



National Center for Science and
Engineering Statistics

Survey of Graduate Students and Postdoctorates in Science and Engineering: Fall 2022

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General Notes

This report presents data from the 2022 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 within the 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.

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TABLE 1-1

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1975–2022

(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
2007old ^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
2007new ^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
2009	631,645	401,008	144,677	85,960	57,805	34,388	6,416	17,001	14,059	8,698	1,737	3,624
2010 ^{c,d}	632,652	407,291	149,241	76,120	63,439	37,351	6,969	19,119	21,345	12,751	2,406	6,188
2011 ^d	626,820	414,440	146,501	65,879	62,639	37,335	6,786	18,518	21,498	13,363	2,312	5,823
2012	627,243	413,033	148,385	65,825	62,851	36,738	7,103	19,010	21,908	13,264	2,497	6,147
2013	633,010	417,251	153,049	62,710	61,942	36,289	7,106	18,547	22,465	13,932	2,494	6,039
2014old ^e	650,738	425,148	162,013	63,577	62,379	36,184	7,292	18,903	23,290	14,283	2,744	6,263
2014new ^e	666,586	437,395	164,488	64,703	63,593	37,316	7,307	18,970	23,706	14,674	2,745	6,287
2015	685,397	448,654	169,354	67,389	63,861	37,639	7,656	18,566	25,292	15,667	2,929	6,696
2016	684,825	452,046	168,443	64,336	64,712	37,941	7,796	18,975	25,747	15,940	3,155	6,652
2017old ^f	684,096	450,343	166,819	66,934	64,888	37,816	7,929	19,143	na	na	na	na
2017new ^f	649,112	415,568	165,581	67,963	64,733	38,241	7,839	18,653	28,180	17,268	3,274	7,638
2018	668,307	432,255	163,301	72,751	64,783	37,564	7,914	19,305	29,284	18,278	3,570	7,436
2019	690,117	453,691	164,004	72,422	66,247	38,503	8,266	19,478	30,349	18,819	3,909	7,621

TABLE 1-1

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1975–2022

(Number)

Year	Graduate students				Postdoctoral appointees				Nonfaculty researchers			
	All fields	Science	Engineering	Health	All fields	Science	Engineering	Health	All fields	Science	Engineering	Health
2020	697,813	464,646	157,729	75,438	65,681	38,741	8,462	18,478	29,661	18,212	3,921	7,528
2021	760,156	509,784	168,050	82,322	63,328	37,189	8,340	17,799	30,548	18,728	3,992	7,828
2022	798,534	538,166	176,000	84,368	62,750	36,673	8,335	17,742	32,279	19,423	4,355	8,501
Master's students												
2017 ^{new} ^f	378,587	229,169	96,756	52,662	na	na	na	na	na	na	na	na
2018	391,211	241,327	93,064	56,820	na	na	na	na	na	na	na	na
2019	408,228	259,795	91,939	56,494	na	na	na	na	na	na	na	na
2020	414,478	267,904	86,450	60,124	na	na	na	na	na	na	na	na
2021	466,613	305,796	95,126	65,691	na	na	na	na	na	na	na	na
2022	501,311	331,983	103,020	66,308	na	na	na	na	na	na	na	na
Doctoral students												
2017 ^{new} ^f	270,525	186,399	68,825	15,301	na	na	na	na	na	na	na	na
2018	277,096	190,928	70,237	15,931	na	na	na	na	na	na	na	na
2019	281,889	193,896	72,065	15,928	na	na	na	na	na	na	na	na
2020	283,335	196,742	71,279	15,314	na	na	na	na	na	na	na	na
2021	293,543	203,988	72,924	16,631	na	na	na	na	na	na	na	na
2022	297,223	206,183	72,980	18,060	na	na	na	na	na	na	na	na

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: 1977–2022

(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
2010 ^{b,c}	632,652	335,481	53.0	297,171	47.0	63,439	38,869	61.3	24,570	38.7	21,345	12,927	60.6	8,418	39.4
2011 ^c	626,820	335,270	53.5	291,550	46.5	62,639	38,167	60.9	24,472	39.1	21,498	13,105	61.0	8,393	39.0
2012	627,243	336,187	53.6	291,056	46.4	62,851	38,166	60.7	24,685	39.3	21,908	13,250	60.5	8,658	39.5
2013	633,010	341,630	54.0	291,380	46.0	61,942	37,585	60.7	24,357	39.3	22,465	13,617	60.6	8,848	39.4
2014old ^d	650,738	356,011	54.7	294,727	45.3	62,379	37,752	60.5	24,627	39.5	23,290	14,099	60.5	9,191	39.5
2014new ^d	666,586	365,841	54.9	300,745	45.1	63,593	38,491	60.5	25,102	39.5	23,706	14,314	60.4	9,392	39.6
2015	685,397	376,296	54.9	309,101	45.1	63,861	38,566	60.4	25,295	39.6	25,292	15,249	60.3	10,043	39.7
2016	684,825	375,569	54.8	309,256	45.2	64,712	39,118	60.4	25,594	39.6	25,747	15,437	60.0	10,310	40.0
2017old ^e	684,096	369,326	54.0	314,770	46.0	64,888	38,936	60.0	25,952	40.0	na	na	na	na	na
2017new ^e	649,112	356,447	54.9	292,665	45.1	64,733	38,870	60.0	25,863	40.0	28,180	16,580	58.8	11,600	41.2
2018	668,307	359,333	53.8	308,974	46.2	64,783	38,661	59.7	26,122	40.3	29,284	17,468	59.7	11,816	40.3
2019	690,117	364,995	52.9	325,122	47.1	66,247	39,173	59.1	27,074	40.9	30,349	17,980	59.2	12,369	40.8
2020	697,813	359,913	51.6	337,900	48.4	65,681	38,239	58.2	27,442	41.8	29,661	17,255	58.2	12,406	41.8

TABLE 1-2a

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1977–2022

(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
2021	760,156	387,277	50.9	372,879	49.1	63,328	36,520	57.7	26,808	42.3	30,548	17,630	57.7	12,918	42.3
2022	798,534	412,109	51.6	386,425	48.4	62,750	36,038	57.4	26,712	42.6	32,279	18,533	57.4	13,746	42.6
Master's students															
2017new ^e	378,587	200,748	53.0	177,839	47.0	na	na	na	na	na	na	na	na	na	na
2018	391,211	201,314	51.5	189,897	48.5	na	na	na	na	na	na	na	na	na	na
2019	408,228	205,768	50.4	202,460	49.6	na	na	na	na	na	na	na	na	na	na
2020	414,478	202,148	48.8	212,330	51.2	na	na	na	na	na	na	na	na	na	na
2021	466,613	226,856	48.6	239,757	51.4	na	na	na	na	na	na	na	na	na	na
2022	501,311	251,531	50.2	249,780	49.8	na	na	na	na	na	na	na	na	na	na
Doctoral students															
2017new ^e	270,525	155,699	57.6	114,826	42.4	na	na	na	na	na	na	na	na	na	na
2018	277,096	158,019	57.0	119,077	43.0	na	na	na	na	na	na	na	na	na	na
2019	281,889	159,227	56.5	122,662	43.5	na	na	na	na	na	na	na	na	na	na
2020	283,335	157,765	55.7	125,570	44.3	na	na	na	na	na	na	na	na	na	na
2021	293,543	160,421	54.6	133,122	45.4	na	na	na	na	na	na	na	na	na	na
2022	297,223	160,578	54.0	136,645	46.0	na	na	na	na	na	na	na	na	na	na

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: 1977–2022

(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
2010 ^{b,c}	407,291	201,263	49.4	206,028	50.6	37,351	23,052	61.7	14,299	38.3	12,751	7,819	61.3	4,932	38.7
2011 ^c	414,440	205,449	49.6	208,991	50.4	37,335	23,027	61.7	14,308	38.3	13,363	8,245	61.7	5,118	38.3
2012	413,033	205,036	49.6	207,997	50.4	36,738	22,662	61.7	14,076	38.3	13,264	8,167	61.6	5,097	38.4
2013	417,251	208,262	49.9	208,989	50.1	36,289	22,340	61.6	13,949	38.4	13,932	8,534	61.3	5,398	38.7
2014old ^d	425,148	215,884	50.8	209,264	49.2	36,184	22,270	61.5	13,914	38.5	14,283	8,777	61.5	5,506	38.5
2014new ^d	437,395	223,592	51.1	213,803	48.9	37,316	22,953	61.5	14,363	38.5	14,674	8,977	61.2	5,697	38.8
2015	448,654	229,578	51.2	219,076	48.8	37,639	23,011	61.1	14,628	38.9	15,667	9,568	61.1	6,099	38.9
2016	452,046	231,826	51.3	220,220	48.7	37,941	23,225	61.2	14,716	38.8	15,940	9,681	60.7	6,259	39.3
2017old ^e	450,343	227,482	50.5	222,861	49.5	37,816	22,991	60.8	14,825	39.2	na	na	na	na	na
2017new ^e	415,568	214,568	51.6	201,000	48.4	38,241	23,262	60.8	14,979	39.2	17,268	10,346	59.9	6,922	40.1
2018	432,255	219,433	50.8	212,822	49.2	37,564	22,749	60.6	14,815	39.4	18,278	11,026	60.3	7,252	39.7
2019	453,691	226,904	50.0	226,787	50.0	38,503	23,069	59.9	15,434	40.1	18,819	11,253	59.8	7,566	40.2
2020	464,646	226,999	48.9	237,647	51.1	38,741	22,764	58.8	15,977	41.2	18,212	10,639	58.4	7,573	41.6
2021	509,784	246,910	48.4	262,874	51.6	37,189	21,594	58.1	15,595	41.9	18,728	10,964	58.5	7,764	41.5

TABLE 1-2b

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science: 1977–2022

(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
2022	538,166	265,932	49.4	272,234	50.6	36,673	21,235	57.9	15,438	42.1	19,423	11,262	58.0	8,161	42.0
Master's students															
2017new ^e	229,169	115,056	50.2	114,113	49.8	na	na	na	na	na	na	na	na	na	na
2018	241,327	118,413	49.1	122,914	50.9	na	na	na	na	na	na	na	na	na	na
2019	259,795	125,525	48.3	134,270	51.7	na	na	na	na	na	na	na	na	na	na
2020	267,904	125,619	46.9	142,285	53.1	na	na	na	na	na	na	na	na	na	na
2021	305,796	143,605	47.0	162,191	53.0	na	na	na	na	na	na	na	na	na	na
2022	331,983	162,530	49.0	169,453	51.0	na	na	na	na	na	na	na	na	na	na
Doctoral students															
2017new ^e	186,399	99,512	53.4	86,887	46.6	na	na	na	na	na	na	na	na	na	na
2018	190,928	101,020	52.9	89,908	47.1	na	na	na	na	na	na	na	na	na	na
2019	193,896	101,379	52.3	92,517	47.7	na	na	na	na	na	na	na	na	na	na
2020	196,742	101,380	51.5	95,362	48.5	na	na	na	na	na	na	na	na	na	na
2021	203,988	103,305	50.6	100,683	49.4	na	na	na	na	na	na	na	na	na	na
2022	206,183	103,402	50.2	102,781	49.8	na	na	na	na	na	na	na	na	na	na

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: 1977–2022

(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
2010 ^{b,c}	149,241	114,788	76.9	34,453	23.1	6,969	5,479	78.6	1,490	21.4	2,406	1,971	81.9	435	18.1
2011 ^c	146,501	112,760	77.0	33,741	23.0	6,786	5,287	77.9	1,499	22.1	2,312	1,895	82.0	417	18.0
2012	148,385	113,834	76.7	34,551	23.3	7,103	5,514	77.6	1,589	22.4	2,497	2,023	81.0	474	19.0
2013	153,049	116,651	76.2	36,398	23.8	7,106	5,518	77.7	1,588	22.3	2,494	1,970	79.0	524	21.0
2014old ^d	162,013	123,056	76.0	38,957	24.0	7,292	5,650	77.5	1,642	22.5	2,744	2,148	78.3	596	21.7
2014new ^d	164,488	124,798	75.9	39,690	24.1	7,307	5,665	77.5	1,642	22.5	2,745	2,149	78.3	596	21.7
2015	169,354	128,845	76.1	40,509	23.9	7,656	5,959	77.8	1,697	22.2	2,929	2,297	78.4	632	21.6
2016	168,443	127,088	75.4	41,355	24.6	7,796	6,074	77.9	1,722	22.1	3,155	2,438	77.3	717	22.7
2017old ^e	166,819	125,105	75.0	41,714	25.0	7,929	6,157	77.7	1,772	22.3	na	na	na	na	na
2017new ^e	165,581	124,749	75.3	40,832	24.7	7,839	6,087	77.7	1,752	22.3	3,274	2,530	77.3	744	22.7
2018	163,301	121,935	74.7	41,366	25.3	7,914	6,046	76.4	1,868	23.6	3,570	2,749	77.0	821	23.0
2019	164,004	120,821	73.7	43,183	26.3	8,266	6,282	76.0	1,984	24.0	3,909	2,990	76.5	919	23.5
2020	157,729	115,133	73.0	42,596	27.0	8,462	6,360	75.2	2,102	24.8	3,921	3,021	77.0	900	23.0
2021	168,050	121,487	72.3	46,563	27.7	8,340	6,144	73.7	2,196	26.3	3,992	3,030	75.9	962	24.1

TABLE 1-2c

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering: 1977–2022

(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
2022	176,000	126,920	72.1	49,080	27.9	8,335	6,047	72.5	2,288	27.5	4,355	3,322	76.3	1,033	23.7
Master's students															
2017new ^e	96,756	73,410	75.9	23,346	24.1	na	na	na	na	na	na	na	na	na	na
2018	93,064	70,039	75.3	23,025	24.7	na	na	na	na	na	na	na	na	na	na
2019	91,939	68,076	74.0	23,863	26.0	na	na	na	na	na	na	na	na	na	na
2020	86,450	63,514	73.5	22,936	26.5	na	na	na	na	na	na	na	na	na	na
2021	95,126	69,461	73.0	25,665	27.0	na	na	na	na	na	na	na	na	na	na
2022	103,020	75,157	73.0	27,863	27.0	na	na	na	na	na	na	na	na	na	na
Doctoral students															
2017new ^e	68,825	51,339	74.6	17,486	25.4	na	na	na	na	na	na	na	na	na	na
2018	70,237	51,896	73.9	18,341	26.1	na	na	na	na	na	na	na	na	na	na
2019	72,065	52,745	73.2	19,320	26.8	na	na	na	na	na	na	na	na	na	na
2020	71,279	51,619	72.4	19,660	27.6	na	na	na	na	na	na	na	na	na	na
2021	72,924	52,026	71.3	20,898	28.7	na	na	na	na	na	na	na	na	na	na
2022	72,980	51,763	70.9	21,217	29.1	na	na	na	na	na	na	na	na	na	na

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: 1977–2022

(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
2010 ^{b,c}	76,120	19,430	25.5	56,690	74.5	19,119	10,338	54.1	8,781	45.9	6,188	3,137	50.7	3,051	49.3
2011 ^c	65,879	17,061	25.9	48,818	74.1	18,518	9,853	53.2	8,665	46.8	5,823	2,965	50.9	2,858	49.1
2012	65,825	17,317	26.3	48,508	73.7	19,010	9,990	52.6	9,020	47.4	6,147	3,060	49.8	3,087	50.2
2013	62,710	16,717	26.7	45,993	73.3	18,547	9,727	52.4	8,820	47.6	6,039	3,113	51.5	2,926	48.5
2014old ^d	63,577	17,071	26.9	46,506	73.1	18,903	9,832	52.0	9,071	48.0	6,263	3,174	50.7	3,089	49.3
2014new ^d	64,703	17,451	27.0	47,252	73.0	18,970	9,873	52.0	9,097	48.0	6,287	3,188	50.7	3,099	49.3
2015	67,389	17,873	26.5	49,516	73.5	18,566	9,596	51.7	8,970	48.3	6,696	3,384	50.5	3,312	49.5
2016	64,336	16,655	25.9	47,681	74.1	18,975	9,819	51.7	9,156	48.3	6,652	3,318	49.9	3,334	50.1
2017old ^e	66,934	16,739	25.0	50,195	75.0	19,143	9,788	51.1	9,355	48.9	na	na	na	na	na
2017new ^e	67,963	17,130	25.2	50,833	74.8	18,653	9,521	51.0	9,132	49.0	7,638	3,704	48.5	3,934	51.5
2018	72,751	17,965	24.7	54,786	75.3	19,305	9,866	51.1	9,439	48.9	7,436	3,693	49.7	3,743	50.3
2019	72,422	17,270	23.8	55,152	76.2	19,478	9,822	50.4	9,656	49.6	7,621	3,737	49.0	3,884	51.0
2020	75,438	17,781	23.6	57,657	76.4	18,478	9,115	49.3	9,363	50.7	7,528	3,595	47.8	3,933	52.2
2021	82,322	18,880	22.9	63,442	77.1	17,799	8,782	49.3	9,017	50.7	7,828	3,636	46.4	4,192	53.6

TABLE 1-2d

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health: 1977–2022

(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
2022	84,368	19,257	22.8	65,111	77.2	17,742	8,756	49.4	8,986	50.6	8,501	3,949	46.5	4,552	53.5
Master's students															
2017new ^e	52,662	12,282	23.3	40,380	76.7	na	na	na	na	na	na	na	na	na	na
2018	56,820	12,862	22.6	43,958	77.4	na	na	na	na	na	na	na	na	na	na
2019	56,494	12,167	21.5	44,327	78.5	na	na	na	na	na	na	na	na	na	na
2020	60,124	13,015	21.6	47,109	78.4	na	na	na	na	na	na	na	na	na	na
2021	65,691	13,790	21.0	51,901	79.0	na	na	na	na	na	na	na	na	na	na
2022	66,308	13,844	20.9	52,464	79.1	na	na	na	na	na	na	na	na	na	na
Doctoral students															
2017new ^e	15,301	4,848	31.7	10,453	68.3	na	na	na	na	na	na	na	na	na	na
2018	15,931	5,103	32.0	10,828	68.0	na	na	na	na	na	na	na	na	na	na
2019	15,928	5,103	32.0	10,825	68.0	na	na	na	na	na	na	na	na	na	na
2020	15,314	4,766	31.1	10,548	68.9	na	na	na	na	na	na	na	na	na	na
2021	16,631	5,090	30.6	11,541	69.4	na	na	na	na	na	na	na	na	na	na
2022	18,060	5,413	30.0	12,647	70.0	na	na	na	na	na	na	na	na	na	na

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: 1980–2022

(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
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

TABLE 1-3a

Citizenship of graduate students and postdoctoral appointees in science, engineering, and health: 1980–2022

(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
Master's students										
2017 ^{new} ^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
Doctoral students										
2017 ^{new} ^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

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: 1980–2022

(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
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

TABLE 1-3b

Citizenship of graduate students and postdoctoral appointees in science: 1980–2022

(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
Master's students										
2017 ^{new} ^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
Doctoral students										
2017 ^{new} ^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

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: 1980–2022

(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
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

TABLE 1-3c

Citizenship of graduate students and postdoctoral appointees in engineering: 1980–2022

(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	
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	
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	

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: 1980–2022

(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
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

TABLE 1-3d

Citizenship of graduate students and postdoctoral appointees in health: 1980–2022

(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
Master's students										
2017 ^{new} ^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
Doctoral students										
2017 ^{new} ^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

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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										More than one race		Unknown ethnicity and race	
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		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
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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		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
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
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

^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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										More than one race		Unknown ethnicity and race	
				American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White					
		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
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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents																	
		Hispanic or Latino		Not Hispanic or Latino										More than one race		Unknown ethnicity and race			
				American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White							
		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
Doctoral students																			
2017new ^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

^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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		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	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
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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		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	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
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

^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: 2000–22

(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
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: 2000–22

(Number and percent)

Year	Total	U.S. citizens and permanent residents														Unknown ethnicity and race		
		Hispanic or Latino		Not Hispanic or Latino								More than one race						
				American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander				White				
		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
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

^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: 1975–2022

(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

TABLE 1-5a

Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2022

(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
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
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
2014 ^{old} ^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
2014 ^{new} ^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
2017 ^{old} ^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
2017 ^{new} ^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
Master's students																				
2017 ^{new} ^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
Doctoral students																				
2017 ^{new} ^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

TABLE 1-5a

Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2022

(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		
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

^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: 1975–2022

(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
2007old ^b	430,860	120,236	27.9	na	na	na	na	na	na
2007new ^b	437,365	122,449	28.0	na	na	na	na	na	na
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

TABLE 1-5b

First-time status among full-time graduate students in science, engineering, and health, by degree level: 1975–2022

(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
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

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: 1975–2022

(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
2007old ^b	430,860	81,542	18.9	167,836	39.0	24,262	5.6	2,927	0.7	154,293	35.8
2007new ^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
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

TABLE 1-6

Primary source of support for full-time graduate students in science, engineering, and health: 1975–2022

(Number and percent)

Year	Total	Federal		Institutional		Nonfederal domestic		Foreign		Personal resources	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
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
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
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

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: 1975–2022

(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: 1975–2022

(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
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
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

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: 1975–2022

(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
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
2014 ^{old} ^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
2014 ^{new} ^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
2017 ^{old} ^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
2017 ^{new} ^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

TABLE 1-8

Primary mechanism of support for full-time graduate students in science, engineering, and health: 1975–2022

(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	Number	Percent	Number	Percent	Number	Percent	Number	Percent
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
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
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

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: 1975–2022

(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 sciences, 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	12,809	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

TABLE 1-9a

Graduate students in science broad fields: 1975–2022

(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 sciences, 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}
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
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
2014 ^{old^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
2014 ^{new^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
2017 ^{old^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
2017 ^{new^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
Master's students														
2017 ^{new^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
Doctoral students														
2017 ^{new^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

TABLE 1-9a

Graduate students in science broad fields: 1975–2022

(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 sciences, 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}
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

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: 1979–2022

(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 sciences, 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
2007 ^{old} ^d	30,986	948	19,218	ne	516	ne	1,322	621	ne	NA	NA	6,760	1,106	495
2007 ^{new} ^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

TABLE 1-9b

Postdoctoral appointees in science broad fields: 1979–2022

(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 sciences, 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}
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
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

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/infbrief/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: 1979–2022

(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 sciences, 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
2007 ^{old} ^d	6,517	256	3,257	ne	195	ne	613	108	ne	NA	NA	1,643	277	168
2007 ^{new} ^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

TABLE 1-9c

Doctorate-holding nonfaculty researchers in science broad fields: 1979–2022

(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 sciences, 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}
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
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

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/infbrief/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: 1975–2022

(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

TABLE 1-10a

Graduate students in engineering broad fields: 1975–2022

(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
2007 ^{new} ^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
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
2014 ^{old} ^e	162,013	5,116	9,510	11,909	20,660	50,051	14,659	25,508	7,869	16,731
2014 ^{new} ^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
2017 ^{old} ^b	166,819	na	na	na	na	na	na	na	na	na
2017 ^{new} ^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
Master's students										
2017 ^{new} ^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
Doctoral students										
2017 ^{new} ^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

TABLE 1-10a

Graduate students in engineering broad fields: 1975–2022

(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
2022	72,980	2,832	9,265	7,590	7,754	17,585	3,856	11,523	4,573	8,002

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: 1979–2022

(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
2007old ^a	4,908	178	640	780	419	885	73	725	559	649
2007new ^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
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

TABLE 1-10b

Postdoctoral appointees in engineering broad fields: 1979–2022

(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
2022	8,335	244	1,540	1,239	1,018	1,217	143	1,189	542	1,203

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: 1979–2022

(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
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

TABLE 1-10c

Doctorate-holding nonfaculty researchers in engineering broad fields: 1979–2022

(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
2022	4,355	153	685	313	569	734	197	527	280	897

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: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
All fields	378,587	391,211	408,228	414,478	466,613	501,311
Science	229,169	241,327	259,795	267,904	305,796	331,983
Agricultural and veterinary sciences ^a	5,603	5,658	5,629	6,487	6,801	6,949
Agricultural sciences	5,603	5,658	5,629	5,589	5,790	6,165
Veterinary biomedical and clinical sciences ^b	na	na	na	898	1,011	784
Biological and biomedical sciences ^a	33,926	35,306	38,078	39,920	42,728	43,062
Biochemistry	791	743	808	889	1,005	911
Biology	8,791	8,696	8,635	8,381	8,294	7,969
Biomedical sciences	4,298	4,379	5,241	5,898	5,794	5,681
Biophysics	18	6	7	8	6	8
Biostatistics and bioinformatics	2,540	2,890	3,036	3,143	3,519	3,852
Biotechnology	1,893	1,953	3,157	3,143	3,395	3,916
Botany and plant biology	378	373	392	376	363	369
Cell, cellular biology, and anatomical sciences	926	919	927	954	1,210	1,137
Ecology and population biology	921	888	939	1,052	1,201	1,058
Epidemiology	2,577	2,669	2,776	3,153	3,623	3,844
Genetics	512	557	581	620	718	749
Microbiological sciences and immunology	1,037	1,254	1,370	1,649	2,011	2,026
Molecular biology	277	364	378	378	405	408
Neurobiology and neuroscience	318	304	362	545	591	515
Nutrition science	2,144	2,546	2,385	2,370	2,871	2,905
Pathology and experimental pathology	122	93	87	105	100	106
Pharmacology and toxicology	881	873	923	770	926	996
Physiology	2,229	2,288	2,594	3,044	2,898	2,891
Zoology and animal biology	759	829	891	869	927	861
Biological and biomedical sciences nec	2,514	2,682	2,589	2,573	2,871	2,860
Computer and information sciences	75,618	77,351	84,092	80,690	102,199	129,972
Computer science	22,786	22,966	24,628	22,670	30,361	42,092
Computer and information sciences ^c	30,217	30,568	33,698	27,044	35,308	45,098
Computer and information sciences ^d	NA	NA	NA	23,625	30,804	39,719
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	3,419	4,504	5,379
Computer and information sciences nec ^c	22,615	23,817	25,766	30,976	36,530	42,782
Computer and information systems security ^d	NA	NA	NA	7,023	8,401	9,254
Information science and studies ^d	NA	NA	NA	11,671	13,098	15,478
Information technology ^d	NA	NA	NA	5,618	7,527	10,601
Computer and information sciences nec ^d	NA	NA	NA	6,664	7,504	7,449
Geosciences, atmospheric sciences, and ocean sciences	6,006	5,629	5,327	5,277	5,520	5,186
Atmospheric sciences and meteorology	464	459	473	458	487	489
Geological and earth sciences	4,107	3,924	3,610	3,561	3,534	3,183
Ocean and marine sciences	1,275	1,246	1,244	1,258	1,499	1,514
Geosciences, atmospheric sciences, and ocean sciences nec	160	ne	ne	ne	ne	ne
Mathematics and statistics	16,568	18,073	19,594	18,284	20,639	20,798
Mathematics and applied mathematics ^c	10,387	11,212	11,933	11,058	13,063	13,002
Applied mathematics ^d	NA	NA	NA	6,678	8,899	9,097
Mathematics ^d	NA	NA	NA	4,380	4,164	3,905
Statistics	6,181	6,861	7,661	7,226	7,576	7,796
Multidisciplinary and interdisciplinary sciences ^c	6,923	7,414	8,203	10,980	11,994	16,931
Biological and physical sciences ^d	NA	NA	NA	993	874	899

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Computational science ^d	NA	NA	NA	1,968	2,088	3,089
Data science and data analytics ^d	NA	NA	NA	2,124	2,358	6,000
International and global studies ^d	NA	NA	NA	1,341	1,267	1,083
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	4,554	5,407	5,860
Natural resources and conservation	7,311	7,691	8,066	8,793	10,012	9,807
Environmental science and studies	3,515	3,683	3,883	4,067	4,851	4,422
Forestry, natural resources, and conservation	3,796	4,008	4,183	4,726	5,161	5,385
Physical sciences	6,368	6,075	6,361	6,275	6,409	6,256
Astronomy and astrophysics	69	72	77	76	85	100
Chemistry	3,453	3,144	3,152	3,096	3,066	3,015
Materials sciences	448	449	539	464	439	402
Physics	2,182	2,173	2,164	2,141	2,278	2,253
Physical sciences nec	216	237	429	498	541	486
Psychology ^a	29,638	35,404	40,838	47,279	51,878	48,321
Clinical psychology	3,098	3,213	3,587	3,480	4,167	4,519
Counseling and applied psychology ^c	19,413	24,714	29,322	33,652	36,482	32,491
Applied psychology ^d	NA	NA	NA	17,673	19,517	20,091
Counseling psychology ^d	NA	NA	NA	15,979	16,965	12,400
Human development ^b	na	na	na	1,499	1,566	1,525
Psychology, general	5,905	6,178	6,357	6,826	7,329	7,346
Research and experimental psychology	1,222	1,299	1,572	1,822	2,334	2,440
Social sciences ^a	41,208	42,726	43,607	43,919	47,616	44,701
Agricultural and natural resource economics	806	779	700	603	672	485
Anthropology	2,363	2,302	2,233	2,167	2,292	2,173
Criminal justice and safety studies	3,869	4,506	4,917	5,674	5,602	5,223
Economics (except agricultural and natural resource)	5,238	5,427	6,084	6,114	6,882	6,734
Geography and cartography	2,696	2,717	2,660	2,745	3,147	2,807
Human development ^b	1,349	1,329	1,339	na	na	na
International relations and national security studies	6,755	6,826	6,657	7,322	8,308	7,833
Linguistics	1,237	1,175	1,153	1,164	1,188	1,159
Political science and government	2,979	2,706	2,897	3,072	3,270	2,925
Public policy analysis	4,718	5,882	6,297	6,352	7,290	6,701
Sociology and population studies	2,629	2,395	2,263	2,342	2,331	2,190
Social sciences, nec ^c	6,569	6,682	6,407	6,364	6,634	6,471
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	2,642	2,767	2,634
Criminology ^d	NA	NA	NA	1,308	1,272	1,180
Urban studies and affairs ^d	NA	NA	NA	907	827	671
Social sciences, other ^d	na	na	na	1,507	1,768	1,986
History and philosophy of science and technology ^e	25	31	32	na	na	na
Social sciences, nec ^c	6,544	6,651	6,375	na	na	na
Engineering	96,756	93,064	91,939	86,450	95,126	103,020
Aerospace, aeronautical, and astronautical engineering	3,322	3,342	3,701	4,326	5,065	5,263
Biological, biomedical, and biosystems engineering	4,108	4,282	4,424	4,536	5,192	5,177
Bioengineering and biomedical engineering	4,037	4,202	4,335	na	na	na
Biological and biosystems engineering	71	80	89	na	na	na
Chemical, petroleum, and chemical-related engineering	4,208	3,815	3,274	2,942	2,983	3,011
Chemical engineering	3,292	3,061	2,632	2,426	2,555	2,599
Petroleum engineering	916	754	642	516	428	412

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Civil, environmental, transportation and related engineering fields ^c	13,506	12,729	11,873	10,819	11,730	12,621
Civil engineering ^d	13,506	12,729	11,873	8,703	9,352	9,692
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	2,116	2,378	2,929
Electrical, electronics, communications and computer engineering	29,816	28,108	28,177	25,312	27,695	32,316
Electrical, electronics, and communications engineering ^c	29,816	28,108	28,177	16,746	17,866	19,757
Computer engineering ^d	NA	NA	NA	8,566	9,829	12,559
Industrial, manufacturing, systems engineering and operations research	12,272	12,389	11,912	11,030	11,949	12,579
Industrial and manufacturing engineering ^c	12,272	12,389	11,912	5,569	5,284	6,349
Systems engineering and operations research ^d	NA	NA	NA	5,461	6,665	6,230
Mechanical engineering	16,279	15,434	14,861	14,305	15,718	16,029
Metallurgical, mining, materials and related engineering fields	2,427	2,395	2,266	2,299	2,518	2,545
Metallurgical and materials engineering ^e	2,115	2,079	1,974	na	na	na
Mining engineering ^e	312	316	292	na	na	na
Other engineering	10,818	10,570	11,451	10,881	12,276	13,479
Agricultural engineering	505	371	494	404	519	389
Engineering mechanics, physics, and science	679	729	852	740	782	762
Nuclear engineering	444	407	418	441	484	493
Engineering, other	na	na	na	9,296	10,491	11,835
Engineering, nec	9,146	9,016	9,638	na	na	na
Nanotechnology	44	47	49	na	na	na
Health	52,662	56,820	56,494	60,124	65,691	66,308
Clinical medicine ^a	25,283	27,494	26,251	29,748	34,021	33,251
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	927	1,287	1,168
Public health	24,570	26,673	25,403	28,821	32,734	32,083
Clinical medicine nec	713	821	848	ne	ne	ne
Other health	27,379	29,326	30,243	30,376	31,670	33,057
Communication disorders sciences	14,748	15,803	16,346	16,762	17,406	17,768
Dental sciences	1,450	1,478	1,315	1,366	1,500	1,545
Nursing science	1,550	1,902	1,861	1,488	1,662	1,535
Pharmaceutical sciences	1,078	1,075	1,187	1,619	1,939	2,142
Veterinary biomedical and clinical sciences ^b	458	637	881	na	na	na
Other health nec ^c	na	na	na	9,141	9,163	10,067
Kinesiology and exercise science ^d	NA	NA	NA	4,977	4,962	4,743
Other health nec ^d	8,095	8,431	8,653	4,164	4,201	5,324

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 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 1-11b

Doctoral student enrollment, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
All fields	270,525	277,096	281,889	283,335	293,543	297,223
Science	186,399	190,928	193,896	196,742	203,988	206,183
Agricultural and veterinary sciences ^a	3,744	3,880	3,889	4,313	4,443	4,647
Agricultural sciences	3,744	3,880	3,889	3,791	3,906	4,145
Veterinary biomedical and clinical sciences ^b	na	na	na	522	537	502
Biological and biomedical sciences ^a	51,291	52,627	53,915	54,905	58,155	59,638
Biochemistry	4,550	4,554	4,534	4,648	4,828	4,994
Biology	7,020	7,054	7,166	7,268	7,400	7,600
Biomedical sciences	3,412	4,030	4,579	4,514	4,826	5,155
Biophysics	843	830	890	860	973	887
Biostatistics and bioinformatics	2,679	2,946	3,192	3,339	3,591	3,799
Biotechnology	91	109	98	101	128	105
Botany and plant biology	1,312	1,317	1,295	1,255	1,269	1,301
Cell, cellular biology, and anatomical sciences	4,786	4,990	4,975	5,008	5,290	5,374
Ecology and population biology	2,566	2,620	2,571	2,725	2,790	2,808
Epidemiology	1,640	1,768	1,916	2,032	2,162	2,213
Genetics	2,021	2,105	2,082	2,182	2,449	2,584
Microbiological sciences and immunology	3,974	3,914	3,937	4,124	4,371	4,466
Molecular biology	1,135	1,128	1,153	1,240	1,265	1,231
Neurobiology and neuroscience	4,871	5,046	5,138	5,275	5,758	5,933
Nutrition science	988	967	948	989	993	1,050
Pathology and experimental pathology	911	880	843	753	849	917
Pharmacology and toxicology	2,244	2,237	2,151	2,174	2,374	2,409
Physiology	2,627	2,631	2,703	2,758	3,041	3,021
Zoology and animal biology	1,195	1,193	1,198	1,178	1,213	1,198
Biological and biomedical sciences nec	2,426	2,308	2,546	2,482	2,585	2,593
Computer and information sciences	14,291	16,127	17,192	18,174	19,531	20,583
Computer science	7,465	8,343	8,646	9,658	10,356	10,832
Computer and information sciences ^c	5,429	6,401	6,952	6,438	6,855	7,195
Computer and information sciences ^d	NA	NA	NA	5,482	6,168	6,432
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	956	687	763
Computer and information sciences nec ^c	1,397	1,383	1,594	2,078	2,320	2,556
Computer and information systems security ^d	NA	NA	NA	270	342	441
Information science and studies ^d	NA	NA	NA	1,245	1,351	1,394
Information technology ^d	NA	NA	NA	405	467	550
Computer and information sciences nec ^d	NA	NA	NA	158	160	171
Geosciences, atmospheric sciences, and ocean sciences	6,539	6,704	6,551	6,515	6,770	6,784
Atmospheric sciences and meteorology	884	883	866	847	902	945
Geological and earth sciences	4,148	4,370	4,239	4,165	4,337	4,285
Ocean and marine sciences	1,420	1,451	1,446	1,503	1,531	1,554
Geosciences, atmospheric sciences, and ocean sciences nec	87	ne	ne	ne	ne	ne
Mathematics and statistics	13,101	13,388	13,565	13,687	13,619	13,589
Mathematics and applied mathematics ^c	10,124	10,230	10,308	10,300	10,219	10,244
Applied mathematics ^d	NA	NA	NA	2,211	2,255	2,127
Mathematics ^d	NA	NA	NA	8,089	7,964	8,117
Statistics	2,977	3,158	3,257	3,387	3,400	3,345
Multidisciplinary and interdisciplinary sciences ^c	2,931	2,924	2,978	3,553	3,774	4,014
Biological and physical sciences ^d	NA	NA	NA	815	887	956

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Computational science ^d	NA	NA	NA	298	347	335
Data science and data analytics ^d	NA	NA	NA	42	46	104
International and global studies ^d	NA	NA	NA	173	183	175
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	2,225	2,311	2,444
Natural resources and conservation	3,568	3,716	3,677	3,705	3,910	3,955
Environmental science and studies	1,621	1,744	1,738	1,799	1,956	1,980
Forestry, natural resources, and conservation	1,947	1,972	1,939	1,906	1,954	1,975
Physical sciences	35,461	36,000	36,506	36,341	37,732	37,836
Astronomy and astrophysics	1,236	1,281	1,373	1,430	1,539	1,603
Chemistry	19,367	19,547	19,748	19,389	20,149	19,695
Materials sciences	927	875	1,013	1,028	1,002	1,223
Physics	13,505	13,913	13,951	13,985	14,501	14,747
Physical sciences nec	426	384	421	509	541	568
Psychology ^a	20,395	20,303	20,231	21,115	21,447	21,121
Clinical psychology	3,751	3,814	3,785	3,668	3,389	3,274
Counseling and applied psychology ^c	6,825	6,946	6,537	6,193	6,371	6,504
Applied psychology ^d	NA	NA	NA	4,833	4,910	5,104
Counseling psychology ^d	NA	NA	NA	1,360	1,461	1,400
Human development ^b	na	na	na	742	797	768
Psychology, general	7,353	6,683	6,749	6,601	6,554	5,835
Research and experimental psychology	2,466	2,860	3,160	3,911	4,336	4,740
Social sciences ^a	35,078	35,259	35,392	34,434	34,607	34,016
Agricultural and natural resource economics	872	919	806	639	522	416
Anthropology	4,562	4,471	4,365	4,296	4,129	4,047
Criminal justice and safety studies	538	663	900	988	1,227	1,390
Economics (except agricultural and natural resource)	7,831	7,917	8,045	7,959	8,266	8,201
Geography and cartography	1,856	1,849	1,741	1,652	1,729	1,547
Human development ^b	685	793	731	na	na	na
International relations and national security studies	398	439	413	408	474	331
Linguistics	1,646	1,548	1,616	1,686	1,652	1,695
Political science and government	5,609	5,611	5,488	5,366	5,332	5,310
Public policy analysis	2,234	2,320	2,414	2,547	2,740	2,690
Sociology and population studies	5,340	5,128	5,070	5,067	4,875	4,655
Social sciences, nec ^c	3,507	3,601	3,803	3,826	3,661	3,734
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	2,482	2,326	2,345
Criminology ^d	NA	NA	NA	318	308	322
Urban studies and affairs ^d	NA	NA	NA	405	391	398
Social sciences, other ^d	na	na	na	621	636	669
History and philosophy of science and technology ^e	235	270	257	na	na	na
Social sciences, nec ^c	3,272	3,331	3,546	na	na	na
Engineering	68,825	70,237	72,065	71,279	72,924	72,980
Aerospace, aeronautical, and astronautical engineering	2,386	2,506	2,554	2,645	2,773	2,832
Biological, biomedical, and biosystems engineering	7,008	7,481	7,934	8,239	8,867	9,265
Bioengineering and biomedical engineering	6,845	7,278	7,715	na	na	na
Biological and biosystems engineering	163	203	219	na	na	na
Chemical, petroleum, and chemical-related engineering	7,536	7,599	7,664	7,612	7,713	7,590
Chemical engineering	6,874	6,950	7,057	7,031	7,115	7,069
Petroleum engineering	662	649	607	581	598	521

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Civil, environmental, transportation and related engineering fields ^c	7,626	7,732	7,752	7,485	7,878	7,754
Civil engineering ^d	7,626	7,732	7,752	6,517	6,760	6,629
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	968	1,118	1,125
Electrical, electronics, communications and computer engineering	17,936	18,119	18,577	17,720	17,570	17,585
Electrical, electronics, and communications engineering ^c	17,936	18,119	18,577	14,694	14,767	14,780
Computer engineering ^d	NA	NA	NA	3,026	2,803	2,805
Industrial, manufacturing, systems engineering and operations research	3,633	3,598	3,762	3,839	3,921	3,856
Industrial and manufacturing engineering ^c	3,633	3,598	3,762	2,413	2,322	2,301
Systems engineering and operations research ^d	NA	NA	NA	1,426	1,599	1,555
Mechanical engineering	11,149	11,159	11,247	11,477	11,540	11,523
Metallurgical, mining, materials and related engineering fields	4,655	4,821	4,817	4,882	4,904	4,573
Metallurgical and materials engineering ^e	4,426	4,610	4,616	na	na	na
Mining engineering ^e	229	211	201	na	na	na
Other engineering	6,896	7,222	7,758	7,380	7,758	8,002
Agricultural engineering	681	661	662	654	668	631
Engineering mechanics, physics, and science	1,457	1,428	1,447	1,468	1,457	1,588
Nuclear engineering	998	1,046	1,031	1,038	1,032	1,085
Engineering, other	na	na	na	4,220	4,601	4,698
Engineering, nec	3,665	4,016	4,472	na	na	na
Nanotechnology	95	71	146	na	na	na
Health	15,301	15,931	15,928	15,314	16,631	18,060
Clinical medicine ^a	4,410	4,508	4,571	4,796	5,612	5,966
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	443	677	954
Public health	4,087	4,104	4,191	4,353	4,935	5,012
Clinical medicine nec	323	404	380	ne	ne	ne
Other health	10,891	11,423	11,357	10,518	11,019	12,094
Communication disorders sciences	1,305	1,099	911	844	792	821
Dental sciences	248	247	208	217	219	228
Nursing science	3,598	3,551	3,439	3,359	3,512	3,657
Pharmaceutical sciences	2,566	2,954	3,121	2,893	2,936	3,059
Veterinary biomedical and clinical sciences ^b	577	575	692	na	na	na
Other health nec ^c	na	na	na	3,205	3,560	4,329
Kinesiology and exercise science ^d	NA	NA	NA	1,024	1,031	981
Other health nec ^d	2,597	2,997	2,986	2,181	2,529	3,348

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 NCSSES 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 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 1-11c

Postdoctoral appointees, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
All fields	64,733	64,783	66,247	65,681	63,328	62,750
Science	38,241	37,564	38,503	38,741	37,189	36,673
Agricultural and veterinary sciences ^a	1,024	1,072	1,079	1,678	1,595	1,705
Agricultural sciences	1,024	1,072	1,079	1,046	1,086	1,201
Veterinary biomedical and clinical sciences ^b	na	na	na	632	509	504
Biological and biomedical sciences ^a	21,781	21,533	21,847	21,902	20,245	19,585
Biochemistry	1,933	1,943	1,912	1,863	1,743	1,756
Biology	2,167	2,108	2,203	2,169	1,979	2,064
Biomedical sciences	1,870	1,941	1,942	1,879	1,906	1,553
Biophysics	144	151	164	147	156	126
Biostatistics and bioinformatics	695	699	721	830	733	691
Biotechnology	103	86	87	96	101	155
Botany and plant biology	586	620	667	579	520	507
Cell, cellular biology, and anatomical sciences	1,859	1,814	1,785	1,661	1,663	1,599
Ecology and population biology	468	446	414	467	430	438
Epidemiology	244	230	285	307	329	377
Genetics	1,529	1,428	1,472	1,485	1,384	1,288
Microbiological sciences and immunology	2,065	2,078	1,985	2,028	1,865	1,811
Molecular biology	477	521	570	722	634	549
Neurobiology and neuroscience	2,137	2,103	2,216	2,075	1,980	1,932
Nutrition science	177	180	192	191	152	146
Pathology and experimental pathology	1,106	1,145	1,302	1,263	1,043	925
Pharmacology and toxicology	1,140	1,012	1,021	1,026	884	915
Physiology	1,851	1,766	1,640	1,804	1,537	1,512
Zoology and animal biology	394	428	406	397	376	411
Biological and biomedical sciences nec	836	834	863	913	830	830
Computer and information sciences	854	879	878	823	880	859
Computer science	468	502	487	466	521	496
Computer and information sciences ^c	256	225	263	224	217	212
Computer and information sciences ^d	NA	NA	NA	187	185	166
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	37	32	46
Computer and information sciences nec ^c	130	152	128	133	142	151
Computer and information systems security ^d	NA	NA	NA	6	9	11
Information science and studies ^d	NA	NA	NA	40	56	65
Information technology ^d	NA	NA	NA	18	6	3
Computer and information sciences nec ^d	NA	NA	NA	69	71	72
Geosciences, atmospheric sciences, and ocean sciences	2,089	1,726	1,778	1,790	1,797	1,787
Atmospheric sciences and meteorology	313	243	249	266	248	253
Geological and earth sciences	1,046	803	845	879	869	844
Ocean and marine sciences	433	401	393	360	373	414
Geosciences, atmospheric sciences, and ocean sciences nec	297	279	291	285	307	276
Mathematics and statistics	991	982	1,070	1,076	1,112	1,110
Mathematics and applied mathematics ^c	860	833	892	924	923	910
Applied mathematics ^d	NA	NA	NA	207	202	221
Mathematics ^d	NA	NA	NA	717	721	689
Statistics	131	149	178	152	189	200
Multidisciplinary and interdisciplinary sciences ^c	1,131	980	972	832	878	840
Biological and physical sciences ^d	NA	NA	NA	119	125	56
Computational science ^d	NA	NA	NA	26	28	31

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Data science and data analytics ^d	NA	NA	NA	57	50	48
International and global studies ^d	NA	NA	NA	13	21	27
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	617	654	678
Natural resources and conservation	731	764	806	845	889	936
Environmental science and studies	270	258	277	279	312	339
Forestry, natural resources, and conservation	461	506	529	566	577	597
Physical sciences	7,211	6,976	7,159	6,937	6,823	6,877
Astronomy and astrophysics	484	536	571	544	561	634
Chemistry	3,435	3,320	3,383	3,294	3,163	3,157
Materials sciences	300	264	259	225	213	246
Physics	2,645	2,619	2,721	2,676	2,677	2,618
Physical sciences nec	347	237	225	198	209	222
Psychology ^a	1,082	1,145	1,152	1,312	1,325	1,308
Clinical psychology	74	73	72	84	63	56
Counseling and applied psychology ^c	135	165	167	123	120	123
Applied psychology ^d	NA	NA	NA	92	110	109
Counseling psychology ^d	NA	NA	NA	31	10	14
Human development ^b	na	na	na	122	106	119
Psychology, general	696	674	663	722	705	735
Research and experimental psychology	177	233	250	261	331	275
Social sciences ^a	1,347	1,507	1,762	1,546	1,645	1,666
Agricultural and natural resource economics	57	53	52	33	42	53
Anthropology	136	137	148	153	149	150
Criminal justice and safety studies	4	12	16	17	16	15
Economics (except agricultural and natural resource)	94	108	132	123	165	152
Geography and cartography	81	120	128	140	127	131
Human development ^b	123	135	156	na	na	na
International relations and national security studies	38	51	85	68	117	98
Linguistics	33	39	39	41	50	58
Political science and government	142	137	170	148	164	162
Public policy analysis	162	191	220	229	213	241
Sociology and population studies	141	149	159	155	168	166
Social sciences, nec ^c	336	375	457	439	434	440
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	226	230	235
Criminology ^d	NA	NA	NA	2	3	8
Urban studies and affairs ^d	NA	NA	NA	5	10	18
Social sciences, other ^d	na	na	na	206	191	179
History and philosophy of science and technology ^e	9	12	21	na	na	na
Social sciences, nec ^c	327	363	436	na	na	na
Engineering	7,839	7,914	8,266	8,462	8,340	8,335
Aerospace, aeronautical, and astronautical engineering	196	207	227	233	277	244
Biological, biomedical, and biosystems engineering	1,476	1,529	1,602	1,696	1,616	1,540
Bioengineering and biomedical engineering	1,398	1,433	1,515	na	na	na
Biological and biosystems engineering	78	96	87	na	na	na
Chemical, petroleum, and chemical-related engineering	1,262	1,205	1,229	1,157	1,167	1,239
Chemical engineering	1,197	1,142	1,157	1,108	1,133	1,215
Petroleum engineering	65	63	72	49	34	24
Civil, environmental, transportation and related engineering fields ^c	804	739	865	1,006	968	1,018

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Civil engineering ^d	804	739	865	904	879	929
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	102	89	89
Electrical, electronics, communications and computer engineering	1,170	1,197	1,305	1,302	1,275	1,217
Electrical, electronics, and communications engineering ^c	1,170	1,197	1,305	1,242	1,186	1,129
Computer engineering ^d	NA	NA	NA	60	89	88
Industrial, manufacturing, systems engineering and operations research	127	156	167	194	127	143
Industrial and manufacturing engineering ^c	127	156	167	83	73	72
Systems engineering and operations research ^d	NA	NA	NA	111	54	71
Mechanical engineering	1,089	1,069	1,142	1,149	1,200	1,189
Metallurgical, mining, materials and related engineering fields	565	575	665	630	562	542
Metallurgical and materials engineering ^e	550	549	642	na	na	na
Mining engineering ^e	15	26	23	na	na	na
Other engineering	1,150	1,237	1,064	1,095	1,148	1,203
Agricultural engineering	111	113	112	122	112	136
Engineering mechanics, physics, and science	316	354	180	199	253	265
Nuclear engineering	94	106	80	81	99	82
Engineering, other	na	na	na	693	684	720
Engineering, nec	544	530	541	na	na	na
Nanotechnology	85	134	151	na	na	na
Health	18,653	19,305	19,478	18,478	17,799	17,742
Clinical medicine ^a	16,100	16,563	16,650	16,287	15,561	15,630
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	430	345	450
Public health	767	791	843	914	880	796
Anesthesiology	422	436	494	466	414	313
Cardiology and cardiovascular disease	824	841	788	706	660	672
Endocrinology, diabetes, and metabolism	331	351	345	334	319	355
Gastroenterology	273	279	287	277	315	310
Hematology	338	316	434	429	362	379
Neurology and neurosurgery	1,202	1,437	1,466	1,491	1,522	1,618
Obstetrics and gynecology	294	313	312	289	230	218
Oncology and cancer research	1,974	2,012	1,830	1,541	1,504	1,391
Ophthalmology	513	517	523	456	464	476
Otorhinolaryngology	265	306	275	314	279	267
Pediatrics	1,270	1,264	1,264	1,337	1,143	1,125
Psychiatry	949	991	1,004	1,088	1,109	951
Pulmonary disease	290	286	275	296	232	238
Radiological sciences	996	1,090	1,152	1,180	1,100	1,218
Surgery	1,247	1,352	1,376	1,193	1,197	1,213
Clinical medicine nec	4,145	3,981	3,982	3,546	3,486	3,640
Other health	2,553	2,742	2,828	2,191	2,238	2,112
Communication disorders sciences	79	83	75	82	88	72
Dental sciences	282	311	316	292	304	311
Nursing science	98	121	120	127	122	141
Pharmaceutical sciences	978	1,063	1,091	1,141	1,101	1,107
Veterinary biomedical and clinical sciences ^b	602	636	679	na	na	na
Other health nec ^c	na	na	na	549	623	481
Kinesiology and exercise science ^d	NA	NA	NA	84	67	71
Other health nec ^d	514	528	547	465	556	410

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 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
All fields	28,180	29,284	30,349	29,661	30,548	32,279
Science	17,268	18,278	18,819	18,212	18,728	19,423
Agricultural and veterinary sciences ^a	496	565	645	964	902	1,068
Agricultural sciences	496	565	645	650	602	755
Veterinary biomedical and clinical sciences ^b	na	na	na	314	300	313
Biological and biomedical sciences ^a	8,203	8,250	8,229	8,112	8,187	8,207
Biochemistry	757	723	755	800	822	843
Biology	847	897	766	776	784	754
Biomedical sciences	533	588	622	406	419	571
Biophysics	46	25	36	66	77	79
Biostatistics and bioinformatics	357	393	400	380	338	357
Biotechnology	91	102	91	95	87	87
Botany and plant biology	228	343	314	258	230	218
Cell, cellular biology, and anatomical sciences	600	610	579	548	533	590
Ecology and population biology	242	248	183	230	250	221
Epidemiology	107	99	99	126	128	122
Genetics	510	405	501	545	591	551
Microbiological sciences and immunology	863	773	764	750	711	708
Molecular biology	133	186	233	225	239	210
Neurobiology and neuroscience	852	732	726	789	795	800
Nutrition science	113	165	136	143	137	98
Pathology and experimental pathology	444	398	422	401	382	308
Pharmacology and toxicology	436	372	377	394	433	387
Physiology	616	681	723	731	663	714
Zoology and animal biology	127	160	168	137	174	187
Biological and biomedical sciences nec	301	350	334	312	394	402
Computer and information sciences	476	515	510	458	457	507
Computer science	279	261	274	218	209	192
Computer and information sciences ^c	134	143	137	147	150	174
Computer and information sciences ^d	NA	NA	NA	104	111	134
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	43	39	40
Computer and information sciences nec ^c	63	111	99	93	98	141
Computer and information systems security ^d	NA	NA	NA	2	18	18
Information science and studies ^d	NA	NA	NA	21	19	30
Information technology ^d	NA	NA	NA	14	13	11
Computer and information sciences nec ^d	NA	NA	NA	56	48	82
Geosciences, atmospheric sciences, and ocean sciences	1,794	2,106	2,177	2,150	2,308	2,448
Atmospheric sciences and meteorology	402	426	434	461	471	515
Geological and earth sciences	603	991	1,104	1,046	1,121	1,127
Ocean and marine sciences	399	365	321	330	360	385
Geosciences, atmospheric sciences, and ocean sciences nec	390	324	318	313	356	421
Mathematics and statistics	240	266	305	201	235	251
Mathematics and applied mathematics ^c	195	207	226	144	176	198
Applied mathematics ^d	NA	NA	NA	50	66	73
Mathematics ^d	NA	NA	NA	94	110	125
Statistics	45	59	79	57	59	53
Multidisciplinary and interdisciplinary sciences ^c	806	832	820	679	816	931
Biological and physical sciences ^d	NA	NA	NA	56	38	43
Computational science ^d	NA	NA	NA	38	56	62

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Data science and data analytics ^d	NA	NA	NA	22	26	32
International and global studies ^d	NA	NA	NA	16	14	17
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	547	682	777
Natural resources and conservation	364	580	582	573	620	605
Environmental science and studies	147	217	215	167	204	201
Forestry, natural resources, and conservation	217	363	367	406	416	404
Physical sciences	2,871	3,056	3,316	2,890	2,895	2,894
Astronomy and astrophysics	494	472	602	569	558	573
Chemistry	931	974	983	906	848	876
Materials sciences	82	73	64	73	64	77
Physics	1,306	1,354	1,458	1,151	1,235	1,162
Physical sciences nec	58	183	209	191	190	206
Psychology ^a	494	507	576	749	803	786
Clinical psychology	40	9	11	16	23	9
Counseling and applied psychology ^c	47	38	120	90	75	81
Applied psychology ^d	NA	NA	NA	64	60	70
Counseling psychology ^d	NA	NA	NA	26	15	11
Human development ^b	na	na	na	137	110	148
Psychology, general	247	302	328	348	389	417
Research and experimental psychology	160	158	117	158	206	131
Social sciences ^a	1,524	1,601	1,659	1,436	1,505	1,726
Agricultural and natural resource economics	44	62	51	52	41	31
Anthropology	85	76	99	81	79	74
Criminal justice and safety studies	5	10	13	12	8	21
Economics (except agricultural and natural resource)	166	156	155	176	164	152
Geography and cartography	98	105	110	103	106	100
Human development ^b	160	130	164	na	na	na
International relations and national security studies	45	59	50	51	76	92
Linguistics	46	37	29	39	40	55
Political science and government	72	72	83	64	74	87
Public policy analysis	292	311	337	361	358	468
Sociology and population studies	143	154	164	148	145	168
Social sciences, nec ^c	368	429	404	349	414	478
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	134	122	96
Criminology ^d	NA	NA	NA	7	11	15
Urban studies and affairs ^d	NA	NA	NA	18	28	37
Social sciences, other ^d	na	na	na	190	253	330
History and philosophy of science and technology ^e	9	1	3	na	na	na
Social sciences, nec ^c	359	428	401	na	na	na
Engineering	3,274	3,570	3,909	3,921	3,992	4,355
Aerospace, aeronautical, and astronautical engineering	102	115	124	149	144	153
Biological, biomedical, and biosystems engineering	451	491	545	525	589	685
Bioengineering and biomedical engineering	415	440	492	na	na	na
Biological and biosystems engineering	36	51	53	na	na	na
Chemical, petroleum, and chemical-related engineering	340	337	410	330	307	313
Chemical engineering	281	257	328	274	257	265
Petroleum engineering	59	80	82	56	50	48
Civil, environmental, transportation and related engineering fields ^c	422	414	492	488	479	569

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–22

(Number)

Detailed field	2017	2018	2019	2020	2021	2022
Civil engineering ^d	422	414	492	451	446	497
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	37	33	72
Electrical, electronics, communications and computer engineering	557	588	637	706	755	734
Electrical, electronics, and communications engineering ^c	557	588	637	647	684	673
Computer engineering ^d	NA	NA	NA	59	71	61
Industrial, manufacturing, systems engineering and operations research	119	105	137	155	107	197
Industrial and manufacturing engineering ^c	119	105	137	53	53	74
Systems engineering and operations research ^d	NA	NA	NA	102	54	123
Mechanical engineering	458	489	531	469	529	527
Metallurgical, mining, materials and related engineering fields	233	267	303	299	259	280
Metallurgical and materials engineering ^e	181	215	242	na	na	na
Mining engineering ^e	52	52	61	na	na	na
Other engineering	592	764	730	800	823	897
Agricultural engineering	52	60	55	54	55	48
Engineering mechanics, physics, and science	200	220	186	177	193	199
Nuclear engineering	22	41	41	45	40	41
Engineering, other	na	na	na	524	535	609
Engineering, nec	285	400	372	na	na	na
Nanotechnology	33	43	76	na	na	na
Health	7,638	7,436	7,621	7,528	7,828	8,501
Clinical medicine ^a	6,448	6,159	6,273	6,500	6,751	7,351
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	167	134	128
Public health	611	646	687	616	656	742
Anesthesiology	147	139	155	122	108	129
Cardiology and cardiovascular disease	248	238	200	182	215	227
Endocrinology, diabetes, and metabolism	98	102	107	91	103	109
Gastroenterology	96	92	98	96	112	105
Hematology	111	114	160	164	180	199
Neurology and neurosurgery	493	425	496	469	527	580
Obstetrics and gynecology	117	94	104	93	106	107
Oncology and cancer research	620	637	630	644	549	648
Ophthalmology	377	297	261	287	259	303
Otorhinolaryngology	116	142	121	125	119	119
Pediatrics	657	624	597	643	632	742
Psychiatry	236	235	241	307	279	351
Pulmonary disease	144	136	107	119	100	116
Radiological sciences	395	436	391	401	381	444
Surgery	505	523	527	507	561	572
Clinical medicine nec	1,477	1,279	1,391	1,467	1,730	1,730
Other health	1,190	1,277	1,348	1,028	1,077	1,150
Communication disorders sciences	66	68	46	49	83	86
Dental sciences	78	92	110	103	123	140
Nursing science	101	96	97	103	117	166
Pharmaceutical sciences	368	344	392	377	372	379
Veterinary biomedical and clinical sciences ^b	260	330	290	na	na	na
Other health nec ^c	na	na	na	396	382	379
Kinesiology and exercise science ^d	NA	NA	NA	46	31	49
Other health nec ^d	317	347	413	350	351	330

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: 2022

(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	798,534	100.0	501,311	100.0	297,223	100.0	62,750	100.0	32,279	100.0
Male	412,109	51.6	251,531	50.2	160,578	54.0	36,038	57.4	18,533	57.4
Female	386,425	48.4	249,780	49.8	136,645	46.0	26,712	42.6	13,746	42.6
U.S. citizens and permanent residents ^a	500,299	62.7	322,005	64.2	178,294	60.0	27,289	43.5	na	na
Hispanic or Latino	69,621	8.7	48,303	9.6	21,318	7.2	2,192	3.5	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,082	0.3	1,331	0.3	751	0.3	92	0.1	na	na
Asian	61,426	7.7	40,873	8.2	20,553	6.9	5,286	8.4	na	na
Black or African American	44,016	5.5	31,398	6.3	12,618	4.2	1,141	1.8	na	na
Native Hawaiian or Other Pacific Islander	738	0.1	541	0.1	197	0.1	34	0.1	na	na
White	279,657	35.0	172,212	34.4	107,445	36.1	15,221	24.3	na	na
More than one race	19,331	2.4	12,002	2.4	7,329	2.5	638	1.0	na	na
Unknown ethnicity and race	23,428	2.9	15,345	3.1	8,083	2.7	2,685	4.3	na	na
Temporary visa holders	298,235	37.3	179,306	35.8	118,929	40.0	35,461	56.5	na	na
Female										
U.S. citizens and permanent residents ^a	227,547	28.5	140,982	28.1	86,565	29.1	14,247	22.7	na	na
Hispanic or Latino	29,310	3.7	19,397	3.9	9,913	3.3	1,071	1.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	748	0.1	457	0.1	291	0.1	40	0.1	na	na
Asian	30,734	3.8	20,427	4.1	10,307	3.5	2,965	4.7	na	na
Black or African American	16,111	2.0	11,295	2.3	4,816	1.6	467	0.7	na	na
Native Hawaiian or Other Pacific Islander	325	*	240	*	85	*	20	*	na	na
White	130,479	16.3	76,872	15.3	53,607	18.0	7,938	12.7	na	na
More than one race	8,505	1.1	5,175	1.0	3,330	1.1	306	0.5	na	na
Unknown ethnicity and race	11,335	1.4	7,119	1.4	4,216	1.4	1,440	2.3	na	na
Temporary visa holders	184,562	23.1	110,549	22.1	74,013	24.9	21,791	34.7	na	na
Male										
U.S. citizens and permanent residents ^a	272,752	34.2	181,023	36.1	91,729	30.9	13,042	20.8	na	na
Hispanic or Latino	40,311	5.0	28,906	5.8	11,405	3.8	1,121	1.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,334	0.2	874	0.2	460	0.2	52	0.1	na	na
Asian	30,692	3.8	20,446	4.1	10,246	3.4	2,321	3.7	na	na
Black or African American	27,905	3.5	20,103	4.0	7,802	2.6	674	1.1	na	na
Native Hawaiian or Other Pacific Islander	413	0.1	301	0.1	112	*	14	*	na	na
White	149,178	18.7	95,340	19.0	53,838	18.1	7,283	11.6	na	na
More than one race	10,826	1.4	6,827	1.4	3,999	1.3	332	0.5	na	na
Unknown ethnicity and race	12,093	1.5	8,226	1.6	3,867	1.3	1,245	2.0	na	na
Temporary visa holders	113,673	14.2	68,757	13.7	44,916	15.1	13,670	21.8	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, 2022.

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2022

(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	798,534	48.4	501,311	49.8	297,223	46.0	62,750	42.6	32,279	42.6
U.S. citizens and permanent residents ^a	500,299	54.5	322,005	56.2	178,294	51.4	27,289	47.8	na	na
Hispanic or Latino	69,621	57.9	48,303	59.8	21,318	53.5	2,192	51.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,082	64.1	1,331	65.7	751	61.3	92	56.5	na	na
Asian	61,426	50.0	40,873	50.0	20,553	49.9	5,286	43.9	na	na
Black or African American	44,016	63.4	31,398	64.0	12,618	61.8	1,141	59.1	na	na
Native Hawaiian or Other Pacific Islander	738	56.0	541	55.6	197	56.9	34	41.2	na	na
White	279,657	53.3	172,212	55.4	107,445	50.1	15,221	47.8	na	na
More than one race	19,331	56.0	12,002	56.9	7,329	54.6	638	52.0	na	na
Unknown ethnicity and race	23,428	51.6	15,345	53.6	8,083	47.8	2,685	46.4	na	na
Temporary visa holders	298,235	38.1	179,306	38.3	118,929	37.8	35,461	38.5	na	na
Science	538,166	50.6	331,983	51.0	206,183	49.8	36,673	42.1	19,423	42.0
U.S. citizens and permanent residents ^a	340,964	55.6	208,232	56.8	132,732	53.8	16,542	46.3	na	na
Hispanic or Latino	48,508	60.0	31,959	62.1	16,549	56.0	1,357	51.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,335	62.2	752	61.7	583	63.0	62	56.5	na	na
Asian	40,603	50.7	26,267	49.5	14,336	53.0	2,822	41.4	na	na
Black or African American	29,714	63.2	20,810	63.4	8,904	62.9	572	55.6	na	na
Native Hawaiian or Other Pacific Islander	537	55.5	382	55.0	155	56.8	23	47.8	na	na
White	190,960	54.5	110,258	56.0	80,702	52.4	9,664	46.6	na	na
More than one race	13,393	58.2	7,876	58.6	5,517	57.7	423	50.4	na	na
Unknown ethnicity and race	15,914	51.4	9,928	52.3	5,986	50.0	1,619	44.6	na	na
Temporary visa holders	197,202	41.9	123,751	41.4	73,451	42.8	20,131	38.6	na	na
Agricultural and veterinary sciences	11,596	59.3	6,949	62.0	4,647	55.3	1,705	45.0	1,068	49.0
U.S. citizens and permanent residents ^a	7,955	62.8	5,535	64.0	2,420	59.8	667	54.0	na	na
Hispanic or Latino	886	62.8	644	64.1	242	59.1	56	57.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	29	65.5	19	84.2	10	30.0	1	100.0	na	na
Asian	396	62.6	267	67.8	129	51.9	101	43.6	na	na
Black or African American	457	65.4	364	64.6	93	68.8	33	39.4	na	na
Native Hawaiian or Other Pacific Islander	14	50.0	13	46.2	1	100.0	0	-	na	na
White	5,680	62.3	3,876	63.6	1,804	59.7	397	57.9	na	na
More than one race	237	66.7	173	65.9	64	68.8	15	53.3	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2022

(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	256	64.1	179	64.8	77	62.3	64	50.0	na	na
Temporary visa holders	3,641	51.8	1,414	54.0	2,227	50.4	1,038	39.2	na	na
Biological and biomedical sciences	102,700	61.9	43,062	66.9	59,638	58.3	19,585	46.5	8,207	46.8
U.S. citizens and permanent residents ^a	79,204	62.3	35,447	66.8	43,757	58.7	8,266	49.6	na	na
Hispanic or Latino	10,691	61.4	4,953	66.9	5,738	56.7	756	54.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	239	60.3	93	64.5	146	57.5	36	58.3	na	na
Asian	10,386	60.7	4,963	64.7	5,423	57.1	1,567	43.7	na	na
Black or African American	6,413	70.6	3,807	73.9	2,606	65.7	271	57.9	na	na
Native Hawaiian or Other Pacific Islander	115	63.5	61	65.6	54	61.1	9	44.4	na	na
White	44,818	61.7	18,595	65.9	26,223	58.7	4,729	50.3	na	na
More than one race	3,271	64.1	1,425	67.2	1,846	61.7	178	48.3	na	na
Unknown ethnicity and race	3,271	61.8	1,550	66.0	1,721	58.0	720	50.4	na	na
Temporary visa holders	23,496	60.3	7,615	67.1	15,881	57.0	11,319	44.2	na	na
Computer and information sciences	150,555	32.5	129,972	33.2	20,583	27.9	859	27.2	507	28.0
U.S. citizens and permanent residents ^a	55,394	29.2	47,610	29.3	7,784	28.7	340	32.1	na	na
Hispanic or Latino	5,615	28.1	5,083	28.0	532	28.9	18	27.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	121	33.9	96	32.3	25	40.0	0	-	na	na
Asian	13,558	33.4	11,960	33.4	1,598	32.8	74	32.4	na	na
Black or African American	5,590	38.2	4,989	38.0	601	39.9	12	33.3	na	na
Native Hawaiian or Other Pacific Islander	93	26.9	80	22.5	13	53.8	0	-	na	na
White	25,030	24.9	20,862	25.0	4,168	24.9	188	34.0	na	na
More than one race	2,028	31.2	1,695	30.8	333	33.0	6	16.7	na	na
Unknown ethnicity and race	3,359	29.9	2,845	29.8	514	30.0	42	26.2	na	na
Temporary visa holders	95,161	34.4	82,362	35.4	12,799	27.4	519	24.1	na	na
Geosciences, atmospheric sciences, and ocean sciences	11,970	51.9	5,186	53.0	6,784	50.9	1,787	42.2	2,448	33.5
U.S. citizens and permanent residents ^a	9,294	55.2	4,585	54.8	4,709	55.6	916	47.5	na	na
Hispanic or Latino	1,109	57.1	578	58.0	531	56.1	77	51.9	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	34	64.7	18	66.7	16	62.5	6	50.0	na	na
Asian	417	62.4	154	67.5	263	59.3	86	43.0	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2022

(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	313	55.6	161	59.6	152	51.3	20	70.0	na	na
Native Hawaiian or Other Pacific Islander	6	83.3	3	100.0	3	66.7	2	50.0	na	na
White	6,686	54.2	3,364	53.3	3,322	55.1	592	47.3	na	na
More than one race	426	58.7	193	54.9	233	61.8	38	47.4	na	na
Unknown ethnicity and race	303	53.1	114	54.4	189	52.4	95	44.2	na	na
Temporary visa holders	2,676	40.3	601	39.8	2,075	40.5	871	36.7	na	na
Mathematics and statistics	34,387	36.3	20,798	40.4	13,589	29.9	1,110	24.5	251	29.5
U.S. citizens and permanent residents ^a	16,331	33.6	9,599	37.3	6,732	28.3	554	26.7	na	na
Hispanic or Latino	1,926	34.2	1,272	37.8	654	27.1	32	15.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	37	35.1	23	34.8	14	35.7	3	33.3	na	na
Asian	2,686	38.5	1,719	42.0	967	32.2	103	30.1	na	na
Black or African American	737	41.5	514	44.2	223	35.4	21	23.8	na	na
Native Hawaiian or Other Pacific Islander	12	50.0	8	50.0	4	50.0	1	0.0	na	na
White	9,472	31.8	5,233	35.6	4,239	27.0	323	25.4	na	na
More than one race	563	32.3	312	33.3	251	31.1	18	44.4	na	na
Unknown ethnicity and race	898	30.8	518	32.8	380	28.2	53	30.2	na	na
Temporary visa holders	18,056	38.7	11,199	43.1	6,857	31.5	556	22.3	na	na
Multidisciplinary and interdisciplinary sciences	20,945	50.7	16,931	49.8	4,014	54.4	840	45.7	931	43.0
U.S. citizens and permanent residents ^a	13,232	53.0	10,514	52.0	2,718	56.7	423	54.1	na	na
Hispanic or Latino	1,698	55.8	1,398	55.2	300	58.3	27	59.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	32	40.6	25	36.0	7	57.1	2	50.0	na	na
Asian	1,927	53.7	1,642	52.9	285	58.6	69	55.1	na	na
Black or African American	1,218	59.4	1,009	58.4	209	64.1	19	52.6	na	na
Native Hawaiian or Other Pacific Islander	21	47.6	14	35.7	7	71.4	4	25.0	na	na
White	7,096	51.2	5,431	50.0	1,665	55.3	250	53.6	na	na
More than one race	501	58.1	384	57.0	117	61.5	13	76.9	na	na
Unknown ethnicity and race	739	48.8	611	48.6	128	50.0	39	48.7	na	na
Temporary visa holders	7,713	46.7	6,417	46.1	1,296	49.5	417	37.2	na	na
Natural resources and conservation	13,762	60.2	9,807	61.4	3,955	57.3	936	46.0	605	39.0
U.S. citizens and permanent residents ^a	11,675	61.7	8,779	62.2	2,896	59.9	585	50.1	na	na
Hispanic or Latino	1,290	65.6	1,008	65.4	282	66.3	37	43.2	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2022

(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				
Not Hispanic or Latino										
American Indian or Alaska Native	121	63.6	74	62.2	47	66.0	2	0.0	na	na
Asian	484	65.7	338	68.0	146	60.3	42	33.3	na	na
Black or African American	478	61.3	306	61.1	172	61.6	11	54.5	na	na
Native Hawaiian or Other Pacific Islander	31	71.0	27	77.8	4	25.0	2	50.0	na	na
White	8,430	60.6	6,435	61.3	1,995	58.6	392	52.6	na	na
More than one race	454	69.8	349	68.8	105	73.3	23	56.5	na	na
Unknown ethnicity and race	387	55.6	242	57.4	145	52.4	76	48.7	na	na
Temporary visa holders	2,087	52.0	1,028	54.1	1,059	50.0	351	39.3	na	na
Physical sciences	44,092	36.8	6,256	39.6	37,836	36.4	6,877	25.8	2,894	23.2
U.S. citizens and permanent residents ^a	26,689	37.8	4,633	40.5	22,056	37.3	2,716	27.3	na	na
Hispanic or Latino	3,288	37.8	737	39.2	2,551	37.4	145	29.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	66	31.8	29	41.4	37	24.3	3	66.7	na	na
Asian	2,789	44.0	446	46.0	2,343	43.6	552	27.2	na	na
Black or African American	1,143	49.9	314	52.9	829	48.7	55	30.9	na	na
Native Hawaiian or Other Pacific Islander	18	33.3	5	20.0	13	38.5	1	0.0	na	na
White	17,289	36.2	2,719	39.1	14,570	35.7	1,564	27.2	na	na
More than one race	1,062	40.5	194	40.7	868	40.4	72	30.6	na	na
Unknown ethnicity and race	1,034	33.0	189	31.7	845	33.3	324	25.3	na	na
Temporary visa holders	17,403	35.3	1,623	37.2	15,780	35.1	4,161	24.7	na	na
Psychology	69,442	80.3	48,321	82.3	21,121	75.8	1,308	65.6	786	66.8
U.S. citizens and permanent residents ^a	64,364	80.6	45,829	82.3	18,535	76.3	959	68.1	na	na
Hispanic or Latino	13,177	81.4	10,130	82.9	3,047	76.1	104	75.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	264	80.7	164	81.1	100	80.0	2	100.0	na	na
Asian	3,967	80.7	2,496	82.0	1,471	78.5	105	63.8	na	na
Black or African American	6,991	81.8	5,173	82.9	1,818	78.8	47	85.1	na	na
Native Hawaiian or Other Pacific Islander	115	76.5	99	77.8	16	68.8	1	100.0	na	na
White	34,375	80.4	23,784	82.5	10,591	75.6	591	65.8	na	na
More than one race	2,558	78.8	1,725	80.6	833	75.0	27	81.5	na	na
Unknown ethnicity and race	2,917	78.6	2,258	79.1	659	76.9	82	65.9	na	na
Temporary visa holders	5,078	76.6	2,492	80.8	2,586	72.6	349	58.7	na	na
Social sciences	78,717	55.1	44,701	56.8	34,016	52.8	1,666	51.6	1,726	54.2

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2022

(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				
U.S. citizens and permanent residents ^a	56,826	56.8	35,701	57.2	21,125	55.9	1,116	52.8	na	na
Hispanic or Latino	8,828	60.6	6,156	61.0	2,672	59.8	105	49.5	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	392	68.4	211	64.9	181	72.4	7	57.1	na	na
Asian	3,993	61.4	2,282	62.7	1,711	59.6	123	64.2	na	na
Black or African American	6,374	63.5	4,173	64.5	2,201	61.6	83	62.7	na	na
Native Hawaiian or Other Pacific Islander	112	50.0	72	48.6	40	52.5	3	100.0	na	na
White	32,084	54.0	19,959	54.2	12,125	53.6	638	48.3	na	na
More than one race	2,293	62.1	1,426	61.9	867	62.6	33	75.8	na	na
Unknown ethnicity and race	2,750	49.0	1,422	48.5	1,328	49.5	124	53.2	na	na
Temporary visa holders	21,891	50.7	9,000	55.0	12,891	47.6	550	49.1	na	na

- = not calculable. 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, 2022.

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2022

(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	798,534	48.4	501,311	49.8	297,223	46.0	62,750	42.6	32,279	42.6
U.S. citizens and permanent residents ^a	500,299	54.5	322,005	56.2	178,294	51.4	27,289	47.8	na	na
Hispanic or Latino	69,621	57.9	48,303	59.8	21,318	53.5	2,192	51.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,082	64.1	1,331	65.7	751	61.3	92	56.5	na	na
Asian	61,426	50.0	40,873	50.0	20,553	49.9	5,286	43.9	na	na
Black or African American	44,016	63.4	31,398	64.0	12,618	61.8	1,141	59.1	na	na
Native Hawaiian or Other Pacific Islander	738	56.0	541	55.6	197	56.9	34	41.2	na	na
White	279,657	53.3	172,212	55.4	107,445	50.1	15,221	47.8	na	na
More than one race	19,331	56.0	12,002	56.9	7,329	54.6	638	52.0	na	na
Unknown ethnicity and race	23,428	51.6	15,345	53.6	8,083	47.8	2,685	46.4	na	na
Temporary visa holders	298,235	38.1	179,306	38.3	118,929	37.8	35,461	38.5	na	na
Engineering	176,000	27.9	103,020	27.0	72,980	29.1	8,335	27.5	4,355	23.7
U.S. citizens and permanent residents ^a	85,274	29.0	53,603	27.0	31,671	32.3	2,839	32.5	na	na
Hispanic or Latino	10,629	28.9	7,379	27.0	3,250	33.1	183	36.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	339	52.2	253	58.1	86	34.9	10	30.0	na	na
Asian	13,268	33.0	8,383	31.7	4,885	35.4	774	27.1	na	na
Black or African American	4,752	33.0	2,983	29.6	1,769	38.7	85	47.1	na	na
Native Hawaiian or Other Pacific Islander	80	33.8	54	27.8	26	46.2	2	50.0	na	na
White	48,988	27.1	30,174	25.0	18,814	30.6	1,445	33.4	na	na
More than one race	3,430	32.4	2,060	29.4	1,370	36.9	67	44.8	na	na
Unknown ethnicity and race	3,788	28.2	2,317	26.8	1,471	30.5	273	32.2	na	na
Temporary visa holders	90,726	26.9	49,417	27.1	41,309	26.6	5,496	24.9	na	na
Aerospace, aeronautical, and astronautical engineering	8,095	19.3	5,263	19.2	2,832	19.4	244	16.4	153	19.6
U.S. citizens and permanent residents ^a	6,119	19.0	4,353	18.4	1,766	20.2	77	16.9	na	na
Hispanic or Latino	703	17.1	536	18.1	167	13.8	3	0.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	12	16.7	10	10.0	2	50.0	0	-	na	na
Asian	868	20.0	632	20.3	236	19.5	22	9.1	na	na
Black or African American	176	23.3	114	22.8	62	24.2	1	0.0	na	na
Native Hawaiian or Other Pacific Islander	10	30.0	8	25.0	2	50.0	0	-	na	na
White	3,894	18.8	2,741	17.9	1,153	20.8	44	20.5	na	na
More than one race	274	22.3	179	20.7	95	25.3	1	0.0	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2022

(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	182	14.8	133	15.0	49	14.3	6	33.3	na	na
Temporary visa holders	1,976	20.4	910	23.1	1,066	18.1	167	16.2	na	na
Biological, biomedical, and biosystems engineering	14,442	48.0	5,177	50.9	9,265	46.4	1,540	38.5	685	38.4
U.S. citizens and permanent residents ^a	9,419	48.6	3,462	49.8	5,957	47.9	645	40.2	na	na
Hispanic or Latino	1,119	48.2	439	48.7	680	47.8	49	36.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	20	55.0	7	57.1	13	53.8	1	100.0	na	na
Asian	1,863	49.5	751	52.9	1,112	47.3	171	35.7	na	na
Black or African American	562	52.7	217	48.8	345	55.1	24	37.5	na	na
Native Hawaiian or Other Pacific Islander	11	36.4	5	40.0	6	33.3	1	100.0	na	na
White	5,010	47.7	1,766	48.2	3,244	47.4	324	42.3	na	na
More than one race	411	52.6	153	55.6	258	50.8	14	85.7	na	na
Unknown ethnicity and race	423	47.3	124	52.4	299	45.2	61	32.8	na	na
Temporary visa holders	5,023	47.0	1,715	53.1	3,308	43.8	895	37.3	na	na
Chemical, petroleum, and chemical-related engineering	10,601	34.1	3,011	33.4	7,590	34.4	1,239	28.8	313	27.2
U.S. citizens and permanent residents ^a	5,129	35.1	1,579	35.6	3,550	34.9	395	30.1	na	na
Hispanic or Latino	558	36.9	225	34.7	333	38.4	26	42.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	20	35.0	7	14.3	13	46.2	1	0.0	na	na
Asian	899	39.8	277	43.3	622	38.3	101	22.8	na	na
Black or African American	238	37.4	94	34.0	144	39.6	7	85.7	na	na
Native Hawaiian or Other Pacific Islander	6	66.7	3	100.0	3	33.3	0	-	na	na
White	3,049	33.8	855	33.9	2,194	33.8	218	31.7	na	na
More than one race	173	28.3	47	31.9	126	27.0	13	30.8	na	na
Unknown ethnicity and race	186	30.6	71	32.4	115	29.6	29	20.7	na	na
Temporary visa holders	5,472	33.1	1,432	30.9	4,040	33.9	844	28.2	na	na
Civil, environmental, transportation and related engineering fields	20,375	34.4	12,621	34.3	7,754	34.7	1,018	31.0	569	23.9
U.S. citizens and permanent residents ^a	9,687	39.6	7,209	37.9	2,478	44.5	342	41.8	na	na
Hispanic or Latino	1,471	41.3	1,169	39.4	302	48.7	24	62.5	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	54	37.0	38	44.7	16	18.8	1	100.0	na	na
Asian	1,088	42.1	825	41.6	263	43.7	81	28.4	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2022

(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	562	35.2	398	32.9	164	40.9	8	37.5	na	na
Native Hawaiian or Other Pacific Islander	10	50.0	4	50.0	6	50.0	1	0.0	na	na
White	5,820	38.7	4,302	37.1	1,518	43.3	169	42.6	na	na
More than one race	345	46.4	244	41.8	101	57.4	8	62.5	na	na
Unknown ethnicity and race	337	39.2	229	34.9	108	48.1	50	48.0	na	na
Temporary visa holders	10,688	29.7	5,412	29.4	5,276	30.1	676	25.6	na	na
Electrical, electronics, communications and computer engineering	49,901	23.5	32,316	25.0	17,585	20.8	1,217	20.4	734	14.9
U.S. citizens and permanent residents ^a	17,290	18.8	11,854	18.2	5,436	20.0	377	24.7	na	na
Hispanic or Latino	2,141	15.8	1,647	15.1	494	18.2	22	18.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	130	76.9	122	82.0	8	0.0	1	0.0	na	na
Asian	3,595	25.6	2,564	25.9	1,031	25.0	114	22.8	na	na
Black or African American	1,018	21.4	703	19.8	315	25.1	15	53.3	na	na
Native Hawaiian or Other Pacific Islander	12	16.7	10	20.0	2	0.0	0	-	na	na
White	8,815	15.1	5,765	14.1	3,050	16.9	179	22.3	na	na
More than one race	706	22.0	476	18.3	230	29.6	12	33.3	na	na
Unknown ethnicity and race	873	21.2	567	19.6	306	24.2	34	32.4	na	na
Temporary visa holders	32,611	26.1	20,462	28.9	12,149	21.2	840	18.5	na	na
Industrial, manufacturing, systems engineering and operations research	16,435	28.3	12,579	27.0	3,856	32.8	143	23.1	197	23.9
U.S. citizens and permanent residents ^a	7,931	29.9	6,461	29.6	1,470	31.1	38	36.8	na	na
Hispanic or Latino	1,161	33.2	1,046	33.1	115	33.9	1	100.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	19	42.1	15	46.7	4	25.0	0	-	na	na
Asian	1,012	36.0	804	36.7	208	33.2	5	40.0	na	na
Black or African American	560	34.5	415	33.0	145	38.6	1	0.0	na	na
Native Hawaiian or Other Pacific Islander	10	30.0	9	33.3	1	0.0	0	-	na	na
White	4,420	26.8	3,560	26.3	860	28.6	21	33.3	na	na
More than one race	275	37.5	220	35.0	55	47.3	1	0.0	na	na
Unknown ethnicity and race	474	27.0	392	27.6	82	24.4	9	44.4	na	na
Temporary visa holders	8,504	26.9	6,118	24.3	2,386	33.8	105	18.1	na	na
Mechanical engineering	27,552	18.5	16,029	16.9	11,523	20.8	1,189	19.4	527	16.7

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2022

(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
U.S. citizens and permanent residents ^a	14,231	21.2	9,435	19.5	4,796	24.7	365	24.4	na	na
Hispanic or Latino	1,891	19.9	1,332	18.2	559	24.0	25	16.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	32	25.0	21	28.6	11	18.2	3	0.0	na	na
Asian	2,044	24.7	1,399	22.7	645	28.8	98	25.5	na	na
Black or African American	587	24.7	362	19.3	225	33.3	8	25.0	na	na
Native Hawaiian or Other Pacific Islander	4	25.0	2	0.0	2	50.0	0	-	na	na
White	8,462	20.0	5,553	18.5	2,909	22.9	187	25.1	na	na
More than one race	609	25.1	399	22.3	210	30.5	6	33.3	na	na
Unknown ethnicity and race	602	23.3	367	23.2	235	23.4	38	23.7	na	na
Temporary visa holders	13,321	15.6	6,594	13.1	6,727	18.1	824	17.2	na	na
Metallurgical, mining, materials and related engineering fields	7,118	31.7	2,545	32.3	4,573	31.4	542	22.1	280	20.4
U.S. citizens and permanent residents ^a	3,934	33.9	1,580	34.2	2,354	33.7	152	23.7	na	na
Hispanic or Latino	463	31.1	193	31.6	270	30.7	8	25.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	15	46.7	9	44.4	6	50.0	1	100.0	na	na
Asian	522	39.3	196	35.7	326	41.4	44	15.9	na	na
Black or African American	163	39.3	65	40.0	98	38.8	2	50.0	na	na
Native Hawaiian or Other Pacific Islander	1	100.0	0	-	1	100.0	0	-	na	na
White	2,449	32.2	982	32.9	1,467	31.7	83	25.3	na	na
More than one race	202	38.6	85	37.6	117	39.3	4	25.0	na	na
Unknown ethnicity and race	119	38.7	50	48.0	69	31.9	10	30.0	na	na
Temporary visa holders	3,184	29.0	965	29.2	2,219	28.9	390	21.5	na	na
Other engineering	21,481	28.8	13,479	28.8	8,002	28.8	1,203	29.1	897	24.3
U.S. citizens and permanent residents ^a	11,534	29.0	7,670	28.5	3,864	30.2	448	34.8	na	na
Hispanic or Latino	1,122	31.2	792	30.6	330	32.7	25	48.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	37	37.8	24	29.2	13	53.8	2	0.0	na	na
Asian	1,377	34.6	935	34.4	442	35.1	138	29.7	na	na
Black or African American	886	36.3	615	35.0	271	39.5	19	57.9	na	na
Native Hawaiian or Other Pacific Islander	16	25.0	13	7.7	3	100.0	0	-	na	na
White	7,069	26.8	4,650	26.0	2,419	28.2	220	36.8	na	na
More than one race	435	31.0	257	31.5	178	30.3	8	25.0	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2022

(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	592	25.8	384	27.1	208	23.6	36	25.0	na	na
Temporary visa holders	9,947	28.5	5,809	29.3	4,138	27.5	755	25.7	na	na

- = not calculable. 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, 2022.

TABLE 2-2c

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health, by sex: 2022

(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	798,534	48.4	501,311	49.8	297,223	46.0	62,750	42.6	32,279	42.6
U.S. citizens and permanent residents ^a	500,299	54.5	322,005	56.2	178,294	51.4	27,289	47.8	na	na
Hispanic or Latino	69,621	57.9	48,303	59.8	21,318	53.5	2,192	51.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,082	64.1	1,331	65.7	751	61.3	92	56.5	na	na
Asian	61,426	50.0	40,873	50.0	20,553	49.9	5,286	43.9	na	na
Black or African American	44,016	63.4	31,398	64.0	12,618	61.8	1,141	59.1	na	na
Native Hawaiian or Other Pacific Islander	738	56.0	541	55.6	197	56.9	34	41.2	na	na
White	279,657	53.3	172,212	55.4	107,445	50.1	15,221	47.8	na	na
More than one race	19,331	56.0	12,002	56.9	7,329	54.6	638	52.0	na	na
Unknown ethnicity and race	23,428	51.6	15,345	53.6	8,083	47.8	2,685	46.4	na	na
Temporary visa holders	298,235	38.1	179,306	38.3	118,929	37.8	35,461	38.5	na	na
Health	84,368	77.2	66,308	79.1	18,060	70.0	17,742	50.6	8,501	53.5
U.S. citizens and permanent residents ^a	74,061	78.9	60,170	80.3	13,891	72.9	7,908	56.4	na	na
Hispanic or Latino	10,484	77.6	8,965	78.9	1,519	70.2	652	55.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	408	79.9	326	80.7	82	76.8	20	70.0	na	na
Asian	7,555	75.5	6,223	77.0	1,332	68.5	1,690	55.7	na	na
Black or African American	9,550	79.0	7,605	79.3	1,945	77.8	484	65.3	na	na
Native Hawaiian or Other Pacific Islander	121	72.7	105	72.4	16	75.0	9	22.2	na	na
White	39,709	80.3	31,780	82.0	7,929	73.4	4,112	56.0	na	na
More than one race	2,508	76.5	2,066	77.8	442	70.4	148	60.1	na	na
Unknown ethnicity and race	3,726	76.3	3,100	77.9	626	68.2	793	54.9	na	na
Temporary visa holders	10,307	64.7	6,138	67.5	4,169	60.4	9,834	46.0	na	na
Clinical medicine ^b	39,217	76.5	33,251	77.4	5,966	71.6	15,630	50.4	7,351	52.9
U.S. citizens and permanent residents ^a	34,718	77.6	29,940	78.2	4,778	73.5	6,792	55.4	na	na
Hispanic or Latino	4,991	76.4	4,339	77.0	652	71.8	591	54.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	270	78.1	209	78.5	61	77.0	16	62.5	na	na
Asian	4,461	75.5	3,923	76.7	538	67.5	1,506	55.1	na	na
Black or African American	5,843	80.8	5,050	81.5	793	76.9	396	65.4	na	na
Native Hawaiian or Other Pacific Islander	75	76.0	66	75.8	9	77.8	8	25.0	na	na

TABLE 2-2c

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health, by sex: 2022

(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	15,660	77.7	13,323	78.3	2,337	74.3	3,606	55.2	na	na
More than one race	1,367	77.7	1,185	78.0	182	75.8	127	59.1	na	na
Unknown ethnicity and race	2,051	74.6	1,845	75.2	206	69.4	542	50.7	na	na
Temporary visa holders	4,499	67.9	3,311	69.5	1,188	63.6	8,838	46.5	na	na
Other health	45,151	77.8	33,057	80.9	12,094	69.3	2,112	52.6	1,150	57.9
U.S. citizens and permanent residents ^a	39,343	80.1	30,230	82.4	9,113	72.6	1,116	62.1	na	na
Hispanic or Latino	5,493	78.8	4,626	80.7	867	69.0	61	57.4	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	138	83.3	117	84.6	21	76.2	4	100.0	na	na
Asian	3,094	75.5	2,300	77.6	794	69.3	184	60.9	na	na
Black or African American	3,707	76.1	2,555	75.0	1,152	78.5	88	64.8	na	na
Native Hawaiian or Other Pacific Islander	46	67.4	39	66.7	7	71.4	1	0.0	na	na
White	24,049	82.0	18,457	84.7	5,592	73.1	506	61.5	na	na
More than one race	1,141	75.0	881	77.5	260	66.5	21	66.7	na	na
Unknown ethnicity and race	1,675	78.3	1,255	81.9	420	67.6	251	63.7	na	na
Temporary visa holders	5,808	62.1	2,827	65.3	2,981	59.1	996	41.9	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 NCSSES 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, 2022.

TABLE 2-3

Demographic characteristics of master's and doctoral students in science, engineering, and health, by enrollment intensity: 2022

(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	579,301	100.0	319,618	100.0	259,683	100.0	194,733	100.0	147,317	100.0	47,416	100.0	219,233	100.0	181,693	100.0	37,540	100.0
Male	298,639	51.6	157,519	49.3	141,120	54.3	98,829	50.8	74,130	50.3	24,699	52.1	113,470	51.8	94,012	51.7	19,458	51.8
Female	280,662	48.4	162,099	50.7	118,563	45.7	95,904	49.2	73,187	49.7	22,717	47.9	105,763	48.2	87,681	48.3	18,082	48.2
U.S. citizens and permanent residents ^a	318,809	55.0	168,660	52.8	150,149	57.8	99,162	50.9	72,404	49.1	26,758	56.4	181,490	82.8	153,345	84.4	28,145	75.0
Hispanic or Latino	44,443	7.7	26,103	8.2	18,340	7.1	14,460	7.4	10,881	7.4	3,579	7.5	25,178	11.5	22,200	12.2	2,978	7.9
Not Hispanic or Latino																		
American Indian or Alaska Native	1,371	0.2	794	0.2	577	0.2	461	0.2	353	0.2	108	0.2	711	0.3	537	0.3	174	0.5
Asian	39,545	6.8	21,351	6.7	18,194	7.0	13,456	6.9	10,072	6.8	3,384	7.1	21,881	10.0	19,522	10.7	2,359	6.3
Black or African American	25,521	4.4	15,880	5.0	9,641	3.7	8,567	4.4	6,717	4.6	1,850	3.9	18,495	8.4	15,518	8.5	2,977	7.9
Native Hawaiian or Other Pacific Islander	431	0.1	272	0.1	159	0.1	139	0.1	113	0.1	26	0.1	307	0.1	269	0.1	38	0.1
White	180,896	31.2	90,532	28.3	90,364	34.8	53,723	27.6	38,316	26.0	15,407	32.5	98,761	45.0	81,680	45.0	17,081	45.5
More than one race	13,378	2.3	6,923	2.2	6,455	2.5	4,417	2.3	3,141	2.1	1,276	2.7	5,953	2.7	5,079	2.8	874	2.3
Unknown ethnicity and race	13,224	2.3	6,805	2.1	6,419	2.5	3,939	2.0	2,811	1.9	1,128	2.4	10,204	4.7	8,540	4.7	1,664	4.4
Temporary visa holders	260,492	45.0	150,958	47.2	109,534	42.2	95,571	49.1	74,913	50.9	20,658	43.6	37,743	17.2	28,348	15.6	9,395	25.0
Male																		
U.S. citizens and permanent residents ^a	137,593	23.8	64,543	20.2	73,050	28.1	40,512	20.8	28,218	19.2	12,294	25.9	89,954	41.0	76,439	42.1	13,515	36.0
Hispanic or Latino	17,696	3.1	9,097	2.8	8,599	3.3	5,515	2.8	3,929	2.7	1,586	3.3	11,614	5.3	10,300	5.7	1,314	3.5
Not Hispanic or Latino																		
American Indian or Alaska Native	465	0.1	239	0.1	226	0.1	133	0.1	95	0.1	38	0.1	283	0.1	218	0.1	65	0.2
Asian	18,733	3.2	9,581	3.0	9,152	3.5	6,178	3.2	4,550	3.1	1,628	3.4	12,001	5.5	10,846	6.0	1,155	3.1
Black or African American	8,645	1.5	4,996	1.6	3,649	1.4	2,825	1.5	2,160	1.5	665	1.4	7,466	3.4	6,299	3.5	1,167	3.1
Native Hawaiian or Other Pacific Islander	173	*	110	*	63	*	53	*	41	*	12	*	152	0.1	130	0.1	22	0.1
White	80,145	13.8	35,060	11.0	45,085	17.4	22,266	11.4	15,009	10.2	7,257	15.3	50,334	23.0	41,812	23.0	8,522	22.7
More than one race	5,653	1.0	2,724	0.9	2,929	1.1	1,808	0.9	1,275	0.9	533	1.1	2,852	1.3	2,451	1.3	401	1.1
Unknown ethnicity and race	6,083	1.1	2,736	0.9	3,347	1.3	1,734	0.9	1,159	0.8	575	1.2	5,252	2.4	4,383	2.4	869	2.3
Temporary visa holders	161,046	27.8	92,976	29.1	68,070	26.2	58,317	29.9	45,912	31.2	12,405	26.2	23,516	10.7	17,573	9.7	5,943	15.8
Female																		
U.S. citizens and permanent residents ^a	181,216	31.3	104,117	32.6	77,099	29.7	58,650	30.1	44,186	30.0	14,464	30.5	91,536	41.8	76,906	42.3	14,630	39.0
Hispanic or Latino	26,747	4.6	17,006	5.3	9,741	3.8	8,945	4.6	6,952	4.7	1,993	4.2	13,564	6.2	11,900	6.5	1,664	4.4
Not Hispanic or Latino																		
American Indian or Alaska Native	906	0.2	555	0.2	351	0.1	328	0.2	258	0.2	70	0.1	428	0.2	319	0.2	109	0.3
Asian	20,812	3.6	11,770	3.7	9,042	3.5	7,278	3.7	5,522	3.7	1,756	3.7	9,880	4.5	8,676	4.8	1,204	3.2
Black or African American	16,876	2.9	10,884	3.4	5,992	2.3	5,742	2.9	4,557	3.1	1,185	2.5	11,029	5.0	9,219	5.1	1,810	4.8

TABLE 2-3

Demographic characteristics of master's and doctoral students in science, engineering, and health, by enrollment intensity: 2022

(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	258	*	162	0.1	96	*	86	*	72	*	14	*	155	0.1	139	0.1	16	*
White	100,751	17.4	55,472	17.4	45,279	17.4	31,457	16.2	23,307	15.8	8,150	17.2	48,427	22.1	39,868	21.9	8,559	22.8
More than one race	7,725	1.3	4,199	1.3	3,526	1.4	2,609	1.3	1,866	1.3	743	1.6	3,101	1.4	2,628	1.4	473	1.3
Unknown ethnicity and race	7,141	1.2	4,069	1.3	3,072	1.2	2,205	1.1	1,652	1.1	553	1.2	4,952	2.3	4,157	2.3	795	2.1
Temporary visa holders	99,446	17.2	57,982	18.1	41,464	16.0	37,254	19.1	29,001	19.7	8,253	17.4	14,227	6.5	10,775	5.9	3,452	9.2

* = 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, 2022.

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2022

(Number and percent)

Broad field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		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			Percent		
All graduate students	798,534	100.0	69,621	100.0	2,082	100.0	61,426	100.0	44,016	100.0	738	100.0	279,657	100.0	19,331	100.0	23,428	100.0	298,235	100.0		
Science	538,166	67.4	48,508	69.7	1,335	64.1	40,603	66.1	29,714	67.5	537	72.8	190,960	68.3	13,393	69.3	15,914	67.9	197,202	66.1		
Agricultural and veterinary sciences	11,596	1.5	886	1.3	29	1.4	396	0.6	457	1.0	14	1.9	5,680	2.0	237	1.2	256	1.1	3,641	1.2		
Biological and biomedical sciences	102,700	12.9	10,691	15.4	239	11.5	10,386	16.9	6,413	14.6	115	15.6	44,818	16.0	3,271	16.9	3,271	14.0	23,496	7.9		
Computer and information sciences	150,555	18.9	5,615	8.1	121	5.8	13,558	22.1	5,590	12.7	93	12.6	25,030	9.0	2,028	10.5	3,359	14.3	95,161	31.9		
Geosciences, atmospheric sciences, and ocean sciences	11,970	1.5	1,109	1.6	34	1.6	417	0.7	313	0.7	6	0.8	6,686	2.4	426	2.2	303	1.3	2,676	0.9		
Mathematics and statistics	34,387	4.3	1,926	2.8	37	1.8	2,686	4.4	737	1.7	12	1.6	9,472	3.4	563	2.9	898	3.8	18,056	6.1		
Multidisciplinary and interdisciplinary sciences	20,945	2.6	1,698	2.4	32	1.5	1,927	3.1	1,218	2.8	21	2.8	7,096	2.5	501	2.6	739	3.2	7,713	2.6		
Natural resources and conservation	13,762	1.7	1,290	1.9	121	5.8	484	0.8	478	1.1	31	4.2	8,430	3.0	454	2.3	387	1.7	2,087	0.7		
Physical sciences	44,092	5.5	3,288	4.7	66	3.2	2,789	4.5	1,143	2.6	18	2.4	17,289	6.2	1,062	5.5	1,034	4.4	17,403	5.8		
Psychology	69,442	8.7	13,177	18.9	264	12.7	3,967	6.5	6,991	15.9	115	15.6	34,375	12.3	2,558	13.2	2,917	12.5	5,078	1.7		
Social sciences	78,717	9.9	8,828	12.7	392	18.8	3,993	6.5	6,374	14.5	112	15.2	32,084	11.5	2,293	11.9	2,750	11.7	21,891	7.3		
Engineering	176,000	22.0	10,629	15.3	339	16.3	13,268	21.6	4,752	10.8	80	10.8	48,988	17.5	3,430	17.7	3,788	16.2	90,726	30.4		
Aerospace, aeronautical, and astronautical engineering	8,095	1.0	703	1.0	12	0.6	868	1.4	176	0.4	10	1.4	3,894	1.4	274	1.4	182	0.8	1,976	0.7		
Biological, biomedical, and biosystems engineering	14,442	1.8	1,119	1.6	20	1.0	1,863	3.0	562	1.3	11	1.5	5,010	1.8	411	2.1	423	1.8	5,023	1.7		
Chemical, petroleum, and chemical-related engineering	10,601	1.3	558	0.8	20	1.0	899	1.5	238	0.5	6	0.8	3,049	1.1	173	0.9	186	0.8	5,472	1.8		
Civil, environmental, transportation and related engineering fields	20,375	2.6	1,471	2.1	54	2.6	1,088	1.8	562	1.3	10	1.4	5,820	2.1	345	1.8	337	1.4	10,688	3.6		
Electrical, electronics, communications and computer engineering	49,901	6.2	2,141	3.1	130	6.2	3,595	5.9	1,018	2.3	12	1.6	8,815	3.2	706	3.7	873	3.7	32,611	10.9		
Industrial, manufacturing, systems engineering and operations research	16,435	2.1	1,161	1.7	19	0.9	1,012	1.6	560	1.3	10	1.4	4,420	1.6	275	1.4	474	2.0	8,504	2.9		
Mechanical engineering	27,552	3.5	1,891	2.7	32	1.5	2,044	3.3	587	1.3	4	0.5	8,462	3.0	609	3.2	602	2.6	13,321	4.5		
Metallurgical, mining, materials and related engineering fields	7,118	0.9	463	0.7	15	0.7	522	0.8	163	0.4	1	0.1	2,449	0.9	202	1.0	119	0.5	3,184	1.1		
Other engineering	21,481	2.7	1,122	1.6	37	1.8	1,377	2.2	886	2.0	16	2.2	7,069	2.5	435	2.3	592	2.5	9,947	3.3		
Health	84,368	10.6	10,484	15.1	408	19.6	7,555	12.3	9,550	21.7	121	16.4	39,709	14.2	2,508	13.0	3,726	15.9	10,307	3.5		
Clinical medicine ^a	39,217	4.9	4,991	7.2	270	13.0	4,461	7.3	5,843	13.3	75	10.2	15,660	5.6	1,367	7.1	2,051	8.8	4,499	1.5		

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2022

(Number and percent)

Broad field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		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			Percent		
Other health	45,151	5.7	5,493	7.9	138	6.6	3,094	5.0	3,707	8.4	46	6.2	24,049	8.6	1,141	5.9	1,675	7.1	5,808	1.9		
Master's students	501,311	62.8	48,303	69.4	1,331	63.9	40,873	66.5	31,398	71.3	541	73.3	172,212	61.6	12,002	62.1	15,345	65.5	179,306	60.1		
Science	331,983	41.6	31,959	45.9	752	36.1	26,267	42.8	20,810	47.3	382	51.8	110,258	39.4	7,876	40.7	9,928	42.4	123,751	41.5		
Agricultural and veterinary sciences	6,949	0.9	644	0.9	19	0.9	267	0.4	364	0.8	13	1.8	3,876	1.4	173	0.9	179	0.8	1,414	0.5		
Biological and biomedical sciences	43,062	5.4	4,953	7.1	93	4.5	4,963	8.1	3,807	8.6	61	8.3	18,595	6.6	1,425	7.4	1,550	6.6	7,615	2.6		
Computer and information sciences	129,972	16.3	5,083	7.3	96	4.6	11,960	19.5	4,989	11.3	80	10.8	20,862	7.5	1,695	8.8	2,845	12.1	82,362	27.6		
Geosciences, atmospheric sciences, and ocean sciences	5,186	0.6	578	0.8	18	0.9	154	0.3	161	0.4	3	0.4	3,364	1.2	193	1.0	114	0.5	601	0.2		
Mathematics and statistics	20,798	2.6	1,272	1.8	23	1.1	1,719	2.8	514	1.2	8	1.1	5,233	1.9	312	1.6	518	2.2	11,199	3.8		
Multidisciplinary and interdisciplinary sciences	16,931	2.1	1,398	2.0	25	1.2	1,642	2.7	1,009	2.3	14	1.9	5,431	1.9	384	2.0	611	2.6	6,417	2.2		
Natural resources and conservation	9,807	1.2	1,008	1.4	74	3.6	338	0.6	306	0.7	27	3.7	6,435	2.3	349	1.8	242	1.0	1,028	0.3		
Physical sciences	6,256	0.8	737	1.1	29	1.4	446	0.7	314	0.7	5	0.7	2,719	1.0	194	1.0	189	0.8	1,623	0.5		
Psychology	48,321	6.1	10,130	14.6	164	7.9	2,496	4.1	5,173	11.8	99	13.4	23,784	8.5	1,725	8.9	2,258	9.6	2,492	0.8		
Social sciences	44,701	5.6	6,156	8.8	211	10.1	2,282	3.7	4,173	9.5	72	9.8	19,959	7.1	1,426	7.4	1,422	6.1	9,000	3.0		
Engineering	103,020	12.9	7,379	10.6	253	12.2	8,383	13.6	2,983	6.8	54	7.3	30,174	10.8	2,060	10.7	2,317	9.9	49,417	16.6		
Aerospace, aeronautical, and astronautical engineering	5,263	0.7	536	0.8	10	0.5	632	1.0	114	0.3	8	1.1	2,741	1.0	179	0.9	133	0.6	910	0.3		
Biological, biomedical, and biosystems engineering	5,177	0.6	439	0.6	7	0.3	751	1.2	217	0.5	5	0.7	1,766	0.6	153	0.8	124	0.5	1,715	0.6		
Chemical, petroleum, and chemical-related engineering	3,011	0.4	225	0.3	7	0.3	277	0.5	94	0.2	3	0.4	855	0.3	47	0.2	71	0.3	1,432	0.5		
Civil, environmental, transportation and related engineering fields	12,621	1.6	1,169	1.7	38	1.8	825	1.3	398	0.9	4	0.5	4,302	1.5	244	1.3	229	1.0	5,412	1.8		
Electrical, electronics, communications and computer engineering	32,316	4.0	1,647	2.4	122	5.9	2,564	4.2	703	1.6	10	1.4	5,765	2.1	476	2.5	567	2.4	20,462	6.9		
Industrial, manufacturing, systems engineering and operations research	12,579	1.6	1,046	1.5	15	0.7	804	1.3	415	0.9	9	1.2	3,560	1.3	220	1.1	392	1.7	6,118	2.1		
Mechanical engineering	16,029	2.0	1,332	1.9	21	1.0	1,399	2.3	362	0.8	2	0.3	5,553	2.0	399	2.1	367	1.6	6,594	2.2		
Metallurgical, mining, materials and related engineering fields	2,545	0.3	193	0.3	9	0.4	196	0.3	65	0.1	0	0.0	982	0.4	85	0.4	50	0.2	965	0.3		
Other engineering	13,479	1.7	792	1.1	24	1.2	935	1.5	615	1.4	13	1.8	4,650	1.7	257	1.3	384	1.6	5,809	1.9		
Health	66,308	8.3	8,965	12.9	326	15.7	6,223	10.1	7,605	17.3	105	14.2	31,780	11.4	2,066	10.7	3,100	13.2	6,138	2.1		

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2022

(Number and percent)

Broad field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		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			Percent		
Clinical medicine ^a	33,251	4.2	4,339	6.2	209	10.0	3,923	6.4	5,050	11.5	66	8.9	13,323	4.8	1,185	6.1	1,845	7.9	3,311	1.1		
Other health	33,057	4.1	4,626	6.6	117	5.6	2,300	3.7	2,555	5.8	39	5.3	18,457	6.6	881	4.6	1,255	5.4	2,827	0.9		
Doctoral students	297,223	37.2	21,318	30.6	751	36.1	20,553	33.5	12,618	28.7	197	26.7	107,445	38.4	7,329	37.9	8,083	34.5	118,929	39.9		
Science	206,183	25.8	16,549	23.8	583	28.0	14,336	23.3	8,904	20.2	155	21.0	80,702	28.9	5,517	28.5	5,986	25.6	73,451	24.6		
Agricultural and veterinary sciences	4,647	0.6	242	0.3	10	0.5	129	0.2	93	0.2	1	0.1	1,804	0.6	64	0.3	77	0.3	2,227	0.7		
Biological and biomedical sciences	59,638	7.5	5,738	8.2	146	7.0	5,423	8.8	2,606	5.9	54	7.3	26,223	9.4	1,846	9.5	1,721	7.3	15,881	5.3		
Computer and information sciences	20,583	2.6	532	0.8	25	1.2	1,598	2.6	601	1.4	13	1.8	4,168	1.5	333	1.7	514	2.2	12,799	4.3		
Geosciences, atmospheric sciences, and ocean sciences	6,784	0.8	531	0.8	16	0.8	263	0.4	152	0.3	3	0.4	3,322	1.2	233	1.2	189	0.8	2,075	0.7		
Mathematics and statistics	13,589	1.7	654	0.9	14	0.7	967	1.6	223	0.5	4	0.5	4,239	1.5	251	1.3	380	1.6	6,857	2.3		
Multidisciplinary and interdisciplinary sciences	4,014	0.5	300	0.4	7	0.3	285	0.5	209	0.5	7	0.9	1,665	0.6	117	0.6	128	0.5	1,296	0.4		
Natural resources and conservation	3,955	0.5	282	0.4	47	2.3	146	0.2	172	0.4	4	0.5	1,995	0.7	105	0.5	145	0.6	1,059	0.4		
Physical sciences	37,836	4.7	2,551	3.7	37	1.8	2,343	3.8	829	1.9	13	1.8	14,570	5.2	868	4.5	845	3.6	15,780	5.3		
Psychology	21,121	2.6	3,047	4.4	100	4.8	1,471	2.4	1,818	4.1	16	2.2	10,591	3.8	833	4.3	659	2.8	2,586	0.9		
Social sciences	34,016	4.3	2,672	3.8	181	8.7	1,711	2.8	2,201	5.0	40	5.4	12,125	4.3	867	4.5	1,328	5.7	12,891	4.3		
Engineering	72,980	9.1	3,250	4.7	86	4.1	4,885	8.0	1,769	4.0	26	3.5	18,814	6.7	1,370	7.1	1,471	6.3	41,309	13.9		
Aerospace, aeronautical, and astronautical engineering	2,832	0.4	167	0.2	2	0.1	236	0.4	62	0.1	2	0.3	1,153	0.4	95	0.5	49	0.2	1,066	0.4		
Biological, biomedical, and biosystems engineering	9,265	1.2	680	1.0	13	0.6	1,112	1.8	345	0.8	6	0.8	3,244	1.2	258	1.3	299	1.3	3,308	1.1		
Chemical, petroleum, and chemical-related engineering	7,590	1.0	333	0.5	13	0.6	622	1.0	144	0.3	3	0.4	2,194	0.8	126	0.7	115	0.5	4,040	1.4		
Civil, environmental, transportation and related engineering fields	7,754	1.0	302	0.4	16	0.8	263	0.4	164	0.4	6	0.8	1,518	0.5	101	0.5	108	0.5	5,276	1.8		
Electrical, electronics, communications and computer engineering	17,585	2.2	494	0.7	8	0.4	1,031	1.7	315	0.7	2	0.3	3,050	1.1	230	1.2	306	1.3	12,149	4.1		
Industrial, manufacturing, systems engineering and operations research	3,856	0.5	115	0.2	4	0.2	208	0.3	145	0.3	1	0.1	860	0.3	55	0.3	82	0.4	2,386	0.8		
Mechanical engineering	11,523	1.4	559	0.8	11	0.5	645	1.1	225	0.5	2	0.3	2,909	1.0	210	1.1	235	1.0	6,727	2.3		
Metallurgical, mining, materials and related engineering fields	4,573	0.6	270	0.4	6	0.3	326	0.5	98	0.2	1	0.1	1,467	0.5	117	0.6	69	0.3	2,219	0.7		
Other engineering	8,002	1.0	330	0.5	13	0.6	442	0.7	271	0.6	3	0.4	2,419	0.9	178	0.9	208	0.9	4,138	1.4		

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2022

(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				
Health	18,060	2.3	1,519	2.2	82	3.9	1,332	2.2	1,945	4.4	16	2.2	7,929	2.8	442	2.3	626	2.7	4,169	1.4
Clinical medicine ^a	5,966	0.7	652	0.9	61	2.9	538	0.9	793	1.8	9	1.2	2,337	0.8	182	0.9	206	0.9	1,188	0.4
Other health	12,094	1.5	867	1.2	21	1.0	794	1.3	1,152	2.6	7	0.9	5,592	2.0	260	1.3	420	1.8	2,981	1.0

^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, 2022.

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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	579,301	81,773	14.1	229,892	39.7	20,206	3.5	3,131	0.5	244,299	42.2
Science	392,192	52,774	13.5	164,710	42.0	11,590	3.0	1,701	0.4	161,417	41.2
Agricultural and veterinary sciences	8,035	1,907	23.7	3,941	49.0	813	10.1	50	0.6	1,324	16.5
Biological and biomedical sciences	83,617	21,244	25.4	37,901	45.3	3,736	4.5	360	0.4	20,376	24.4
Computer and information sciences	101,252	6,323	6.2	25,106	24.8	1,800	1.8	350	0.3	67,673	66.8
Geosciences, atmospheric sciences, and ocean sciences	9,747	2,726	28.0	5,203	53.4	475	4.9	90	0.9	1,253	12.9
Mathematics and statistics	26,598	1,572	5.9	13,517	50.8	381	1.4	133	0.5	10,995	41.3
Multidisciplinary and interdisciplinary sciences	13,048	944	7.2	4,097	31.4	316	2.4	50	0.4	7,641	58.6
Natural resources and conservation	9,161	1,635	17.8	4,027	44.0	456	5.0	35	0.4	3,008	32.8
Physical sciences	39,012	10,516	27.0	23,810	61.0	1,566	4.0	223	0.6	2,897	7.4
Psychology	45,196	3,113	6.9	15,536	34.4	775	1.7	51	0.1	25,721	56.9
Social sciences	56,526	2,794	4.9	31,572	55.9	1,272	2.3	359	0.6	20,529	36.3
Engineering	130,447	24,183	18.5	50,289	38.6	7,347	5.6	1,142	0.9	47,486	36.4
Aerospace, aeronautical, and astronautical engineering	5,420	1,244	23.0	2,297	42.4	274	5.1	77	1.4	1,528	28.2
Biological, biomedical, and biosystems engineering	12,416	3,463	27.9	5,363	43.2	732	5.9	55	0.4	2,803	22.6
Chemical, petroleum, and chemical-related engineering	9,320	2,419	26.0	4,320	46.4	902	9.7	111	1.2	1,568	16.8
Civil, environmental, transportation and related engineering fields	14,920	2,239	15.0	6,737	45.2	790	5.3	158	1.1	4,996	33.5
Electrical, electronics, communications and computer engineering	37,882	5,621	14.8	12,399	32.7	1,706	4.5	256	0.7	17,900	47.3
Industrial, manufacturing, systems engineering and operations research	9,822	1,070	10.9	3,309	33.7	319	3.2	72	0.7	5,052	51.4
Mechanical engineering	20,696	4,117	19.9	8,511	41.1	1,253	6.1	225	1.1	6,590	31.8
Metallurgical, mining, materials and related engineering fields	5,888	1,697	28.8	2,399	40.7	557	9.5	68	1.2	1,167	19.8
Other engineering	14,083	2,313	16.4	4,954	35.2	814	5.8	120	0.9	5,882	41.8
Health	56,662	4,816	8.5	14,893	26.3	1,269	2.2	288	0.5	35,396	62.5
Clinical medicine ^a	23,215	1,828	7.9	5,670	24.4	626	2.7	97	0.4	14,994	64.6
Other health	33,447	2,988	8.9	9,223	27.6	643	1.9	191	0.6	20,402	61.0
Master's students	319,618	15,823	5.0	74,909	23.4	5,428	1.7	952	0.3	222,506	69.6
Science	208,749	9,442	4.5	48,623	23.3	3,045	1.5	530	0.3	147,109	70.5
Agricultural and veterinary sciences	4,143	790	19.1	1,819	43.9	401	9.7	18	0.4	1,115	26.9
Biological and biomedical sciences	27,987	1,896	6.8	7,268	26.0	485	1.7	67	0.2	18,271	65.3
Computer and information sciences	83,708	1,870	2.2	14,742	17.6	736	0.9	167	0.2	66,193	79.1
Geosciences, atmospheric sciences, and ocean sciences	3,621	686	18.9	1,851	51.1	140	3.9	17	0.5	927	25.6
Mathematics and statistics	14,239	205	1.4	3,560	25.0	113	0.8	41	0.3	10,320	72.5
Multidisciplinary and interdisciplinary sciences	9,767	413	4.2	2,002	20.5	169	1.7	25	0.3	7,158	73.3
Natural resources and conservation	6,010	879	14.6	2,239	37.3	225	3.7	9	0.1	2,658	44.2
Physical sciences	3,726	323	8.7	1,738	46.6	81	2.2	28	0.8	1,556	41.8
Psychology	27,861	1,072	3.8	4,619	16.6	162	0.6	9	*	21,999	79.0
Social sciences	27,687	1,308	4.7	8,785	31.7	533	1.9	149	0.5	16,912	61.1

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Engineering	66,427	3,981	6.0	17,367	26.1	1,673	2.5	289	0.4	43,117	64.9
Aerospace, aeronautical, and aeronautical engineering	2,937	404	13.8	1,106	37.7	99	3.4	25	0.9	1,303	44.4
Biological, biomedical, and biosystems engineering	3,834	219	5.7	1,050	27.4	99	2.6	7	0.2	2,459	64.1
Chemical, petroleum, and chemical-related engineering	2,099	92	4.4	613	29.2	88	4.2	14	0.7	1,292	61.6
Civil, environmental, transportation and related engineering fields	8,215	541	6.6	2,942	35.8	229	2.8	53	0.6	4,450	54.2
Electrical, electronics, communications and computer engineering	22,725	820	3.6	4,859	21.4	370	1.6	53	0.2	16,623	73.1
Industrial, manufacturing, systems engineering and operations research	6,920	486	7.0	1,535	22.2	114	1.6	46	0.7	4,739	68.5
Mechanical engineering	10,423	830	8.0	3,252	31.2	358	3.4	62	0.6	5,921	56.8
Metallurgical, mining, materials and related engineering fields	1,667	191	11.5	470	28.2	100	6.0	9	0.5	897	53.8
Other engineering	7,607	398	5.2	1,540	20.2	216	2.8	20	0.3	5,433	71.4
Health	44,442	2,400	5.4	8,919	20.1	710	1.6	133	0.3	32,280	72.6
Clinical medicine ^a	19,519	1,058	5.4	3,811	19.5	401	2.1	54	0.3	14,195	72.7
Other health	24,923	1,342	5.4	5,108	20.5	309	1.2	79	0.3	18,085	72.6
Doctoral students	259,683	65,950	25.4	154,983	59.7	14,778	5.7	2,179	0.8	21,793	8.4
Science	183,443	43,332	23.6	116,087	63.3	8,545	4.7	1,171	0.6	14,308	7.8
Agricultural and veterinary sciences	3,892	1,117	28.7	2,122	54.5	412	10.6	32	0.8	209	5.4
Biological and biomedical sciences	55,630	19,348	34.8	30,633	55.1	3,251	5.8	293	0.5	2,105	3.8
Computer and information sciences	17,544	4,453	25.4	10,364	59.1	1,064	6.1	183	1.0	1,480	8.4
Geosciences, atmospheric sciences, and ocean sciences	6,126	2,040	33.3	3,352	54.7	335	5.5	73	1.2	326	5.3
Mathematics and statistics	12,359	1,367	11.1	9,957	80.6	268	2.2	92	0.7	675	5.5
Multidisciplinary and interdisciplinary sciences	3,281	531	16.2	2,095	63.9	147	4.5	25	0.8	483	14.7
Natural resources and conservation	3,151	756	24.0	1,788	56.7	231	7.3	26	0.8	350	11.1
Physical sciences	35,286	10,193	28.9	22,072	62.6	1,485	4.2	195	0.6	1,341	3.8
Psychology	17,335	2,041	11.8	10,917	63.0	613	3.5	42	0.2	3,722	21.5
Social sciences	28,839	1,486	5.2	22,787	79.0	739	2.6	210	0.7	3,617	12.5
Engineering	64,020	20,202	31.6	32,922	51.4	5,674	8.9	853	1.3	4,369	6.8
Aerospace, aeronautical, and aeronautical engineering	2,483	840	33.8	1,191	48.0	175	7.0	52	2.1	225	9.1
Biological, biomedical, and biosystems engineering	8,582	3,244	37.8	4,313	50.3	633	7.4	48	0.6	344	4.0
Chemical, petroleum, and chemical-related engineering	7,221	2,327	32.2	3,707	51.3	814	11.3	97	1.3	276	3.8
Civil, environmental, transportation and related engineering fields	6,705	1,698	25.3	3,795	56.6	561	8.4	105	1.6	546	8.1
Electrical, electronics, communications and computer engineering	15,157	4,801	31.7	7,540	49.7	1,336	8.8	203	1.3	1,277	8.4

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Industrial, manufacturing, systems engineering and operations research	2,902	584	20.1	1,774	61.1	205	7.1	26	0.9	313	10.8
Mechanical engineering	10,273	3,287	32.0	5,259	51.2	895	8.7	163	1.6	669	6.5
Metallurgical, mining, materials and related engineering fields	4,221	1,506	35.7	1,929	45.7	457	10.8	59	1.4	270	6.4
Other engineering	6,476	1,915	29.6	3,414	52.7	598	9.2	100	1.5	449	6.9
Health	12,220	2,416	19.8	5,974	48.9	559	4.6	155	1.3	3,116	25.5
Clinical medicine ^a	3,696	770	20.8	1,859	50.3	225	6.1	43	1.2	799	21.6
Other health	8,524	1,646	19.3	4,115	48.3	334	3.9	112	1.3	2,317	27.2

* = value < 0.05%.

^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, 2022.

TABLE 3-2

Primary source of support for postdoctoral appointees in science, engineering, and health, by broad field: 2022

(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	62,750	31,643	50.4	14,529	23.2	9,680	15.4	1,166	1.9	633	1.0	5,099	8.1
Science	36,673	18,955	51.7	8,685	23.7	5,217	14.2	519	1.4	297	0.8	3,000	8.2
Agricultural and veterinary sciences	1,705	809	47.4	499	29.3	257	15.1	19	1.1	5	0.3	116	6.8
Biological and biomedical sciences	19,585	10,900	55.7	3,694	18.9	2,787	14.2	266	1.4	94	0.5	1,844	9.4
Computer and information sciences	859	385	44.8	273	31.8	115	13.4	28	3.3	12	1.4	46	5.4
Geosciences, atmospheric sciences, and ocean sciences	1,787	903	50.5	413	23.1	237	13.3	39	2.2	76	4.3	119	6.7
Mathematics and statistics	1,110	310	27.9	577	52.0	117	10.5	7	0.6	11	1.0	88	7.9
Multidisciplinary and interdisciplinary sciences	840	366	43.6	252	30.0	131	15.6	11	1.3	8	1.0	72	8.6
Natural resources and conservation	936	447	47.8	268	28.6	136	14.5	12	1.3	15	1.6	58	6.2
Physical sciences	6,877	3,797	55.2	1,502	21.8	1,012	14.7	91	1.3	42	0.6	433	6.3
Psychology	1,308	697	53.3	334	25.5	153	11.7	23	1.8	22	1.7	79	6.0
Social sciences	1,666	341	20.5	873	52.4	272	16.3	23	1.4	12	0.7	145	8.7
Engineering	8,335	4,169	50.0	2,019	24.2	1,423	17.1	230	2.8	79	0.9	415	5.0
Aerospace, aeronautical, and astronautical engineering	244	124	50.8	50	20.5	35	14.3	4	1.6	2	0.8	29	11.9
Biological, biomedical, and biosystems engineering	1,540	881	57.2	308	20.0	257	16.7	30	1.9	8	0.5	56	3.6
Chemical, petroleum, and chemical-related engineering	1,239	577	46.6	286	23.1	270	21.8	34	2.7	5	0.4	67	5.4
Civil, environmental, transportation and related engineering fields	1,018	414	40.7	339	33.3	184	18.1	18	1.8	7	0.7	56	5.5
Electrical, electronics, communications and computer engineering	1,217	653	53.7	248	20.4	203	16.7	34	2.8	21	1.7	58	4.8
Industrial, manufacturing, systems engineering and operations research	143	53	37.1	53	37.1	19	13.3	8	5.6	0	0.0	10	7.0
Mechanical engineering	1,189	595	50.0	314	26.4	151	12.7	47	4.0	8	0.7	74	6.2
Metallurgical, mining, materials and related engineering fields	542	283	52.2	118	21.8	102	18.8	8	1.5	9	1.7	22	4.1

TABLE 3-2

Primary source of support for postdoctoral appointees in science, engineering, and health, by broad field: 2022

(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
Other engineering	1,203	589	49.0	303	25.2	202	16.8	47	3.9	19	1.6	43	3.6
Health	17,742	8,519	48.0	3,825	21.6	3,040	17.1	417	2.4	257	1.4	1,684	9.5
Clinical medicine ^a	15,630	7,521	48.1	3,243	20.7	2,692	17.2	406	2.6	245	1.6	1,523	9.7
Other health	2,112	998	47.3	582	27.6	348	16.5	11	0.5	12	0.6	161	7.6

^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, 2022.

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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	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
Science	52,774	3,676	7.0	2,986	5.7	18,254	34.6	2,049	3.9	1,284	2.4	13,324	25.2	2,885	5.5	8,316	15.8
Agricultural and veterinary sciences	1,907	20	1.0	48	2.5	123	6.4	117	6.1	5	0.3	160	8.4	1,172	61.5	262	13.7
Biological and biomedical sciences	21,244	442	2.1	196	0.9	14,556	68.5	1,005	4.7	69	0.3	2,408	11.3	800	3.8	1,768	8.3
Computer and information sciences	6,323	1,287	20.4	182	2.9	380	6.0	166	2.6	71	1.1	2,909	46.0	103	1.6	1,225	19.4
Geosciences, atmospheric sciences, and ocean sciences	2,726	179	6.6	120	4.4	26	1.0	18	0.7	460	16.9	1,246	45.7	39	1.4	638	23.4
Mathematics and statistics	1,572	133	8.5	36	2.3	205	13.0	42	2.7	25	1.6	970	61.7	12	0.8	149	9.5
Multidisciplinary and interdisciplinary sciences	944	59	6.3	52	5.5	214	22.7	26	2.8	18	1.9	192	20.3	32	3.4	351	37.2
Natural resources and conservation	1,635	52	3.2	59	3.6	57	3.5	72	4.4	43	2.6	298	18.2	397	24.3	657	40.2
Physical sciences	10,516	807	7.7	2,273	21.6	1,732	16.5	268	2.5	555	5.3	4,095	38.9	31	0.3	755	7.2
Psychology	3,113	216	6.9	7	0.2	816	26.2	252	8.1	0	0.0	395	12.7	12	0.4	1,415	45.5
Social sciences	2,794	481	17.2	13	0.5	145	5.2	83	3.0	38	1.4	651	23.3	287	10.3	1,096	39.2
Engineering	24,183	5,041	20.8	2,873	11.9	3,276	13.5	871	3.6	886	3.7	7,670	31.7	385	1.6	3,181	13.2
Aerospace, aeronautical, and astronautical engineering	1,244	581	46.7	65	5.2	3	0.2	1	0.1	210	16.9	169	13.6	1	0.1	214	17.2
Biological, biomedical, and biosystems engineering	3,463	187	5.4	22	0.6	2,088	60.3	169	4.9	9	0.3	673	19.4	57	1.6	258	7.5
Chemical, petroleum, and chemical-related engineering	2,419	227	9.4	507	21.0	294	12.2	55	2.3	49	2.0	997	41.2	34	1.4	256	10.6
Civil, environmental, transportation and related engineering fields	2,239	247	11.0	213	9.5	48	2.1	106	4.7	97	4.3	765	34.2	62	2.8	701	31.3
Electrical, electronics, communications and computer engineering	5,621	1,591	28.3	469	8.3	380	6.8	138	2.5	172	3.1	2,247	40.0	54	1.0	570	10.1
Industrial, manufacturing, systems engineering and operations research	1,070	429	40.1	53	5.0	38	3.6	49	4.6	22	2.1	293	27.4	8	0.7	178	16.6
Mechanical engineering	4,117	1,073	26.1	604	14.7	229	5.6	95	2.3	228	5.5	1,356	32.9	28	0.7	504	12.2
Metallurgical, mining, materials and related engineering fields	1,697	343	20.2	400	23.6	37	2.2	90	5.3	49	2.9	600	35.4	11	0.6	167	9.8
Other engineering	2,313	363	15.7	540	23.3	159	6.9	168	7.3	50	2.2	570	24.6	130	5.6	333	14.4
Health	4,816	376	7.8	11	0.2	1,670	34.7	603	12.5	4	0.1	142	2.9	37	0.8	1,973	41.0
Clinical medicine ^a	1,828	98	5.4	10	0.5	594	32.5	374	20.5	3	0.2	44	2.4	18	1.0	687	37.6
Other health	2,988	278	9.3	1	*	1,076	36.0	229	7.7	1	*	98	3.3	19	0.6	1,286	43.0
Master's students	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
Science	9,442	1,167	12.4	165	1.7	689	7.3	252	2.7	141	1.5	1,375	14.6	1,193	12.6	4,460	47.2
Agricultural and veterinary sciences	790	4	0.5	8	1.0	18	2.3	41	5.2	2	0.3	47	5.9	534	67.6	136	17.2
Biological and biomedical sciences	1,896	81	4.3	24	1.3	481	25.4	57	3.0	10	0.5	228	12.0	231	12.2	784	41.4
Computer and information sciences	1,870	408	21.8	44	2.4	69	3.7	43	2.3	33	1.8	410	21.9	58	3.1	805	43.0
Geosciences, atmospheric sciences, and ocean sciences	686	58	8.5	34	5.0	3	0.4	4	0.6	53	7.7	248	36.2	9	1.3	277	40.4
Mathematics and statistics	205	38	18.5	2	1.0	20	9.8	4	2.0	6	2.9	64	31.2	3	1.5	68	33.2
Multidisciplinary and interdisciplinary sciences	413	32	7.7	4	1.0	19	4.6	1	0.2	4	1.0	47	11.4	17	4.1	289	70.0
Natural resources and conservation	879	29	3.3	21	2.4	15	1.7	38	4.3	9	1.0	108	12.3	219	24.9	440	50.1
Physical sciences	323	68	21.1	24	7.4	23	7.1	3	0.9	15	4.6	101	31.3	5	1.5	84	26.0

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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	1,072	67	6.3	0	0.0	36	3.4	41	3.8	0	0.0	42	3.9	4	0.4	882	82.3
Social sciences	1,308	382	29.2	4	0.3	5	0.4	20	1.5	9	0.7	80	6.1	113	8.6	695	53.1
Engineering	3,981	1,362	34.2	383	9.6	138	3.5	108	2.7	181	4.5	705	17.7	106	2.7	998	25.1
Aerospace, aeronautical, and astronautical engineering	404	222	55.0	17	4.2	0	0.0	0	0.0	49	12.1	23	5.7	0	0.0	93	23.0
Biological, biomedical, and biosystems engineering	219	19	8.7	2	0.9	62	28.3	6	2.7	2	0.9	28	12.8	16	7.3	84	38.4
Chemical, petroleum, and chemical-related engineering	92	9	9.8	23	25.0	0	0.0	1	1.1	6	6.5	27	29.3	5	5.4	21	22.8
Civil, environmental, transportation and related engineering fields	541	75	13.9	36	6.7	9	1.7	29	5.4	16	3.0	119	22.0	21	3.9	236	43.6
Electrical, electronics, communications and computer engineering	820	296	36.1	56	6.8	31	3.8	15	1.8	30	3.7	222	27.1	11	1.3	159	19.4
Industrial, manufacturing, systems engineering and operations research	486	305	62.8	20	4.1	6	1.2	9	1.9	2	0.4	29	6.0	5	1.0	110	22.6
Mechanical engineering	830	285	34.3	112	13.5	25	3.0	24	2.9	58	7.0	165	19.9	5	0.6	156	18.8
Metallurgical, mining, materials and related engineering fields	191	57	29.8	44	23.0	0	0.0	8	4.2	8	4.2	44	23.0	1	0.5	29	15.2
Other engineering	398	94	23.6	73	18.3	5	1.3	16	4.0	10	2.5	48	12.1	42	10.6	110	27.6
Health	2,400	272	11.3	6	0.3	280	11.7	270	11.3	0	0.0	39	1.6	16	0.7	1,517	63.2
Clinical medicine ^a	1,058	73	6.9	6	0.6	187	17.7	200	18.9	0	0.0	11	1.0	9	0.9	572	54.1
Other health	1,342	199	14.8	0	0.0	93	6.9	70	5.2	0	0.0	28	2.1	7	0.5	945	70.4
Doctoral students	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
Science	43,332	2,509	5.8	2,821	6.5	17,565	40.5	1,797	4.1	1,143	2.6	11,949	27.6	1,692	3.9	3,856	8.9
Agricultural and veterinary sciences	1,117	16	1.4	40	3.6	105	9.4	76	6.8	3	0.3	113	10.1	638	57.1	126	11.3
Biological and biomedical sciences	19,348	361	1.9	172	0.9	14,075	72.7	948	4.9	59	0.3	2,180	11.3	569	2.9	984	5.1
Computer and information sciences	4,453	879	19.7	138	3.1	311	7.0	123	2.8	38	0.9	2,499	56.1	45	1.0	420	9.4
Geosciences, atmospheric sciences, and ocean sciences	2,040	121	5.9	86	4.2	23	1.1	14	0.7	407	20.0	998	48.9	30	1.5	361	17.7
Mathematics and statistics	1,367	95	6.9	34	2.5	185	13.5	38	2.8	19	1.4	906	66.3	9	0.7	81	5.9
Multidisciplinary and interdisciplinary sciences	531	27	5.1	48	9.0	195	36.7	25	4.7	14	2.6	145	27.3	15	2.8	62	11.7
Natural resources and conservation	756	23	3.0	38	5.0	42	5.6	34	4.5	34	4.5	190	25.1	178	23.5	217	28.7
Physical sciences	10,193	739	7.3	2,249	22.1	1,709	16.8	265	2.6	540	5.3	3,994	39.2	26	0.3	671	6.6
Psychology	2,041	149	7.3	7	0.3	780	38.2	211	10.3	0	0.0	353	17.3	8	0.4	533	26.1
Social sciences	1,486	99	6.7	9	0.6	140	9.4	63	4.2	29	2.0	571	38.4	174	11.7	401	27.0
Engineering	20,202	3,679	18.2	2,490	12.3	3,138	15.5	763	3.8	705	3.5	6,965	34.5	279	1.4	2,183	10.8
Aerospace, aeronautical, and astronautical engineering	840	359	42.7	48	5.7	3	0.4	1	0.1	161	19.2	146	17.4	1	0.1	121	14.4
Biological, biomedical, and biosystems engineering	3,244	168	5.2	20	0.6	2,026	62.5	163	5.0	7	0.2	645	19.9	41	1.3	174	5.4
Chemical, petroleum, and chemical-related engineering	2,327	218	9.4	484	20.8	294	12.6	54	2.3	43	1.8	970	41.7	29	1.2	235	10.1
Civil, environmental, transportation and related engineering fields	1,698	172	10.1	177	10.4	39	2.3	77	4.5	81	4.8	646	38.0	41	2.4	465	27.4
Electrical, electronics, communications and computer engineering	4,801	1,295	27.0	413	8.6	349	7.3	123	2.6	142	3.0	2,025	42.2	43	0.9	411	8.6

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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
Industrial, manufacturing, systems engineering and operations research	584	124	21.2	33	5.7	32	5.5	40	6.8	20	3.4	264	45.2	3	0.5	68	11.6
Mechanical engineering	3,287	788	24.0	492	15.0	204	6.2	71	2.2	170	5.2	1,191	36.2	23	0.7	348	10.6
Metallurgical, mining, materials and related engineering fields	1,506	286	19.0	356	23.6	37	2.5	82	5.4	41	2.7	556	36.9	10	0.7	138	9.2
Other engineering	1,915	269	14.0	467	24.4	154	8.0	152	7.9	40	2.1	522	27.3	88	4.6	223	11.6
Health	2,416	104	4.3	5	0.2	1,390	57.5	333	13.8	4	0.2	103	4.3	21	0.9	456	18.9
Clinical medicine ^a	770	25	3.2	4	0.5	407	52.9	174	22.6	3	0.4	33	4.3	9	1.2	115	14.9
Other health	1,646	79	4.8	1	0.1	983	59.7	159	9.7	1	0.1	70	4.3	12	0.7	341	20.7

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.

* = value < 0.05%.

^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, 2022.

TABLE 3-4

Detailed primary source of federal support for postdoctoral appointees in science, engineering, and health, by broad field: 2022

(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	31,643	2,148	6.8	2,107	6.7	18,566	58.7	892	2.8	677	2.1	3,880	12.3	974	3.1	2,399	7.6
Science	18,955	960	5.1	1,395	7.4	10,089	53.2	503	2.7	581	3.1	3,005	15.9	884	4.7	1,538	8.1
Agricultural and veterinary sciences	809	16	2.0	42	5.2	204	25.2	9	1.1	6	0.7	66	8.2	404	49.9	62	7.7
Biological and biomedical sciences	10,900	294	2.7	204	1.9	8,253	75.7	297	2.7	35	0.3	865	7.9	312	2.9	640	5.9
Computer and information sciences	385	101	26.2	14	3.6	43	11.2	9	2.3	2	0.5	173	44.9	6	1.6	37	9.6
Geosciences, atmospheric sciences, and ocean sciences	903	81	9.0	42	4.7	24	2.7	8	0.9	153	16.9	369	40.9	26	2.9	200	22.1
Mathematics and statistics	310	57	18.4	21	6.8	51	16.5	4	1.3	4	1.3	148	47.7	3	1.0	22	7.1
Multidisciplinary and interdisciplinary sciences	366	38	10.4	18	4.9	186	50.8	11	3.0	4	1.1	77	21.0	10	2.7	22	6.0
Natural resources and conservation	447	17	3.8	30	6.7	11	2.5	7	1.6	22	4.9	114	25.5	80	17.9	166	37.1
Physical sciences	3,797	321	8.5	1,016	26.8	766	20.2	98	2.6	328	8.6	989	26.0	8	0.2	271	7.1
Psychology	697	18	2.6	1	0.1	478	68.6	35	5.0	1	0.1	94	13.5	8	1.1	62	8.9
Social sciences	341	17	5.0	7	2.1	73	21.4	25	7.3	26	7.6	110	32.3	27	7.9	56	16.4
Engineering	4,169	903	21.7	703	16.9	1,036	24.9	76	1.8	92	2.2	821	19.7	81	1.9	457	11.0
Aerospace, aeronautical, and astronautical engineering	124	54	43.5	18	14.5	6	4.8	0	0.0	15	12.1	21	16.9	0	0.0	10	8.1
Biological, biomedical, and biosystems engineering	881	71	8.1	17	1.9	640	72.6	20	2.3	2	0.2	62	7.0	8	0.9	61	6.9
Chemical, petroleum, and chemical-related engineering	577	74	12.8	186	32.2	105	18.2	15	2.6	4	0.7	144	25.0	6	1.0	43	7.5
Civil, environmental, transportation and related engineering fields	414	67	16.2	70	16.9	19	4.6	5	1.2	17	4.1	117	28.3	11	2.7	108	26.1
Electrical, electronics, communications and computer engineering	653	249	38.1	81	12.4	82	12.6	10	1.5	10	1.5	163	25.0	6	0.9	52	8.0
Industrial, manufacturing, systems engineering and operations research	53	20	37.7	10	18.9	3	5.7	1	1.9	0	0.0	15	28.3	0	0.0	4	7.5
Mechanical engineering	595	158	26.6	110	18.5	97	16.3	7	1.2	25	4.2	127	21.3	6	1.0	65	10.9
Metallurgical, mining, materials and related engineering fields	283	86	30.4	81	28.6	12	4.2	5	1.8	5	1.8	58	20.5	5	1.8	31	11.0
Other engineering	589	124	21.1	130	22.1	72	12.2	13	2.2	14	2.4	114	19.4	39	6.6	83	14.1
Health	8,519	285	3.3	9	0.1	7,441	87.3	313	3.7	4	*	54	0.6	9	0.1	404	4.7
Clinical medicine ^a	7,521	240	3.2	8	0.1	6,639	88.3	260	3.5	3	*	36	0.5	4	0.1	331	4.4
Other health	998	45	4.5	1	0.1	802	80.4	53	5.3	1	0.1	18	1.8	5	0.5	73	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 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, 2022.

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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	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
Science	392,192	34,711	8.9	81,549	20.8	66,907	17.1	9,415	2.4	161,417	41.2	38,193	9.7
Agricultural and veterinary sciences	8,035	452	5.6	4,696	58.4	909	11.3	26	0.3	1,324	16.5	628	7.8
Biological and biomedical sciences	83,617	10,990	13.1	27,861	33.3	10,276	12.3	6,065	7.3	20,376	24.4	8,049	9.6
Computer and information sciences	101,252	3,081	3.0	10,926	10.8	8,727	8.6	430	0.4	67,673	66.8	10,415	10.3
Geosciences, atmospheric sciences, and ocean sciences	9,747	1,102	11.3	4,301	44.1	2,352	24.1	78	0.8	1,253	12.9	661	6.8
Mathematics and statistics	26,598	1,987	7.5	2,662	10.0	8,820	33.2	177	0.7	10,995	41.3	1,957	7.4
Multidisciplinary and interdisciplinary sciences	13,048	1,558	11.9	1,244	9.5	1,058	8.1	117	0.9	7,641	58.6	1,430	11.0
Natural resources and conservation	9,161	924	10.1	2,645	28.9	1,278	14.0	101	1.1	3,008	32.8	1,205	13.2
Physical sciences	39,012	4,552	11.7	15,649	40.1	13,171	33.8	577	1.5	2,897	7.4	2,166	5.6
Psychology	45,196	1,937	4.3	5,228	11.6	6,479	14.3	870	1.9	25,721	56.9	4,961	11.0
Social sciences	56,526	8,128	14.4	6,337	11.2	13,837	24.5	974	1.7	20,529	36.3	6,721	11.9
Engineering	130,447	10,780	8.3	43,122	33.1	14,136	10.8	1,155	0.9	47,486	36.4	13,768	10.6
Aerospace, aeronautical, and astronautical engineering	5,420	434	8.0	1,976	36.5	697	12.9	55	1.0	1,528	28.2	730	13.5
Biological, biomedical, and biosystems engineering	12,416	1,812	14.6	5,127	41.3	987	7.9	404	3.3	2,803	22.6	1,283	10.3
Chemical, petroleum, and chemical-related engineering	9,320	1,382	14.8	4,486	48.1	1,174	12.6	78	0.8	1,568	16.8	632	6.8
Civil, environmental, transportation and related engineering fields	14,920	1,235	8.3	5,038	33.8	1,854	12.4	83	0.6	4,996	33.5	1,714	11.5
Electrical, electronics, communications and computer engineering	37,882	2,012	5.3	10,006	26.4	3,882	10.2	164	0.4	17,900	47.3	3,918	10.3
Industrial, manufacturing, systems engineering and operations research	9,822	514	5.2	1,685	17.2	1,016	10.3	58	0.6	5,052	51.4	1,497	15.2

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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
Mechanical engineering	20,696	1,525	7.4	7,206	34.8	2,921	14.1	178	0.9	6,590	31.8	2,276	11.0
Metallurgical, mining, materials and related engineering fields	5,888	629	10.7	3,104	52.7	531	9.0	54	0.9	1,167	19.8	403	6.8
Other engineering	14,083	1,237	8.8	4,494	31.9	1,074	7.6	81	0.6	5,882	41.8	1,315	9.3
Health	56,662	2,156	3.8	5,514	9.7	3,850	6.8	1,147	2.0	35,396	62.5	8,599	15.2
Clinical medicine ^a	23,215	928	4.0	2,153	9.3	1,027	4.4	607	2.6	14,994	64.6	3,506	15.1
Other health	33,447	1,228	3.7	3,361	10.0	2,823	8.4	540	1.6	20,402	61.0	5,093	15.2
Master's students	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
Science	208,749	5,123	2.5	13,806	6.6	16,865	8.1	1,158	0.6	147,109	70.5	24,688	11.8
Agricultural and veterinary sciences	4,143	130	3.1	2,067	49.9	413	10.0	9	0.2	1,115	26.9	409	9.9
Biological and biomedical sciences	27,987	501	1.8	2,822	10.1	2,880	10.3	121	0.4	18,271	65.3	3,392	12.1
Computer and information sciences	83,708	1,012	1.2	2,421	2.9	4,531	5.4	201	0.2	66,193	79.1	9,350	11.2
Geosciences, atmospheric sciences, and ocean sciences	3,621	126	3.5	1,139	31.5	1,126	31.1	9	0.2	927	25.6	294	8.1
Mathematics and statistics	14,239	290	2.0	405	2.8	1,805	12.7	28	0.2	10,320	72.5	1,391	9.8
Multidisciplinary and interdisciplinary sciences	9,767	752	7.7	330	3.4	357	3.7	22	0.2	7,158	73.3	1,148	11.8
Natural resources and conservation	6,010	432	7.2	1,289	21.4	645	10.7	76	1.3	2,658	44.2	910	15.1
Physical sciences	3,726	68	1.8	518	13.9	1,050	28.2	70	1.9	1,556	41.8	464	12.5
Psychology	27,861	196	0.7	1,125	4.0	1,244	4.5	253	0.9	21,999	79.0	3,044	10.9
Social sciences	27,687	1,616	5.8	1,690	6.1	2,814	10.2	369	1.3	16,912	61.1	4,286	15.5
Engineering	66,427	2,052	3.1	6,836	10.3	5,050	7.6	331	0.5	43,117	64.9	9,041	13.6
Aerospace, aeronautical, and astronautical engineering	2,937	98	3.3	584	19.9	356	12.1	39	1.3	1,303	44.4	557	19.0
Biological, biomedical, and biosystems engineering	3,834	133	3.5	367	9.6	350	9.1	13	0.3	2,459	64.1	512	13.4
Chemical, petroleum, and chemical-related engineering	2,099	91	4.3	266	12.7	186	8.9	8	0.4	1,292	61.6	256	12.2

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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
Civil, environmental, transportation and related engineering fields	8,215	417	5.1	1,309	15.9	804	9.8	27	0.3	4,450	54.2	1,208	14.7
Electrical, electronics, communications and computer engineering	22,725	334	1.5	1,459	6.4	1,532	6.7	61	0.3	16,623	73.1	2,716	12.0
Industrial, manufacturing, systems engineering and operations research	6,920	220	3.2	336	4.9	364	5.3	49	0.7	4,739	68.5	1,212	17.5
Mechanical engineering	10,423	352	3.4	1,498	14.4	942	9.0	78	0.7	5,921	56.8	1,632	15.7
Metallurgical, mining, materials and related engineering fields	1,667	73	4.4	385	23.1	140	8.4	13	0.8	897	53.8	159	9.5
Other engineering	7,607	334	4.4	632	8.3	376	4.9	43	0.6	5,433	71.4	789	10.4
Health	44,442	944	2.1	1,914	4.3	1,962	4.4	518	1.2	32,280	72.6	6,824	15.4
Clinical medicine ^a	19,519	545	2.8	912	4.7	581	3.0	294	1.5	14,195	72.7	2,992	15.3
Other health	24,923	399	1.6	1,002	4.0	1,381	5.5	224	0.9	18,085	72.6	3,832	15.4
Doctoral students	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
Science	183,443	29,588	16.1	67,743	36.9	50,042	27.3	8,257	4.5	14,308	7.8	13,505	7.4
Agricultural and veterinary sciences	3,892	322	8.3	2,629	67.5	496	12.7	17	0.4	209	5.4	219	5.6
Biological and biomedical sciences	55,630	10,489	18.9	25,039	45.0	7,396	13.3	5,944	10.7	2,105	3.8	4,657	8.4
Computer and information sciences	17,544	2,069	11.8	8,505	48.5	4,196	23.9	229	1.3	1,480	8.4	1,065	6.1
Geosciences, atmospheric sciences, and ocean sciences	6,126	976	15.9	3,162	51.6	1,226	20.0	69	1.1	326	5.3	367	6.0
Mathematics and statistics	12,359	1,697	13.7	2,257	18.3	7,015	56.8	149	1.2	675	5.5	566	4.6
Multidisciplinary and interdisciplinary sciences	3,281	806	24.6	914	27.9	701	21.4	95	2.9	483	14.7	282	8.6
Natural resources and conservation	3,151	492	15.6	1,356	43.0	633	20.1	25	0.8	350	11.1	295	9.4

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2022

(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	35,286	4,484	12.7	15,131	42.9	12,121	34.4	507	1.4	1,341	3.8	1,702	4.8
Psychology	17,335	1,741	10.0	4,103	23.7	5,235	30.2	617	3.6	3,722	21.5	1,917	11.1
Social sciences	28,839	6,512	22.6	4,647	16.1	11,023	38.2	605	2.1	3,617	12.5	2,435	8.4
Engineering	64,020	8,728	13.6	36,286	56.7	9,086	14.2	824	1.3	4,369	6.8	4,727	7.4
Aerospace, aeronautical, and astronautical engineering	2,483	336	13.5	1,392	56.1	341	13.7	16	0.6	225	9.1	173	7.0
Biological, biomedical, and biosystems engineering	8,582	1,679	19.6	4,760	55.5	637	7.4	391	4.6	344	4.0	771	9.0
Chemical, petroleum, and chemical-related engineering	7,221	1,291	17.9	4,220	58.4	988	13.7	70	1.0	276	3.8	376	5.2
Civil, environmental, transportation and related engineering fields	6,705	818	12.2	3,729	55.6	1,050	15.7	56	0.8	546	8.1	506	7.5
Electrical, electronics, communications and computer engineering	15,157	1,678	11.1	8,547	56.4	2,350	15.5	103	0.7	1,277	8.4	1,202	7.9
Industrial, manufacturing, systems engineering and operations research	2,902	294	10.1	1,349	46.5	652	22.5	9	0.3	313	10.8	285	9.8
Mechanical engineering	10,273	1,173	11.4	5,708	55.6	1,979	19.3	100	1.0	669	6.5	644	6.3
Metallurgical, mining, materials and related engineering fields	4,221	556	13.2	2,719	64.4	391	9.3	41	1.0	270	6.4	244	5.8
Other engineering	6,476	903	13.9	3,862	59.6	698	10.8	38	0.6	449	6.9	526	8.1
Health	12,220	1,212	9.9	3,600	29.5	1,888	15.5	629	5.1	3,116	25.5	1,775	14.5
Clinical medicine ^a	3,696	383	10.4	1,241	33.6	446	12.1	313	8.5	799	21.6	514	13.9
Other health	8,524	829	9.7	2,359	27.7	1,442	16.9	316	3.7	2,317	27.2	1,261	14.8

^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, 2022.

TABLE 3-6

Primary mechanism of support for postdoctoral appointees in science, engineering, and health, by broad field: 2022

(Number and percent)

Broad field	Total	Fellowships		Research grants		Traineeships		Other types of support	
		Number	Percent	Number	Percent	Number	Percent	Other	
								Number	Percent
All surveyed fields	62,750	6,056	9.7	38,583	61.5	3,406	5.4	14,705	23.4
Science	36,673	3,372	9.2	23,734	64.7	1,555	4.2	8,012	21.8
Agricultural and veterinary sciences	1,705	91	5.3	1,070	62.8	82	4.8	462	27.1
Biological and biomedical sciences	19,585	1,674	8.5	12,673	64.7	969	4.9	4,269	21.8
Computer and information sciences	859	75	8.7	584	68.0	24	2.8	176	20.5
Geosciences, atmospheric sciences, and ocean sciences	1,787	189	10.6	1,236	69.2	15	0.8	347	19.4
Mathematics and statistics	1,110	140	12.6	453	40.8	82	7.4	435	39.2
Multidisciplinary and interdisciplinary sciences	840	89	10.6	532	63.3	39	4.6	180	21.4
Natural resources and conservation	936	75	8.0	641	68.5	18	1.9	202	21.6
Physical sciences	6,877	624	9.1	4,954	72.0	128	1.9	1,171	17.0
Psychology	1,308	126	9.6	775	59.3	112	8.6	295	22.6
Social sciences	1,666	289	17.3	816	49.0	86	5.2	475	28.5
Engineering	8,335	711	8.5	6,055	72.6	145	1.7	1,424	17.1
Aerospace, aeronautical, and astronautical engineering	244	29	11.9	151	61.9	2	0.8	62	25.4
Biological, biomedical, and biosystems engineering	1,540	142	9.2	1,075	69.8	67	4.4	256	16.6
Chemical, petroleum, and chemical-related engineering	1,239	131	10.6	897	72.4	21	1.7	190	15.3
Civil, environmental, transportation and related engineering fields	1,018	83	8.2	766	75.2	8	0.8	161	15.8
Electrical, electronics, communications and computer engineering	1,217	92	7.6	910	74.8	19	1.6	196	16.1
Industrial, manufacturing, systems engineering and operations research	143	14	9.8	92	64.3	1	0.7	36	25.2
Mechanical engineering	1,189	117	9.8	834	70.1	8	0.7	230	19.3
Metallurgical, mining, materials and related engineering fields	542	32	5.9	414	76.4	10	1.8	86	15.9
Other engineering	1,203	71	5.9	916	76.1	9	0.7	207	17.2
Health	17,742	1,973	11.1	8,794	49.6	1,706	9.6	5,269	29.7
Clinical medicine ^a	15,630	1,781	11.4	7,660	49.0	1,511	9.7	4,678	29.9
Other health	2,112	192	9.1	1,134	53.7	195	9.2	591	28.0

^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, 2022.

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2022

(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	798,534	100.0	501,311	100.0	297,223	100.0	62,750	100.0	32,279	100.0
Science	538,166	67.4	331,983	66.2	206,183	69.4	36,673	58.4	19,423	60.2
Agricultural and veterinary sciences	11,596	1.5	6,949	1.4	4,647	1.6	1,705	2.7	1,068	3.3
Agricultural sciences	10,310	1.3	6,165	1.2	4,145	1.4	1,201	1.9	755	2.3
Veterinary biomedical and clinical sciences	1,286	0.2	784	0.2	502	0.2	504	0.8	313	1.0
Biological and biomedical sciences	102,700	12.9	43,062	8.6	59,638	20.1	19,585	31.2	8,207	25.4
Biochemistry	5,905	0.7	911	0.2	4,994	1.7	1,756	2.8	843	2.6
Biology	15,569	1.9	7,969	1.6	7,600	2.6	2,064	3.3	754	2.3
Biomedical sciences	10,836	1.4	5,681	1.1	5,155	1.7	1,553	2.5	571	1.8
Biophysics	895	0.1	8	*	887	0.3	126	0.2	79	0.2
Biostatistics and bioinformatics	7,651	1.0	3,852	0.8	3,799	1.3	691	1.1	357	1.1
Biotechnology	4,021	0.5	3,916	0.8	105	*	155	0.2	87	0.3
Botany and plant biology	1,670	0.2	369	0.1	1,301	0.4	507	0.8	218	0.7
Cell, cellular biology, and anatomical sciences	6,511	0.8	1,137	0.2	5,374	1.8	1,599	2.5	590	1.8
Ecology and population biology	3,866	0.5	1,058	0.2	2,808	0.9	438	0.7	221	0.7
Epidemiology	6,057	0.8	3,844	0.8	2,213	0.7	377	0.6	122	0.4
Genetics	3,333	0.4	749	0.1	2,584	0.9	1,288	2.1	551	1.7
Microbiological sciences and immunology	6,492	0.8	2,026	0.4	4,466	1.5	1,811	2.9	708	2.2
Molecular biology	1,639	0.2	408	0.1	1,231	0.4	549	0.9	210	0.7
Neurobiology and neuroscience	6,448	0.8	515	0.1	5,933	2.0	1,932	3.1	800	2.5
Nutrition science	3,955	0.5	2,905	0.6	1,050	0.4	146	0.2	98	0.3
Pathology and experimental pathology	1,023	0.1	106	*	917	0.3	925	1.5	308	1.0
Pharmacology and toxicology	3,405	0.4	996	0.2	2,409	0.8	915	1.5	387	1.2
Physiology	5,912	0.7	2,891	0.6	3,021	1.0	1,512	2.4	714	2.2
Zoology and animal biology	2,059	0.3	861	0.2	1,198	0.4	411	0.7	187	0.6
Biological and biomedical sciences nec	5,453	0.7	2,860	0.6	2,593	0.9	830	1.3	402	1.2
Computer and information sciences	150,555	18.9	129,972	25.9	20,583	6.9	859	1.4	507	1.6
Artificial intelligence, informatics, and computer and information science topics	6,142	0.8	5,379	1.1	763	0.3	46	0.1	40	0.1
Computer and information sciences	46,151	5.8	39,719	7.9	6,432	2.2	166	0.3	134	0.4
Computer and information systems security	9,695	1.2	9,254	1.8	441	0.1	11	*	18	0.1
Computer science	52,924	6.6	42,092	8.4	10,832	3.6	496	0.8	192	0.6
Information science and studies	16,872	2.1	15,478	3.1	1,394	0.5	65	0.1	30	0.1
Information technology	11,151	1.4	10,601	2.1	550	0.2	3	*	11	*
Computer and information sciences nec	7,620	1.0	7,449	1.5	171	0.1	72	0.1	82	0.3
Geosciences, atmospheric sciences, and ocean sciences	11,970	1.5	5,186	1.0	6,784	2.3	1,787	2.8	2,448	7.6
Atmospheric sciences and meteorology	1,434	0.2	489	0.1	945	0.3	253	0.4	515	1.6
Geological and earth sciences	7,468	0.9	3,183	0.6	4,285	1.4	844	1.3	1,127	3.5
Ocean and marine sciences	3,068	0.4	1,514	0.3	1,554	0.5	414	0.7	385	1.2
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	276	0.4	421	1.3
Mathematics and statistics	34,387	4.3	20,798	4.1	13,589	4.6	1,110	1.8	251	0.8
Applied mathematics	11,224	1.4	9,097	1.8	2,127	0.7	221	0.4	73	0.2
Mathematics	12,022	1.5	3,905	0.8	8,117	2.7	689	1.1	125	0.4
Statistics	11,141	1.4	7,796	1.6	3,345	1.1	200	0.3	53	0.2

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2022

(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
Multidisciplinary and interdisciplinary sciences	20,945	2.6	16,931	3.4	4,014	1.4	840	1.3	931	2.9
Biological and physical sciences	1,855	0.2	899	0.2	956	0.3	56	0.1	43	0.1
Computational science	3,424	0.4	3,089	0.6	335	0.1	31	*	62	0.2
Data science and data analytics	6,104	0.8	6,000	1.2	104	*	48	0.1	32	0.1
International and global studies	1,258	0.2	1,083	0.2	175	0.1	27	*	17	0.1
Multidisciplinary and interdisciplinary sciences nec	8,304	1.0	5,860	1.2	2,444	0.8	678	1.1	777	2.4
Natural resources and conservation	13,762	1.7	9,807	2.0	3,955	1.3	936	1.5	605	1.9
Environmental science and studies	6,402	0.8	4,422	0.9	1,980	0.7	339	0.5	201	0.6
Forestry, natural resources, and conservation	7,360	0.9	5,385	1.1	1,975	0.7	597	1.0	404	1.3
Physical sciences	44,092	5.5	6,256	1.2	37,836	12.7	6,877	11.0	2,894	9.0
Astronomy and astrophysics	1,703	0.2	100	*	1,603	0.5	634	1.0	573	1.8
Chemistry	22,710	2.8	3,015	0.6	19,695	6.6	3,157	5.0	876	2.7
Materials sciences	1,625	0.2	402	0.1	1,223	0.4	246	0.4	77	0.2
Physics	17,000	2.1	2,253	0.4	14,747	5.0	2,618	4.2	1,162	3.6
Physical sciences nec	1,054	0.1	486	0.1	568	0.2	222	0.4	206	0.6
Psychology	69,442	8.7	48,321	9.6	21,121	7.1	1,308	2.1	786	2.4
Applied psychology	25,195	3.2	20,091	4.0	5,104	1.7	109	0.2	70	0.2
Clinical psychology	7,793	1.0	4,519	0.9	3,274	1.1	56	0.1	9	*
Counseling psychology	13,800	1.7	12,400	2.5	1,400	0.5	14	*	11	*
Human development	2,293	0.3	1,525	0.3	768	0.3	119	0.2	148	0.5
Psychology, general	13,181	1.7	7,346	1.5	5,835	2.0	735	1.2	417	1.3
Research and experimental psychology	7,180	0.9	2,440	0.5	4,740	1.6	275	0.4	131	0.4
Social sciences	78,717	9.9	44,701	8.9	34,016	11.4	1,666	2.7	1,726	5.3
Agricultural and natural resource economics	901	0.1	485	0.1	416	0.1	53	0.1	31	0.1
Anthropology	6,220	0.8	2,173	0.4	4,047	1.4	150	0.2	74	0.2
Area, ethnic, cultural, gender, and group studies	4,979	0.6	2,634	0.5	2,345	0.8	235	0.4	96	0.3
Criminal justice and safety studies	6,613	0.8	5,223	1.0	1,390	0.5	15	*	21	0.1
Criminology	1,502	0.2	1,180	0.2	322	0.1	8	*	15	*
Economics (except agricultural and natural resource)	14,935	1.9	6,734	1.3	8,201	2.8	152	0.2	152	0.5
Geography and cartography	4,354	0.5	2,807	0.6	1,547	0.5	131	0.2	100	0.3
International relations and national security studies	8,164	1.0	7,833	1.6	331	0.1	98	0.2	92	0.3
Linguistics	2,854	0.4	1,159	0.2	1,695	0.6	58	0.1	55	0.2
Political science and government	8,235	1.0	2,925	0.6	5,310	1.8	162	0.3	87	0.3
Public policy analysis	9,391	1.2	6,701	1.3	2,690	0.9	241	0.4	468	1.4
Sociology and population studies	6,845	0.9	2,190	0.4	4,655	1.6	166	0.3	168	0.5
Urban studies and affairs	1,069	0.1	671	0.1	398	0.1	18	*	37	0.1
Social sciences, other	2,655	0.3	1,986	0.4	669	0.2	179	0.3	330	1.0
Engineering	176,000	22.0	103,020	20.6	72,980	24.6	8,335	13.3	4,355	13.5
Aerospace, aeronautical, and astronautical engineering	8,095	1.0	5,263	1.0	2,832	1.0	244	0.4	153	0.5
Biological, biomedical, and biosystems engineering	14,442	1.8	5,177	1.0	9,265	3.1	1,540	2.5	685	2.1

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2022

(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
Chemical, petroleum, and chemical-related engineering	10,601	1.3	3,011	0.6	7,590	2.6	1,239	2.0	313	1.0
Chemical engineering	9,668	1.2	2,599	0.5	7,069	2.4	1,215	1.9	265	0.8
Petroleum engineering	933	0.1	412	0.1	521	0.2	24	*	48	0.1
Civil, environmental, transportation and related engineering fields	20,375	2.6	12,621	2.5	7,754	2.6	1,018	1.6	569	1.8
Civil engineering	16,321	2.0	9,692	1.9	6,629	2.2	929	1.5	497	1.5
Architectural, environmental, construction and surveying engineering	4,054	0.5	2,929	0.6	1,125	0.4	89	0.1	72	0.2
Electrical, electronics, communications and computer engineering	49,901	6.2	32,316	6.4	17,585	5.9	1,217	1.9	734	2.3
Electrical, electronics, and communications engineering	34,537	4.3	19,757	3.9	14,780	5.0	1,129	1.8	673	2.1
Computer engineering	15,364	1.9	12,559	2.5	2,805	0.9	88	0.1	61	0.2
Industrial, manufacturing, systems engineering and operations research	16,435	2.1	12,579	2.5	3,856	1.3	143	0.2	197	0.6
Industrial and manufacturing engineering	8,650	1.1	6,349	1.3	2,301	0.8	72	0.1	74	0.2
Systems engineering and operations research	7,785	1.0	6,230	1.2	1,555	0.5	71	0.1	123	0.4
Mechanical engineering	27,552	3.5	16,029	3.2	11,523	3.9	1,189	1.9	527	1.6
Metallurgical, mining, materials and related engineering fields	7,118	0.9	2,545	0.5	4,573	1.5	542	0.9	280	0.9
Other engineering	21,481	2.7	13,479	2.7	8,002	2.7	1,203	1.9	897	2.8
Agricultural engineering	1,020	0.1	389	0.1	631	0.2	136	0.2	48	0.1
Engineering mechanics, physics, and science	2,350	0.3	762	0.2	1,588	0.5	265	0.4	199	0.6
Nuclear engineering	1,578	0.2	493	0.1	1,085	0.4	82	0.1	41	0.1
Engineering, other	16,533	2.1	11,835	2.4	4,698	1.6	720	1.1	609	1.9
Health	84,368	10.6	66,308	13.2	18,060	6.1	17,742	28.3	8,501	26.3
Clinical medicine	39,217	4.9	33,251	6.6	5,966	2.0	15,630	24.9	7,351	22.8
Medical clinical sciences and clinical and medical laboratory sciences	2,122	0.3	1,168	0.2	954	0.3	450	0.7	128	0.4
Public health	37,095	4.6	32,083	6.4	5,012	1.7	796	1.3	742	2.3
Anesthesiology	ne	ne	ne	ne	ne	ne	313	0.5	129	0.4
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	672	1.1	227	0.7
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	355	0.6	109	0.3
Gastroenterology	ne	ne	ne	ne	ne	ne	310	0.5	105	0.3
Hematology	ne	ne	ne	ne	ne	ne	379	0.6	199	0.6
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	1,618	2.6	580	1.8
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	218	0.3	107	0.3
Oncology and cancer research	ne	ne	ne	ne	ne	ne	1,391	2.2	648	2.0
Ophthalmology	ne	ne	ne	ne	ne	ne	476	0.8	303	0.9
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	267	0.4	119	0.4
Pediatrics	ne	ne	ne	ne	ne	ne	1,125	1.8	742	2.3
Psychiatry	ne	ne	ne	ne	ne	ne	951	1.5	351	1.1
Pulmonary disease	ne	ne	ne	ne	ne	ne	238	0.4	116	0.4
Radiological sciences	ne	ne	ne	ne	ne	ne	1,218	1.9	444	1.4
Surgery	ne	ne	ne	ne	ne	ne	1,213	1.9	572	1.8

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2022

(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
Clinical medicine nec	ne	ne	ne	ne	ne	ne	3,640	5.8	1,730	5.4
Other health	45,151	5.7	33,057	6.6	12,094	4.1	2,112	3.4	1,150	3.6
Communication disorders sciences	18,589	2.3	17,768	3.5	821	0.3	72	0.1	86	0.3
Dental sciences	1,773	0.2	1,545	0.3	228	0.1	311	0.5	140	0.4
Kinesiology and exercise science	5,724	0.7	4,743	0.9	981	0.3	71	0.1	49	0.2
Nursing science	5,192	0.7	1,535	0.3	3,657	1.2	141	0.2	166	0.5
Pharmaceutical sciences	5,201	0.7	2,142	0.4	3,059	1.0	1,107	1.8	379	1.2
Other health nec	8,672	1.1	5,324	1.1	3,348	1.1	410	0.7	330	1.0

* = 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, 2022.

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2022

(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	798,534	48.4	501,311	49.8	297,223	46.0	62,750	42.6	32,279	42.6
Science	538,166	50.6	331,983	51.0	206,183	49.8	36,673	42.1	19,423	42.0
Agricultural and veterinary sciences	11,596	59.3	6,949	62.0	4,647	55.3	1,705	45.0	1,068	49.0
Agricultural sciences	10,310	58.1	6,165	60.3	4,145	54.8	1,201	41.0	755	46.4
Veterinary biomedical and clinical sciences	1,286	69.1	784	75.3	502	59.6	504	54.4	313	55.3
Biological and biomedical sciences	102,700	61.9	43,062	66.9	59,638	58.3	19,585	46.5	8,207	46.8
Biochemistry	5,905	53.7	911	58.4	4,994	52.9	1,756	41.3	843	40.2
Biology	15,569	61.3	7,969	64.2	7,600	58.2	2,064	45.3	754	48.0
Biomedical sciences	10,836	64.9	5,681	69.2	5,155	60.2	1,553	50.4	571	45.4
Biophysics	895	41.6	8	37.5	887	41.6	126	42.9	79	30.4
Biostatistics and bioinformatics	7,651	52.7	3,852	58.0	3,799	47.3	691	43.1	357	47.1
Biotechnology	4,021	61.9	3,916	61.9	105	61.9	155	38.1	87	42.5
Botany and plant biology	1,670	55.7	369	57.7	1,301	55.2	507	44.2	218	45.4
Cell, cellular biology, and anatomical sciences	6,511	59.5	1,137	64.0	5,374	58.6	1,599	48.1	590	48.3
Ecology and population biology	3,866	61.5	1,058	65.5	2,808	60.0	438	47.9	221	45.2
Epidemiology	6,057	72.9	3,844	73.6	2,213	71.6	377	61.0	122	64.8
Genetics	3,333	63.0	749	77.2	2,584	58.9	1,288	43.2	551	44.5
Microbiological sciences and immunology	6,492	62.7	2,026	69.4	4,466	59.7	1,811	50.6	708	47.6
Molecular biology	1,639	59.8	408	67.6	1,231	57.2	549	39.2	210	39.0
Neurobiology and neuroscience	6,448	60.7	515	66.0	5,933	60.2	1,932	45.4	800	48.1
Nutrition science	3,955	84.1	2,905	86.3	1,050	78.1	146	60.3	98	67.3
Pathology and experimental pathology	1,023	62.7	106	67.9	917	62.1	925	46.3	308	52.9
Pharmacology and toxicology	3,405	62.3	996	68.7	2,409	59.7	915	47.2	387	46.8
Physiology	5,912	57.5	2,891	58.7	3,021	56.4	1,512	48.6	714	50.7
Zoology and animal biology	2,059	57.8	861	61.2	1,198	55.4	411	44.0	187	41.7
Biological and biomedical sciences nec	5,453	65.4	2,860	70.0	2,593	60.3	830	47.1	402	46.3
Computer and information sciences	150,555	32.5	129,972	33.2	20,583	27.9	859	27.2	507	28.0
Artificial intelligence, informatics, and computer and information science topics	6,142	36.7	5,379	36.4	763	38.3	46	32.6	40	32.5
Computer and information sciences	46,151	29.4	39,719	30.3	6,432	24.3	166	25.9	134	26.9
Computer and information systems security	9,695	27.2	9,254	27.4	441	23.8	11	36.4	18	11.1
Computer science	52,924	28.7	42,092	29.5	10,832	25.6	496	24.2	192	29.7
Information science and studies	16,872	46.7	15,478	46.2	1,394	51.5	65	52.3	30	36.7
Information technology	11,151	40.6	10,601	40.5	550	42.7	3	66.7	11	27.3
Computer and information sciences nec	7,620	36.7	7,449	36.7	171	34.5	72	22.2	82	24.4

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2022

(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 sciences, and ocean sciences	11,970	51.9	5,186	53.0	6,784	50.9	1,787	42.2	2,448	33.5
Atmospheric sciences and meteorology	1,434	41.7	489	42.1	945	41.5	253	37.9	515	27.8
Geological and earth sciences	7,468	48.9	3,183	48.0	4,285	49.6	844	40.4	1,127	34.3
Ocean and marine sciences	3,068	63.8	1,514	67.2	1,554	60.4	414	47.1	385	43.4
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	276	44.6	421	29.0
Mathematics and statistics	34,387	36.3	20,798	40.4	13,589	29.9	1,110	24.5	251	29.5
Applied mathematics	11,224	37.6	9,097	38.4	2,127	34.2	221	23.1	73	26.0
Mathematics	12,022	31.4	3,905	41.0	8,117	26.8	689	25.4	125	28.0
Statistics	11,141	40.1	7,796	42.5	3,345	34.7	200	23.0	53	37.7
Multidisciplinary and interdisciplinary sciences	20,945	50.7	16,931	49.8	4,014	54.4	840	45.7	931	43.0
Biological and physical sciences	1,855	55.6	899	58.1	956	53.3	56	53.6	43	25.6
Computational science	3,424	36.3	3,089	37.2	335	28.1	31	25.8	62	30.6
Data science and data analytics	6,104	36.8	6,000	36.9	104	34.6	48	31.3	32	31.3
International and global studies	1,258	62.6	1,083	63.3	175	58.9	27	55.6	17	64.7
Multidisciplinary and interdisciplinary sciences nec	8,304	63.9	5,860	66.0	2,444	58.9	678	46.6	777	44.9
Natural resources and conservation	13,762	60.2	9,807	61.4	3,955	57.3	936	46.0	605	39.0
Environmental science and studies	6,402	62.8	4,422	64.0	1,980	60.0	339	49.3	201	45.8
Forestry, natural resources, and conservation	7,360	58.0	5,385	59.2	1,975	54.6	597	44.2	404	35.6
Physical sciences	44,092	36.8	6,256	39.6	37,836	36.4	6,877	25.8	2,894	23.2
Astronomy and astrophysics	1,703	46.0	100	43.0	1,603	46.2	634	33.3	573	23.4
Chemistry	22,710	45.0	3,015	49.9	19,695	44.3	3,157	27.8	876	29.3
Materials sciences	1,625	33.7	402	30.6	1,223	34.8	246	24.4	77	24.7
Physics	17,000	24.6	2,253	23.5	14,747	24.7	2,618	21.4	1,162	18.2
Physical sciences nec	1,054	47.8	486	57.6	568	39.4	222	28.8	206	23.8
Psychology	69,442	80.3	48,321	82.3	21,121	75.8	1,308	65.6	786	66.8
Applied psychology	25,195	81.8	20,091	82.9	5,104	77.2	109	79.8	70	77.1
Clinical psychology	7,793	80.7	4,519	81.5	3,274	79.6	56	87.5	9	88.9
Counseling psychology	13,800	82.6	12,400	83.3	1,400	76.7	14	100.0	11	90.9
Human development	2,293	88.7	1,525	91.4	768	83.3	119	79.0	148	71.6
Psychology, general	13,181	76.0	7,346	77.3	5,835	74.4	735	60.8	417	62.1
Research and experimental psychology	7,180	75.6	2,440	82.5	4,740	72.1	275	60.7	131	67.2
Social sciences	78,717	55.1	44,701	56.8	34,016	52.8	1,666	51.6	1,726	54.2
Agricultural and natural resource economics	901	45.6	485	45.4	416	45.9	53	30.2	31	29.0
Anthropology	6,220	67.7	2,173	69.9	4,047	66.5	150	54.7	74	63.5
Area, ethnic, cultural, gender, and group studies	4,979	66.2	2,634	67.1	2,345	65.1	235	59.1	96	62.5

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2022

(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
Criminal justice and safety studies	6,613	62.9	5,223	65.0	1,390	54.9	15	73.3	21	57.1
Criminology	1,502	70.5	1,180	70.3	322	71.4	8	62.5	15	73.3
Economics (except agricultural and natural resource)	14,935	39.7	6,734	42.9	8,201	37.1	152	38.2	152	46.1
Geography and cartography	4,354	49.4	2,807	46.9	1,547	53.8	131	51.9	100	38.0
International relations and national security studies	8,164	49.8	7,833	49.9	331	47.4	98	54.1	92	34.8
Linguistics	2,854	61.5	1,159	65.3	1,695	58.8	58	44.8	55	47.3
Political science and government	8,235	46.3	2,925	46.7	5,310	46.1	162	46.3	87	41.4
Public policy analysis	9,391	58.2	6,701	60.5	2,690	52.5	241	58.9	468	58.8
Sociology and population studies	6,845	67.9	2,190	72.9	4,655	65.5	166	59.0	168	58.3
Urban studies and affairs	1,069	62.4	671	64.5	398	58.8	18	50.0	37	62.2
Social sciences, other	2,655	64.8	1,986	67.2	669	57.7	179	43.0	330	60.0
Engineering	176,000	27.9	103,020	27.0	72,980	29.1	8,335	27.5	4,355	23.7
Aerospace, aeronautical, and astronautical engineering	8,095	19.3	5,263	19.2	2,832	19.4	244	16.4	153	19.6
Biological, biomedical, and biosystems engineering	14,442	48.0	5,177	50.9	9,265	46.4	1,540	38.5	685	38.4
Chemical, petroleum, and chemical-related engineering	10,601	34.1	3,011	33.4	7,590	34.4	1,239	28.8	313	27.2
Chemical engineering	9,668	35.4	2,599	35.6	7,069	35.3	1,215	29.0	265	30.9
Petroleum engineering	933	20.5	412	19.4	521	21.3	24	20.8	48	6.3
Civil, environmental, transportation and related engineering fields	20,375	34.4	12,621	34.3	7,754	34.7	1,018	31.0	569	23.9
Civil engineering	16,321	32.5	9,692	32.5	6,629	32.5	929	30.5	497	23.1
Architectural, environmental, construction and surveying engineering	4,054	42.2	2,929	40.2	1,125	47.6	89	37.1	72	29.2
Electrical, electronics, communications and computer engineering	49,901	23.5	32,316	25.0	17,585	20.8	1,217	20.4	734	14.9
Electrical, electronics, and communications engineering	34,537	21.4	19,757	22.0	14,780	20.7	1,129	20.5	673	14.1
Computer engineering	15,364	28.2	12,559	29.7	2,805	21.7	88	19.3	61	23.0
Industrial, manufacturing, systems engineering and operations research	16,435	28.3	12,579	27.0	3,856	32.8	143	23.1	197	23.9
Industrial and manufacturing engineering	8,650	26.8	6,349	24.0	2,301	34.7	72	22.2	74	24.3
Systems engineering and operations research	7,785	30.0	6,230	30.0	1,555	29.9	71	23.9	123	23.6
Mechanical engineering	27,552	18.5	16,029	16.9	11,523	20.8	1,189	19.4	527	16.7
Metallurgical, mining, materials and related engineering fields	7,118	31.7	2,545	32.3	4,573	31.4	542	22.1	280	20.4
Other engineering	21,481	28.8	13,479	28.8	8,002	28.8	1,203	29.1	897	24.3
Agricultural engineering	1,020	39.2	389	42.4	631	37.2	136	35.3	48	33.3

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2022

(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
Engineering mechanics, physics, and science	2,350	28.6	762	29.5	1,588	28.1	265	25.3	199	18.1
Nuclear engineering	1,578	20.2	493	18.1	1,085	21.2	82	23.2	41	24.4
Engineering, other	16,533	29.0	11,835	28.8	4,698	29.6	720	30.0	609	25.6
Health	84,368	77.2	66,308	79.1	18,060	70.0	17,742	50.6	8,501	53.5
Clinical medicine	39,217	76.5	33,251	77.4	5,966	71.6	15,630	50.4	7,351	52.9
Medical clinical sciences and clinical and medical laboratory sciences	2,122	63.7	1,168	63.4	954	64.2	450	53.3	128	54.7
Public health	37,095	77.2	32,083	77.9	5,012	73.0	796	63.6	742	66.4
Anesthesiology	ne	ne	ne	ne	ne	ne	313	47.0	129	44.2
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	672	42.4	227	45.4
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	355	51.8	109	56.9
Gastroenterology	ne	ne	ne	ne	ne	ne	310	49.7	105	44.8
Hematology	ne	ne	ne	ne	ne	ne	379	44.3	199	51.3
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	1,618	51.0	580	48.6
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	218	64.2	107	74.8
Oncology and cancer research	ne	ne	ne	ne	ne	ne	1,391	50.3	648	57.9
Ophthalmology	ne	ne	ne	ne	ne	ne	476	47.7	303	46.9
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	267	47.2	119	55.5
Pediatrics	ne	ne	ne	ne	ne	ne	1,125	59.0	742	55.1
Psychiatry	ne	ne	ne	ne	ne	ne	951	63.3	351	61.0
Pulmonary disease	ne	ne	ne	ne	ne	ne	238	47.1	116	56.9
Radiological sciences	ne	ne	ne	ne	ne	ne	1,218	40.0	444	34.2
Surgery	ne	ne	ne	ne	ne	ne	1,213	42.9	572	45.1
Clinical medicine nec	ne	ne	ne	ne	ne	ne	3,640	49.2	1,730	52.5
Other health	45,151	77.8	33,057	80.9	12,094	69.3	2,112	52.6	1,150	57.9
Communication disorders sciences	18,589	95.0	17,768	95.6	821	81.6	72	66.7	86	68.6
Dental sciences	1,773	54.1	1,545	53.5	228	57.9	311	52.7	140	52.1
Kinesiology and exercise science	5,724	50.9	4,743	51.2	981	49.4	71	52.1	49	51.0
Nursing science	5,192	85.9	1,535	86.5	3,657	85.6	141	85.1	166	85.5
Pharmaceutical sciences	5,201	60.7	2,142	66.9	3,059	56.4	1,107	46.3	379	45.4
Other health nec	8,672	68.9	5,324	70.2	3,348	66.8	410	55.6	330	59.1

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, 2022.

TABLE 4-3
Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2022

(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	798,534	100.0	579,301	100.0	194,733	100.0	219,233	100.0	501,311	100.0	319,618	100.0	147,317	100.0	181,693	100.0	297,223	100.0	259,683	100.0	47,416	100.0	37,540	100.0
Science	538,166	67.4	392,192	67.7	130,265	66.9	145,974	66.6	331,983	66.2	208,749	65.3	96,349	65.4	123,234	67.8	206,183	69.4	183,443	70.6	33,916	71.5	22,740	60.6
Agricultural and veterinary sciences	11,596	1.5	8,035	1.4	2,205	1.1	3,561	1.6	6,949	1.4	4,143	1.3	1,534	1.0	2,806	1.5	4,647	1.6	3,892	1.5	671	1.4	755	2.0
Agricultural sciences	10,310	1.3	7,291	1.3	2,000	1.0	3,019	1.4	6,165	1.2	3,831	1.2	1,406	1.0	2,334	1.3	4,145	1.4	3,460	1.3	594	1.3	685	1.8
Veterinary biomedical and clinical sciences	1,286	0.2	744	0.1	205	0.1	542	0.2	784	0.2	312	0.1	128	0.1	472	0.3	502	0.2	432	0.2	77	0.2	70	0.2
Biological and biomedical sciences	102,700	12.9	83,617	14.4	24,054	12.4	19,083	8.7	43,062	8.6	27,987	8.8	13,871	9.4	15,075	8.3	59,638	20.1	55,630	21.4	10,183	21.5	4,008	10.7
Biochemistry	5,905	0.7	5,330	0.9	1,126	0.6	575	0.3	911	0.2	638	0.2	334	0.2	273	0.2	4,994	1.7	4,692	1.8	792	1.7	302	0.8
Biology	15,569	1.9	11,222	1.9	3,082	1.6	4,347	2.0	7,969	1.6	4,307	1.3	1,803	1.2	3,662	2.0	7,600	2.6	6,915	2.7	1,279	2.7	685	1.8
Biomedical sciences	10,836	1.4	9,465	1.6	3,930	2.0	1,371	0.6	5,681	1.1	4,565	1.4	2,614	1.8	1,116	0.6	5,155	1.7	4,900	1.9	1,316	2.8	255	0.7
Biophysics	895	0.1	882	0.2	140	0.1	13	*	8	*	7	*	1	*	1	*	887	0.3	875	0.3	139	0.3	12	*
Biostatistics and bioinformatics	7,651	1.0	6,353	1.1	2,124	1.1	1,298	0.6	3,852	0.8	2,871	0.9	1,495	1.0	981	0.5	3,799	1.3	3,482	1.3	629	1.3	317	0.8
Biotechnology	4,021	0.5	2,058	0.4	987	0.5	1,963	0.9	3,916	0.8	1,967	0.6	976	0.7	1,949	1.1	105	*	91	*	11	*	14	*
Botany and plant biology	1,670	0.2	1,537	0.3	299	0.2	133	0.1	369	0.1	322	0.1	109	0.1	47	*	1,301	0.4	1,215	0.5	190	0.4	86	0.2
Cell, cellular biology, and anatomical sciences	6,511	0.8	6,001	1.0	1,345	0.7	510	0.2	1,137	0.2	826	0.3	455	0.3	311	0.2	5,374	1.8	5,175	2.0	890	1.9	199	0.5
Ecology and population biology	3,866	0.5	3,216	0.6	724	0.4	650	0.3	1,058	0.2	729	0.2	261	0.2	329	0.2	2,808	0.9	2,487	1.0	463	1.0	321	0.9
Epidemiology	6,057	0.8	4,594	0.8	1,743	0.9	1,463	0.7	3,844	0.8	2,754	0.9	1,369	0.9	1,090	0.6	2,213	0.7	1,840	0.7	374	0.8	373	1.0
Genetics	3,333	0.4	2,999	0.5	549	0.3	334	0.2	749	0.1	515	0.2	236	0.2	234	0.1	2,584	0.9	2,484	1.0	313	0.7	100	0.3
Microbiological sciences and immunology	6,492	0.8	5,191	0.9	1,071	0.5	1,301	0.6	2,026	0.4	929	0.3	441	0.3	1,097	0.6	4,466	1.5	4,262	1.6	630	1.3	204	0.5
Molecular biology	1,639	0.2	1,414	0.2	346	0.2	225	0.1	408	0.1	257	0.1	130	0.1	151	0.1	1,231	0.4	1,157	0.4	216	0.5	74	0.2
Neurobiology and neuroscience	6,448	0.8	6,151	1.1	1,094	0.6	297	0.1	515	0.1	381	0.1	177	0.1	134	0.1	5,933	2.0	5,770	2.2	917	1.9	163	0.4
Nutrition science	3,955	0.5	2,845	0.5	1,128	0.6	1,110	0.5	2,905	0.6	1,942	0.6	936	0.6	963	0.5	1,050	0.4	903	0.3	192	0.4	147	0.4
Pathology and experimental pathology	1,023	0.1	952	0.2	167	0.1	71	*	106	*	78	*	42	*	28	*	917	0.3	874	0.3	125	0.3	43	0.1
Pharmacology and toxicology	3,405	0.4	2,880	0.5	612	0.3	525	0.2	996	0.2	564	0.2	288	0.2	432	0.2	2,409	0.8	2,316	0.9	324	0.7	93	0.2
Physiology	5,912	0.7	4,917	0.8	1,532	0.8	995	0.5	2,891	0.6	2,072	0.6	1,089	0.7	819	0.5	3,021	1.0	2,845	1.1	443	0.9	176	0.5
Zoology and animal biology	2,059	0.3	1,593	0.3	339	0.2	466	0.2	861	0.2	537	0.2	182	0.1	324	0.2	1,198	0.4	1,056	0.4	157	0.3	142	0.4
Biological and biomedical sciences nec	5,453	0.7	4,017	0.7	1,716	0.9	1,436	0.7	2,860	0.6	1,726	0.5	933	0.6	1,134	0.6	2,593	0.9	2,291	0.9	783	1.7	302	0.8
Computer and information sciences	150,555	18.9	101,252	17.5	43,189	22.2	49,303	22.5	129,972	25.9	83,708	26.2	40,087	27.2	46,264	25.5	20,583	6.9	17,544	6.8	3,102	6.5	3,039	8.1

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2022

(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
Artificial intelligence, informatics, and computer and information science topics	6,142	0.8	4,298	0.7	1,901	1.0	1,844	0.8	5,379	1.1	3,675	1.1	1,791	1.2	1,704	0.9	763	0.3	623	0.2	110	0.2	140	0.4
Computer and information sciences	46,151	5.8	28,059	4.8	11,965	6.1	18,092	8.3	39,719	7.9	22,657	7.1	11,040	7.5	17,062	9.4	6,432	2.2	5,402	2.1	925	2.0	1,030	2.7
Computer and information systems security	9,695	1.2	3,733	0.6	1,625	0.8	5,962	2.7	9,254	1.8	3,463	1.1	1,553	1.1	5,791	3.2	441	0.1	270	0.1	72	0.2	171	0.5
Computer science	52,924	6.6	41,924	7.2	16,999	8.7	11,000	5.0	42,092	8.4	32,295	10.1	15,302	10.4	9,797	5.4	10,832	3.6	9,629	3.7	1,697	3.6	1,203	3.2
Information science and studies	16,872	2.1	10,131	1.7	4,638	2.4	6,741	3.1	15,478	3.1	9,097	2.8	4,463	3.0	6,381	3.5	1,394	0.5	1,034	0.4	175	0.4	360	1.0
Information technology	11,151	1.4	7,887	1.4	3,722	1.9	3,264	1.5	10,601	2.1	7,426	2.3	3,619	2.5	3,175	1.7	550	0.2	461	0.2	103	0.2	89	0.2
Computer and information sciences nec	7,620	1.0	5,220	0.9	2,339	1.2	2,400	1.1	7,449	1.5	5,095	1.6	2,319	1.6	2,354	1.3	171	0.1	125	*	20	*	46	0.1
Geosciences, atmospheric sciences, and ocean sciences	11,970	1.5	9,747	1.7	2,394	1.2	2,223	1.0	5,186	1.0	3,621	1.1	1,348	0.9	1,565	0.9	6,784	2.3	6,126	2.4	1,046	2.2	658	1.8
Atmospheric sciences and meteorology	1,434	0.2	1,286	0.2	297	0.2	148	0.1	489	0.1	432	0.1	151	0.1	57	*	945	0.3	854	0.3	146	0.3	91	0.2
Geological and earth sciences	7,468	0.9	5,967	1.0	1,488	0.8	1,501	0.7	3,183	0.6	2,107	0.7	810	0.5	1,076	0.6	4,285	1.4	3,860	1.5	678	1.4	425	1.1
Ocean and marine sciences	3,068	0.4	2,494	0.4	609	0.3	574	0.3	1,514	0.3	1,082	0.3	387	0.3	432	0.2	1,554	0.5	1,412	0.5	222	0.5	142	0.4
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	ne	ne	ne
Mathematics and statistics	34,387	4.3	26,598	4.6	9,608	4.9	7,789	3.6	20,798	4.1	14,239	4.5	7,056	4.8	6,559	3.6	13,589	4.6	12,359	4.8	2,552	5.4	1,230	3.3
Applied mathematics	11,224	1.4	9,018	1.6	4,012	2.1	2,206	1.0	9,097	1.8	7,121	2.2	3,650	2.5	1,976	1.1	2,127	0.7	1,897	0.7	362	0.8	230	0.6
Mathematics	12,022	1.5	9,517	1.6	2,456	1.3	2,505	1.1	3,905	0.8	2,067	0.6	858	0.6	1,838	1.0	8,117	2.7	7,450	2.9	1,598	3.4	667	1.8
Statistics	11,141	1.4	8,063	1.4	3,140	1.6	3,078	1.4	7,796	1.6	5,051	1.6	2,548	1.7	2,745	1.5	3,345	1.1	3,012	1.2	592	1.2	333	0.9
Multidisciplinary and interdisciplinary sciences	20,945	2.6	13,048	2.3	5,883	3.0	7,897	3.6	16,931	3.4	9,767	3.1	5,169	3.5	7,164	3.9	4,014	1.4	3,281	1.3	714	1.5	733	2.0
Biological and physical sciences	1,855	0.2	1,562	0.3	660	0.3	293	0.1	899	0.2	673	0.2	416	0.3	226	0.1	956	0.3	889	0.3	244	0.5	67	0.2
Computational science	3,424	0.4	2,095	0.4	1,011	0.5	1,329	0.6	3,089	0.6	1,828	0.6	962	0.7	1,261	0.7	335	0.1	267	0.1	49	0.1	68	0.2
Data science and data analytics	6,104	0.8	2,581	0.4	1,647	0.8	3,523	1.6	6,000	1.2	2,502	0.8	1,611	1.1	3,498	1.9	104	*	79	*	36	0.1	25	0.1
International and global studies	1,258	0.2	909	0.2	338	0.2	349	0.2	1,083	0.2	766	0.2	315	0.2	317	0.2	175	0.1	143	0.1	23	*	32	0.1
Multidisciplinary and interdisciplinary sciences nec	8,304	1.0	5,901	1.0	2,227	1.1	2,403	1.1	5,860	1.2	3,998	1.3	1,865	1.3	1,862	1.0	2,444	0.8	1,903	0.7	362	0.8	541	1.4
Natural resources and conservation	13,762	1.7	9,161	1.6	2,810	1.4	4,601	2.1	9,807	2.0	6,010	1.9	2,317	1.6	3,797	2.1	3,955	1.3	3,151	1.2	493	1.0	804	2.1
Environmental science and studies	6,402	0.8	4,480	0.8	1,538	0.8	1,922	0.9	4,422	0.9	2,864	0.9	1,260	0.9	1,558	0.9	1,980	0.7	1,616	0.6	278	0.6	364	1.0

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2022

(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
Forestry, natural resources, and conservation	7,360	0.9	4,681	0.8	1,272	0.7	2,679	1.2	5,385	1.1	3,146	1.0	1,057	0.7	2,239	1.2	1,975	0.7	1,535	0.6	215	0.5	440	1.2
Physical sciences	44,092	5.5	39,012	6.7	8,334	4.3	5,080	2.3	6,256	1.2	3,726	1.2	1,495	1.0	2,530	1.4	37,836	12.7	35,286	13.6	6,839	14.4	2,550	6.8
Astronomy and astrophysics	1,703	0.2	1,601	0.3	328	0.2	102	*	100	*	61	*	18	*	39	*	1,603	0.5	1,540	0.6	310	0.7	63	0.2
Chemistry	22,710	2.8	20,302	3.5	4,446	2.3	2,408	1.1	3,015	0.6	1,802	0.6	712	0.5	1,213	0.7	19,695	6.6	18,500	7.1	3,734	7.9	1,195	3.2
Materials sciences	1,625	0.2	1,421	0.2	345	0.2	204	0.1	402	0.1	300	0.1	138	0.1	102	0.1	1,223	0.4	1,121	0.4	207	0.4	102	0.3
Physics	17,000	2.1	15,019	2.6	3,015	1.5	1,981	0.9	2,253	0.4	1,347	0.4	532	0.4	906	0.5	14,747	5.0	13,672	5.3	2,483	5.2	1,075	2.9
Physical sciences nec	1,054	0.1	669	0.1	200	0.1	385	0.2	486	0.1	216	0.1	95	0.1	270	0.1	568	0.2	453	0.2	105	0.2	115	0.3
Psychology	69,442	8.7	45,196	7.8	13,945	7.2	24,246	11.1	48,321	9.6	27,861	8.7	10,597	7.2	20,460	11.3	21,121	7.1	17,335	6.7	3,348	7.1	3,786	10.1
Applied psychology	25,195	3.2	13,697	2.4	4,750	2.4	11,498	5.2	20,091	4.0	10,087	3.2	4,032	2.7	10,004	5.5	5,104	1.7	3,610	1.4	718	1.5	1,494	4.0
Clinical psychology	7,793	1.0	5,249	0.9	1,318	0.7	2,544	1.2	4,519	0.9	2,537	0.8	808	0.5	1,982	1.1	3,274	1.1	2,712	1.0	510	1.1	562	1.5
Counseling psychology	13,800	1.7	9,161	1.6	2,854	1.5	4,639	2.1	12,400	2.5	8,122	2.5	2,626	1.8	4,278	2.4	1,400	0.5	1,039	0.4	228	0.5	361	1.0
Human development	2,293	0.3	1,488	0.3	545	0.3	805	0.4	1,525	0.3	895	0.3	425	0.3	630	0.3	768	0.3	593	0.2	120	0.3	175	0.5
Psychology, general	13,181	1.7	9,422	1.6	2,919	1.5	3,759	1.7	7,346	1.5	4,457	1.4	1,965	1.3	2,889	1.6	5,835	2.0	4,965	1.9	954	2.0	870	2.3
Research and experimental psychology	7,180	0.9	6,179	1.1	1,559	0.8	1,001	0.5	2,440	0.5	1,763	0.6	741	0.5	677	0.4	4,740	1.6	4,416	1.7	818	1.7	324	0.9
Social sciences	78,717	9.9	56,526	9.8	17,843	9.2	22,191	10.1	44,701	8.9	27,687	8.7	12,875	8.7	17,014	9.4	34,016	11.4	28,839	11.1	4,968	10.5	5,177	13.8
Agricultural and natural resource economics	901	0.1	709	0.1	224	0.1	192	0.1	485	0.1	339	0.1	160	0.1	146	0.1	416	0.1	370	0.1	64	0.1	46	0.1
Anthropology	6,220	0.8	4,897	0.8	1,138	0.6	1,323	0.6	2,173	0.4	1,392	0.4	606	0.4	781	0.4	4,047	1.4	3,505	1.3	532	1.1	542	1.4
Area, ethnic, cultural, gender, and group studies	4,979	0.6	3,802	0.7	1,204	0.6	1,177	0.5	2,634	0.5	1,876	0.6	904	0.6	758	0.4	2,345	0.8	1,926	0.7	300	0.6	419	1.1
Criminal justice and safety studies	6,613	0.8	3,257	0.6	1,174	0.6	3,356	1.5	5,223	1.0	2,356	0.7	997	0.7	2,867	1.6	1,390	0.5	901	0.3	177	0.4	489	1.3
Criminology	1,502	0.2	908	0.2	359	0.2	594	0.3	1,180	0.2	629	0.2	288	0.2	551	0.3	322	0.1	279	0.1	71	0.1	43	0.1
Economics (except agricultural and natural resource)	14,935	1.9	12,568	2.2	3,977	2.0	2,367	1.1	6,734	1.3	4,984	1.6	2,617	1.8	1,750	1.0	8,201	2.8	7,584	2.9	1,360	2.9	617	1.6
Geography and cartography	4,354	0.5	2,645	0.5	795	0.4	1,709	0.8	2,807	0.6	1,347	0.4	562	0.4	1,460	0.8	1,547	0.5	1,298	0.5	233	0.5	249	0.7
International relations and national security studies	8,164	1.0	5,148	0.9	2,179	1.1	3,016	1.4	7,833	1.6	4,893	1.5	2,131	1.4	2,940	1.6	331	0.1	255	0.1	48	0.1	76	0.2
Linguistics	2,854	0.4	2,162	0.4	527	0.3	692	0.3	1,159	0.2	683	0.2	277	0.2	476	0.3	1,695	0.6	1,479	0.6	250	0.5	216	0.6
Political science and government	8,235	1.0	6,279	1.1	1,542	0.8	1,956	0.9	2,925	0.6	1,530	0.5	704	0.5	1,395	0.8	5,310	1.8	4,749	1.8	838	1.8	561	1.5
Public policy analysis	9,391	1.2	6,473	1.1	2,500	1.3	2,918	1.3	6,701	1.3	4,774	1.5	2,173	1.5	1,927	1.1	2,690	0.9	1,699	0.7	327	0.7	991	2.6
Sociology and population studies	6,845	0.9	5,245	0.9	1,209	0.6	1,600	0.7	2,190	0.4	1,247	0.4	566	0.4	943	0.5	4,655	1.6	3,998	1.5	643	1.4	657	1.8

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2022

(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
Urban studies and affairs	1,069	0.1	517	0.1	169	0.1	552	0.3	671	0.1	286	0.1	133	0.1	385	0.2	398	0.1	231	0.1	36	0.1	167	0.4
Social sciences, other	2,655	0.3	1,916	0.3	846	0.4	739	0.3	1,986	0.4	1,351	0.4	757	0.5	635	0.3	669	0.2	565	0.2	89	0.2	104	0.3
Engineering	176,000	22.0	130,447	22.5	42,841	22.0	45,553	20.8	103,020	20.6	66,427	20.8	31,912	21.7	36,593	20.1	72,980	24.6	64,020	24.7	10,929	23.0	8,960	23.9
Aerospace, aeronautical, and astronautical engineering	8,095	1.0	5,420	0.9	1,691	0.9	2,675	1.2	5,263	1.0	2,937	0.9	1,316	0.9	2,326	1.3	2,832	1.0	2,483	1.0	375	0.8	349	0.9
Biological, biomedical, and biosystems engineering	14,442	1.8	12,416	2.1	3,797	1.9	2,026	0.9	5,177	1.0	3,834	1.2	2,186	1.5	1,343	0.7	9,265	3.1	8,582	3.3	1,611	3.4	683	1.8
Chemical, petroleum, and chemical-related engineering	10,601	1.3	9,320	1.6	2,355	1.2	1,281	0.6	3,011	0.6	2,099	0.7	1,008	0.7	912	0.5	7,590	2.6	7,221	2.8	1,347	2.8	369	1.0
Chemical engineering	9,668	1.2	8,556	1.5	2,182	1.1	1,112	0.5	2,599	0.5	1,803	0.6	911	0.6	796	0.4	7,069	2.4	6,753	2.6	1,271	2.7	316	0.8
Petroleum engineering	933	0.1	764	0.1	173	0.1	169	0.1	412	0.1	296	0.1	97	0.1	116	0.1	521	0.2	468	0.2	76	0.2	53	0.1
Civil, environmental, transportation and related engineering fields	20,375	2.6	14,920	2.6	4,975	2.6	5,455	2.5	12,621	2.5	8,215	2.6	3,867	2.6	4,406	2.4	7,754	2.6	6,705	2.6	1,108	2.3	1,049	2.8
Civil engineering	16,321	2.0	12,031	2.1	3,965	2.0	4,290	2.0	9,692	1.9	6,276	2.0	3,007	2.0	3,416	1.9	6,629	2.2	5,755	2.2	958	2.0	874	2.3
Architectural, environmental, construction and surveying engineering	4,054	0.5	2,889	0.5	1,010	0.5	1,165	0.5	2,929	0.6	1,939	0.6	860	0.6	990	0.5	1,125	0.4	950	0.4	150	0.3	175	0.5
Electrical, electronics, communications and computer engineering	49,901	6.2	37,882	6.5	13,165	6.8	12,019	5.5	32,316	6.4	22,725	7.1	10,774	7.3	9,591	5.3	17,585	5.9	15,157	5.8	2,391	5.0	2,428	6.5
Electrical, electronics, and communications engineering	34,537	4.3	25,801	4.5	8,036	4.1	8,736	4.0	19,757	3.9	12,983	4.1	6,015	4.1	6,774	3.7	14,780	5.0	12,818	4.9	2,021	4.3	1,962	5.2
Computer engineering	15,364	1.9	12,081	2.1	5,129	2.6	3,283	1.5	12,559	2.5	9,742	3.0	4,759	3.2	2,817	1.6	2,805	0.9	2,339	0.9	370	0.8	466	1.2
Industrial, manufacturing, systems engineering and operations research	16,435	2.1	9,822	1.7	4,183	2.1	6,613	3.0	12,579	2.5	6,920	2.2	3,634	2.5	5,659	3.1	3,856	1.3	2,902	1.1	549	1.2	954	2.5
Industrial and manufacturing engineering	8,650	1.1	6,034	1.0	2,503	1.3	2,616	1.2	6,349	1.3	4,268	1.3	2,188	1.5	2,081	1.1	2,301	0.8	1,766	0.7	315	0.7	535	1.4
Systems engineering and operations research	7,785	1.0	3,788	0.7	1,680	0.9	3,997	1.8	6,230	1.2	2,652	0.8	1,446	1.0	3,578	2.0	1,555	0.5	1,136	0.4	234	0.5	419	1.1
Mechanical engineering	27,552	3.5	20,696	3.6	6,417	3.3	6,856	3.1	16,029	3.2	10,423	3.3	4,801	3.3	5,606	3.1	11,523	3.9	10,273	4.0	1,616	3.4	1,250	3.3
Metallurgical, mining, materials and related engineering fields	7,118	0.9	5,888	1.0	1,448	0.7	1,230	0.6	2,545	0.5	1,667	0.5	743	0.5	878	0.5	4,573	1.5	4,221	1.6	705	1.5	352	0.9
Other engineering	21,481	2.7	14,083	2.4	4,810	2.5	7,398	3.4	13,479	2.7	7,607	2.4	3,583	2.4	5,872	3.2	8,002	2.7	6,476	2.5	1,227	2.6	1,526	4.1
Agricultural engineering	1,020	0.1	835	0.1	191	0.1	185	0.1	389	0.1	291	0.1	105	0.1	98	0.1	631	0.2	544	0.2	86	0.2	87	0.2

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2022

(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
Engineering mechanics, physics, and science	2,350	0.3	2,030	0.4	561	0.3	320	0.1	762	0.2	542	0.2	274	0.2	220	0.1	1,588	0.5	1,488	0.6	287	0.6	100	0.3
Nuclear engineering	1,578	0.2	1,214	0.2	311	0.2	364	0.2	493	0.1	327	0.1	133	0.1	166	0.1	1,085	0.4	887	0.3	178	0.4	198	0.5
Engineering, other	16,533	2.1	10,004	1.7	3,747	1.9	6,529	3.0	11,835	2.4	6,447	2.0	3,071	2.1	5,388	3.0	4,698	1.6	3,557	1.4	676	1.4	1,141	3.0
Health	84,368	10.6	56,662	9.8	21,627	11.1	27,706	12.6	66,308	13.2	44,442	13.9	19,056	12.9	21,866	12.0	18,060	6.1	12,220	4.7	2,571	5.4	5,840	15.6
Clinical medicine	39,217	4.9	23,215	4.0	9,181	4.7	16,002	7.3	33,251	6.6	19,519	6.1	8,403	5.7	13,732	7.6	5,966	2.0	3,696	1.4	778	1.6	2,270	6.0
Medical clinical sciences and clinical and medical laboratory sciences	2,122	0.3	1,124	0.2	389	0.2	998	0.5	1,168	0.2	638	0.2	289	0.2	530	0.3	954	0.3	486	0.2	100	0.2	468	1.2
Public health	37,095	4.6	22,091	3.8	8,792	4.5	15,004	6.8	32,083	6.4	18,881	5.9	8,114	5.5	13,202	7.3	5,012	1.7	3,210	1.2	678	1.4	1,802	4.8
Other health	45,151	5.7	33,447	5.8	12,446	6.4	11,704	5.3	33,057	6.6	24,923	7.8	10,653	7.2	8,134	4.5	12,094	4.1	8,524	3.3	1,793	3.8	3,570	9.5
Communication disorders sciences	18,589	2.3	16,522	2.9	6,843	3.5	2,067	0.9	17,768	3.5	15,778	4.9	6,695	4.5	1,990	1.1	821	0.3	744	0.3	148	0.3	77	0.2
Dental sciences	1,773	0.2	1,617	0.3	532	0.3	156	0.1	1,545	0.3	1,399	0.4	483	0.3	146	0.1	228	0.1	218	0.1	49	0.1	10	*
Kinesiology and exercise science	5,724	0.7	3,881	0.7	1,633	0.8	1,843	0.8	4,743	0.9	3,132	1.0	1,494	1.0	1,611	0.9	981	0.3	749	0.3	139	0.3	232	0.6
Nursing science	5,192	0.7	2,710	0.5	588	0.3	2,482	1.1	1,535	0.3	721	0.2	203	0.1	814	0.4	3,657	1.2	1,989	0.8	385	0.8	1,668	4.4
Pharmaceutical sciences	5,201	0.7	3,828	0.7	1,051	0.5	1,373	0.6	2,142	0.4	1,115	0.3	515	0.3	1,027	0.6	3,059	1.0	2,713	1.0	536	1.1	346	0.9
Other health nec	8,672	1.1	4,889	0.8	1,799	0.9	3,783	1.7	5,324	1.1	2,778	0.9	1,263	0.9	2,546	1.4	3,348	1.1	2,111	0.8	536	1.1	1,237	3.3

* = value < 0.05%.

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, 2022.

TABLE 4-4a

Citizenship, ethnicity, and race of graduate students, by detailed field: 2022

(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	798,534	100.0	69,621	100.0	2,082	100.0	61,426	100.0	44,016	100.0	738	100.0	279,657	100.0	19,331	100.0	23,428	100.0	298,235	100.0
Science	538,166	67.4	48,508	69.7	1,335	64.1	40,603	66.1	29,714	67.5	537	72.8	190,960	68.3	13,393	69.3	15,914	67.9	197,202	66.1
Agricultural and veterinary sciences	11,596	1.5	886	1.3	29	1.4	396	0.6	457	1.0	14	1.9	5,680	2.0	237	1.2	256	1.1	3,641	1.2
Agricultural sciences	10,310	1.3	773	1.1	29	1.4	344	0.6	407	0.9	13	1.8	5,044	1.8	207	1.1	200	0.9	3,293	1.1
Veterinary biomedical and clinical sciences	1,286	0.2	113	0.2	0	0.0	52	0.1	50	0.1	1	0.1	636	0.2	30	0.2	56	0.2	348	0.1
Biological and biomedical sciences	102,700	12.9	10,691	15.4	239	11.5	10,386	16.9	6,413	14.6	115	15.6	44,818	16.0	3,271	16.9	3,271	14.0	23,496	7.9
Biochemistry	5,905	0.7	628	0.9	20	1.0	507	0.8	234	0.5	7	0.9	2,525	0.9	196	1.0	127	0.5	1,661	0.6
Biology	15,569	1.9	1,785	2.6	42	2.0	1,044	1.7	893	2.0	29	3.9	7,782	2.8	504	2.6	437	1.9	3,053	1.0
Biomedical sciences	10,836	1.4	1,178	1.7	23	1.1	1,594	2.6	1,272	2.9	8	1.1	4,138	1.5	329	1.7	360	1.5	1,934	0.6
Biophysics	895	0.1	86	0.1	0	0.0	114	0.2	20	*	0	0.0	352	0.1	32	0.2	16	0.1	275	0.1
Biostatistics and bioinformatics	7,651	1.0	397	0.6	7	0.3	1,072	1.7	230	0.5	8	1.1	2,051	0.7	172	0.9	255	1.1	3,459	1.2
Biotechnology	4,021	0.5	417	0.6	6	0.3	580	0.9	308	0.7	2	0.3	1,240	0.4	129	0.7	159	0.7	1,180	0.4
Botany and plant biology	1,670	0.2	145	0.2	5	0.2	83	0.1	38	0.1	1	0.1	778	0.3	50	0.3	48	0.2	522	0.2
Cell, cellular biology, and anatomical sciences	6,511	0.8	784	1.1	18	0.9	690	1.1	267	0.6	9	1.2	2,816	1.0	187	1.0	219	0.9	1,521	0.5
Ecology and population biology	3,866	0.5	357	0.5	15	0.7	167	0.3	130	0.3	5	0.7	2,325	0.8	125	0.6	103	0.4	639	0.2
Epidemiology	6,057	0.8	607	0.9	8	0.4	814	1.3	545	1.2	8	1.1	2,221	0.8	186	1.0	176	0.8	1,492	0.5
Genetics	3,333	0.4	326	0.5	5	0.2	312	0.5	148	0.3	2	0.3	1,622	0.6	113	0.6	95	0.4	710	0.2
Microbiological sciences and immunology	6,492	0.8	830	1.2	21	1.0	606	1.0	349	0.8	4	0.5	3,119	1.1	223	1.2	240	1.0	1,100	0.4
Molecular biology	1,639	0.2	213	0.3	2	0.1	187	0.3	87	0.2	3	0.4	654	0.2	52	0.3	44	0.2	397	0.1
Neurobiology and neuroscience	6,448	0.8	787	1.1	14	0.7	663	1.1	320	0.7	1	0.1	2,992	1.1	246	1.3	207	0.9	1,218	0.4
Nutrition science	3,955	0.5	442	0.6	7	0.3	263	0.4	190	0.4	5	0.7	2,083	0.7	111	0.6	153	0.7	701	0.2
Pathology and experimental pathology	1,023	0.1	94	0.1	3	0.1	92	0.1	50	0.1	2	0.3	467	0.2	26	0.1	54	0.2	235	0.1
Pharmacology and toxicology	3,405	0.4	317	0.5	8	0.4	367	0.6	212	0.5	1	0.1	1,365	0.5	101	0.5	116	0.5	918	0.3
Physiology	5,912	0.7	506	0.7	12	0.6	600	1.0	433	1.0	8	1.1	2,694	1.0	199	1.0	217	0.9	1,243	0.4
Zoology and animal biology	2,059	0.3	163	0.2	7	0.3	73	0.1	59	0.1	0	0.0	1,266	0.5	69	0.4	50	0.2	372	0.1
Biological and biomedical sciences nec	5,453	0.7	629	0.9	16	0.8	558	0.9	628	1.4	12	1.6	2,328	0.8	221	1.1	195	0.8	866	0.3
Computer and information sciences	150,555	18.9	5,615	8.1	121	5.8	13,558	22.1	5,590	12.7	93	12.6	25,030	9.0	2,028	10.5	3,359	14.3	95,161	31.9
Artificial intelligence, informatics, and computer and information science topics	6,142	0.8	250	0.4	7	0.3	585	1.0	238	0.5	4	0.5	1,298	0.5	112	0.6	139	0.6	3,509	1.2
Computer and information sciences	46,151	5.8	1,549	2.2	14	0.7	4,671	7.6	1,012	2.3	19	2.6	7,860	2.8	571	3.0	681	2.9	29,774	10.0
Computer and information systems security	9,695	1.2	899	1.3	32	1.5	1,108	1.8	1,490	3.4	15	2.0	3,081	1.1	282	1.5	433	1.8	2,355	0.8
Computer science	52,924	6.6	1,065	1.5	22	1.1	4,113	6.7	709	1.6	22	3.0	6,000	2.1	536	2.8	1,195	5.1	39,262	13.2

TABLE 4-4a

Citizenship, ethnicity, and race of graduate students, by detailed field: 2022

(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	16,872	2.1	926	1.3	24	1.2	1,659	2.7	1,332	3.0	20	2.7	3,809	1.4	289	1.5	556	2.4	8,257	2.8	
Information technology	11,151	1.4	498	0.7	17	0.8	832	1.4	499	1.1	10	1.4	1,467	0.5	127	0.7	193	0.8	7,508	2.5	
Computer and information sciences nec	7,620	1.0	428	0.6	5	0.2	590	1.0	310	0.7	3	0.4	1,515	0.5	111	0.6	162	0.7	4,496	1.5	
Geosciences, atmospheric sciences, and ocean sciences	11,970	1.5	1,109	1.6	34	1.6	417	0.7	313	0.7	6	0.8	6,686	2.4	426	2.2	303	1.3	2,676	0.9	
Atmospheric sciences and meteorology	1,434	0.2	99	0.1	1	*	41	0.1	43	0.1	1	0.1	800	0.3	43	0.2	28	0.1	378	0.1	
Geological and earth sciences	7,468	0.9	704	1.0	28	1.3	266	0.4	185	0.4	2	0.3	4,033	1.4	242	1.3	162	0.7	1,846	0.6	
Ocean and marine sciences	3,068	0.4	306	0.4	5	0.2	110	0.2	85	0.2	3	0.4	1,853	0.7	141	0.7	113	0.5	452	0.2	
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	34,387	4.3	1,926	2.8	37	1.8	2,686	4.4	737	1.7	12	1.6	9,472	3.4	563	2.9	898	3.8	18,056	6.1	
Applied mathematics	11,224	1.4	499	0.7	8	0.4	704	1.1	206	0.5	3	0.4	2,175	0.8	159	0.8	248	1.1	7,222	2.4	
Mathematics	12,022	1.5	898	1.3	21	1.0	864	1.4	281	0.6	5	0.7	4,780	1.7	250	1.3	396	1.7	4,527	1.5	
Statistics	11,141	1.4	529	0.8	8	0.4	1,118	1.8	250	0.6	4	0.5	2,517	0.9	154	0.8	254	1.1	6,307	2.1	
Multidisciplinary and interdisciplinary sciences	20,945	2.6	1,698	2.4	32	1.5	1,927	3.1	1,218	2.8	21	2.8	7,096	2.5	501	2.6	739	3.2	7,713	2.6	
Biological and physical sciences	1,855	0.2	154	0.2	6	0.3	192	0.3	105	0.2	6	0.8	736	0.3	66	0.3	80	0.3	510	0.2	
Computational science	3,424	0.4	212	0.3	3	0.1	286	0.5	72	0.2	3	0.4	979	0.4	68	0.4	65	0.3	1,736	0.6	
Data science and data analytics	6,104	0.8	420	0.6	7	0.3	716	1.2	393	0.9	2	0.3	1,814	0.6	121	0.6	347	1.5	2,284	0.8	
International and global studies	1,258	0.2	253	0.4	5	0.2	84	0.1	104	0.2	2	0.3	463	0.2	45	0.2	26	0.1	276	0.1	
Multidisciplinary and interdisciplinary sciences nec	8,304	1.0	659	0.9	11	0.5	649	1.1	544	1.2	8	1.1	3,104	1.1	201	1.0	221	0.9	2,907	1.0	
Natural resources and conservation	13,762	1.7	1,290	1.9	121	5.8	484	0.8	478	1.1	31	4.2	8,430	3.0	454	2.3	387	1.7	2,087	0.7	
Environmental science and studies	6,402	0.8	713	1.0	55	2.6	297	0.5	252	0.6	24	3.3	3,633	1.3	192	1.0	192	0.8	1,044	0.4	
Forestry, natural resources, and conservation	7,360	0.9	577	0.8	66	3.2	187	0.3	226	0.5	7	0.9	4,797	1.7	262	1.4	195	0.8	1,043	0.3	
Physical sciences	44,092	5.5	3,288	4.7	66	3.2	2,789	4.5	1,143	2.6	18	2.4	17,289	6.2	1,062	5.5	1,034	4.4	17,403	5.8	
Astronomy and astrophysics	1,703	0.2	169	0.2	4	0.2	123	0.2	50	0.1	1	0.1	814	0.3	83	0.4	51	0.2	408	0.1	
Chemistry	22,710	2.8	1,854	2.7	32	1.5	1,554	2.5	670	1.5	14	1.9	8,816	3.2	529	2.7	496	2.1	8,745	2.9	
Materials sciences	1,625	0.2	87	0.1	3	0.1	124	0.2	47	0.1	1	0.1	473	0.2	26	0.1	54	0.2	810	0.3	
Physics	17,000	2.1	1,124	1.6	26	1.2	942	1.5	302	0.7	2	0.3	6,705	2.4	399	2.1	404	1.7	7,096	2.4	
Physical sciences nec	1,054	0.1	54	0.1	1	*	46	0.1	74	0.2	0	0.0	481	0.2	25	0.1	29	0.1	344	0.1	
Psychology	69,442	8.7	13,177	18.9	264	12.7	3,967	6.5	6,991	15.9	115	15.6	34,375	12.3	2,558	13.2	2,917	12.5	5,078	1.7	
Applied psychology	25,195	3.2	5,302	7.6	84	4.0	1,306	2.1	2,493	5.7	48	6.5	12,675	4.5	860	4.4	1,252	5.3	1,175	0.4	
Clinical psychology	7,793	1.0	1,678	2.4	26	1.2	549	0.9	564	1.3	22	3.0	3,889	1.4	340	1.8	440	1.9	285	0.1	
Counseling psychology	13,800	1.7	2,928	4.2	72	3.5	683	1.1	1,978	4.5	23	3.1	6,619	2.4	489	2.5	584	2.5	424	0.1	

TABLE 4-4a

Citizenship, ethnicity, and race of graduate students, by detailed field: 2022

(Number and percent)

Detailed field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		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	Percent		
Human development	2,293	0.3	345	0.5	9	0.4	97	0.2	214	0.5	1	0.1	1,212	0.4	87	0.5	82	0.4	246	0.1		
Psychology, general	13,181	1.7	2,019	2.9	56	2.7	724	1.2	1,280	2.9	20	2.7	6,660	2.4	553	2.9	415	1.8	1,454	0.5		
Research and experimental psychology	7,180	0.9	905	1.3	17	0.8	608	1.0	462	1.0	1	0.1	3,320	1.2	229	1.2	144	0.6	1,494	0.5		
Social sciences	78,717	9.9	8,828	12.7	392	18.8	3,993	6.5	6,374	14.5	112	15.2	32,084	11.5	2,293	11.9	2,750	11.7	21,891	7.3		
Agricultural and natural resource economics	901	0.1	56	0.1	4	0.2	28	*	29	0.1	1	0.1	300	0.1	8	*	17	0.1	458	0.2		
Anthropology	6,220	0.8	772	1.1	65	3.1	219	0.4	245	0.6	10	1.4	3,316	1.2	267	1.4	233	1.0	1,093	0.4		
Area, ethnic, cultural, gender, and group studies	4,979	0.6	948	1.4	130	6.2	269	0.4	573	1.3	28	3.8	1,566	0.6	218	1.1	150	0.6	1,097	0.4		
Criminal justice and safety studies	6,613	0.8	1,090	1.6	32	1.5	152	0.2	1,328	3.0	6	0.8	3,075	1.1	244	1.3	485	2.1	201	0.1		
Criminology	1,502	0.2	309	0.4	3	0.1	26	*	193	0.4	3	0.4	745	0.3	60	0.3	28	0.1	135	*		
Economics (except agricultural and natural resource)	14,935	1.9	652	0.9	5	0.2	790	1.3	339	0.8	13	1.8	3,474	1.2	195	1.0	305	1.3	9,162	3.1		
Geography and cartography	4,354	0.5	414	0.6	24	1.2	161	0.3	152	0.3	5	0.7	2,317	0.8	102	0.5	146	0.6	1,033	0.3		
International relations and national security studies	8,164	1.0	1,053	1.5	16	0.8	514	0.8	591	1.3	14	1.9	3,974	1.4	258	1.3	332	1.4	1,412	0.5		
Linguistics	2,854	0.4	236	0.3	27	1.3	182	0.3	88	0.2	2	0.3	1,148	0.4	73	0.4	88	0.4	1,010	0.3		
Political science and government	8,235	1.0	834	1.2	18	0.9	359	0.6	550	1.2	5	0.7	3,689	1.3	275	1.4	253	1.1	2,252	0.8		
Public policy analysis	9,391	1.2	1,013	1.5	27	1.3	655	1.1	1,004	2.3	10	1.4	4,065	1.5	252	1.3	392	1.7	1,973	0.7		
Sociology and population studies	6,845	0.9	1,119	1.6	26	1.2	359	0.6	806	1.8	9	1.2	2,799	1.0	231	1.2	207	0.9	1,289	0.4		
Urban studies and affairs	1,069	0.1	97	0.1	5	0.2	60	0.1	186	0.4	1	0.1	496	0.2	31	0.2	21	0.1	172	0.1		
Social sciences, other	2,655	0.3	235	0.3	10	0.5	219	0.4	290	0.7	5	0.7	1,120	0.4	79	0.4	93	0.4	604	0.2		
Engineering	176,000	22.0	10,629	15.3	339	16.3	13,268	21.6	4,752	10.8	80	10.8	48,988	17.5	3,430	17.7	3,788	16.2	90,726	30.4		
Aerospace, aeronautical, and astronautical engineering	8,095	1.0	703	1.0	12	0.6	868	1.4	176	0.4	10	1.4	3,894	1.4	274	1.4	182	0.8	1,976	0.7		
Biological, biomedical, and biosystems engineering	14,442	1.8	1,119	1.6	20	1.0	1,863	3.0	562	1.3	11	1.5	5,010	1.8	411	2.1	423	1.8	5,023	1.7		
Chemical, petroleum, and chemical-related engineering	10,601	1.3	558	0.8	20	1.0	899	1.5	238	0.5	6	0.8	3,049	1.1	173	0.9	186	0.8	5,472	1.8		
Chemical engineering	9,668	1.2	532	0.8	18	0.9	873	1.4	202	0.5	6	0.8	2,922	1.0	168	0.9	176	0.8	4,771	1.6		
Petroleum engineering	933	0.1	26	*	2	0.1	26	*	36	0.1	0	0.0	127	*	5	*	10	*	701	0.2		
Civil, environmental, transportation and related engineering fields	20,375	2.6	1,471	2.1	54	2.6	1,088	1.8	562	1.3	10	1.4	5,820	2.1	345	1.8	337	1.4	10,688	3.6		
Civil engineering	16,321	2.0	1,126	1.6	44	2.1	915	1.5	410	0.9	9	1.2	4,534	1.6	257	1.3	260	1.1	8,766	2.9		
Architectural, environmental, construction and surveying engineering	4,054	0.5	345	0.5	10	0.5	173	0.3	152	0.3	1	0.1	1,286	0.5	88	0.5	77	0.3	1,922	0.6		
Electrical, electronics, communications and computer engineering	49,901	6.2	2,141	3.1	130	6.2	3,595	5.9	1,018	2.3	12	1.6	8,815	3.2	706	3.7	873	3.7	32,611	10.9		
Electrical, electronics, and communications engineering	34,537	4.3	1,670	2.4	121	5.8	2,643	4.3	738	1.7	9	1.2	6,977	2.5	555	2.9	621	2.7	21,203	7.1		
Computer engineering	15,364	1.9	471	0.7	9	0.4	952	1.5	280	0.6	3	0.4	1,838	0.7	151	0.8	252	1.1	11,408	3.8		
Industrial, manufacturing, systems engineering and operations research	16,435	2.1	1,161	1.7	19	0.9	1,012	1.6	560	1.3	10	1.4	4,420	1.6	275	1.4	474	2.0	8,504	2.9		

TABLE 4-4a

Citizenship, ethnicity, and race of graduate students, by detailed field: 2022

(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	
Industrial and manufacturing engineering	8,650	1.1	519	0.7	8	0.4	353	0.6	226	0.5	5	0.7	1,518	0.5	86	0.4	93	0.4	5,842	2.0
Systems engineering and operations research	7,785	1.0	642	0.9	11	0.5	659	1.1	334	0.8	5	0.7	2,902	1.0	189	1.0	381	1.6	2,662	0.9
Mechanical engineering	27,552	3.5	1,891	2.7	32	1.5	2,044	3.3	587	1.3	4	0.5	8,462	3.0	609	3.2	602	2.6	13,321	4.5
Metallurgical, mining, materials and related engineering fields	7,118	0.9	463	0.7	15	0.7	522	0.8	163	0.4	1	0.1	2,449	0.9	202	1.0	119	0.5	3,184	1.1
Other engineering	21,481	2.7	1,122	1.6	37	1.8	1,377	2.2	886	2.0	16	2.2	7,069	2.5	435	2.3	592	2.5	9,947	3.3
Agricultural engineering	1,020	0.1	45	0.1	2	0.1	39	0.1	23	0.1	1	0.1	315	0.1	23	0.1	14	0.1	558	0.2
Engineering mechanics, physics, and science	2,350	0.3	119	0.2	3	0.1	177	0.3	68	0.2	0	0.0	722	0.3	57	0.3	40	0.2	1,164	0.4
Nuclear engineering	1,578	0.2	136	0.2	2	0.1	75	0.1	31	0.1	1	0.1	832	0.3	66	0.3	55	0.2	380	0.1
Engineering, other	16,533	2.1	822	1.2	30	1.4	1,086	1.8	764	1.7	14	1.9	5,200	1.9	289	1.5	483	2.1	7,845	2.6
Health	84,368	10.6	10,484	15.1	408	19.6	7,555	12.3	9,550	21.7	121	16.4	39,709	14.2	2,508	13.0	3,726	15.9	10,307	3.5
Clinical medicine	39,217	4.9	4,991	7.2	270	13.0	4,461	7.3	5,843	13.3	75	10.2	15,660	5.6	1,367	7.1	2,051	8.8	4,499	1.5
Medical clinical sciences and clinical and medical laboratory sciences	2,122	0.3	194	0.3	14	0.7	277	0.5	229	0.5	1	0.1	991	0.4	50	0.3	119	0.5	247	0.1
Public health	37,095	4.6	4,797	6.9	256	12.3	4,184	6.8	5,614	12.8	74	10.0	14,669	5.2	1,317	6.8	1,932	8.2	4,252	1.4
Other health	45,151	5.7	5,493	7.9	138	6.6	3,094	5.0	3,707	8.4	46	6.2	24,049	8.6	1,141	5.9	1,675	7.1	5,808	1.9
Communication disorders sciences	18,589	2.3	2,841	4.1	77	3.7	914	1.5	855	1.9	15	2.0	12,278	4.4	456	2.4	779	3.3	374	0.1
Dental sciences	1,773	0.2	100	0.1	3	0.1	279	0.5	68	0.2	2	0.3	757	0.3	51	0.3	89	0.4	424	0.1
Kinesiology and exercise science	5,724	0.7	848	1.2	21	1.0	162	0.3	694	1.6	13	1.8	3,001	1.1	205	1.1	135	0.6	645	0.2
Nursing science	5,192	0.7	492	0.7	13	0.6	364	0.6	700	1.6	5	0.7	2,873	1.0	105	0.5	165	0.7	475	0.2
Pharmaceutical sciences	5,201	0.7	292	0.4	5	0.2	427	0.7	393	0.9	2	0.3	1,443	0.5	123	0.6	140	0.6	2,376	0.8
Other health nec	8,672	1.1	920	1.3	19	0.9	948	1.5	997	2.3	9	1.2	3,697	1.3	201	1.0	367	1.6	1,514	0.5

* = value < 0.05%.

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, 2022.

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2022

(Number and percent)

Detailed field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		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	Percent		
All detailed fields	501,311	100.0	48,303	100.0	1,331	100.0	40,873	100.0	31,398	100.0	541	100.0	172,212	100.0	12,002	100.0	15,345	100.0	179,306	100.0		
Science	331,983	66.2	31,959	66.2	752	56.5	26,267	64.3	20,810	66.3	382	70.6	110,258	64.0	7,876	65.6	9,928	64.7	123,751	69.0		
Agricultural and veterinary sciences	6,949	1.4	644	1.3	19	1.4	267	0.7	364	1.2	13	2.4	3,876	2.3	173	1.4	179	1.2	1,414	0.8		
Agricultural sciences	6,165	1.2	556	1.2	19	1.4	232	0.6	327	1.0	12	2.2	3,450	2.0	154	1.3	138	0.9	1,277	0.7		
Veterinary biomedical and clinical sciences	784	0.2	88	0.2	0	0.0	35	0.1	37	0.1	1	0.2	426	0.2	19	0.2	41	0.3	137	0.1		
Biological and biomedical sciences	43,062	8.6	4,953	10.3	93	7.0	4,963	12.1	3,807	12.1	61	11.3	18,595	10.8	1,425	11.9	1,550	10.1	7,615	4.2		
Biochemistry	911	0.2	116	0.2	1	0.1	77	0.2	41	0.1	1	0.2	353	0.2	25	0.2	41	0.3	256	0.1		
Biology	7,969	1.6	1,083	2.2	22	1.7	558	1.4	603	1.9	23	4.3	4,354	2.5	268	2.2	248	1.6	810	0.5		
Biomedical sciences	5,681	1.1	689	1.4	9	0.7	1,072	2.6	967	3.1	5	0.9	1,953	1.1	184	1.5	209	1.4	593	0.3		
Biophysics	8	*	1	*	0	0.0	1	*	0	0.0	0	0.0	4	*	1	*	1	*	0	0.0		
Biostatistics and bioinformatics	3,852	0.8	215	0.4	6	0.5	578	1.4	143	0.5	2	0.4	960	0.6	74	0.6	102	0.7	1,772	1.0		
Biotechnology	3,916	0.8	407	0.8	5	0.4	570	1.4	306	1.0	1	0.2	1,201	0.7	126	1.0	156	1.0	1,144	0.6		
Botany and plant biology	369	0.1	30	0.1	2	0.2	15	*	9	*	0	0.0	193	0.1	14	0.1	10	0.1	96	0.1		
Cell, cellular biology, and anatomical sciences	1,137	0.2	167	0.3	4	0.3	124	0.3	64	0.2	1	0.2	484	0.3	46	0.4	65	0.4	182	0.1		
Ecology and population biology	1,058	0.2	90	0.2	6	0.5	26	0.1	37	0.1	1	0.2	778	0.5	38	0.3	35	0.2	47	*		
Epidemiology	3,844	0.8	440	0.9	3	0.2	562	1.4	356	1.1	6	1.1	1,383	0.8	129	1.1	94	0.6	871	0.5		
Genetics	749	0.1	59	0.1	1	0.1	70	0.2	31	0.1	0	0.0	421	0.2	31	0.3	33	0.2	103	0.1		
Microbiological sciences and immunology	2,026	0.4	339	0.7	7	0.5	196	0.5	122	0.4	2	0.4	959	0.6	75	0.6	107	0.7	219	0.1		
Molecular biology	408	0.1	63	0.1	0	0.0	53	0.1	43	0.1	1	0.2	155	0.1	13	0.1	7	*	73	*		
Neurobiology and neuroscience	515	0.1	81	0.2	1	0.1	69	0.2	37	0.1	0	0.0	227	0.1	18	0.1	11	0.1	71	*		
Nutrition science	2,905	0.6	368	0.8	6	0.5	198	0.5	136	0.4	4	0.7	1,646	1.0	85	0.7	131	0.9	331	0.2		
Pathology and experimental pathology	106	*	6	*	0	0.0	12	*	6	*	0	0.0	49	*	4	*	2	*	27	*		
Pharmacology and toxicology	996	0.2	79	0.2	1	0.1	111	0.3	55	0.2	1	0.2	366	0.2	20	0.2	42	0.3	321	0.2		
Physiology	2,891	0.6	251	0.5	6	0.5	289	0.7	305	1.0	5	0.9	1,357	0.8	123	1.0	122	0.8	433	0.2		
Zoology and animal biology	861	0.2	77	0.2	6	0.5	30	0.1	22	0.1	0	0.0	592	0.3	29	0.2	15	0.1	90	0.1		
Biological and biomedical sciences nec	2,860	0.6	392	0.8	7	0.5	352	0.9	524	1.7	8	1.5	1,160	0.7	122	1.0	119	0.8	176	0.1		
Computer and information sciences	129,972	25.9	5,083	10.5	96	7.2	11,960	29.3	4,989	15.9	80	14.8	20,862	12.1	1,695	14.1	2,845	18.5	82,362	45.9		
Artificial intelligence, informatics, and computer and information science topics	5,379	1.1	238	0.5	6	0.5	537	1.3	216	0.7	4	0.7	1,107	0.6	100	0.8	111	0.7	3,060	1.7		
Computer and information sciences	39,719	7.9	1,390	2.9	12	0.9	4,273	10.5	863	2.7	15	2.8	6,576	3.8	493	4.1	547	3.6	25,550	14.2		
Computer and information systems security	9,254	1.8	867	1.8	23	1.7	1,056	2.6	1,389	4.4	15	2.8	2,921	1.7	269	2.2	417	2.7	2,297	1.3		
Computer science	42,092	8.4	833	1.7	15	1.1	3,196	7.8	553	1.8	15	2.8	4,008	2.3	358	3.0	911	5.9	32,203	18.0		

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2022

(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	15,478	3.1	857	1.8	18	1.4	1,539	3.8	1,212	3.9	18	3.3	3,427	2.0	256	2.1	524	3.4	7,627	4.3	
Information technology	10,601	2.1	479	1.0	17	1.3	789	1.9	464	1.5	10	1.8	1,362	0.8	113	0.9	178	1.2	7,189	4.0	
Computer and information sciences nec	7,449	1.5	419	0.9	5	0.4	570	1.4	292	0.9	3	0.6	1,461	0.8	106	0.9	157	1.0	4,436	2.5	
Geosciences, atmospheric sciences, and ocean sciences	5,186	1.0	578	1.2	18	1.4	154	0.4	161	0.5	3	0.6	3,364	2.0	193	1.6	114	0.7	601	0.3	
Atmospheric sciences and meteorology	489	0.1	36	0.1	1	0.1	16	*	16	0.1	1	0.2	337	0.2	15	0.1	2	*	65	*	
Geological and earth sciences	3,183	0.6	352	0.7	15	1.1	84	0.2	93	0.3	1	0.2	2,024	1.2	114	0.9	67	0.4	433	0.2	
Ocean and marine sciences	1,514	0.3	190	0.4	2	0.2	54	0.1	52	0.2	1	0.2	1,003	0.6	64	0.5	45	0.3	103	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	20,798	4.1	1,272	2.6	23	1.7	1,719	4.2	514	1.6	8	1.5	5,233	3.0	312	2.6	518	3.4	11,199	6.2	
Applied mathematics	9,097	1.8	391	0.8	7	0.5	584	1.4	154	0.5	3	0.6	1,495	0.9	107	0.9	196	1.3	6,160	3.4	
Mathematics	3,905	0.8	442	0.9	14	1.1	270	0.7	151	0.5	3	0.6	1,881	1.1	88	0.7	158	1.0	898	0.5	
Statistics	7,796	1.6	439	0.9	2	0.2	865	2.1	209	0.7	2	0.4	1,857	1.1	117	1.0	164	1.1	4,141	2.3	
Multidisciplinary and interdisciplinary sciences	16,931	3.4	1,398	2.9	25	1.9	1,642	4.0	1,009	3.2	14	2.6	5,431	3.2	384	3.2	611	4.0	6,417	3.6	
Biological and physical sciences	899	0.2	88	0.2	3	0.2	114	0.3	67	0.2	1	0.2	352	0.2	41	0.3	46	0.3	187	0.1	
Computational science	3,089	0.6	188	0.4	2	0.2	267	0.7	64	0.2	3	0.6	864	0.5	60	0.5	51	0.3	1,590	0.9	
Data science and data analytics	6,000	1.2	415	0.9	7	0.5	706	1.7	391	1.2	2	0.4	1,792	1.0	117	1.0	346	2.3	2,224	1.2	
International and global studies	1,083	0.2	218	0.5	5	0.4	77	0.2	85	0.3	2	0.4	415	0.2	42	0.3	24	0.2	215	0.1	
Multidisciplinary and interdisciplinary sciences nec	5,860	1.2	489	1.0	8	0.6	478	1.2	402	1.3	6	1.1	2,008	1.2	124	1.0	144	0.9	2,201	1.2	
Natural resources and conservation	9,807	2.0	1,008	2.1	74	5.6	338	0.8	306	1.0	27	5.0	6,435	3.7	349	2.9	242	1.6	1,028	0.6	
Environmental science and studies	4,422	0.9	545	1.1	35	2.6	203	0.5	141	0.4	21	3.9	2,681	1.6	142	1.2	111	0.7	543	0.3	
Forestry, natural resources, and conservation	5,385	1.1	463	1.0	39	2.9	135	0.3	165	0.5	6	1.1	3,754	2.2	207	1.7	131	0.9	485	0.3	
Physical sciences	6,256	1.2	737	1.5	29	2.2	446	1.1	314	1.0	5	0.9	2,719	1.6	194	1.6	189	1.2	1,623	0.9	
Astronomy and astrophysics	100	*	18	*	0	0.0	11	*	4	*	0	0.0	45	*	6	*	3	*	13	*	
Chemistry	3,015	0.6	392	0.8	13	1.0	240	0.6	200	0.6	3	0.6	1,276	0.7	90	0.7	66	0.4	735	0.4	
Materials sciences	402	0.1	27	0.1	3	0.2	33	0.1	13	*	0	0.0	94	0.1	5	*	10	0.1	217	0.1	
Physics	2,253	0.4	262	0.5	12	0.9	135	0.3	82	0.3	2	0.4	984	0.6	76	0.6	91	0.6	609	0.3	
Physical sciences nec	486	0.1	38	0.1	1	0.1	27	0.1	15	*	0	0.0	320	0.2	17	0.1	19	0.1	49	*	
Psychology	48,321	9.6	10,130	21.0	164	12.3	2,496	6.1	5,173	16.5	99	18.3	23,784	13.8	1,725	14.4	2,258	14.7	2,492	1.4	
Applied psychology	20,091	4.0	4,498	9.3	47	3.5	1,015	2.5	1,905	6.1	44	8.1	10,189	5.9	667	5.6	1,106	7.2	620	0.3	
Clinical psychology	4,519	0.9	999	2.1	15	1.1	288	0.7	352	1.1	19	3.5	2,216	1.3	214	1.8	271	1.8	145	0.1	
Counseling psychology	12,400	2.5	2,736	5.7	69	5.2	573	1.4	1,731	5.5	23	4.3	5,985	3.5	427	3.6	548	3.6	308	0.2	

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2022

(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	
Human development	1,525	0.3	278	0.6	7	0.5	63	0.2	125	0.4	1	0.2	845	0.5	48	0.4	67	0.4	91	0.1
Psychology, general	7,346	1.5	1,231	2.5	20	1.5	364	0.9	847	2.7	11	2.0	3,510	2.0	309	2.6	210	1.4	844	0.5
Research and experimental psychology	2,440	0.5	388	0.8	6	0.5	193	0.5	213	0.7	1	0.2	1,039	0.6	60	0.5	56	0.4	484	0.3
Social sciences	44,701	8.9	6,156	12.7	211	15.9	2,282	5.6	4,173	13.3	72	13.3	19,959	11.6	1,426	11.9	1,422	9.3	9,000	5.0
Agricultural and natural resource economics	485	0.1	41	0.1	4	0.3	11	*	20	0.1	1	0.2	217	0.1	5	*	14	0.1	172	0.1
Anthropology	2,173	0.4	324	0.7	25	1.9	58	0.1	79	0.3	2	0.4	1,402	0.8	119	1.0	48	0.3	116	0.1
Area, ethnic, cultural, gender, and group studies	2,634	0.5	549	1.1	59	4.4	134	0.3	247	0.8	22	4.1	920	0.5	124	1.0	53	0.3	526	0.3
Criminal justice and safety studies	5,223	1.0	960	2.0	26	2.0	121	0.3	1,106	3.5	4	0.7	2,415	1.4	190	1.6	267	1.7	134	0.1
Criminology	1,180	0.2	264	0.5	3	0.2	17	*	173	0.6	3	0.6	561	0.3	50	0.4	22	0.1	87	*
Economics (except agricultural and natural resource)	6,734	1.3	441	0.9	3	0.2	327	0.8	224	0.7	10	1.8	1,773	1.0	120	1.0	145	0.9	3,691	2.1
Geography and cartography	2,807	0.6	292	0.6	12	0.9	99	0.2	96	0.3	4	0.7	1,719	1.0	66	0.5	103	0.7	416	0.2
International relations and national security studies	7,833	1.6	1,027	2.1	16	1.2	496	1.2	571	1.8	13	2.4	3,846	2.2	253	2.1	319	2.1	1,292	0.7
Linguistics	1,159	0.2	142	0.3	12	0.9	87	0.2	52	0.2	1	0.2	555	0.3	32	0.3	49	0.3	229	0.1
Political science and government	2,925	0.6	481	1.0	11	0.8	115	0.3	278	0.9	5	0.9	1,478	0.9	117	1.0	91	0.6	349	0.2
Public policy analysis	6,701	1.3	825	1.7	15	1.1	502	1.2	607	1.9	3	0.6	3,069	1.8	172	1.4	185	1.2	1,323	0.7
Sociology and population studies	2,190	0.4	545	1.1	14	1.1	88	0.2	340	1.1	4	0.7	865	0.5	86	0.7	54	0.4	194	0.1
Urban studies and affairs	671	0.1	72	0.1	3	0.2	41	0.1	130	0.4	0	0.0	334	0.2	29	0.2	11	0.1	51	*
Social sciences, other	1,986	0.4	193	0.4	8	0.6	186	0.5	250	0.8	0	0.0	805	0.5	63	0.5	61	0.4	420	0.2
Engineering	103,020	20.6	7,379	15.3	253	19.0	8,383	20.5	2,983	9.5	54	10.0	30,174	17.5	2,060	17.2	2,317	15.1	49,417	27.6
Aerospace, aeronautical, and astronautical engineering	5,263	1.0	536	1.1	10	0.8	632	1.5	114	0.4	8	1.5	2,741	1.6	179	1.5	133	0.9	910	0.5
Biological, biomedical, and biosystems engineering	5,177	1.0	439	0.9	7	0.5	751	1.8	217	0.7	5	0.9	1,766	1.0	153	1.3	124	0.8	1,715	1.0
Chemical, petroleum, and chemical-related engineering	3,011	0.6	225	0.5	7	0.5	277	0.7	94	0.3	3	0.6	855	0.5	47	0.4	71	0.5	1,432	0.8
Chemical engineering	2,599	0.5	205	0.4	5	0.4	266	0.7	71	0.2	3	0.6	785	0.5	43	0.4	66	0.4	1,155	0.6
Petroleum engineering	412	0.1	20	*	2	0.2	11	*	23	0.1	0	0.0	70	*	4	*	5	*	277	0.2
Civil, environmental, transportation and related engineering fields	12,621	2.5	1,169	2.4	38	2.9	825	2.0	398	1.3	4	0.7	4,302	2.5	244	2.0	229	1.5	5,412	3.0
Civil engineering	9,692	1.9	896	1.9	31	2.3	693	1.7	280	0.9	4	0.7	3,311	1.9	178	1.5	172	1.1	4,127	2.3
Architectural, environmental, construction and surveying engineering	2,929	0.6	273	0.6	7	0.5	132	0.3	118	0.4	0	0.0	991	0.6	66	0.5	57	0.4	1,285	0.7
Electrical, electronics, communications and computer engineering	32,316	6.4	1,647	3.4	122	9.2	2,564	6.3	703	2.2	10	1.8	5,765	3.3	476	4.0	567	3.7	20,462	11.4
Electrical, electronics, and communications engineering	19,757	3.9	1,233	2.6	114	8.6	1,767	4.3	478	1.5	8	1.5	4,409	2.6	360	3.0	365	2.4	11,023	6.1
Computer engineering	12,559	2.5	414	0.9	8	0.6	797	1.9	225	0.7	2	0.4	1,356	0.8	116	1.0	202	1.3	9,439	5.3
Industrial, manufacturing, systems engineering and operations research	12,579	2.5	1,046	2.2	15	1.1	804	2.0	415	1.3	9	1.7	3,560	2.1	220	1.8	392	2.6	6,118	3.4

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2022

(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		
Industrial and manufacturing engineering	6,349	1.3	456	0.9	5	0.4	269	0.7	141	0.4	5	0.9	1,112	0.6	71	0.6	62	0.4	4,228	2.4	
Systems engineering and operations research	6,230	1.2	590	1.2	10	0.8	535	1.3	274	0.9	4	0.7	2,448	1.4	149	1.2	330	2.2	1,890	1.1	
Mechanical engineering	16,029	3.2	1,332	2.8	21	1.6	1,399	3.4	362	1.2	2	0.4	5,553	3.2	399	3.3	367	2.4	6,594	3.7	
Metallurgical, mining, materials and related engineering fields	2,545	0.5	193	0.4	9	0.7	196	0.5	65	0.2	0	0.0	982	0.6	85	0.7	50	0.3	965	0.5	
Other engineering	13,479	2.7	792	1.6	24	1.8	935	2.3	615	2.0	13	2.4	4,650	2.7	257	2.1	384	2.5	5,809	3.2	
Agricultural engineering	389	0.1	28	0.1	1	0.1	17	*	10	*	0	0.0	178	0.1	11	0.1	4	*	140	0.1	
Engineering mechanics, physics, and science	762	0.2	49	0.1	0	0.0	68	0.2	29	0.1	0	0.0	261	0.2	23	0.2	16	0.1	316	0.2	
Nuclear engineering	493	0.1	60	0.1	1	0.1	22	0.1	7	*	1	0.2	294	0.2	23	0.2	14	0.1	71	*	
Engineering, other	11,835	2.4	655	1.4	22	1.7	828	2.0	569	1.8	12	2.2	3,917	2.3	200	1.7	350	2.3	5,282	2.9	
Health	66,308	13.2	8,965	18.6	326	24.5	6,223	15.2	7,605	24.2	105	19.4	31,780	18.5	2,066	17.2	3,100	20.2	6,138	3.4	
Clinical medicine	33,251	6.6	4,339	9.0	209	15.7	3,923	9.6	5,050	16.1	66	12.2	13,323	7.7	1,185	9.9	1,845	12.0	3,311	1.8	
Medical clinical sciences and clinical and medical laboratory sciences	1,168	0.2	84	0.2	4	0.3	185	0.5	167	0.5	1	0.2	520	0.3	31	0.3	65	0.4	111	0.1	
Public health	32,083	6.4	4,255	8.8	205	15.4	3,738	9.1	4,883	15.6	65	12.0	12,803	7.4	1,154	9.6	1,780	11.6	3,200	1.8	
Other health	33,057	6.6	4,626	9.6	117	8.8	2,300	5.6	2,555	8.1	39	7.2	18,457	10.7	881	7.3	1,255	8.2	2,827	1.6	
Communication disorders sciences	17,768	3.5	2,752	5.7	77	5.8	872	2.1	817	2.6	15	2.8	11,823	6.9	437	3.6	759	4.9	216	0.1	
Dental sciences	1,545	0.3	87	0.2	3	0.2	255	0.6	60	0.2	2	0.4	713	0.4	46	0.4	83	0.5	296	0.2	
Kinesiology and exercise science	4,743	0.9	778	1.6	20	1.5	131	0.3	641	2.0	13	2.4	2,439	1.4	189	1.6	114	0.7	418	0.2	
Nursing science	1,535	0.3	243	0.5	1	0.1	138	0.3	189	0.6	1	0.2	847	0.5	32	0.3	46	0.3	38	*	
Pharmaceutical sciences	2,142	0.4	135	0.3	4	0.3	195	0.5	252	0.8	2	0.4	677	0.4	63	0.5	47	0.3	767	0.4	
Other health nec	5,324	1.1	631	1.3	12	0.9	709	1.7	596	1.9	6	1.1	1,958	1.1	114	0.9	206	1.3	1,092	0.6	

* = value < 0.05%.

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, 2022.

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2022

(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		
All detailed fields	297,223	100.0	21,318	100.0	751	100.0	20,553	100.0	12,618	100.0	197	100.0	107,445	100.0	7,329	100.0	8,083	100.0	118,929	100.0	
Science	206,183	69.4	16,549	77.6	583	77.6	14,336	69.8	8,904	70.6	155	78.7	80,702	75.1	5,517	75.3	5,986	74.1	73,451	61.8	
Agricultural and veterinary sciences	4,647	1.6	242	1.1	10	1.3	129	0.6	93	0.7	1	0.5	1,804	1.7	64	0.9	77	1.0	2,227	1.9	
Agricultural sciences	4,145	1.4	217	1.0	10	1.3	112	0.5	80	0.6	1	0.5	1,594	1.5	53	0.7	62	0.8	2,016	1.7	
Veterinary biomedical and clinical sciences	502	0.2	25	0.1	0	0.0	17	0.1	13	0.1	0	0.0	210	0.2	11	0.2	15	0.2	211	0.2	
Biological and biomedical sciences	59,638	20.1	5,738	26.9	146	19.4	5,423	26.4	2,606	20.7	54	27.4	26,223	24.4	1,846	25.2	1,721	21.3	15,881	13.4	
Biochemistry	4,994	1.7	512	2.4	19	2.5	430	2.1	193	1.5	6	3.0	2,172	2.0	171	2.3	86	1.1	1,405	1.2	
Biology	7,600	2.6	702	3.3	20	2.7	486	2.4	290	2.3	6	3.0	3,428	3.2	236	3.2	189	2.3	2,243	1.9	
Biomedical sciences	5,155	1.7	489	2.3	14	1.9	522	2.5	305	2.4	3	1.5	2,185	2.0	145	2.0	151	1.9	1,341	1.1	
Biophysics	887	0.3	85	0.4	0	0.0	113	0.5	20	0.2	0	0.0	348	0.3	31	0.4	15	0.2	275	0.2	
Biostatistics and bioinformatics	3,799	1.3	182	0.9	1	0.1	494	2.4	87	0.7	6	3.0	1,091	1.0	98	1.3	153	1.9	1,687	1.4	
Biotechnology	105	*	10	*	1	0.1	10	*	2	*	1	0.5	39	*	3	*	3	*	36	*	
Botany and plant biology	1,301	0.4	115	0.5	3	0.4	68	0.3	29	0.2	1	0.5	585	0.5	36	0.5	38	0.5	426	0.4	
Cell, cellular biology, and anatomical sciences	5,374	1.8	617	2.9	14	1.9	566	2.8	203	1.6	8	4.1	2,332	2.2	141	1.9	154	1.9	1,339	1.1	
Ecology and population biology	2,808	0.9	267	1.3	9	1.2	141	0.7	93	0.7	4	2.0	1,547	1.4	87	1.2	68	0.8	592	0.5	
Epidemiology	2,213	0.7	167	0.8	5	0.7	252	1.2	189	1.5	2	1.0	838	0.8	57	0.8	82	1.0	621	0.5	
Genetics	2,584	0.9	267	1.3	4	0.5	242	1.2	117	0.9	2	1.0	1,201	1.1	82	1.1	62	0.8	607	0.5	
Microbiological sciences and immunology	4,466	1.5	491	2.3	14	1.9	410	2.0	227	1.8	2	1.0	2,160	2.0	148	2.0	133	1.6	881	0.7	
Molecular biology	1,231	0.4	150	0.7	2	0.3	134	0.7	44	0.3	2	1.0	499	0.5	39	0.5	37	0.5	324	0.3	
Neurobiology and neuroscience	5,933	2.0	706	3.3	13	1.7	594	2.9	283	2.2	1	0.5	2,765	2.6	228	3.1	196	2.4	1,147	1.0	
Nutrition science	1,050	0.4	74	0.3	1	0.1	65	0.3	54	0.4	1	0.5	437	0.4	26	0.4	22	0.3	370	0.3	
Pathology and experimental pathology	917	0.3	88	0.4	3	0.4	80	0.4	44	0.3	2	1.0	418	0.4	22	0.3	52	0.6	208	0.2	
Pharmacology and toxicology	2,409	0.8	238	1.1	7	0.9	256	1.2	157	1.2	0	0.0	999	0.9	81	1.1	74	0.9	597	0.5	
Physiology	3,021	1.0	255	1.2	6	0.8	311	1.5	128	1.0	3	1.5	1,337	1.2	76	1.0	95	1.2	810	0.7	
Zoology and animal biology	1,198	0.4	86	0.4	1	0.1	43	0.2	37	0.3	0	0.0	674	0.6	40	0.5	35	0.4	282	0.2	
Biological and biomedical sciences nec	2,593	0.9	237	1.1	9	1.2	206	1.0	104	0.8	4	2.0	1,168	1.1	99	1.4	76	0.9	690	0.6	
Computer and information sciences	20,583	6.9	532	2.5	25	3.3	1,598	7.8	601	4.8	13	6.6	4,168	3.9	333	4.5	514	6.4	12,799	10.8	
Artificial intelligence, informatics, and computer and information science topics	763	0.3	12	0.1	1	0.1	48	0.2	22	0.2	0	0.0	191	0.2	12	0.2	28	0.3	449	0.4	
Computer and information sciences	6,432	2.2	159	0.7	2	0.3	398	1.9	149	1.2	4	2.0	1,284	1.2	78	1.1	134	1.7	4,224	3.6	
Computer and information systems security	441	0.1	32	0.2	9	1.2	52	0.3	101	0.8	0	0.0	160	0.1	13	0.2	16	0.2	58	*	
Computer science	10,832	3.6	232	1.1	7	0.9	917	4.5	156	1.2	7	3.6	1,992	1.9	178	2.4	284	3.5	7,059	5.9	

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2022

(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
Information science and studies	1,394	0.5	69	0.3	6	0.8	120	0.6	120	1.0	2	1.0	382	0.4	33	0.5	32	0.4	630	0.5	
Information technology	550	0.2	19	0.1	0	0.0	43	0.2	35	0.3	0	0.0	105	0.1	14	0.2	15	0.2	319	0.3	
Computer and information sciences nec	171	0.1	9	*	0	0.0	20	0.1	18	0.1	0	0.0	54	0.1	5	0.1	5	0.1	60	0.1	
Geosciences, atmospheric sciences, and ocean sciences	6,784	2.3	531	2.5	16	2.1	263	1.3	152	1.2	3	1.5	3,322	3.1	233	3.2	189	2.3	2,075	1.7	
Atmospheric sciences and meteorology	945	0.3	63	0.3	0	0.0	25	0.1	27	0.2	0	0.0	463	0.4	28	0.4	26	0.3	313	0.3	
Geological and earth sciences	4,285	1.4	352	1.7	13	1.7	182	0.9	92	0.7	1	0.5	2,009	1.9	128	1.7	95	1.2	1,413	1.2	
Ocean and marine sciences	1,554	0.5	116	0.5	3	0.4	56	0.3	33	0.3	2	1.0	850	0.8	77	1.1	68	0.8	349	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	ne
Mathematics and statistics	13,589	4.6	654	3.1	14	1.9	967	4.7	223	1.8	4	2.0	4,239	3.9	251	3.4	380	4.7	6,857	5.8	
Applied mathematics	2,127	0.7	108	0.5	1	0.1	120	0.6	52	0.4	0	0.0	680	0.6	52	0.7	52	0.6	1,062	0.9	
Mathematics	8,117	2.7	456	2.1	7	0.9	594	2.9	130	1.0	2	1.0	2,899	2.7	162	2.2	238	2.9	3,629	3.1	
Statistics	3,345	1.1	90	0.4	6	0.8	253	1.2	41	0.3	2	1.0	660	0.6	37	0.5	90	1.1	2,166	1.8	
Multidisciplinary and interdisciplinary sciences	4,014	1.4	300	1.4	7	0.9	285	1.4	209	1.7	7	3.6	1,665	1.5	117	1.6	128	1.6	1,296	1.1	
Biological and physical sciences	956	0.3	66	0.3	3	0.4	78	0.4	38	0.3	5	2.5	384	0.4	25	0.3	34	0.4	323	0.3	
Computational science	335	0.1	24	0.1	1	0.1	19	0.1	8	0.1	0	0.0	115	0.1	8	0.1	14	0.2	146	0.1	
Data science and data analytics	104	*	5	*	0	0.0	10	*	2	*	0	0.0	22	*	4	0.1	1	*	60	0.1	
International and global studies	175	0.1	35	0.2	0	0.0	7	*	19	0.2	0	0.0	48	*	3	*	2	*	61	0.1	
Multidisciplinary and interdisciplinary sciences nec	2,444	0.8	170	0.8	3	0.4	171	0.8	142	1.1	2	1.0	1,096	1.0	77	1.1	77	1.0	706	0.6	
Natural resources and conservation	3,955	1.3	282	1.3	47	6.3	146	0.7	172	1.4	4	2.0	1,995	1.9	105	1.4	145	1.8	1,059	0.9	
Environmental science and studies	1,980	0.7	168	0.8	20	2.7	94	0.5	111	0.9	3	1.5	952	0.9	50	0.7	81	1.0	501	0.4	
Forestry, natural resources, and conservation	1,975	0.7	114	0.5	27	3.6	52	0.3	61	0.5	1	0.5	1,043	1.0	55	0.8	64	0.8	558	0.5	
Physical sciences	37,836	12.7	2,551	12.0	37	4.9	2,343	11.4	829	6.6	13	6.6	14,570	13.6	868	11.8	845	10.5	15,780	13.3	
Astronomy and astrophysics	1,603	0.5	151	0.7	4	0.5	112	0.5	46	0.4	1	0.5	769	0.7	77	1.1	48	0.6	395	0.3	
Chemistry	19,695	6.6	1,462	6.9	19	2.5	1,314	6.4	470	3.7	11	5.6	7,540	7.0	439	6.0	430	5.3	8,010	6.7	
Materials sciences	1,223	0.4	60	0.3	0	0.0	91	0.4	34	0.3	1	0.5	379	0.4	21	0.3	44	0.5	593	0.5	
Physics	14,747	5.0	862	4.0	14	1.9	807	3.9	220	1.7	0	0.0	5,721	5.3	323	4.4	313	3.9	6,487	5.5	
Physical sciences nec	568	0.2	16	0.1	0	0.0	19	0.1	59	0.5	0	0.0	161	0.1	8	0.1	10	0.1	295	0.2	
Psychology	21,121	7.1	3,047	14.3	100	13.3	1,471	7.2	1,818	14.4	16	8.1	10,591	9.9	833	11.4	659	8.2	2,586	2.2	
Applied psychology	5,104	1.7	804	3.8	37	4.9	291	1.4	588	4.7	4	2.0	2,486	2.3	193	2.6	146	1.8	555	0.5	
Clinical psychology	3,274	1.1	679	3.2	11	1.5	261	1.3	212	1.7	3	1.5	1,673	1.6	126	1.7	169	2.1	140	0.1	
Counseling psychology	1,400	0.5	192	0.9	3	0.4	110	0.5	247	2.0	0	0.0	634	0.6	62	0.8	36	0.4	116	0.1	

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2022

(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	
Human development	768	0.3	67	0.3	2	0.3	34	0.2	89	0.7	0	0.0	367	0.3	39	0.5	15	0.2	155	0.1
Psychology, general	5,835	2.0	788	3.7	36	4.8	360	1.8	433	3.4	9	4.6	3,150	2.9	244	3.3	205	2.5	610	0.5
Research and experimental psychology	4,740	1.6	517	2.4	11	1.5	415	2.0	249	2.0	0	0.0	2,281	2.1	169	2.3	88	1.1	1,010	0.8
Social sciences	34,016	11.4	2,672	12.5	181	24.1	1,711	8.3	2,201	17.4	40	20.3	12,125	11.3	867	11.8	1,328	16.4	12,891	10.8
Agricultural and natural resource economics	416	0.1	15	0.1	0	0.0	17	0.1	9	0.1	0	0.0	83	0.1	3	*	3	*	286	0.2
Anthropology	4,047	1.4	448	2.1	40	5.3	161	0.8	166	1.3	8	4.1	1,914	1.8	148	2.0	185	2.3	977	0.8
Area, ethnic, cultural, gender, and group studies	2,345	0.8	399	1.9	71	9.5	135	0.7	326	2.6	6	3.0	646	0.6	94	1.3	97	1.2	571	0.5
Criminal justice and safety studies	1,390	0.5	130	0.6	6	0.8	31	0.2	222	1.8	2	1.0	660	0.6	54	0.7	218	2.7	67	0.1
Criminology	322	0.1	45	0.2	0	0.0	9	*	20	0.2	0	0.0	184	0.2	10	0.1	6	0.1	48	*
Economics (except agricultural and natural resource)	8,201	2.8	211	1.0	2	0.3	463	2.3	115	0.9	3	1.5	1,701	1.6	75	1.0	160	2.0	5,471	4.6
Geography and cartography	1,547	0.5	122	0.6	12	1.6	62	0.3	56	0.4	1	0.5	598	0.6	36	0.5	43	0.5	617	0.5
International relations and national security studies	331	0.1	26	0.1	0	0.0	18	0.1	20	0.2	1	0.5	128	0.1	5	0.1	13	0.2	120	0.1
Linguistics	1,695	0.6	94	0.4	15	2.0	95	0.5	36	0.3	1	0.5	593	0.6	41	0.6	39	0.5	781	0.7
Political science and government	5,310	1.8	353	1.7	7	0.9	244	1.2	272	2.2	0	0.0	2,211	2.1	158	2.2	162	2.0	1,903	1.6
Public policy analysis	2,690	0.9	188	0.9	12	1.6	153	0.7	397	3.1	7	3.6	996	0.9	80	1.1	207	2.6	650	0.5
Sociology and population studies	4,655	1.6	574	2.7	12	1.6	271	1.3	466	3.7	5	2.5	1,934	1.8	145	2.0	153	1.9	1,095	0.9
Urban studies and affairs	398	0.1	25	0.1	2	0.3	19	0.1	56	0.4	1	0.5	162	0.2	2	*	10	0.1	121	0.1
Social sciences, other	669	0.2	42	0.2	2	0.3	33	0.2	40	0.3	5	2.5	315	0.3	16	0.2	32	0.4	184	0.2
Engineering	72,980	24.6	3,250	15.2	86	11.5	4,885	23.8	1,769	14.0	26	13.2	18,814	17.5	1,370	18.7	1,471	18.2	41,309	34.7
Aerospace, aeronautical, and astronautical engineering	2,832	1.0	167	0.8	2	0.3	236	1.1	62	0.5	2	1.0	1,153	1.1	95	1.3	49	0.6	1,066	0.9
Biological, biomedical, and biosystems engineering	9,265	3.1	680	3.2	13	1.7	1,112	5.4	345	2.7	6	3.0	3,244	3.0	258	3.5	299	3.7	3,308	2.8
Chemical, petroleum, and chemical-related engineering	7,590	2.6	333	1.6	13	1.7	622	3.0	144	1.1	3	1.5	2,194	2.0	126	1.7	115	1.4	4,040	3.4
Chemical engineering	7,069	2.4	327	1.5	13	1.7	607	3.0	131	1.0	3	1.5	2,137	2.0	125	1.7	110	1.4	3,616	3.0
Petroleum engineering	521	0.2	6	*	0	0.0	15	0.1	13	0.1	0	0.0	57	0.1	1	*	5	0.1	424	0.4
Civil, environmental, transportation and related engineering fields	7,754	2.6	302	1.4	16	2.1	263	1.3	164	1.3	6	3.0	1,518	1.4	101	1.4	108	1.3	5,276	4.4
Civil engineering	6,629	2.2	230	1.1	13	1.7	222	1.1	130	1.0	5	2.5	1,223	1.1	79	1.1	88	1.1	4,639	3.9
Architectural, environmental, construction and surveying engineering	1,125	0.4	72	0.3	3	0.4	41	0.2	34	0.3	1	0.5	295	0.3	22	0.3	20	0.2	637	0.5
Electrical, electronics, communications and computer engineering	17,585	5.9	494	2.3	8	1.1	1,031	5.0	315	2.5	2	1.0	3,050	2.8	230	3.1	306	3.8	12,149	10.2
Electrical, electronics, and communications engineering	14,780	5.0	437	2.0	7	0.9	876	4.3	260	2.1	1	0.5	2,568	2.4	195	2.7	256	3.2	10,180	8.6
Computer engineering	2,805	0.9	57	0.3	1	0.1	155	0.8	55	0.4	1	0.5	482	0.4	35	0.5	50	0.6	1,969	1.7
Industrial, manufacturing, systems engineering and operations research	3,856	1.3	115	0.5	4	0.5	208	1.0	145	1.1	1	0.5	860	0.8	55	0.8	82	1.0	2,386	2.0

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2022

(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	2,301	0.8	63	0.3	3	0.4	84	0.4	85	0.7	0	0.0	406	0.4	15	0.2	31	0.4	1,614	1.4
Systems engineering and operations research	1,555	0.5	52	0.2	1	0.1	124	0.6	60	0.5	1	0.5	454	0.4	40	0.5	51	0.6	772	0.6
Mechanical engineering	11,523	3.9	559	2.6	11	1.5	645	3.1	225	1.8	2	1.0	2,909	2.7	210	2.9	235	2.9	6,727	5.7
Metallurgical, mining, materials and related engineering fields	4,573	1.5	270	1.3	6	0.8	326	1.6	98	0.8	1	0.5	1,467	1.4	117	1.6	69	0.9	2,219	1.9
Other engineering	8,002	2.7	330	1.5	13	1.7	442	2.2	271	2.1	3	1.5	2,419	2.3	178	2.4	208	2.6	4,138	3.5
Agricultural engineering	631	0.2	17	0.1	1	0.1	22	0.1	13	0.1	1	0.5	137	0.1	12	0.2	10	0.1	418	0.4
Engineering mechanics, physics, and science	1,588	0.5	70	0.3	3	0.4	109	0.5	39	0.3	0	0.0	461	0.4	34	0.5	24	0.3	848	0.7
Nuclear engineering	1,085	0.4	76	0.4	1	0.1	53	0.3	24	0.2	0	0.0	538	0.5	43	0.6	41	0.5	309	0.3
Engineering, other	4,698	1.6	167	0.8	8	1.1	258	1.3	195	1.5	2	1.0	1,283	1.2	89	1.2	133	1.6	2,563	2.2
Health	18,060	6.1	1,519	7.1	82	10.9	1,332	6.5	1,945	15.4	16	8.1	7,929	7.4	442	6.0	626	7.7	4,169	3.5
Clinical medicine	5,966	2.0	652	3.1	61	8.1	538	2.6	793	6.3	9	4.6	2,337	2.2	182	2.5	206	2.5	1,188	1.0
Medical clinical sciences and clinical and medical laboratory sciences	954	0.3	110	0.5	10	1.3	92	0.4	62	0.5	0	0.0	471	0.4	19	0.3	54	0.7	136	0.1
Public health	5,012	1.7	542	2.5	51	6.8	446	2.2	731	5.8	9	4.6	1,866	1.7	163	2.2	152	1.9	1,052	0.9
Other health	12,094	4.1	867	4.1	21	2.8	794	3.9	1,152	9.1	7	3.6	5,592	5.2	260	3.5	420	5.2	2,981	2.5
Communication disorders sciences	821	0.3	89	0.4	0	0.0	42	0.2	38	0.3	0	0.0	455	0.4	19	0.3	20	0.2	158	0.1
Dental sciences	228	0.1	13	0.1	0	0.0	24	0.1	8	0.1	0	0.0	44	*	5	0.1	6	0.1	128	0.1
Kinesiology and exercise science	981	0.3	70	0.3	1	0.1	31	0.2	53	0.4	0	0.0	562	0.5	16	0.2	21	0.3	227	0.2
Nursing science	3,657	1.2	249	1.2	12	1.6	226	1.1	511	4.0	4	2.0	2,026	1.9	73	1.0	119	1.5	437	0.4
Pharmaceutical sciences	3,059	1.0	157	0.7	1	0.1	232	1.1	141	1.1	0	0.0	766	0.7	60	0.8	93	1.2	1,609	1.4
Other health nec	3,348	1.1	289	1.4	7	0.9	239	1.2	401	3.2	3	1.5	1,739	1.6	87	1.2	161	2.0	422	0.4

* = value < 0.05%.

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, 2022.

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2022

(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	14,354	687	11,148	677	7,545	414	7,962	332	6,204	270
Science	10,192	667	7,666	651	5,393	381	4,677	322	3,638	259
Agricultural and veterinary sciences	352	93	308	93	223	56	337	73	274	66
Agricultural sciences	318	91	283	91	201	56	220	60	195	51
Veterinary biomedical and clinical sciences	34	25	25	21	22	17	117	38	79	34
Biological and biomedical sciences	2,776	510	1,696	490	1,890	290	1,800	269	1,329	205
Biochemistry	187	149	90	83	158	128	138	111	122	91
Biology	389	350	341	324	158	149	204	169	151	120
Biomedical sciences	185	141	130	104	107	90	70	53	56	40
Biophysics	38	34	6	6	38	34	12	11	13	12
Biostatistics and bioinformatics	204	122	153	108	126	84	87	60	71	46
Biotechnology	88	77	82	71	8	8	23	19	18	16
Botany and plant biology	65	46	55	44	57	40	48	29	35	27
Cell, cellular biology, and anatomical sciences	195	125	92	72	157	107	125	89	82	61
Ecology and population biology	113	90	74	61	80	65	61	46	48	39
Epidemiology	101	80	69	60	70	65	51	44	26	22
Genetics	99	73	50	43	76	61	97	64	80	50
Microbiological sciences and immunology	184	126	88	73	150	109	173	110	112	73
Molecular biology	53	47	22	19	39	35	40	36	32	27
Neurobiology and neuroscience	187	134	47	41	167	127	140	92	98	68
Nutrition science	116	93	100	85	58	53	36	24	24	22
Pathology and experimental pathology	40	37	13	13	34	33	69	48	46	40
Pharmacology and toxicology	147	102	61	55	129	93	97	81	64	54
Physiology	206	139	111	90	148	103	174	95	117	69
Zoology and animal biology	79	48	65	44	66	42	43	32	34	28
Biological and biomedical sciences nec	100	70	47	38	64	50	112	52	100	42
Computer and information sciences	1,075	430	982	426	308	195	192	128	167	92
Artificial intelligence, informatics, and computer and information science topics	92	68	81	63	21	16	19	14	17	14
Computer and information sciences	213	168	178	161	91	72	47	45	38	28
Computer and information systems security	160	124	157	123	8	7	5	5	6	6
Computer science	291	237	266	229	137	117	83	78	61	50
Information science and studies	131	93	120	88	31	28	18	15	14	14
Information technology	98	76	94	75	11	9	3	3	2	2
Computer and information sciences nec	90	66	86	64	9	8	17	15	29	24
Geosciences, atmospheric sciences, and ocean sciences	396	224	335	207	266	155	270	137	241	120
Atmospheric sciences and meteorology	59	47	48	41	46	41	47	32	40	29
Geological and earth sciences	260	196	224	179	163	133	143	110	122	90
Ocean and marine sciences	77	60	63	54	57	46	56	39	56	39

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2022

(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 sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	24	12	23	9
Mathematics and statistics	748	354	644	347	345	196	200	131	81	57
Applied mathematics	218	160	183	142	80	71	36	35	19	17
Mathematics	323	291	275	257	171	162	114	101	37	34
Statistics	207	165	186	160	94	83	50	50	25	21
Multidisciplinary and interdisciplinary sciences	439	237	354	212	145	103	189	90	218	88
Biological and physical sciences	38	35	29	27	17	16	17	15	14	13
Computational science	56	46	48	40	15	14	11	9	6	6
Data science and data analytics	70	63	69	63	5	5	14	13	14	11
International and global studies	33	30	30	28	8	7	5	5	8	6
Multidisciplinary and interdisciplinary sciences nec	242	152	178	123	100	78	142	68	176	69
Natural resources and conservation	381	208	320	197	168	102	162	89	152	79
Environmental science and studies	218	161	177	147	81	61	59	50	57	45
Forestry, natural resources, and conservation	163	86	143	85	87	54	103	54	95	49
Physical sciences	806	326	577	305	565	227	593	221	449	182
Astronomy and astrophysics	61	53	15	15	54	48	70	50	58	38
Chemistry	356	307	292	268	229	203	221	191	174	147
Materials sciences	63	50	36	32	48	40	24	20	25	19
Physics	298	237	216	192	219	189	258	180	167	126
Physical sciences nec	28	24	18	16	15	14	20	19	25	18
Psychology	1,158	474	828	427	518	242	266	149	210	123
Applied psychology	416	285	352	257	148	120	42	34	29	23
Clinical psychology	123	111	63	55	66	65	16	14	6	4
Counseling psychology	121	114	90	88	47	47	8	8	6	6
Human development	70	63	60	57	27	26	39	31	53	32
Psychology, general	264	238	197	186	109	96	118	104	88	79
Research and experimental psychology	164	119	66	53	121	94	43	34	28	26
Social sciences	2,061	411	1,622	401	965	208	668	150	517	135
Agricultural and natural resource economics	37	30	32	29	16	15	23	23	15	15
Anthropology	178	157	128	121	111	103	65	58	40	31
Area, ethnic, cultural, gender, and group studies	292	135	227	124	116	66	120	46	52	25
Criminal justice and safety studies	119	111	114	109	23	23	8	7	10	9
Criminology	46	44	43	42	14	14	5	5	5	5
Economics (except agricultural and natural resource)	295	202	229	176	164	131	58	45	47	38
Geography and cartography	164	135	157	132	65	63	44	39	22	18
International relations and national security studies	100	80	96	77	12	12	18	15	18	10
Linguistics	107	94	77	70	64	58	30	26	16	15
Political science and government	213	191	158	149	131	123	56	45	31	28
Public policy analysis	148	106	112	88	60	50	64	52	89	56
Sociology and population studies	224	202	148	142	127	120	77	64	56	42

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2022

(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
Urban studies and affairs	39	30	30	24	15	14	9	8	17	10
Social sciences, other	99	80	71	60	47	44	91	54	99	41
Engineering	2,545	328	2,250	321	1,455	233	1,152	214	928	184
Aerospace, aeronautical, and astronautical engineering	73	65	71	65	52	50	39	32	36	32
Biological, biomedical, and biosystems engineering	234	179	193	160	167	143	145	116	124	92
Chemical, petroleum, and chemical-related engineering	202	144	182	139	147	121	144	119	97	72
Chemical engineering	174	142	157	136	130	121	135	116	87	71
Petroleum engineering	28	21	25	21	17	16	9	9	10	9
Civil, environmental, transportation and related engineering fields	388	207	357	203	209	140	190	125	134	90
Civil engineering	249	196	233	193	148	135	169	116	119	85
Architectural, environmental, construction and surveying engineering	139	99	124	94	61	51	21	21	15	14
Electrical, electronics, communications and computer engineering	481	254	441	250	247	175	165	131	140	102
Electrical, electronics, and communications engineering	299	230	272	226	178	165	146	126	129	99
Computer engineering	182	131	169	127	69	64	19	17	11	9
Industrial, manufacturing, systems engineering and operations research	241	150	224	144	107	89	44	40	49	33
Industrial and manufacturing engineering	125	105	121	103	61	59	31	27	31	23
Systems engineering and operations research	116	83	103	77	46	37	13	13	18	14
Mechanical engineering	301	229	279	225	178	162	163	136	110	92
Metallurgical, mining, materials and related engineering fields	147	97	127	90	106	80	82	59	62	45
Other engineering	478	198	376	176	242	129	180	98	176	89
Agricultural engineering	34	28	31	28	27	24	25	22	16	15
Engineering mechanics, physics, and science	68	51	46	38	47	37	25	22	27	17
Nuclear engineering	29	28	27	27	26	26	13	12	11	10
Engineering, other	347	169	272	146	142	90	117	74	122	73
Health	1,617	452	1,232	434	697	229	2,133	180	1,638	140
Clinical medicine	600	273	513	266	218	118	1,730	141	1,332	111
Medical clinical sciences and clinical and medical laboratory sciences	75	56	56	46	30	27	31	22	44	21
Public health	525	262	457	257	188	105	185	98	164	82
Anesthesiology	ne	ne	ne	ne	ne	ne	46	39	33	29
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	60	35	35	26
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	43	36	28	23
Gastroenterology	ne	ne	ne	ne	ne	ne	43	33	25	23

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2022

(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
Hematology	ne	ne	ne	ne	ne	ne	31	25	24	19
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	118	58	87	47
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	43	28	39	30
Oncology and cancer research	ne	ne	ne	ne	ne	ne	105	50	65	35
Ophthalmology	ne	ne	ne	ne	ne	ne	61	48	41	36
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	35	33	29	27
Pediatrics	ne	ne	ne	ne	ne	ne	135	56	104	44
Psychiatry	ne	ne	ne	ne	ne	ne	86	56	54	41
Pulmonary disease	ne	ne	ne	ne	ne	ne	35	33	28	27
Radiological sciences	ne	ne	ne	ne	ne	ne	113	51	86	38
Surgery	ne	ne	ne	ne	ne	ne	189	60	141	50
Clinical medicine nec	ne	ne	ne	ne	ne	ne	371	80	305	62
Other health	1,017	403	719	367	479	209	403	133	306	103
Communication disorders sciences	259	237	240	231	72	65	32	31	30	29
Dental sciences	97	45	84	44	23	20	66	33	42	23
Kinesiology and exercise science	176	157	162	148	47	45	25	25	17	17
Nursing science	149	138	24	24	136	127	55	43	52	32
Pharmaceutical sciences	135	88	88	66	101	70	109	68	78	49
Other health nec	201	140	121	99	100	76	116	61	87	46

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, 2022.

TABLE 4-6a

Agricultural and veterinary sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	93	13.5	93	13.5	56	8.1
Schools	93	12.0	93	12.0	56	7.2
Units	352	1.6	308	1.4	223	1.0
All graduate students	11,596	100.0	6,949	100.0	4,647	100.0
Male	4,718	40.7	2,640	38.0	2,078	44.7
Female	6,878	59.3	4,309	62.0	2,569	55.3
U.S. citizens and permanent residents ^a	7,955	68.6	5,535	79.7	2,420	52.1
Hispanic or Latino	886	7.6	644	9.3	242	5.2
Not Hispanic or Latino						
American Indian or Alaska Native	29	0.3	19	0.3	10	0.2
Asian	396	3.4	267	3.8	129	2.8
Black or African American	457	3.9	364	5.2	93	2.0
Native Hawaiian or Other Pacific Islander	14	0.1	13	0.2	1	*
White	5,680	49.0	3,876	55.8	1,804	38.8
More than one race	237	2.0	173	2.5	64	1.4
Unknown ethnicity and race	256	2.2	179	2.6	77	1.7
Temporary visa holders	3,641	31.4	1,414	20.3	2,227	47.9
Part time	3,561	30.7	2,806	40.4	755	16.2
Full time	8,035	69.3	4,143	59.6	3,892	83.8
First time	2,205	19.0	1,534	22.1	671	14.4
Primary source of support for full-time students ^b						
Federal	1,907	16.4	790	11.4	1,117	24.0
DOD	20	0.2	4	0.1	16	0.3
DOE	48	0.4	8	0.1	40	0.9
HHS	240	2.1	59	0.8	181	3.9
NIH	123	1.1	18	0.3	105	2.3
Other HHS	117	1.0	41	0.6	76	1.6
NASA	5	*	2	*	3	0.1
NSF	160	1.4	47	0.7	113	2.4
USDA	1,172	10.1	534	7.7	638	13.7
Other	262	2.3	136	2.0	126	2.7
Nonfederal	4,804	41.4	2,238	32.2	2,566	55.2
Institutional	3,941	34.0	1,819	26.2	2,122	45.7
Domestic	813	7.0	401	5.8	412	8.9
Foreign	50	0.4	18	0.3	32	0.7
Self-support	1,324	11.4	1,115	16.0	209	4.5
Primary mechanism of support for full-time students ^b						
Fellowships	452	3.9	130	1.9	322	6.9
Research assistantships	4,696	40.5	2,067	29.7	2,629	56.6
Teaching assistantships	909	7.8	413	5.9	496	10.7
Traineeships	26	0.2	9	0.1	17	0.4
Other types of support	1,952	16.8	1,524	21.9	428	9.2
Self-support	1,324	11.4	1,115	16.0	209	4.5
Other	628	5.4	409	5.9	219	4.7

* = 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 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, 2022.

TABLE 4-6b

Agricultural and veterinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	73	10.6	66	9.6
Schools	73	9.4	68	8.8
Units	337	1.5	274	1.2
All individuals	1,705	100.0	1,068	100.0
Male	938	55.0	545	51.0
Female	767	45.0	523	49.0
U.S. citizens and permanent residents ^a	667	39.1	na	na
Hispanic or Latino	56	3.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	101	5.9	na	na
Black or African American	33	1.9	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	397	23.3	na	na
More than one race	15	0.9	na	na
Unknown ethnicity and race	64	3.8	na	na
Temporary visa holders	1,038	60.9	na	na
Primary source of support				
Federal	809	47.4	na	na
Nonfederal ^b	775	45.5	na	na
Personal resources	5	0.3	na	na
Unknown or not stated	116	6.8	na	na
Primary mechanism of support				
Fellowships	91	5.3	na	na
Research grants	1,070	62.8	na	na
Traineeships	82	4.8	na	na
Other types of support	462	27.1	na	na
Degree type ^c				
Doctoral degree	1,114	65.3	711	66.6
Professional degree	133	7.8	99	9.3
Dual degree	24	1.4	16	1.5
Doctoral degree type unknown	434	25.5	242	22.7
Degree origin				
United States	614	36.0	na	na
Foreign country	354	20.8	na	na
Unknown	737	43.2	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, 2022.

TABLE 4-7a

Biological and biomedical sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	510	73.9	490	71.0	290	42.0
Schools	566	73.0	539	69.5	337	43.5
Units	2,776	12.3	1,696	7.5	1,890	8.4
All graduate students	102,700	100.0	43,062	100.0	59,638	100.0
Male	39,150	38.1	14,272	33.1	24,878	41.7
Female	63,550	61.9	28,790	66.9	34,760	58.3
U.S. citizens and permanent residents ^a	79,204	77.1	35,447	82.3	43,757	73.4
Hispanic or Latino	10,691	10.4	4,953	11.5	5,738	9.6
Not Hispanic or Latino						
American Indian or Alaska Native	239	0.2	93	0.2	146	0.2
Asian	10,386	10.1	4,963	11.5	5,423	9.1
Black or African American	6,413	6.2	3,807	8.8	2,606	4.4
Native Hawaiian or Other Pacific Islander	115	0.1	61	0.1	54	0.1
White	44,818	43.6	18,595	43.2	26,223	44.0
More than one race	3,271	3.2	1,425	3.3	1,846	3.1
Unknown ethnicity and race	3,271	3.2	1,550	3.6	1,721	2.9
Temporary visa holders	23,496	22.9	7,615	17.7	15,881	26.6
Part time	19,083	18.6	15,075	35.0	4,008	6.7
Full time	83,617	81.4	27,987	65.0	55,630	93.3
First time	24,054	23.4	13,871	32.2	10,183	17.1
Primary source of support for full-time students ^b						
Federal	21,244	20.7	1,896	4.4	19,348	32.4
DOD	442	0.4	81	0.2	361	0.6
DOE	196	0.2	24	0.1	172	0.3
HHS	15,561	15.2	538	1.2	15,023	25.2
NIH	14,556	14.2	481	1.1	14,075	23.6
Other HHS	1,005	1.0	57	0.1	948	1.6
NASA	69	0.1	10	*	59	0.1
NSF	2,408	2.3	228	0.5	2,180	3.7
USDA	800	0.8	231	0.5	569	1.0
Other	1,768	1.7	784	1.8	984	1.6
Nonfederal	41,997	40.9	7,820	18.2	34,177	57.3
Institutional	37,901	36.9	7,268	16.9	30,633	51.4
Domestic	3,736	3.6	485	1.1	3,251	5.5
Foreign	360	0.4	67	0.2	293	0.5
Self-support	20,376	19.8	18,271	42.4	2,105	3.5
Primary mechanism of support for full-time students ^b						
Fellowships	10,990	10.7	501	1.2	10,489	17.6
Research assistantships	27,861	27.1	2,822	6.6	25,039	42.0
Teaching assistantships	10,276	10.0	2,880	6.7	7,396	12.4
Traineeships	6,065	5.9	121	0.3	5,944	10.0
Other types of support	28,425	27.7	21,663	50.3	6,762	11.3
Self-support	20,376	19.8	18,271	42.4	2,105	3.5
Other	8,049	7.8	3,392	7.9	4,657	7.8

* = 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, 2022.

TABLE 4-7b

Biological and biomedical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	269	39.0	205	29.7
Schools	321	41.4	245	31.6
Units	1,800	8.0	1,329	5.9
All individuals	19,585	100.0	8,207	100.0
Male	10,478	53.5	4,370	53.2
Female	9,107	46.5	3,837	46.8
U.S. citizens and permanent residents ^a	8,266	42.2	na	na
Hispanic or Latino	756	3.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	36	0.2	na	na
Asian	1,567	8.0	na	na
Black or African American	271	1.4	na	na
Native Hawaiian or Other Pacific Islander	9	*	na	na
White	4,729	24.1	na	na
More than one race	178	0.9	na	na
Unknown ethnicity and race	720	3.7	na	na
Temporary visa holders	11,319	57.8	na	na
Primary source of support				
Federal	10,900	55.7	na	na
Nonfederal ^b	6,747	34.4	na	na
Personal resources	94	0.5	na	na
Unknown or not stated	1,844	9.4	na	na
Primary mechanism of support				
Fellowships	1,674	8.5	na	na
Research grants	12,673	64.7	na	na
Traineeships	969	4.9	na	na
Other types of support	4,269	21.8	na	na
Degree type ^c				
Doctoral degree	15,528	79.3	5,961	72.6
Professional degree	802	4.1	505	6.2
Dual degree	370	1.9	153	1.9
Doctoral degree type unknown	2,885	14.7	1,588	19.3
Degree origin				
United States	7,009	35.8	na	na
Foreign country	7,729	39.5	na	na
Unknown	4,847	24.7	na	na

* = value < 0.05%. 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, 2022.

TABLE 4-8a

Computer and information sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	430	62.3	426	61.7	195	28.3
Schools	441	56.9	437	56.4	199	25.7
Units	1,075	4.8	982	4.4	308	1.4
All graduate students	150,555	100.0	129,972	100.0	20,583	100.0
Male	101,682	67.5	86,842	66.8	14,840	72.1
Female	48,873	32.5	43,130	33.2	5,743	27.9
U.S. citizens and permanent residents ^a	55,394	36.8	47,610	36.6	7,784	37.8
Hispanic or Latino	5,615	3.7	5,083	3.9	532	2.6
Not Hispanic or Latino						
American Indian or Alaska Native	121	0.1	96	0.1	25	0.1
Asian	13,558	9.0	11,960	9.2	1,598	7.8
Black or African American	5,590	3.7	4,989	3.8	601	2.9
Native Hawaiian or Other Pacific Islander	93	0.1	80	0.1	13	0.1
White	25,030	16.6	20,862	16.1	4,168	20.2
More than one race	2,028	1.3	1,695	1.3	333	1.6
Unknown ethnicity and race	3,359	2.2	2,845	2.2	514	2.5
Temporary visa holders	95,161	63.2	82,362	63.4	12,799	62.2
Part time	49,303	32.7	46,264	35.6	3,039	14.8
Full time	101,252	67.3	83,708	64.4	17,544	85.2
First time	43,189	28.7	40,087	30.8	3,102	15.1
Primary source of support for full-time students ^b						
Federal	6,323	4.2	1,870	1.4	4,453	21.6
DOD	1,287	0.9	408	0.3	879	4.3
DOE	182	0.1	44	*	138	0.7
HHS	546	0.4	112	0.1	434	2.1
NIH	380	0.3	69	0.1	311	1.5
Other HHS	166	0.1	43	*	123	0.6
NASA	71	*	33	*	38	0.2
NSF	2,909	1.9	410	0.3	2,499	12.1
USDA	103	0.1	58	*	45	0.2
Other	1,225	0.8	805	0.6	420	2.0
Nonfederal	27,256	18.1	15,645	12.0	11,611	56.4
Institutional	25,106	16.7	14,742	11.3	10,364	50.4
Domestic	1,800	1.2	736	0.6	1,064	5.2
Foreign	350	0.2	167	0.1	183	0.9
Self-support	67,673	44.9	66,193	50.9	1,480	7.2
Primary mechanism of support for full-time students ^b						
Fellowships	3,081	2.0	1,012	0.8	2,069	10.1
Research assistantships	10,926	7.3	2,421	1.9	8,505	41.3
Teaching assistantships	8,727	5.8	4,531	3.5	4,196	20.4
Traineeships	430	0.3	201	0.2	229	1.1
Other types of support	78,088	51.9	75,543	58.1	2,545	12.4
Self-support	67,673	44.9	66,193	50.9	1,480	7.2
Other	10,415	6.9	9,350	7.2	1,065	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, 2022.

TABLE 4-8b

Computer and information sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	128	18.6	92	13.3
Schools	133	17.2	96	12.4
Units	192	0.9	167	0.7
All individuals	859	100.0	507	100.0
Male	625	72.8	365	72.0
Female	234	27.2	142	28.0
U.S. citizens and permanent residents ^a	340	39.6	na	na
Hispanic or Latino	18	2.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	74	8.6	na	na
Black or African American	12	1.4	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	188	21.9	na	na
More than one race	6	0.7	na	na
Unknown ethnicity and race	42	4.9	na	na
Temporary visa holders	519	60.4	na	na
Primary source of support				
Federal	385	44.8	na	na
Nonfederal ^b	416	48.4	na	na
Personal resources	12	1.4	na	na
Unknown or not stated	46	5.4	na	na
Primary mechanism of support				
Fellowships	75	8.7	na	na
Research grants	584	68.0	na	na
Traineeships	24	2.8	na	na
Other types of support	176	20.5	na	na
Degree type ^c				
Doctoral degree	673	78.3	390	76.9
Professional degree	17	2.0	8	1.6
Dual degree	6	0.7	2	0.4
Doctoral degree type unknown	163	19.0	107	21.1
Degree origin				
United States	387	45.1	na	na
Foreign country	202	23.5	na	na
Unknown	270	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, 2022.

TABLE 4-9a

Geosciences, atmospheric sciences, and ocean sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	224	32.5	207	30.0	155	22.5
Schools	229	29.5	212	27.4	157	20.3
Units	396	1.8	335	1.5	266	1.2
All graduate students	11,970	100.0	5,186	100.0	6,784	100.0
Male	5,763	48.1	2,435	47.0	3,328	49.1
Female	6,207	51.9	2,751	53.0	3,456	50.9
U.S. citizens and permanent residents ^a	9,294	77.6	4,585	88.4	4,709	69.4
Hispanic or Latino	1,109	9.3	578	11.1	531	7.8
Not Hispanic or Latino						
American Indian or Alaska Native	34	0.3	18	0.3	16	0.2
Asian	417	3.5	154	3.0	263	3.9
Black or African American	313	2.6	161	3.1	152	2.2
Native Hawaiian or Other Pacific Islander	6	0.1	3	0.1	3	*
White	6,686	55.9	3,364	64.9	3,322	49.0
More than one race	426	3.6	193	3.7	233	3.4
Unknown ethnicity and race	303	2.5	114	2.2	189	2.8
Temporary visa holders	2,676	22.4	601	11.6	2,075	30.6
Part time	2,223	18.6	1,565	30.2	658	9.7
Full time	9,747	81.4	3,621	69.8	6,126	90.3
First time	2,394	20.0	1,348	26.0	1,046	15.4
Primary source of support for full-time students ^b						
Federal	2,726	22.8	686	13.2	2,040	30.1
DOD	179	1.5	58	1.1	121	1.8
DOE	120	1.0	34	0.7	86	1.3
HHS	44	0.4	7	0.1	37	0.5
NIH	26	0.2	3	0.1	23	0.3
Other HHS	18	0.2	4	0.1	14	0.2
NASA	460	3.8	53	1.0	407	6.0
NSF	1,246	10.4	248	4.8	998	14.7
USDA	39	0.3	9	0.2	30	0.4
Other	638	5.3	277	5.3	361	5.3
Nonfederal	5,768	48.2	2,008	38.7	3,760	55.4
Institutional	5,203	43.5	1,851	35.7	3,352	49.4
Domestic	475	4.0	140	2.7	335	4.9
Foreign	90	0.8	17	0.3	73	1.1
Self-support	1,253	10.5	927	17.9	326	4.8
Primary mechanism of support for full-time students ^b						
Fellowships	1,102	9.2	126	2.4	976	14.4
Research assistantships	4,301	35.9	1,139	22.0	3,162	46.6
Teaching assistantships	2,352	19.6	1,126	21.7	1,226	18.1
Traineeships	78	0.7	9	0.2	69	1.0
Other types of support	1,914	16.0	1,221	23.5	693	10.2
Self-support	1,253	10.5	927	17.9	326	4.8
Other	661	5.5	294	5.7	367	5.4

* = 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, 2022.

TABLE 4-9b

Geosciences, atmospheric sciences, and ocean sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	137	19.9	120	17.4
Schools	138	17.8	120	15.5
Units	270	1.2	241	1.1
All individuals	1,787	100.0	2,448	100.0
Male	1,032	57.8	1,629	66.5
Female	755	42.2	819	33.5
U.S. citizens and permanent residents ^a	916	51.3	na	na
Hispanic or Latino	77	4.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	6	0.3	na	na
Asian	86	4.8	na	na
Black or African American	20	1.1	na	na
Native Hawaiian or Other Pacific Islander	2	0.1	na	na
White	592	33.1	na	na
More than one race	38	2.1	na	na
Unknown ethnicity and race	95	5.3	na	na
Temporary visa holders	871	48.7	na	na
Primary source of support				
Federal	903	50.5	na	na
Nonfederal ^b	689	38.6	na	na
Personal resources	76	4.3	na	na
Unknown or not stated	119	6.7	na	na
Primary mechanism of support				
Fellowships	189	10.6	na	na
Research grants	1,236	69.2	na	na
Traineeships	15	0.8	na	na
Other types of support	347	19.4	na	na
Degree type ^c				
Doctoral degree	1,495	83.7	1,784	72.9
Professional degree	22	1.2	79	3.2
Dual degree	12	0.7	2	0.1
Doctoral degree type unknown	258	14.4	583	23.8
Degree origin				
United States	856	47.9	na	na
Foreign country	378	21.2	na	na
Unknown	553	30.9	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, 2022.

TABLE 4-10a

Mathematics and statistics master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	354	51.3	347	50.3	196	28.4
Schools	363	46.8	355	45.8	200	25.8
Units	748	3.3	644	2.9	345	1.5
All graduate students	34,387	100.0	20,798	100.0	13,589	100.0
Male	21,918	63.7	12,393	59.6	9,525	70.1
Female	12,469	36.3	8,405	40.4	4,064	29.9
U.S. citizens and permanent residents ^a	16,331	47.5	9,599	46.2	6,732	49.5
Hispanic or Latino	1,926	5.6	1,272	6.1	654	4.8
Not Hispanic or Latino						
American Indian or Alaska Native	37	0.1	23	0.1	14	0.1
Asian	2,686	7.8	1,719	8.3	967	7.1
Black or African American	737	2.1	514	2.5	223	1.6
Native Hawaiian or Other Pacific Islander	12	*	8	*	4	*
White	9,472	27.5	5,233	25.2	4,239	31.2
More than one race	563	1.6	312	1.5	251	1.8
Unknown ethnicity and race	898	2.6	518	2.5	380	2.8
Temporary visa holders	18,056	52.5	11,199	53.8	6,857	50.5
Part time	7,789	22.7	6,559	31.5	1,230	9.1
Full time	26,598	77.3	14,239	68.5	12,359	90.9
First time	9,608	27.9	7,056	33.9	2,552	18.8
Primary source of support for full-time students ^b						
Federal	1,572	4.6	205	1.0	1,367	10.1
DOD	133	0.4	38	0.2	95	0.7
DOE	36	0.1	2	*	34	0.3
HHS	247	0.7	24	0.1	223	1.6
NIH	205	0.6	20	0.1	185	1.4
Other HHS	42	0.1	4	*	38	0.3
NASA	25	0.1	6	*	19	0.1
NSF	970	2.8	64	0.3	906	6.7
USDA	12	*	3	*	9	0.1
Other	149	0.4	68	0.3	81	0.6
Nonfederal	14,031	40.8	3,714	17.9	10,317	75.9
Institutional	13,517	39.3	3,560	17.1	9,957	73.3
Domestic	381	1.1	113	0.5	268	2.0
Foreign	133	0.4	41	0.2	92	0.7
Self-support	10,995	32.0	10,320	49.6	675	5.0
Primary mechanism of support for full-time students ^b						
Fellowships	1,987	5.8	290	1.4	1,697	12.5
Research assistantships	2,662	7.7	405	1.9	2,257	16.6
Teaching assistantships	8,820	25.6	1,805	8.7	7,015	51.6
Traineeships	177	0.5	28	0.1	149	1.1
Other types of support	12,952	37.7	11,711	56.3	1,241	9.1
Self-support	10,995	32.0	10,320	49.6	675	5.0
Other	1,957	5.7	1,391	6.7	566	4.2

* = 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, 2022.

TABLE 4-10b

Mathematics and statistics postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	131	19.0	57	8.3
Schools	132	17.0	58	7.5
Units	200	0.9	81	0.4
All individuals	1,110	100.0	251	100.0
Male	838	75.5	177	70.5
Female	272	24.5	74	29.5
U.S. citizens and permanent residents ^a	554	49.9	na	na
Hispanic or Latino	32	2.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	3	0.3	na	na
Asian	103	9.3	na	na
Black or African American	21	1.9	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	323	29.1	na	na
More than one race	18	1.6	na	na
Unknown ethnicity and race	53	4.8	na	na
Temporary visa holders	556	50.1	na	na
Primary source of support				
Federal	310	27.9	na	na
Nonfederal ^b	701	63.2	na	na
Personal resources	11	1.0	na	na
Unknown or not stated	88	7.9	na	na
Primary mechanism of support				
Fellowships	140	12.6	na	na
Research grants	453	40.8	na	na
Traineeships	82	7.4	na	na
Other types of support	435	39.2	na	na
Degree type ^c				
Doctoral degree	922	83.1	220	87.6
Professional degree	17	1.5	15	6.0
Dual degree	6	0.5	0	0.0
Doctoral degree type unknown	165	14.9	16	6.4
Degree origin				
United States	537	48.4	na	na
Foreign country	187	16.8	na	na
Unknown	386	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, 2022.

TABLE 4-11a

Multidisciplinary and interdisciplinary sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	237	34.3	212	30.7	103	14.9
Schools	248	32.0	219	28.3	109	14.1
Units	439	1.9	354	1.6	145	0.6
All graduate students	20,945	100.0	16,931	100.0	4,014	100.0
Male	10,329	49.3	8,498	50.2	1,831	45.6
Female	10,616	50.7	8,433	49.8	2,183	54.4
U.S. citizens and permanent residents ^a	13,232	63.2	10,514	62.1	2,718	67.7
Hispanic or Latino	1,698	8.1	1,398	8.3	300	7.5
Not Hispanic or Latino						
American Indian or Alaska Native	32	0.2	25	0.1	7	0.2
Asian	1,927	9.2	1,642	9.7	285	7.1
Black or African American	1,218	5.8	1,009	6.0	209	5.2
Native Hawaiian or Other Pacific Islander	21	0.1	14	0.1	7	0.2
White	7,096	33.9	5,431	32.1	1,665	41.5
More than one race	501	2.4	384	2.3	117	2.9
Unknown ethnicity and race	739	3.5	611	3.6	128	3.2
Temporary visa holders	7,713	36.8	6,417	37.9	1,296	32.3
Part time	7,897	37.7	7,164	42.3	733	18.3
Full time	13,048	62.3	9,767	57.7	3,281	81.7
First time	5,883	28.1	5,169	30.5	714	17.8
Primary source of support for full-time students ^b						
Federal	944	4.5	413	2.4	531	13.2
DOD	59	0.3	32	0.2	27	0.7
DOE	52	0.2	4	*	48	1.2
HHS	240	1.1	20	0.1	220	5.5
NIH	214	1.0	19	0.1	195	4.9
Other HHS	26	0.1	1	*	25	0.6
NASA	18	0.1	4	*	14	0.3
NSF	192	0.9	47	0.3	145	3.6
USDA	32	0.2	17	0.1	15	0.4
Other	351	1.7	289	1.7	62	1.5
Nonfederal	4,463	21.3	2,196	13.0	2,267	56.5
Institutional	4,097	19.6	2,002	11.8	2,095	52.2
Domestic	316	1.5	169	1.0	147	3.7
Foreign	50	0.2	25	0.1	25	0.6
Self-support	7,641	36.5	7,158	42.3	483	12.0
Primary mechanism of support for full-time students ^b						
Fellowships	1,558	7.4	752	4.4	806	20.1
Research assistantships	1,244	5.9	330	1.9	914	22.8
Teaching assistantships	1,058	5.1	357	2.1	701	17.5
Traineeships	117	0.6	22	0.1	95	2.4
Other types of support	9,071	43.3	8,306	49.1	765	19.1
Self-support	7,641	36.5	7,158	42.3	483	12.0
Other	1,430	6.8	1,148	6.8	282	7.0

* = 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](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE 4-11b

Multidisciplinary and interdisciplinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	90	13.0	88	12.8
Schools	91	11.7	89	11.5
Units	189	0.8	218	1.0
All individuals	840	100.0	931	100.0
Male	456	54.3	531	57.0
Female	384	45.7	400	43.0
U.S. citizens and permanent residents ^a	423	50.4	na	na
Hispanic or Latino	27	3.2	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	69	8.2	na	na
Black or African American	19	2.3	na	na
Native Hawaiian or Other Pacific Islander	4	0.5	na	na
White	250	29.8	na	na
More than one race	13	1.5	na	na
Unknown ethnicity and race	39	4.6	na	na
Temporary visa holders	417	49.6	na	na
Primary source of support				
Federal	366	43.6	na	na
Nonfederal ^b	394	46.9	na	na
Personal resources	8	1.0	na	na
Unknown or not stated	72	8.6	na	na
Primary mechanism of support				
Fellowships	89	10.6	na	na
Research grants	532	63.3	na	na
Traineeships	39	4.6	na	na
Other types of support	180	21.4	na	na
Degree type ^c				
Doctoral degree	616	73.3	713	76.6
Professional degree	20	2.4	68	7.3
Dual degree	7	0.8	4	0.4
Doctoral degree type unknown	197	23.5	146	15.7
Degree origin				
United States	363	43.2	na	na
Foreign country	200	23.8	na	na
Unknown	277	33.0	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, 2022.

TABLE 4-12a

Natural resources and conservation master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	208	30.1	197	28.6	102	14.8
Schools	211	27.2	200	25.8	103	13.3
Units	381	1.7	320	1.4	168	0.7
All graduate students	13,762	100.0	9,807	100.0	3,955	100.0
Male	5,476	39.8	3,787	38.6	1,689	42.7
Female	8,286	60.2	6,020	61.4	2,266	57.3
U.S. citizens and permanent residents ^a	11,675	84.8	8,779	89.5	2,896	73.2
Hispanic or Latino	1,290	9.4	1,008	10.3	282	7.1
Not Hispanic or Latino						
American Indian or Alaska Native	121	0.9	74	0.8	47	1.2
Asian	484	3.5	338	3.4	146	3.7
Black or African American	478	3.5	306	3.1	172	4.3
Native Hawaiian or Other Pacific Islander	31	0.2	27	0.3	4	0.1
White	8,430	61.3	6,435	65.6	1,995	50.4
More than one race	454	3.3	349	3.6	105	2.7
Unknown ethnicity and race	387	2.8	242	2.5	145	3.7
Temporary visa holders	2,087	15.2	1,028	10.5	1,059	26.8
Part time	4,601	33.4	3,797	38.7	804	20.3
Full time	9,161	66.6	6,010	61.3	3,151	79.7
First time	2,810	20.4	2,317	23.6	493	12.5
Primary source of support for full-time students ^b						
Federal	1,635	11.9	879	9.0	756	19.1
DOD	52	0.4	29	0.3	23	0.6
DOE	59	0.4	21	0.2	38	1.0
HHS	129	0.9	53	0.5	76	1.9
NIH	57	0.4	15	0.2	42	1.1
Other HHS	72	0.5	38	0.4	34	0.9
NASA	43	0.3	9	0.1	34	0.9
NSF	298	2.2	108	1.1	190	4.8
USDA	397	2.9	219	2.2	178	4.5
Other	657	4.8	440	4.5	217	5.5
Nonfederal	4,518	32.8	2,473	25.2	2,045	51.7
Institutional	4,027	29.3	2,239	22.8	1,788	45.2
Domestic	456	3.3	225	2.3	231	5.8
Foreign	35	0.3	9	0.1	26	0.7
Self-support	3,008	21.9	2,658	27.1	350	8.8
Primary mechanism of support for full-time students ^b						
Fellowships	924	6.7	432	4.4	492	12.4
Research assistantships	2,645	19.2	1,289	13.1	1,356	34.3
Teaching assistantships	1,278	9.3	645	6.6	633	16.0
Traineeships	101	0.7	76	0.8	25	0.6
Other types of support	4,213	30.6	3,568	36.4	645	16.3
Self-support	3,008	21.9	2,658	27.1	350	8.8
Other	1,205	8.8	910	9.3	295	7.5

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, 2022.

TABLE 4-12b

Natural resources and conservation postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	89	12.9	79	11.4
Schools	90	11.6	79	10.2
Units	162	0.7	152	0.7
All individuals	936	100.0	605	100.0
Male	505	54.0	369	61.0
Female	431	46.0	236	39.0
U.S. citizens and permanent residents ^a	585	62.5	na	na
Hispanic or Latino	37	4.0	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	42	4.5	na	na
Black or African American	11	1.2	na	na
Native Hawaiian or Other Pacific Islander	2	0.2	na	na
White	392	41.9	na	na
More than one race	23	2.5	na	na
Unknown ethnicity and race	76	8.1	na	na
Temporary visa holders	351	37.5	na	na
Primary source of support				
Federal	447	47.8	na	na
Nonfederal ^b	416	44.4	na	na
Personal resources	15	1.6	na	na
Unknown or not stated	58	6.2	na	na
Primary mechanism of support				
Fellowships	75	8.0	na	na
Research grants	641	68.5	na	na
Traineeships	18	1.9	na	na
Other types of support	202	21.6	na	na
Degree type ^c				
Doctoral degree	697	74.5	373	61.7
Professional degree	24	2.6	13	2.1
Dual degree	3	0.3	1	0.2
Doctoral degree type unknown	212	22.6	218	36.0
Degree origin				
United States	437	46.7	na	na
Foreign country	166	17.7	na	na
Unknown	333	35.6	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](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE 4-13a

Physical sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	326	47.2	305	44.2	227	32.9
Schools	332	42.8	311	40.1	229	29.5
Units	806	3.6	577	2.6	565	2.5
All graduate students	44,092	100.0	6,256	100.0	37,836	100.0
Male	27,851	63.2	3,777	60.4	24,074	63.6
Female	16,241	36.8	2,479	39.6	13,762	36.4
U.S. citizens and permanent residents ^a	26,689	60.5	4,633	74.1	22,056	58.3
Hispanic or Latino	3,288	7.5	737	11.8	2,551	6.7
Not Hispanic or Latino						
American Indian or Alaska Native	66	0.1	29	0.5	37	0.1
Asian	2,789	6.3	446	7.1	2,343	6.2
Black or African American	1,143	2.6	314	5.0	829	2.2
Native Hawaiian or Other Pacific Islander	18	*	5	0.1	13	*
White	17,289	39.2	2,719	43.5	14,570	38.5
More than one race	1,062	2.4	194	3.1	868	2.3
Unknown ethnicity and race	1,034	2.3	189	3.0	845	2.2
Temporary visa holders	17,403	39.5	1,623	25.9	15,780	41.7
Part time	5,080	11.5	2,530	40.4	2,550	6.7
Full time	39,012	88.5	3,726	59.6	35,286	93.3
First time	8,334	18.9	1,495	23.9	6,839	18.1
Primary source of support for full-time students ^b						
Federal	10,516	23.9	323	5.2	10,193	26.9
DOD	807	1.8	68	1.1	739	2.0
DOE	2,273	5.2	24	0.4	2,249	5.9
HHS	2,000	4.5	26	0.4	1,974	5.2
NIH	1,732	3.9	23	0.4	1,709	4.5
Other HHS	268	0.6	3	*	265	0.7
NASA	555	1.3	15	0.2	540	1.4
NSF	4,095	9.3	101	1.6	3,994	10.6
USDA	31	0.1	5	0.1	26	0.1
Other	755	1.7	84	1.3	671	1.8
Nonfederal	25,599	58.1	1,847	29.5	23,752	62.8
Institutional	23,810	54.0	1,738	27.8	22,072	58.3
Domestic	1,566	3.6	81	1.3	1,485	3.9
Foreign	223	0.5	28	0.4	195	0.5
Self-support	2,897	6.6	1,556	24.9	1,341	3.5
Primary mechanism of support for full-time students ^b						
Fellowships	4,552	10.3	68	1.1	4,484	11.9
Research assistantships	15,649	35.5	518	8.3	15,131	40.0
Teaching assistantships	13,171	29.9	1,050	16.8	12,121	32.0
Traineeships	577	1.3	70	1.1	507	1.3
Other types of support	5,063	11.5	2,020	32.3	3,043	8.0
Self-support	2,897	6.6	1,556	24.9	1,341	3.5
Other	2,166	4.9	464	7.4	1,702	4.5

* = 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, 2022.

TABLE 4-13b

Physical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	221	32.0	182	26.4
Schools	228	29.4	184	23.7
Units	593	2.6	449	2.0
All individuals	6,877	100.0	2,894	100.0
Male	5,106	74.2	2,224	76.8
Female	1,771	25.8	670	23.2
U.S. citizens and permanent residents ^a	2,716	39.5	na	na
Hispanic or Latino	145	2.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	3	*	na	na
Asian	552	8.0	na	na
Black or African American	55	0.8	na	na
Native Hawaiian or Other Pacific Islander	1	*	na	na
White	1,564	22.7	na	na
More than one race	72	1.0	na	na
Unknown ethnicity and race	324	4.7	na	na
Temporary visa holders	4,161	60.5	na	na
Primary source of support				
Federal	3,797	55.2	na	na
Nonfederal ^b	2,605	37.9	na	na
Personal resources	42	0.6	na	na
Unknown or not stated	433	6.3	na	na
Primary mechanism of support				
Fellowships	624	9.1	na	na
Research grants	4,954	72.0	na	na
Traineeships	128	1.9	na	na
Other types of support	1,171	17.0	na	na
Degree type ^c				
Doctoral degree	5,152	74.9	2,438	84.2
Professional degree	142	2.1	73	2.5
Dual degree	35	0.5	7	0.2
Doctoral degree type unknown	1,548	22.5	376	13.0
Degree origin				
United States	2,324	33.8	na	na
Foreign country	1,839	26.7	na	na
Unknown	2,714	39.5	na	na

* = value < 0.05%. 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, 2022.

TABLE 4-14a

Psychology master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	474	68.7	427	61.9	242	35.1
Schools	485	62.6	434	56.0	247	31.9
Units	1,158	5.1	828	3.7	518	2.3
All graduate students	69,442	100.0	48,321	100.0	21,121	100.0
Male	13,673	19.7	8,571	17.7	5,102	24.2
Female	55,769	80.3	39,750	82.3	16,019	75.8
U.S. citizens and permanent residents ^a	64,364	92.7	45,829	94.8	18,535	87.8
Hispanic or Latino	13,177	19.0	10,130	21.0	3,047	14.4
Not Hispanic or Latino						
American Indian or Alaska Native	264	0.4	164	0.3	100	0.5
Asian	3,967	5.7	2,496	5.2	1,471	7.0
Black or African American	6,991	10.1	5,173	10.7	1,818	8.6
Native Hawaiian or Other Pacific Islander	115	0.2	99	0.2	16	0.1
White	34,375	49.5	23,784	49.2	10,591	50.1
More than one race	2,558	3.7	1,725	3.6	833	3.9
Unknown ethnicity and race	2,917	4.2	2,258	4.7	659	3.1
Temporary visa holders	5,078	7.3	2,492	5.2	2,586	12.2
Part time	24,246	34.9	20,460	42.3	3,786	17.9
Full time	45,196	65.1	27,861	57.7	17,335	82.1
First time	13,945	20.1	10,597	21.9	3,348	15.9
Primary source of support for full-time students ^b						
Federal	3,113	4.5	1,072	2.2	2,041	9.7
DOD	216	0.3	67	0.1	149	0.7
DOE	7	*	0	0.0	7	*
HHS	1,068	1.5	77	0.2	991	4.7
NIH	816	1.2	36	0.1	780	3.7
Other HHS	252	0.4	41	0.1	211	1.0
NSF	395	0.6	42	0.1	353	1.7
USDA	12	*	4	*	8	*
Other	1,415	2.0	882	1.8	533	2.5
Nonfederal	16,362	23.6	4,790	9.9	11,572	54.8
Institutional	15,536	22.4	4,619	9.6	10,917	51.7
Domestic	775	1.1	162	0.3	613	2.9
Foreign	51	0.1	9	*	42	0.2
Self-support	25,721	37.0	21,999	45.5	3,722	17.6
Primary mechanism of support for full-time students ^b						
Fellowships	1,937	2.8	196	0.4	1,741	8.2
Research assistantships	5,228	7.5	1,125	2.3	4,103	19.4
Teaching assistantships	6,479	9.3	1,244	2.6	5,235	24.8
Traineeships	870	1.3	253	0.5	617	2.9
Other types of support	30,682	44.2	25,043	51.8	5,639	26.7
Self-support	25,721	37.0	21,999	45.5	3,722	17.6
Other	4,961	7.1	3,044	6.3	1,917	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. 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, 2022.

TABLE 4-14b

Psychology postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	149	21.6	123	17.8
Schools	160	20.6	126	16.3
Units	266	1.2	210	0.9
All individuals	1,308	100.0	786	100.0
Male	450	34.4	261	33.2
Female	858	65.6	525	66.8
U.S. citizens and permanent residents ^a	959	73.3	na	na
Hispanic or Latino	104	8.0	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	105	8.0	na	na
Black or African American	47	3.6	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	591	45.2	na	na
More than one race	27	2.1	na	na
Unknown ethnicity and race	82	6.3	na	na
Temporary visa holders	349	26.7	na	na
Primary source of support				
Federal	697	53.3	na	na
Nonfederal ^b	510	39.0	na	na
Personal resources	22	1.7	na	na
Unknown or not stated	79	6.0	na	na
Primary mechanism of support				
Fellowships	126	9.6	na	na
Research grants	775	59.3	na	na
Traineeships	112	8.6	na	na
Other types of support	295	22.6	na	na
Degree type ^c				
Doctoral degree	1,010	77.2	609	77.5
Professional degree	44	3.4	40	5.1
Dual degree	22	1.7	9	1.1
Doctoral degree type unknown	232	17.7	128	16.3
Degree origin				
United States	696	53.2	na	na
Foreign country	196	15.0	na	na
Unknown	416	31.8	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, 2022.

TABLE 4-15a

Social sciences master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	411	59.6	401	58.1	208	30.1
Schools	423	54.6	413	53.3	215	27.7
Units	2,061	9.2	1,622	7.2	965	4.3
All graduate students	78,717	100.0	44,701	100.0	34,016	100.0
Male	35,372	44.9	19,315	43.2	16,057	47.2
Female	43,345	55.1	25,386	56.8	17,959	52.8
U.S. citizens and permanent residents ^a	56,826	72.2	35,701	79.9	21,125	62.1
Hispanic or Latino	8,828	11.2	6,156	13.8	2,672	7.9
Not Hispanic or Latino						
American Indian or Alaska Native	392	0.5	211	0.5	181	0.5
Asian	3,993	5.1	2,282	5.1	1,711	5.0
Black or African American	6,374	8.1	4,173	9.3	2,201	6.5
Native Hawaiian or Other Pacific Islander	112	0.1	72	0.2	40	0.1
White	32,084	40.8	19,959	44.7	12,125	35.6
More than one race	2,293	2.9	1,426	3.2	867	2.5
Unknown ethnicity and race	2,750	3.5	1,422	3.2	1,328	3.9
Temporary visa holders	21,891	27.8	9,000	20.1	12,891	37.9
Part time	22,191	28.2	17,014	38.1	5,177	15.2
Full time	56,526	71.8	27,687	61.9	28,839	84.8
First time	17,843	22.7	12,875	28.8	4,968	14.6
Primary source of support for full-time students ^b						
Federal	2,794	3.5	1,308	2.9	1,486	4.4
DOD	481	0.6	382	0.9	99	0.3
DOE	13	*	4	*	9	*
HHS	228	0.3	25	0.1	203	0.6
NIH	145	0.2	5	*	140	0.4
Other HHS	83	0.1	20	*	63	0.2
NASA	38	*	9	*	29	0.1
NSF	651	0.8	80	0.2	571	1.7
USDA	287	0.4	113	0.3	174	0.5
Other	1,096	1.4	695	1.6	401	1.2
Nonfederal	33,203	42.2	9,467	21.2	23,736	69.8
Institutional	31,572	40.1	8,785	19.7	22,787	67.0
Domestic	1,272	1.6	533	1.2	739	2.2
Foreign	359	0.5	149	0.3	210	0.6
Self-support	20,529	26.1	16,912	37.8	3,617	10.6
Primary mechanism of support for full-time students ^b						
Fellowships	8,128	10.3	1,616	3.6	6,512	19.1
Research assistantships	6,337	8.1	1,690	3.8	4,647	13.7
Teaching assistantships	13,837	17.6	2,814	6.3	11,023	32.4
Traineeships	974	1.2	369	0.8	605	1.8
Other types of support	27,250	34.6	21,198	47.4	6,052	17.8
Self-support	20,529	26.1	16,912	37.8	3,617	10.6
Other	6,721	8.5	4,286	9.6	2,435	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, 2022.

TABLE 4-15b

Social sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	150	21.7	135	19.6
Schools	156	20.1	138	17.8
Units	668	3.0	517	2.3
All individuals	1,666	100.0	1,726	100.0
Male	807	48.4	791	45.8
Female	859	51.6	935	54.2
U.S. citizens and permanent residents ^a	1,116	67.0	na	na
Hispanic or Latino	105	6.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	7	0.4	na	na
Asian	123	7.4	na	na
Black or African American	83	5.0	na	na
Native Hawaiian or Other Pacific Islander	3	0.2	na	na
White	638	38.3	na	na
More than one race	33	2.0	na	na
Unknown ethnicity and race	124	7.4	na	na
Temporary visa holders	550	33.0	na	na
Primary source of support				
Federal	341	20.5	na	na
Nonfederal ^b	1,168	70.1	na	na
Personal resources	12	0.7	na	na
Unknown or not stated	145	8.7	na	na
Primary mechanism of support				
Fellowships	289	17.3	na	na
Research grants	816	49.0	na	na
Traineeships	86	5.2	na	na
Other types of support	475	28.5	na	na
Degree type ^c				
Doctoral degree	1,309	78.6	1,281	74.2
Professional degree	47	2.8	112	6.5
Dual degree	10	0.6	13	0.8
Doctoral degree type unknown	300	18.0	320	18.5
Degree origin				
United States	984	59.1	na	na
Foreign country	212	12.7	na	na
Unknown	470	28.2	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, 2022.

TABLE 4-16a

Aerospace, aeronautical, and astronautical engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	65	9.4	65	9.4	50	7.2
Schools	65	8.4	65	8.4	50	6.5
Units	73	0.3	71	0.3	52	0.2
All graduate students	8,095	100.0	5,263	100.0	2,832	100.0
Male	6,532	80.7	4,250	80.8	2,282	80.6
Female	1,563	19.3	1,013	19.2	550	19.4
U.S. citizens and permanent residents ^a	6,119	75.6	4,353	82.7	1,766	62.4
Hispanic or Latino	703	8.7	536	10.2	167	5.9
Not Hispanic or Latino						
American Indian or Alaska Native	12	0.1	10	0.2	2	0.1
Asian	868	10.7	632	12.0	236	8.3
Black or African American	176	2.2	114	2.2	62	2.2
Native Hawaiian or Other Pacific Islander	10	0.1	8	0.2	2	0.1
White	3,894	48.1	2,741	52.1	1,153	40.7
More than one race	274	3.4	179	3.4	95	3.4
Unknown ethnicity and race	182	2.2	133	2.5	49	1.7
Temporary visa holders	1,976	24.4	910	17.3	1,066	37.6
Part time	2,675	33.0	2,326	44.2	349	12.3
Full time	5,420	67.0	2,937	55.8	2,483	87.7
First time	1,691	20.9	1,316	25.0	375	13.2
Primary source of support for full-time students ^b						
Federal	1,244	15.4	404	7.7	840	29.7
DOD	581	7.2	222	4.2	359	12.7
DOE	65	0.8	17	0.3	48	1.7
HHS	4	*	0	0.0	4	0.1
NIH	3	*	0	0.0	3	0.1
Other HHS	1	*	0	0.0	1	*
NASA	210	2.6	49	0.9	161	5.7
NSF	169	2.1	23	0.4	146	5.2
USDA	1	*	0	0.0	1	*
Other	214	2.6	93	1.8	121	4.3
Nonfederal	2,648	32.7	1,230	23.4	1,418	50.1
Institutional	2,297	28.4	1,106	21.0	1,191	42.1
Domestic	274	3.4	99	1.9	175	6.2
Foreign	77	1.0	25	0.5	52	1.8
Self-support	1,528	18.9	1,303	24.8	225	7.9
Primary mechanism of support for full-time students ^b						
Fellowships	434	5.4	98	1.9	336	11.9
Research assistantships	1,976	24.4	584	11.1	1,392	49.2
Teaching assistantships	697	8.6	356	6.8	341	12.0
Traineeships	55	0.7	39	0.7	16	0.6
Other types of support	2,258	27.9	1,860	35.3	398	14.1
Self-support	1,528	18.9	1,303	24.8	225	7.9
Other	730	9.0	557	10.6	173	6.1

* = 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, 2022.

TABLE 4-16b

Aerospace, aeronautical, and astronautical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	32	4.6	32	4.6
Schools	32	4.1	32	4.1
Units	39	0.2	36	0.2
All individuals	244	100.0	153	100.0
Male	204	83.6	123	80.4
Female	40	16.4	30	19.6
U.S. citizens and permanent residents ^a	77	31.6	na	na
Hispanic or Latino	3	1.2	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	22	9.0	na	na
Black or African American	1	0.4	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	44	18.0	na	na
More than one race	1	0.4	na	na
Unknown ethnicity and race	6	2.5	na	na
Temporary visa holders	167	68.4	na	na
Primary source of support				
Federal	124	50.8	na	na
Nonfederal ^b	89	36.5	na	na
Personal resources	2	0.8	na	na
Unknown or not stated	29	11.9	na	na
Primary mechanism of support				
Fellowships	29	11.9	na	na
Research grants	151	61.9	na	na
Traineeships	2	0.8	na	na
Other types of support	62	25.4	na	na
Degree type ^c				
Doctoral degree	209	85.7	141	92.2
Professional degree	5	2.0	4	2.6
Dual degree	0	0.0	0	0.0
Doctoral degree type unknown	30	12.3	8	5.2
Degree origin				
United States	117	48.0	na	na
Foreign country	45	18.4	na	na
Unknown	82	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](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE 4-17a

Biological, biomedical, and biosystems engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	179	25.9	160	23.2	143	20.7
Schools	184	23.7	162	20.9	146	18.8
Units	234	1.0	193	0.9	167	0.7
All graduate students	14,442	100.0	5,177	100.0	9,265	100.0
Male	7,506	52.0	2,543	49.1	4,963	53.6
Female	6,936	48.0	2,634	50.9	4,302	46.4
U.S. citizens and permanent residents ^a	9,419	65.2	3,462	66.9	5,957	64.3
Hispanic or Latino	1,119	7.7	439	8.5	680	7.3
Not Hispanic or Latino						
American Indian or Alaska Native	20	0.1	7	0.1	13	0.1
Asian	1,863	12.9	751	14.5	1,112	12.0
Black or African American	562	3.9	217	4.2	345	3.7
Native Hawaiian or Other Pacific Islander	11	0.1	5	0.1	6	0.1
White	5,010	34.7	1,766	34.1	3,244	35.0
More than one race	411	2.8	153	3.0	258	2.8
Unknown ethnicity and race	423	2.9	124	2.4	299	3.2
Temporary visa holders	5,023	34.8	1,715	33.1	3,308	35.7
Part time	2,026	14.0	1,343	25.9	683	7.4
Full time	12,416	86.0	3,834	74.1	8,582	92.6
First time	3,797	26.3	2,186	42.2	1,611	17.4
Primary source of support for full-time students ^b						
Federal	3,463	24.0	219	4.2	3,244	35.0
DOD	187	1.3	19	0.4	168	1.8
DOE	22	0.2	2	*	20	0.2
HHS	2,257	15.6	68	1.3	2,189	23.6
NIH	2,088	14.5	62	1.2	2,026	21.9
Other HHS	169	1.2	6	0.1	163	1.8
NASA	9	0.1	2	*	7	0.1
NSF	673	4.7	28	0.5	645	7.0
USDA	57	0.4	16	0.3	41	0.4
Other	258	1.8	84	1.6	174	1.9
Nonfederal	6,150	42.6	1,156	22.3	4,994	53.9
Institutional	5,363	37.1	1,050	20.3	4,313	46.6
Domestic	732	5.1	99	1.9	633	6.8
Foreign	55	0.4	7	0.1	48	0.5
Self-support	2,803	19.4	2,459	47.5	344	3.7
Primary mechanism of support for full-time students ^b						
Fellowships	1,812	12.5	133	2.6	1,679	18.1
Research assistantships	5,127	35.5	367	7.1	4,760	51.4
Teaching assistantships	987	6.8	350	6.8	637	6.9
Traineeships	404	2.8	13	0.3	391	4.2
Other types of support	4,086	28.3	2,971	57.4	1,115	12.0
Self-support	2,803	19.4	2,459	47.5	344	3.7
Other	1,283	8.9	512	9.9	771	8.3

* = 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, 2022.

TABLE 4-17b

Biological, biomedical, and biosystems engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	116	16.8	92	13.3
Schools	121	15.6	93	12.0
Units	145	0.6	124	0.6
All individuals	1,540	100.0	685	100.0
Male	947	61.5	422	61.6
Female	593	38.5	263	38.4
U.S. citizens and permanent residents ^a	645	41.9	na	na
Hispanic or Latino	49	3.2	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	171	11.1	na	na
Black or African American	24	1.6	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	324	21.0	na	na
More than one race	14	0.9	na	na
Unknown ethnicity and race	61	4.0	na	na
Temporary visa holders	895	58.1	na	na
Primary source of support				
Federal	881	57.2	na	na
Nonfederal ^b	595	38.6	na	na
Personal resources	8	0.5	na	na
Unknown or not stated	56	3.6	na	na
Primary mechanism of support				
Fellowships	142	9.2	na	na
Research grants	1,075	69.8	na	na
Traineeships	67	4.4	na	na
Other types of support	256	16.6	na	na
Degree type ^c				
Doctoral degree	1,210	78.6	515	75.2
Professional degree	55	3.6	42	6.1
Dual degree	29	1.9	10	1.5
Doctoral degree type unknown	246	16.0	118	17.2
Degree origin				
United States	621	40.3	na	na
Foreign country	494	32.1	na	na
Unknown	425	27.6	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](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE 4-18a

Chemical, petroleum, and chemical-related engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	144	20.9	139	20.1	121	17.5
Schools	145	18.7	140	18.1	121	15.6
Units	202	0.9	182	0.8	147	0.7
All graduate students	10,601	100.0	3,011	100.0	7,590	100.0
Male	6,987	65.9	2,006	66.6	4,981	65.6
Female	3,614	34.1	1,005	33.4	2,609	34.4
U.S. citizens and permanent residents ^a	5,129	48.4	1,579	52.4	3,550	46.8
Hispanic or Latino	558	5.3	225	7.5	333	4.4
Not Hispanic or Latino						
American Indian or Alaska Native	20	0.2	7	0.2	13	0.2
Asian	899	8.5	277	9.2	622	8.2
Black or African American	238	2.2	94	3.1	144	1.9
Native Hawaiian or Other Pacific Islander	6	0.1	3	0.1	3	*
White	3,049	28.8	855	28.4	2,194	28.9
More than one race	173	1.6	47	1.6	126	1.7
Unknown ethnicity and race	186	1.8	71	2.4	115	1.5
Temporary visa holders	5,472	51.6	1,432	47.6	4,040	53.2
Part time	1,281	12.1	912	30.3	369	4.9
Full time	9,320	87.9	2,099	69.7	7,221	95.1
First time	2,355	22.2	1,008	33.5	1,347	17.7
Primary source of support for full-time students ^b						
Federal	2,419	22.8	92	3.1	2,327	30.7
DOD	227	2.1	9	0.3	218	2.9
DOE	507	4.8	23	0.8	484	6.4
HHS	349	3.3	1	*	348	4.6
NIH	294	2.8	0	0.0	294	3.9
Other HHS	55	0.5	1	*	54	0.7
NASA	49	0.5	6	0.2	43	0.6
NSF	997	9.4	27	0.9	970	12.8
USDA	34	0.3	5	0.2	29	0.4
Other	256	2.4	21	0.7	235	3.1
Nonfederal	5,333	50.3	715	23.7	4,618	60.8
Institutional	4,320	40.8	613	20.4	3,707	48.8
Domestic	902	8.5	88	2.9	814	10.7
Foreign	111	1.0	14	0.5	97	1.3
Self-support	1,568	14.8	1,292	42.9	276	3.6
Primary mechanism of support for full-time students ^b						
Fellowships	1,382	13.0	91	3.0	1,291	17.0
Research assistantships	4,486	42.3	266	8.8	4,220	55.6
Teaching assistantships	1,174	11.1	186	6.2	988	13.0
Traineeships	78	0.7	8	0.3	70	0.9
Other types of support	2,200	20.8	1,548	51.4	652	8.6
Self-support	1,568	14.8	1,292	42.9	276	3.6
Other	632	6.0	256	8.5	376	5.0

* = 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](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE 4-18b

Chemical, petroleum, and chemical-related engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	119	17.2	72	10.4
Schools	120	15.5	72	9.3
Units	144	0.6	97	0.4
All individuals	1,239	100.0	313	100.0
Male	882	71.2	228	72.8
Female	357	28.8	85	27.2
U.S. citizens and permanent residents ^a	395	31.9	na	na
Hispanic or Latino	26	2.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	101	8.2	na	na
Black or African American	7	0.6	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	218	17.6	na	na
More than one race	13	1.0	na	na
Unknown ethnicity and race	29	2.3	na	na
Temporary visa holders	844	68.1	na	na
Primary source of support				
Federal	577	46.6	na	na
Nonfederal ^b	590	47.6	na	na
Personal resources	5	0.4	na	na
Unknown or not stated	67	5.4	na	na
Primary mechanism of support				
Fellowships	131	10.6	na	na
Research grants	897	72.4	na	na
Traineeships	21	1.7	na	na
Other types of support	190	15.3	na	na
Degree type ^c				
Doctoral degree	971	78.4	270	86.3
Professional degree	32	2.6	5	1.6
Dual degree	6	0.5	13	4.2
Doctoral degree type unknown	230	18.6	25	8.0
Degree origin				
United States	451	36.4	na	na
Foreign country	380	30.7	na	na
Unknown	408	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, 2022.

TABLE 4-19a

Civil, environmental, transportation and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	207	30.0	203	29.4	140	20.3
Schools	209	27.0	205	26.5	141	18.2
Units	388	1.7	357	1.6	209	0.9
All graduate students	20,375	100.0	12,621	100.0	7,754	100.0
Male	13,362	65.6	8,297	65.7	5,065	65.3
Female	7,013	34.4	4,324	34.3	2,689	34.7
U.S. citizens and permanent residents ^a	9,687	47.5	7,209	57.1	2,478	32.0
Hispanic or Latino	1,471	7.2	1,169	9.3	302	3.9
Not Hispanic or Latino						
American Indian or Alaska Native	54	0.3	38	0.3	16	0.2
Asian	1,088	5.3	825	6.5	263	3.4
Black or African American	562	2.8	398	3.2	164	2.1
Native Hawaiian or Other Pacific Islander	10	*	4	*	6	0.1
White	5,820	28.6	4,302	34.1	1,518	19.6
More than one race	345	1.7	244	1.9	101	1.3
Unknown ethnicity and race	337	1.7	229	1.8	108	1.4
Temporary visa holders	10,688	52.5	5,412	42.9	5,276	68.0
Part time	5,455	26.8	4,406	34.9	1,049	13.5
Full time	14,920	73.2	8,215	65.1	6,705	86.5
First time	4,975	24.4	3,867	30.6	1,108	14.3
Primary source of support for full-time students ^b						
Federal	2,239	11.0	541	4.3	1,698	21.9
DOD	247	1.2	75	0.6	172	2.2
DOE	213	1.0	36	0.3	177	2.3
HHS	154	0.8	38	0.3	116	1.5
NIH	48	0.2	9	0.1	39	0.5
Other HHS	106	0.5	29	0.2	77	1.0
NASA	97	0.5	16	0.1	81	1.0
NSF	765	3.8	119	0.9	646	8.3
USDA	62	0.3	21	0.2	41	0.5
Other	701	3.4	236	1.9	465	6.0
Nonfederal	7,685	37.7	3,224	25.5	4,461	57.5
Institutional	6,737	33.1	2,942	23.3	3,795	48.9
Domestic	790	3.9	229	1.8	561	7.2
Foreign	158	0.8	53	0.4	105	1.4
Self-support	4,996	24.5	4,450	35.3	546	7.0
Primary mechanism of support for full-time students ^b						
Fellowships	1,235	6.1	417	3.3	818	10.5
Research assistantships	5,038	24.7	1,309	10.4	3,729	48.1
Teaching assistantships	1,854	9.1	804	6.4	1,050	13.5
Traineeships	83	0.4	27	0.2	56	0.7
Other types of support	6,710	32.9	5,658	44.8	1,052	13.6
Self-support	4,996	24.5	4,450	35.3	546	7.0
Other	1,714	8.4	1,208	9.6	506	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, 2022.

TABLE 4-19b

Civil, environmental, transportation and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	125	18.1	90	13.0
Schools	127	16.4	91	11.7
Units	190	0.8	134	0.6
All individuals	1,018	100.0	569	100.0
Male	702	69.0	433	76.1
Female	316	31.0	136	23.9
U.S. citizens and permanent residents ^a	342	33.6	na	na
Hispanic or Latino	24	2.4	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	81	8.0	na	na
Black or African American	8	0.8	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	169	16.6	na	na
More than one race	8	0.8	na	na
Unknown ethnicity and race	50	4.9	na	na
Temporary visa holders	676	66.4	na	na
Primary source of support				
Federal	414	40.7	na	na
Nonfederal ^b	541	53.1	na	na
Personal resources	7	0.7	na	na
Unknown or not stated	56	5.5	na	na
Primary mechanism of support				
Fellowships	83	8.2	na	na
Research grants	766	75.2	na	na
Traineeships	8	0.8	na	na
Other types of support	161	15.8	na	na
Degree type ^c				
Doctoral degree	815	80.1	446	78.4
Professional degree	19	1.9	27	4.7
Dual degree	3	0.3	1	0.2
Doctoral degree type unknown	181	17.8	95	16.7
Degree origin				
United States	492	48.3	na	na
Foreign country	220	21.6	na	na
Unknown	306	30.1	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, 2022.

TABLE 4-20a

Electrical, electronics, communications and computer engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	254	36.8	250	36.2	175	25.4
Schools	260	33.5	256	33.0	177	22.8
Units	481	2.1	441	2.0	247	1.1
All graduate students	49,901	100.0	32,316	100.0	17,585	100.0
Male	38,156	76.5	24,236	75.0	13,920	79.2
Female	11,745	23.5	8,080	25.0	3,665	20.8
U.S. citizens and permanent residents ^a	17,290	34.6	11,854	36.7	5,436	30.9
Hispanic or Latino	2,141	4.3	1,647	5.1	494	2.8
Not Hispanic or Latino						
American Indian or Alaska Native	130	0.3	122	0.4	8	*
Asian	3,595	7.2	2,564	7.9	1,031	5.9
Black or African American	1,018	2.0	703	2.2	315	1.8
Native Hawaiian or Other Pacific Islander	12	*	10	*	2	*
White	8,815	17.7	5,765	17.8	3,050	17.3
More than one race	706	1.4	476	1.5	230	1.3
Unknown ethnicity and race	873	1.7	567	1.8	306	1.7
Temporary visa holders	32,611	65.4	20,462	63.3	12,149	69.1
Part time	12,019	24.1	9,591	29.7	2,428	13.8
Full time	37,882	75.9	22,725	70.3	15,157	86.2
First time	13,165	26.4	10,774	33.3	2,391	13.6
Primary source of support for full-time students ^b						
Federal	5,621	11.3	820	2.5	4,801	27.3
DOD	1,591	3.2	296	0.9	1,295	7.4
DOE	469	0.9	56	0.2	413	2.3
HHS	518	1.0	46	0.1	472	2.7
NIH	380	0.8	31	0.1	349	2.0
Other HHS	138	0.3	15	*	123	0.7
NASA	172	0.3	30	0.1	142	0.8
NSF	2,247	4.5	222	0.7	2,025	11.5
USDA	54	0.1	11	*	43	0.2
Other	570	1.1	159	0.5	411	2.3
Nonfederal	14,361	28.8	5,282	16.3	9,079	51.6
Institutional	12,399	24.8	4,859	15.0	7,540	42.9
Domestic	1,706	3.4	370	1.1	1,336	7.6
Foreign	256	0.5	53	0.2	203	1.2
Self-support	17,900	35.9	16,623	51.4	1,277	7.3
Primary mechanism of support for full-time students ^b						
Fellowships	2,012	4.0	334	1.0	1,678	9.5
Research assistantships	10,006	20.1	1,459	4.5	8,547	48.6
Teaching assistantships	3,882	7.8	1,532	4.7	2,350	13.4
Traineeships	164	0.3	61	0.2	103	0.6
Other types of support	21,818	43.7	19,339	59.8	2,479	14.1
Self-support	17,900	35.9	16,623	51.4	1,277	7.3
Other	3,918	7.9	2,716	8.4	1,202	6.8

* = 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, 2022.

TABLE 4-20b

Electrical, electronics, communications and computer engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	131	19.0	102	14.8
Schools	133	17.2	104	13.4
Units	165	0.7	140	0.6
All individuals	1,217	100.0	734	100.0
Male	969	79.6	625	85.1
Female	248	20.4	109	14.9
U.S. citizens and permanent residents ^a	377	31.0	na	na
Hispanic or Latino	22	1.8	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	114	9.4	na	na
Black or African American	15	1.2	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	179	14.7	na	na
More than one race	12	1.0	na	na
Unknown ethnicity and race	34	2.8	na	na
Temporary visa holders	840	69.0	na	na
Primary source of support				
Federal	653	53.7	na	na
Nonfederal ^b	485	39.9	na	na
Personal resources	21	1.7	na	na
Unknown or not stated	58	4.8	na	na
Primary mechanism of support				
Fellowships	92	7.6	na	na
Research grants	910	74.8	na	na
Traineeships	19	1.6	na	na
Other types of support	196	16.1	na	na
Degree type ^c				
Doctoral degree	980	80.5	600	81.7
Professional degree	21	1.7	19	2.6
Dual degree	7	0.6	1	0.1
Doctoral degree type unknown	209	17.2	114	15.5
Degree origin				
United States	503	41.3	na	na
Foreign country	356	29.3	na	na
Unknown	358	29.4	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, 2022.

TABLE 4-21a

Industrial, manufacturing, systems engineering and operations research master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	150	21.7	144	20.9	89	12.9
Schools	151	19.5	145	18.7	90	11.6
Units	241	1.1	224	1.0	107	0.5
All graduate students	16,435	100.0	12,579	100.0	3,856	100.0
Male	11,776	71.7	9,184	73.0	2,592	67.2
Female	4,659	28.3	3,395	27.0	1,264	32.8
U.S. citizens and permanent residents ^a	7,931	48.3	6,461	51.4	1,470	38.1
Hispanic or Latino	1,161	7.1	1,046	8.3	115	3.0
Not Hispanic or Latino						
American Indian or Alaska Native	19	0.1	15	0.1	4	0.1
Asian	1,012	6.2	804	6.4	208	5.4
Black or African American	560	3.4	415	3.3	145	3.8
Native Hawaiian or Other Pacific Islander	10	0.1	9	0.1	1	*
White	4,420	26.9	3,560	28.3	860	22.3
More than one race	275	1.7	220	1.7	55	1.4
Unknown ethnicity and race	474	2.9	392	3.1	82	2.1
Temporary visa holders	8,504	51.7	6,118	48.6	2,386	61.9
Part time	6,613	40.2	5,659	45.0	954	24.7
Full time	9,822	59.8	6,920	55.0	2,902	75.3
First time	4,183	25.5	3,634	28.9	549	14.2
Primary source of support for full-time students ^b						
Federal	1,070	6.5	486	3.9	584	15.1
DOD	429	2.6	305	2.4	124	3.2
DOE	53	0.3	20	0.2	33	0.9
HHS	87	0.5	15	0.1	72	1.9
NIH	38	0.2	6	*	32	0.8
Other HHS	49	0.3	9	0.1	40	1.0
NASA	22	0.1	2	*	20	0.5
NSF	293	1.8	29	0.2	264	6.8
USDA	8	*	5	*	3	0.1
Other	178	1.1	110	0.9	68	1.8
Nonfederal	3,700	22.5	1,695	13.5	2,005	52.0
Institutional	3,309	20.1	1,535	12.2	1,774	46.0
Domestic	319	1.9	114	0.9	205	5.3
Foreign	72	0.4	46	0.4	26	0.7
Self-support	5,052	30.7	4,739	37.7	313	8.1
Primary mechanism of support for full-time students ^b						
Fellowships	514	3.1	220	1.7	294	7.6
Research assistantships	1,685	10.3	336	2.7	1,349	35.0
Teaching assistantships	1,016	6.2	364	2.9	652	16.9
Traineeships	58	0.4	49	0.4	9	0.2
Other types of support	6,549	39.8	5,951	47.3	598	15.5
Self-support	5,052	30.7	4,739	37.7	313	8.1
Other	1,497	9.1	1,212	9.6	285	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, 2022.

TABLE 4-21b

Industrial, manufacturing, systems engineering and operations research postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	40	5.8	33	4.8
Schools	41	5.3	33	4.3
Units	44	0.2	49	0.2
All individuals	143	100.0	197	100.0
Male	110	76.9	150	76.1
Female	33	23.1	47	23.9
U.S. citizens and permanent residents ^a	38	26.6	na	na
Hispanic or Latino	1	0.7	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	5	3.5	na	na
Black or African American	1	0.7	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	21	14.7	na	na
More than one race	1	0.7	na	na
Unknown ethnicity and race	9	6.3	na	na
Temporary visa holders	105	73.4	na	na
Primary source of support				
Federal	53	37.1	na	na
Nonfederal ^b	80	55.9	na	na
Personal resources	0	0.0	na	na
Unknown or not stated	10	7.0	na	na
Primary mechanism of support				
Fellowships	14	9.8	na	na
Research grants	92	64.3	na	na
Traineeships	1	0.7	na	na
Other types of support	36	25.2	na	na
Degree type ^c				
Doctoral degree	120	83.9	123	62.4
Professional degree	0	0.0	9	4.6
Dual degree	0	0.0	2	1.0
Doctoral degree type unknown	23	16.1	63	32.0
Degree origin				
United States	80	55.9	na	na
Foreign country	30	21.0	na	na
Unknown	33	23.1	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, 2022.

TABLE 4-22a

Mechanical engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	229	33.2	225	32.6	162	23.5
Schools	235	30.3	231	29.8	164	21.2
Units	301	1.3	279	1.2	178	0.8
All graduate students	27,552	100.0	16,029	100.0	11,523	100.0
Male	22,445	81.5	13,323	83.1	9,122	79.2
Female	5,107	18.5	2,706	16.9	2,401	20.8
U.S. citizens and permanent residents ^a	14,231	51.7	9,435	58.9	4,796	41.6
Hispanic or Latino	1,891	6.9	1,332	8.3	559	4.9
Not Hispanic or Latino						
American Indian or Alaska Native	32	0.1	21	0.1	11	0.1
Asian	2,044	7.4	1,399	8.7	645	5.6
Black or African American	587	2.1	362	2.3	225	2.0
Native Hawaiian or Other Pacific Islander	4	*	2	*	2	*
White	8,462	30.7	5,553	34.6	2,909	25.2
More than one race	609	2.2	399	2.5	210	1.8
Unknown ethnicity and race	602	2.2	367	2.3	235	2.0
Temporary visa holders	13,321	48.3	6,594	41.1	6,727	58.4
Part time	6,856	24.9	5,606	35.0	1,250	10.8
Full time	20,696	75.1	10,423	65.0	10,273	89.2
First time	6,417	23.3	4,801	30.0	1,616	14.0
Primary source of support for full-time students ^b						
Federal	4,117	14.9	830	5.2	3,287	28.5
DOD	1,073	3.9	285	1.8	788	6.8
DOE	604	2.2	112	0.7	492	4.3
HHS	324	1.2	49	0.3	275	2.4
NIH	229	0.8	25	0.2	204	1.8
Other HHS	95	0.3	24	0.1	71	0.6
NASA	228	0.8	58	0.4	170	1.5
NSF	1,356	4.9	165	1.0	1,191	10.3
USDA	28	0.1	5	*	23	0.2
Other	504	1.8	156	1.0	348	3.0
Nonfederal	9,989	36.3	3,672	22.9	6,317	54.8
Institutional	8,511	30.9	3,252	20.3	5,259	45.6
Domestic	1,253	4.5	358	2.2	895	7.8
Foreign	225	0.8	62	0.4	163	1.4
Self-support	6,590	23.9	5,921	36.9	669	5.8
Primary mechanism of support for full-time students ^b						
Fellowships	1,525	5.5	352	2.2	1,173	10.2
Research assistantships	7,206	26.2	1,498	9.3	5,708	49.5
Teaching assistantships	2,921	10.6	942	5.9	1,979	17.2
Traineeships	178	0.6	78	0.5	100	0.9
Other types of support	8,866	32.2	7,553	47.1	1,313	11.4
Self-support	6,590	23.9	5,921	36.9	669	5.8
Other	2,276	8.3	1,632	10.2	644	5.6

* = 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, 2022.

TABLE 4-22b

Mechanical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	136	19.7	92	13.3
Schools	140	18.1	93	12.0
Units	163	0.7	110	0.5
All individuals	1,189	100.0	527	100.0
Male	958	80.6	439	83.3
Female	231	19.4	88	16.7
U.S. citizens and permanent residents ^a	365	30.7	na	na
Hispanic or Latino	25	2.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	3	0.3	na	na
Asian	98	8.2	na	na
Black or African American	8	0.7	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	187	15.7	na	na
More than one race	6	0.5	na	na
Unknown ethnicity and race	38	3.2	na	na
Temporary visa holders	824	69.3	na	na
Primary source of support				
Federal	595	50.0	na	na
Nonfederal ^b	512	43.1	na	na
Personal resources	8	0.7	na	na
Unknown or not stated	74	6.2	na	na
Primary mechanism of support				
Fellowships	117	9.8	na	na
Research grants	834	70.1	na	na
Traineeships	8	0.7	na	na
Other types of support	230	19.3	na	na
Degree type ^c				
Doctoral degree	942	79.2	393	74.6
Professional degree	24	2.0	31	5.9
Dual degree	2	0.2	10	1.9
Doctoral degree type unknown	221	18.6	93	17.6
Degree origin				
United States	460	38.7	na	na
Foreign country	291	24.5	na	na
Unknown	438	36.8	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, 2022.

TABLE 4-23a

Metallurgical, mining, materials and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	97	14.1	90	13.0	80	11.6
Schools	99	12.8	92	11.9	80	10.3
Units	147	0.7	127	0.6	106	0.5
All graduate students	7,118	100.0	2,545	100.0	4,573	100.0
Male	4,861	68.3	1,723	67.7	3,138	68.6
Female	2,257	31.7	822	32.3	1,435	31.4
U.S. citizens and permanent residents ^a	3,934	55.3	1,580	62.1	2,354	51.5
Hispanic or Latino	463	6.5	193	7.6	270	5.9
Not Hispanic or Latino						
American Indian or Alaska Native	15	0.2	9	0.4	6	0.1
Asian	522	7.3	196	7.7	326	7.1
Black or African American	163	2.3	65	2.6	98	2.1
Native Hawaiian or Other Pacific Islander	1	*	0	0.0	1	*
White	2,449	34.4	982	38.6	1,467	32.1
More than one race	202	2.8	85	3.3	117	2.6
Unknown ethnicity and race	119	1.7	50	2.0	69	1.5
Temporary visa holders	3,184	44.7	965	37.9	2,219	48.5
Part time	1,230	17.3	878	34.5	352	7.7
Full time	5,888	82.7	1,667	65.5	4,221	92.3
First time	1,448	20.3	743	29.2	705	15.4
Primary source of support for full-time students ^b						
Federal	1,697	23.8	191	7.5	1,506	32.9
DOD	343	4.8	57	2.2	286	6.3
DOE	400	5.6	44	1.7	356	7.8
HHS	127	1.8	8	0.3	119	2.6
NIH	37	0.5	0	0.0	37	0.8
Other HHS	90	1.3	8	0.3	82	1.8
NASA	49	0.7	8	0.3	41	0.9
NSF	600	8.4	44	1.7	556	12.2
USDA	11	0.2	1	*	10	0.2
Other	167	2.3	29	1.1	138	3.0
Nonfederal	3,024	42.5	579	22.8	2,445	53.5
Institutional	2,399	33.7	470	18.5	1,929	42.2
Domestic	557	7.8	100	3.9	457	10.0
Foreign	68	1.0	9	0.4	59	1.3
Self-support	1,167	16.4	897	35.2	270	5.9
Primary mechanism of support for full-time students ^b						
Fellowships	629	8.8	73	2.9	556	12.2
Research assistantships	3,104	43.6	385	15.1	2,719	59.5
Teaching assistantships	531	7.5	140	5.5	391	8.6
Traineeships	54	0.8	13	0.5	41	0.9
Other types of support	1,570	22.1	1,056	41.5	514	11.2
Self-support	1,167	16.4	897	35.2	270	5.9
Other	403	5.7	159	6.2	244	5.3

* = 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, 2022.

TABLE 4-23b

Metallurgical, mining, materials and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	59	8.6	45	6.5
Schools	59	7.6	45	5.8
Units	82	0.4	62	0.3
All individuals	542	100.0	280	100.0
Male	422	77.9	223	79.6
Female	120	22.1	57	20.4
U.S. citizens and permanent residents ^a	152	28.0	na	na
Hispanic or Latino	8	1.5	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.2	na	na
Asian	44	8.1	na	na
Black or African American	2	0.4	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	83	15.3	na	na
More than one race	4	0.7	na	na
Unknown ethnicity and race	10	1.8	na	na
Temporary visa holders	390	72.0	na	na
Primary source of support				
Federal	283	52.2	na	na
Nonfederal ^b	228	42.1	na	na
Personal resources	9	1.7	na	na
Unknown or not stated	22	4.1	na	na
Primary mechanism of support				
Fellowships	32	5.9	na	na
Research grants	414	76.4	na	na
Traineeships	10	1.8	na	na
Other types of support	86	15.9	na	na
Degree type ^c				
Doctoral degree	363	67.0	240	85.7
Professional degree	9	1.7	8	2.9
Dual degree	7	1.3	3	1.1
Doctoral degree type unknown	163	30.1	29	10.4
Degree origin				
United States	165	30.4	na	na
Foreign country	148	27.3	na	na
Unknown	229	42.3	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, 2022.

TABLE 4-24a

Other engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	198	28.7	176	25.5	129	18.7
Schools	204	26.3	182	23.5	130	16.8
Units	478	2.1	376	1.7	242	1.1
All graduate students	21,481	100.0	13,479	100.0	8,002	100.0
Male	15,295	71.2	9,595	71.2	5,700	71.2
Female	6,186	28.8	3,884	28.8	2,302	28.8
U.S. citizens and permanent residents ^a	11,534	53.7	7,670	56.9	3,864	48.3
Hispanic or Latino	1,122	5.2	792	5.9	330	4.1
Not Hispanic or Latino						
American Indian or Alaska Native	37	0.2	24	0.2	13	0.2
Asian	1,377	6.4	935	6.9	442	5.5
Black or African American	886	4.1	615	4.6	271	3.4
Native Hawaiian or Other Pacific Islander	16	0.1	13	0.1	3	*
White	7,069	32.9	4,650	34.5	2,419	30.2
More than one race	435	2.0	257	1.9	178	2.2
Unknown ethnicity and race	592	2.8	384	2.8	208	2.6
Temporary visa holders	9,947	46.3	5,809	43.1	4,138	51.7
Part time	7,398	34.4	5,872	43.6	1,526	19.1
Full time	14,083	65.6	7,607	56.4	6,476	80.9
First time	4,810	22.4	3,583	26.6	1,227	15.3
Primary source of support for full-time students ^b						
Federal	2,313	10.8	398	3.0	1,915	23.9
DOD	363	1.7	94	0.7	269	3.4
DOE	540	2.5	73	0.5	467	5.8
HHS	327	1.5	21	0.2	306	3.8
NIH	159	0.7	5	*	154	1.9
Other HHS	168	0.8	16	0.1	152	1.9
NASA	50	0.2	10	0.1	40	0.5
NSF	570	2.7	48	0.4	522	6.5
USDA	130	0.6	42	0.3	88	1.1
Other	333	1.6	110	0.8	223	2.8
Nonfederal	5,888	27.4	1,776	13.2	4,112	51.4
Institutional	4,954	23.1	1,540	11.4	3,414	42.7
Domestic	814	3.8	216	1.6	598	7.5
Foreign	120	0.6	20	0.1	100	1.2
Self-support	5,882	27.4	5,433	40.3	449	5.6
Primary mechanism of support for full-time students ^b						
Fellowships	1,237	5.8	334	2.5	903	11.3
Research assistantships	4,494	20.9	632	4.7	3,862	48.3
Teaching assistantships	1,074	5.0	376	2.8	698	8.7
Traineeships	81	0.4	43	0.3	38	0.5
Other types of support	7,197	33.5	6,222	46.2	975	12.2
Self-support	5,882	27.4	5,433	40.3	449	5.6
Other	1,315	6.1	789	5.9	526	6.6

* = 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, 2022.

TABLE 4-24b

Other engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	98	14.2	89	12.9
Schools	98	12.6	89	11.5
Units	180	0.8	176	0.8
All individuals	1,203	100.0	897	100.0
Male	853	70.9	679	75.7
Female	350	29.1	218	24.3
U.S. citizens and permanent residents ^a	448	37.2	na	na
Hispanic or Latino	25	2.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	138	11.5	na	na
Black or African American	19	1.6	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	220	18.3	na	na
More than one race	8	0.7	na	na
Unknown ethnicity and race	36	3.0	na	na
Temporary visa holders	755	62.8	na	na
Primary source of support				
Federal	589	49.0	na	na
Nonfederal ^b	552	45.9	na	na
Personal resources	19	1.6	na	na
Unknown or not stated	43	3.6	na	na
Primary mechanism of support				
Fellowships	71	5.9	na	na
Research grants	916	76.1	na	na
Traineeships	9	0.7	na	na
Other types of support	207	17.2	na	na
Degree type ^c				
Doctoral degree	1,060	88.1	735	81.9
Professional degree	16	1.3	15	1.7
Dual degree	6	0.5	3	0.3
Doctoral degree type unknown	121	10.1	144	16.1
Degree origin				
United States	543	45.1	na	na
Foreign country	423	35.2	na	na
Unknown	237	19.7	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, 2022.

TABLE 4-25a

Clinical medicine master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	273	39.6	266	38.6	118	17.1
Schools	291	37.5	283	36.5	124	16.0
Units	600	2.7	513	2.3	218	1.0
All graduate students	39,217	100.0	33,251	100.0	5,966	100.0
Male	9,227	23.5	7,530	22.6	1,697	28.4
Female	29,990	76.5	25,721	77.4	4,269	71.6
U.S. citizens and permanent residents ^a	34,718	88.5	29,940	90.0	4,778	80.1
Hispanic or Latino	4,991	12.7	4,339	13.0	652	10.9
Not Hispanic or Latino						
American Indian or Alaska Native	270	0.7	209	0.6	61	1.0
Asian	4,461	11.4	3,923	11.8	538	9.0
Black or African American	5,843	14.9	5,050	15.2	793	13.3
Native Hawaiian or Other Pacific Islander	75	0.2	66	0.2	9	0.2
White	15,660	39.9	13,323	40.1	2,337	39.2
More than one race	1,367	3.5	1,185	3.6	182	3.1
Unknown ethnicity and race	2,051	5.2	1,845	5.5	206	3.5
Temporary visa holders	4,499	11.5	3,311	10.0	1,188	19.9
Part time	16,002	40.8	13,732	41.3	2,270	38.0
Full time	23,215	59.2	19,519	58.7	3,696	62.0
First time	9,181	23.4	8,403	25.3	778	13.0
Primary source of support for full-time students ^b						
Federal	1,828	4.7	1,058	3.2	770	12.9
DOD	98	0.2	73	0.2	25	0.4
DOE	10	*	6	*	4	0.1
HHS	968	2.5	387	1.2	581	9.7
NIH	594	1.5	187	0.6	407	6.8
Other HHS	374	1.0	200	0.6	174	2.9
NASA	3	*	0	0.0	3	0.1
NSF	44	0.1	11	*	33	0.6
USDA	18	*	9	*	9	0.2
Other	687	1.8	572	1.7	115	1.9
Nonfederal	6,393	16.3	4,266	12.8	2,127	35.7
Institutional	5,670	14.5	3,811	11.5	1,859	31.2
Domestic	626	1.6	401	1.2	225	3.8
Foreign	97	0.2	54	0.2	43	0.7
Self-support	14,994	38.2	14,195	42.7	799	13.4
Primary mechanism of support for full-time students ^b						
Fellowships	928	2.4	545	1.6	383	6.4
Research assistantships	2,153	5.5	912	2.7	1,241	20.8
Teaching assistantships	1,027	2.6	581	1.7	446	7.5
Traineeships	607	1.5	294	0.9	313	5.2
Other types of support	18,500	47.2	17,187	51.7	1,313	22.0
Self-support	14,994	38.2	14,195	42.7	799	13.4
Other	3,506	8.9	2,992	9.0	514	8.6

* = 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. 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, 2022.

TABLE 4-25b

Clinical medicine postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	141	20.4	111	16.1
Schools	167	21.5	129	16.6
Units	1,730	7.7	1,332	5.9
All individuals	15,630	100.0	7,351	100.0
Male	7,754	49.6	3,465	47.1
Female	7,876	50.4	3,886	52.9
U.S. citizens and permanent residents ^a	6,792	43.5	na	na
Hispanic or Latino	591	3.8	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	16	0.1	na	na
Asian	1,506	9.6	na	na
Black or African American	396	2.5	na	na
Native Hawaiian or Other Pacific Islander	8	0.1	na	na
White	3,606	23.1	na	na
More than one race	127	0.8	na	na
Unknown ethnicity and race	542	3.5	na	na
Temporary visa holders	8,838	56.5	na	na
Primary source of support				
Federal	7,521	48.1	na	na
Nonfederal ^b	6,341	40.6	na	na
Personal resources	245	1.6	na	na
Unknown or not stated	1,523	9.7	na	na
Primary mechanism of support				
Fellowships	1,781	11.4	na	na
Research grants	7,660	49.0	na	na
Traineeships	1,511	9.7	na	na
Other types of support	4,678	29.9	na	na
Degree type ^c				
Doctoral degree	9,461	60.5	3,921	53.3
Professional degree	3,035	19.4	1,056	14.4
Dual degree	828	5.3	287	3.9
Doctoral degree type unknown	2,306	14.8	2,087	28.4
Degree origin				
United States	5,170	33.1	na	na
Foreign country	6,004	38.4	na	na
Unknown	4,456	28.5	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. 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, 2022.

TABLE 4-26a

Other health master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	403	58.4	367	53.2	209	30.3
Schools	428	55.2	382	49.3	224	28.9
Units	1,017	4.5	719	3.2	479	2.1
All graduate students	45,151	100.0	33,057	100.0	12,094	100.0
Male	10,030	22.2	6,314	19.1	3,716	30.7
Female	35,121	77.8	26,743	80.9	8,378	69.3
U.S. citizens and permanent residents ^a	39,343	87.1	30,230	91.4	9,113	75.4
Hispanic or Latino	5,493	12.2	4,626	14.0	867	7.2
Not Hispanic or Latino						
American Indian or Alaska Native	138	0.3	117	0.4	21	0.2
Asian	3,094	6.9	2,300	7.0	794	6.6
Black or African American	3,707	8.2	2,555	7.7	1,152	9.5
Native Hawaiian or Other Pacific Islander	46	0.1	39	0.1	7	0.1
White	24,049	53.3	18,457	55.8	5,592	46.2
More than one race	1,141	2.5	881	2.7	260	2.1
Unknown ethnicity and race	1,675	3.7	1,255	3.8	420	3.5
Temporary visa holders	5,808	12.9	2,827	8.6	2,981	24.6
Part time	11,704	25.9	8,134	24.6	3,570	29.5
Full time	33,447	74.1	24,923	75.4	8,524	70.5
First time	12,446	27.6	10,653	32.2	1,793	14.8
Primary source of support for full-time students ^b						
Federal	2,988	6.6	1,342	4.1	1,646	13.6
DOD	278	0.6	199	0.6	79	0.7
DOE	1	*	0	0.0	1	*
HHS	1,305	2.9	163	0.5	1,142	9.4
NIH	1,076	2.4	93	0.3	983	8.1
Other HHS	229	0.5	70	0.2	159	1.3
NASA	1	*	0	0.0	1	*
NSF	98	0.2	28	0.1	70	0.6
USDA	19	*	7	*	12	0.1
Other	1,286	2.8	945	2.9	341	2.8
Nonfederal	10,057	22.3	5,496	16.6	4,561	37.7
Institutional	9,223	20.4	5,108	15.5	4,115	34.0
Domestic	643	1.4	309	0.9	334	2.8
Foreign	191	0.4	79	0.2	112	0.9
Self-support	20,402	45.2	18,085	54.7	2,317	19.2
Primary mechanism of support for full-time students ^b						
Fellowships	1,228	2.7	399	1.2	829	6.9
Research assistantships	3,361	7.4	1,002	3.0	2,359	19.5
Teaching assistantships	2,823	6.3	1,381	4.2	1,442	11.9
Traineeships	540	1.2	224	0.7	316	2.6
Other types of support	25,495	56.5	21,917	66.3	3,578	29.6
Self-support	20,402	45.2	18,085	54.7	2,317	19.2
Other	5,093	11.3	3,832	11.6	1,261	10.4

* = 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](#). 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, 2022.

TABLE 4-26b

Other health postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2022

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	133	19.3	103	14.9
Schools	149	19.2	112	14.5
Units	403	1.8	306	1.4
All individuals	2,112	100.0	1,150	100.0
Male	1,002	47.4	484	42.1
Female	1,110	52.6	666	57.9
U.S. citizens and permanent residents ^a	1,116	52.8	na	na
Hispanic or Latino	61	2.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	4	0.2	na	na
Asian	184	8.7	na	na
Black or African American	88	4.2	na	na
Native Hawaiian or Other Pacific Islander	1	*	na	na
White	506	24.0	na	na
More than one race	21	1.0	na	na
Unknown ethnicity and race	251	11.9	na	na
Temporary visa holders	996	47.2	na	na
Primary source of support				
Federal	998	47.3	na	na
Nonfederal ^b	941	44.6	na	na
Personal resources	12	0.6	na	na
Unknown or not stated	161	7.6	na	na
Primary mechanism of support				
Fellowships	192	9.1	na	na
Research grants	1,134	53.7	na	na
Traineeships	195	9.2	na	na
Other types of support	591	28.0	na	na
Degree type ^c				
Doctoral degree	1,388	65.7	675	58.7
Professional degree	366	17.3	145	12.6
Dual degree	41	1.9	26	2.3
Doctoral degree type unknown	317	15.0	304	26.4
Degree origin				
United States	880	41.7	na	na
Foreign country	604	28.6	na	na
Unknown	628	29.7	na	na

* = value < 0.05%. 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, 2022.

TABLE 5-1

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields, by institutional control: 2022

(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	798,534	67.1	501,311	65.3	297,223	70.3	62,750	53.3	32,279	68.8
Science	538,166	66.1	331,983	64.0	206,183	69.4	36,673	56.3	19,423	69.3
Agricultural and veterinary sciences	11,596	94.3	6,949	93.7	4,647	95.2	1,705	88.9	1,068	94.1
Biological and biomedical sciences	102,700	62.6	43,062	59.8	59,638	64.6	19,585	49.7	8,207	58.2
Computer and information sciences	150,555	70.4	129,972	70.7	20,583	68.6	859	53.0	507	83.8
Geosciences, atmospheric sciences, and ocean sciences	11,970	82.3	5,186	87.2	6,784	78.6	1,787	71.8	2,448	86.9
Mathematics and statistics	34,387	63.8	20,798	56.6	13,589	74.9	1,110	58.5	251	81.3
Multidisciplinary and interdisciplinary sciences	20,945	61.9	16,931	59.7	4,014	71.2	840	58.1	931	68.1
Natural resources and conservation	13,762	84.5	9,807	82.9	3,955	88.4	936	85.5	605	94.0
Physical sciences	44,092	72.2	6,256	72.0	37,836	72.2	6,877	59.6	2,894	70.3
Psychology	69,442	54.4	48,321	48.4	21,121	68.0	1,308	56.0	786	76.3
Social sciences	78,717	61.5	44,701	58.0	34,016	66.2	1,666	52.2	1,726	63.0
Engineering	176,000	69.7	103,020	67.6	72,980	72.6	8,335	59.9	4,355	76.0
Aerospace, aeronautical, and astronautical engineering	8,095	75.7	5,263	72.9	2,832	80.9	244	68.0	153	79.1
Biological, biomedical, and biosystems engineering	14,442	59.3	5,177	58.3	9,265	59.8	1,540	41.8	685	56.1
Chemical, petroleum, and chemical-related engineering	10,601	68.7	3,011	64.3	7,590	70.4	1,239	58.9	313	78.0
Civil, environmental, transportation and related engineering fields	20,375	76.7	12,621	74.6	7,754	80.2	1,018	71.7	569	81.0
Electrical, electronics, communications and computer engineering	49,901	66.5	32,316	62.5	17,585	73.7	1,217	60.9	734	77.4

TABLE 5-1

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields, by institutional control: 2022

(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				
Industrial, manufacturing, systems engineering and operations research	16,435	67.6	12,579	64.5	3,856	77.7	143	57.3	197	53.8
Mechanical engineering	27,552	70.2	16,029	68.7	11,523	72.3	1,189	61.3	527	82.5
Metallurgical, mining, materials and related engineering fields	7,118	77.2	2,545	76.1	4,573	77.8	542	66.4	280	89.6
Other engineering	21,481	74.0	13,479	75.5	8,002	71.5	1,203	67.1	897	82.3
Health	84,368	68.5	66,308	68.0	18,060	70.5	17,742	44.1	8,501	64.0
Clinical medicine ^a	39,217	63.1	33,251	62.3	5,966	67.6	15,630	39.5	7,351	61.1
Other health	45,151	73.2	33,057	73.7	12,094	71.9	2,112	78.2	1,150	82.7

^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, 2022.

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2022

(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	798,534	0.8	501,311	0.9	297,223	0.7	62,750	0.3	32,279	0.5
Male	412,109	0.7	251,531	0.7	160,578	0.6	36,038	0.3	18,533	0.5
Female	386,425	1.0	249,780	1.1	136,645	0.8	26,712	0.3	13,746	0.5
U.S. citizens and permanent residents ^a	500,299	1.1	322,005	1.2	178,294	0.8	27,289	0.4	na	na
Hispanic or Latino	69,621	0.3	48,303	0.3	21,318	0.2	2,192	*	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,082	1.2	1,331	1.6	751	0.7	92	0.0	na	na
Asian	61,426	0.6	40,873	0.7	20,553	0.5	5,286	0.5	na	na
Black or African American	44,016	8.6	31,398	8.7	12,618	8.4	1,141	4.4	na	na
Native Hawaiian or Other Pacific Islander	738	0.1	541	0.2	197	0.0	34	2.9	na	na
White	279,657	0.2	172,212	0.3	107,445	0.1	15,221	0.1	na	na
More than one race	19,331	0.7	12,002	0.7	7,329	0.8	638	0.3	na	na
Unknown ethnicity and race	23,428	1.0	15,345	1.1	8,083	0.8	2,685	0.4	na	na
Temporary visa holders	298,235	0.4	179,306	0.3	118,929	0.6	35,461	0.2	na	na
Science	538,166	0.9	331,983	1.0	206,183	0.7	36,673	0.3	19,423	0.6
Agricultural and veterinary sciences	11,596	3.3	6,949	4.7	4,647	1.3	1,705	1.3	1,068	1.4
Biological and biomedical sciences	102,700	1.0	43,062	1.5	59,638	0.6	19,585	0.3	8,207	0.4
Computer and information sciences	150,555	0.6	129,972	0.6	20,583	0.7	859	0.2	507	0.2
Geosciences, atmospheric sciences, and ocean sciences	11,970	0.6	5,186	1.0	6,784	0.3	1,787	0.3	2,448	1.8
Mathematics and statistics	34,387	0.4	20,798	0.3	13,589	0.5	1,110	0.1	251	0.4
Multidisciplinary and interdisciplinary sciences	20,945	0.1	16,931	0.1	4,014	0.0	840	0.1	931	0.1
Natural resources and conservation	13,762	1.3	9,807	1.1	3,955	2.1	936	0.5	605	0.8
Physical sciences	44,092	0.9	6,256	2.2	37,836	0.6	6,877	0.3	2,894	0.3
Psychology	69,442	1.1	48,321	1.2	21,121	1.0	1,308	0.0	786	0.4
Social sciences	78,717	0.9	44,701	1.1	34,016	0.6	1,666	0.1	1,726	0.4
Engineering	176,000	0.6	103,020	0.5	72,980	0.7	8,335	0.2	4,355	0.4
Aerospace, aeronautical, and astronautical engineering	8,095	0.0	5,263	0.0	2,832	0.0	244	0.0	153	0.0
Biological, biomedical, and biosystems engineering	14,442	0.1	5,177	0.3	9,265	*	1,540	0.0	685	0.0
Chemical, petroleum, and chemical-related engineering	10,601	0.3	3,011	0.6	7,590	0.1	1,239	0.1	313	0.0
Civil, environmental, transportation and related engineering fields	20,375	0.2	12,621	0.2	7,754	0.2	1,018	0.3	569	0.4
Electrical, electronics, communications and computer engineering	49,901	0.5	32,316	0.4	17,585	0.9	1,217	0.4	734	0.0

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2022

(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
Industrial, manufacturing, systems engineering and operations research	16,435	0.4	12,579	0.2	3,856	1.2	143	0.0	197	0.0
Mechanical engineering	27,552	0.3	16,029	0.3	11,523	0.3	1,189	0.3	527	0.0
Metallurgical, mining, materials and related engineering fields	7,118	0.2	2,545	0.2	4,573	0.2	542	0.0	280	0.0
Other engineering	21,481	2.2	13,479	1.9	8,002	2.7	1,203	0.3	897	1.8
Health	84,368	1.2	66,308	1.2	18,060	1.2	17,742	0.3	8,501	0.4
Clinical medicine ^b	39,217	1.1	33,251	1.0	5,966	1.5	15,630	*	7,351	0.1
Other health	45,151	1.3	33,057	1.5	12,094	1.0	2,112	2.0	1,150	1.7
Black or African American individuals										
Male	16,111	8.1	11,295	8.0	4,816	8.6	467	4.3	na	na
Female	27,905	8.9	20,103	9.2	7,802	8.2	674	4.5	na	na
Science	29,714	9.2	20,810	9.4	8,904	8.7	572	3.0	na	na
Agricultural and veterinary sciences	457	44.9	364	50.5	93	22.6	33	3.0	na	na
Biological and biomedical sciences	6,413	9.4	3,807	11.2	2,606	6.9	271	4.1	na	na
Computer and information sciences	5,590	7.4	4,989	7.1	601	10.5	12	8.3	na	na
Geosciences, atmospheric sciences, and ocean sciences	313	10.5	161	15.5	152	5.3	20	0.0	na	na
Mathematics and statistics	737	8.0	514	8.2	223	7.6	21	0.0	na	na
Multidisciplinary and interdisciplinary sciences	1,218	0.5	1,009	0.6	209	0.0	19	0.0	na	na
Natural resources and conservation	478	22.8	306	13.7	172	39.0	11	9.1	na	na
Physical sciences	1,143	17.4	314	27.1	829	13.8	55	3.6	na	na
Psychology	6,991	8.6	5,173	8.8	1,818	8.0	47	0.0	na	na
Social sciences	6,374	7.9	4,173	8.4	2,201	7.1	83	1.2	na	na
Engineering	4,752	9.0	2,983	9.1	1,769	8.9	85	3.5	na	na
Aerospace, aeronautical, and astronautical engineering	176	0.0	114	0.0	62	0.0	1	0.0	na	na
Biological, biomedical, and biosystems engineering	562	2.7	217	5.5	345	0.9	24	0.0	na	na
Chemical, petroleum, and chemical-related engineering	238	6.3	94	10.6	144	3.5	7	0.0	na	na
Civil, environmental, transportation and related engineering fields	562	2.5	398	1.5	164	4.9	8	12.5	na	na
Electrical, electronics, communications and computer engineering	1,018	9.2	703	6.4	315	15.6	15	0.0	na	na

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2022

(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
Industrial, manufacturing, systems engineering and operations research	560	7.5	415	4.3	145	16.6	1	0.0	na	na
Mechanical engineering	587	6.3	362	6.1	225	6.7	8	12.5	na	na
Metallurgical, mining, materials and related engineering fields	163	1.8	65	1.5	98	2.0	2	0.0	na	na
Other engineering	886	23.6	615	25.7	271	18.8	19	5.3	na	na
Health	9,550	6.6	7,605	6.7	1,945	6.5	484	6.2	na	na
Clinical medicine ^b	5,843	5.5	5,050	5.2	793	7.1	396	0.3	na	na
Other health	3,707	8.4	2,555	9.4	1,152	6.2	88	33.0	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, 2022.

TABLE 5-3

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health, by broad field and Carnegie classification: 2022

(Number and percent)

2018 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	798,534	100.0	501,311	100.0	297,223	100.0	62,750	100.0	32,279	100.0
Doctoral: highest research	526,529	65.9	286,072	57.1	240,457	80.9	52,094	83.0	27,068	83.9
Doctoral: higher research	125,490	15.7	87,827	17.5	37,663	12.7	3,174	5.1	3,407	10.6
Doctoral: moderate research	42,007	5.3	35,991	7.2	6,016	2.0	147	0.2	40	0.1
Master's: larger programs	75,401	9.4	73,481	14.7	1,920	0.6	87	0.1	49	0.2
Master's: medium programs	4,594	0.6	4,225	0.8	369	0.1	55	0.1	84	0.3
Master's: small programs and baccalaureate	4,006	0.5	3,447	0.7	559	0.2	51	0.1	30	0.1
Medical schools and centers	18,313	2.3	9,378	1.9	8,935	3.0	6,015	9.6	1,314	4.1
Other 4-year special focus	773	0.1	510	0.1	263	0.1	8	*	16	*
Not classified	1,421	0.2	380	0.1	1,041	0.4	1,119	1.8	271	0.8
Science	538,166	100.0	331,983	100.0	206,183	100.0	36,673	100.0	19,423	100.0
Doctoral: highest research	344,428	64.0	178,194	53.7	166,234	80.6	30,131	82.2	15,958	82.2
Doctoral: higher research	86,195	16.0	60,355	18.2	25,840	12.5	2,264	6.2	2,357	12.1
Doctoral: moderate research	32,819	6.1	28,616	8.6	4,203	2.0	102	0.3	28	0.1
Master's: larger programs	56,198	10.4	54,981	16.6	1,217	0.6	42	0.1	33	0.2
Master's: medium programs	3,297	0.6	3,136	0.9	161	0.1	17	*	8	*
Master's: small programs and baccalaureate	3,084	0.6	2,610	0.8	474	0.2	38	0.1	24	0.1
Medical schools and centers	10,751	2.0	3,880	1.2	6,871	3.3	3,051	8.3	770	4.0
Other 4-year special focus	281	0.1	98	*	183	0.1	4	*	0	0.0
Not classified	1,113	0.2	113	*	1,000	0.5	1,024	2.8	245	1.3
Engineering	176,000	100.0	103,020	100.0	72,980	100.0	8,335	100.0	4,355	100.0
Doctoral: highest research	137,870	78.3	75,041	72.8	62,829	86.1	7,562	90.7	3,397	78.0
Doctoral: higher research	25,028	14.2	16,136	15.7	8,892	12.2	570	6.8	795	18.3
Doctoral: moderate research	2,251	1.3	2,049	2.0	202	0.3	1	*	0	0.0
Master's: larger programs	8,909	5.1	8,585	8.3	324	0.4	25	0.3	15	0.3
Master's: medium programs	616	0.4	408	0.4	208	0.3	38	0.5	76	1.7
Master's: small programs and baccalaureate	406	0.2	342	0.3	64	0.1	2	*	3	0.1
Medical schools and centers	428	0.2	47	*	381	0.5	113	1.4	35	0.8
Other 4-year special focus	492	0.3	412	0.4	80	0.1	4	*	16	0.4
Not classified	0	0.0	0	0.0	0	0.0	20	0.2	18	0.4
Health	84,368	100.0	66,308	100.0	18,060	100.0	17,742	100.0	8,501	100.0
Doctoral: highest research	44,231	52.4	32,837	49.5	11,394	63.1	14,401	81.2	7,713	90.7
Doctoral: higher research	14,267	16.9	11,336	17.1	2,931	16.2	340	1.9	255	3.0
Doctoral: moderate research	6,937	8.2	5,326	8.0	1,611	8.9	44	0.2	12	0.1
Master's: larger programs	10,294	12.2	9,915	15.0	379	2.1	20	0.1	1	*
Master's: medium programs	681	0.8	681	1.0	0	0.0	0	0.0	0	0.0
Master's: small programs and baccalaureate	516	0.6	495	0.7	21	0.1	11	0.1	3	*
Medical schools and centers	7,134	8.5	5,451	8.2	1,683	9.3	2,851	16.1	509	6.0
Other 4-year special focus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not classified	308	0.4	267	0.4	41	0.2	75	0.4	8	0.1

* = value < 0.05%.

Note(s):

Institutions are designated by 2018 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, 2022.

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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	-	798,534	538,166	176,000	84,368	-	579,301	392,192	130,447	56,662	-	219,233	145,974	45,553	27,706
Georgia Institute of Technology	1	16,797	12,511	4,243	43	16	6,145	2,717	3,408	20	1	10,652	9,794	835	23
Johns Hopkins U.	2	14,731	8,186	4,004	2,541	12	6,422	3,777	1,514	1,131	2	8,309	4,409	2,490	1,410
Arizona State U.	3	12,971	8,507	4,304	160	7	7,993	4,933	2,921	139	3	4,978	3,574	1,383	21
Columbia U. in the City of New York	4	12,063	8,297	2,894	872	4	8,873	6,228	1,883	762	7	3,190	2,069	1,011	110
U. Michigan	5	11,763	6,269	4,756	738	1	10,167	5,573	3,872	722	24	1,596	696	884	16
New York U.	6	11,671	8,652	2,286	733	3	9,007	6,461	2,020	526	10	2,664	2,191	266	207
U. Southern California	7	11,410	7,146	3,310	954	2	9,562	6,310	2,492	760	18	1,848	836	818	194
U. Illinois, Urbana-Champaign	8	10,321	7,177	2,935	209	5	8,730	5,867	2,660	203	26	1,591	1,310	275	6
Northeastern U. ^b	9	9,065	3,955	4,972	138	6	8,628	3,678	4,819	131	135	437	277	153	7
Texas A&M U.	10	9,009	4,962	3,631	416	8	7,312	4,025	2,908	379	22	1,697	937	723	37
Purdue U.	11	8,938	3,314	5,105	519	21	5,528	2,489	2,727	312	5	3,410	825	2,378	207
U. Florida	12	8,910	6,064	2,182	664	18	5,807	3,865	1,491	451	9	3,103	2,199	691	213
U. Washington	13	8,428	5,318	2,096	1,014	9	6,603	4,271	1,487	845	20	1,825	1,047	609	169
U. Texas, Austin	14	8,145	5,398	2,257	490	19	5,596	3,256	1,975	365	11	2,549	2,142	282	125
U. California, Berkeley	15	7,785	4,854	2,184	747	15	6,267	3,643	2,169	455	28	1,518	1,211	15	292
U. Colorado	16	7,719	4,481	2,481	757	10	6,500	3,961	1,919	620	36	1,219	520	562	137
Pennsylvania State U.	17	7,402	4,624	2,547	231	25	5,239	3,240	1,805	194	13	2,163	1,384	742	37
U. Maryland, College Park	18	7,048	4,056	1,861	1,131	22	5,454	3,453	1,452	549	25	1,594	603	409	582
Indiana U.	19	6,647	4,672	374	1,601	30	4,663	3,275	209	1,179	16	1,984	1,397	165	422
Boston U.	20	6,636	4,484	1,077	1,075	27	4,943	3,301	882	760	23	1,693	1,183	195	315
Carnegie Mellon U.	21	6,622	3,694	2,928	0	13	6,410	3,599	2,811	0	228	212	95	117	0
Stanford U.	22	6,499	3,848	2,452	199	14	6,276	3,752	2,347	177	219	223	96	105	22
U. California, Los Angeles	23	6,492	3,743	2,109	640	11	6,492	3,743	2,109	640	628	0	0	0	0
U. Wisconsin-Madison	24	6,491	4,406	1,588	497	24	5,291	3,713	1,177	401	39	1,200	693	411	96
North Carolina State U.	25	6,426	3,478	2,948	0	26	5,193	2,882	2,311	0	35	1,233	596	637	0
George Washington U.	26	6,235	3,798	671	1,766	59	2,785	2,101	265	419	4	3,450	1,697	406	1,347
Liberty U.	27	6,138	5,001	27	1,110	50	2,998	2,384	24	590	8	3,140	2,617	3	520
Cornell U.	28	5,950	3,906	1,928	116	17	5,877	3,849	1,926	102	390	73	57	2	14
U. Minnesota	29	5,931	3,840	1,298	793	23	5,380	3,549	1,177	654	105	551	291	121	139
U. California, San Diego	30	5,907	3,794	2,094	19	20	5,538	3,604	1,915	19	156	369	190	179	0
Ohio State U.	31	5,577	3,258	1,629	690	28	4,893	2,997	1,447	449	80	684	261	182	241
Virginia Polytechnic Institute and State U.	32	5,423	3,140	2,212	71	36	4,068	2,169	1,833	66	32	1,355	971	379	5
U. Texas, Dallas	33	5,383	4,063	1,101	219	33	4,362	3,337	810	215	48	1,021	726	291	4
U. North Texas, Denton	34	5,328	4,580	549	199	38	3,966	3,363	438	165	31	1,362	1,217	111	34

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
George Mason U.	35	5,309	4,396	540	373	43	3,327	2,836	279	212	17	1,982	1,560	261	161
SUNY, U. Buffalo	36	5,219	3,214	1,606	399	35	4,200	2,653	1,224	323	50	1,019	561	382	76
U. Chicago	37	5,051	4,785	266	0	32	4,435	4,173	262	0	92	616	612	4	0
Massachusetts Institute of Technology	38	4,948	2,562	2,386	0	29	4,872	2,561	2,311	0	383	76	1	75	0
U. Texas, Arlington	39	4,915	3,043	1,782	90	40	3,836	2,515	1,279	42	43	1,079	528	503	48
U. South Florida, Tampa	40	4,737	2,657	854	1,226	41	3,483	2,184	680	619	34	1,254	473	174	607
U. North Carolina, Chapel Hill	41	4,649	2,701	116	1,832	37	4,009	2,619	107	1,283	88	640	82	9	549
Harvard U.	42	4,607	3,276	573	758	34	4,247	3,137	563	547	162	360	139	10	211
U. California, Davis	43	4,542	3,329	986	227	31	4,448	3,294	937	217	354	94	35	49	10
U. Cincinnati	44	4,496	2,606	959	931	61	2,658	1,676	597	385	19	1,838	930	362	546
Northwestern U.	45	4,480	3,021	1,264	195	39	3,908	2,636	1,161	111	101	572	385	103	84
Rutgers, State U. New Jersey	46	4,349	3,582	737	30	44	3,271	2,717	524	30	45	1,078	865	213	0
U. Arizona	47	4,183	2,868	750	565	62	2,645	1,903	416	326	27	1,538	965	334	239
U. Illinois, Chicago	48	4,166	1,980	795	1,391	47	3,170	1,576	606	988	52	996	404	189	403
U. Pittsburgh	49	4,085	2,658	830	597	42	3,444	2,290	689	465	87	641	368	141	132
Stevens Institute of Technology	50	3,897	2,392	1,505	0	52	2,968	2,017	951	0	56	929	375	554	0
U. Central Florida	51	3,795	1,933	1,278	584	68	2,408	1,370	677	361	29	1,387	563	601	223
Michigan State U.	52	3,784	2,793	637	354	51	2,973	2,216	527	230	66	811	577	110	124
U. New Mexico	53	3,722	2,078	1,068	576	80	2,019	1,182	456	381	21	1,703	896	612	195
Washington U., Saint Louis	54	3,695	2,341	1,112	242	45	3,257	2,112	932	213	134	438	229	180	29
Texas Tech U.	55	3,691	2,502	893	296	53	2,942	2,047	656	239	72	749	455	237	57
U. Utah	56	3,684	2,282	922	480	54	2,877	1,853	676	348	67	807	429	246	132
U. Georgia	57	3,680	3,127	220	333	46	3,189	2,676	206	307	121	491	451	14	26
Florida State U.	58	3,639	2,915	390	334	67	2,431	1,985	274	172	38	1,208	930	116	162
U. Massachusetts, Amherst	59	3,622	2,506	712	404	58	2,809	2,093	564	152	65	813	413	148	252
Colorado State U., Fort Collins	60	3,618	2,708	858	52	109	1,499	1,206	255	38	14	2,119	1,502	603	14
U. Houston	61	3,497	1,740	1,582	175	60	2,691	1,296	1,237	158	68	806	444	345	17
Georgetown U.	62	3,422	3,308	0	114	56	2,822	2,768	0	54	97	600	540	0	60
Auburn U.	63	3,388	2,205	1,047	136	79	2,034	1,302	627	105	33	1,354	903	420	31
U. California, Irvine	64	3,317	2,134	1,183	0	48	3,158	2,036	1,122	0	280	159	98	61	0
U. Connecticut	65	3,267	2,011	893	363	64	2,607	1,710	614	283	84	660	301	279	80
U. Maryland, U. C.	66	3,228	3,228	0	0	589	26	26	0	0	6	3,202	3,202	0	0
SUNY, Stony Brook U.	67	3,211	2,335	643	233	55	2,836	2,097	551	188	155	375	238	92	45
Duke U.	68	3,137	2,127	930	80	49	3,137	2,127	930	80	628	0	0	0	0
Florida Institute of Technology	69	3,113	2,493	620	0	147	1,085	658	427	0	15	2,028	1,835	193	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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. Virginia	70	3,076	1,982	905	189	63	2,608	1,695	738	175	126	468	287	167	14
Oregon State U.	71	3,024	2,009	723	292	73	2,278	1,515	599	164	73	746	494	124	128
Pepperdine U.	72	3,023	3,023	0	0	170	859	859	0	0	12	2,164	2,164	0	0
Lamar U.	73	3,004	2,410	322	272	86	1,886	1,456	245	185	40	1,118	954	77	87
Clemson U.	74	2,972	1,620	1,246	106	74	2,275	1,111	1,076	88	78	697	509	170	18
Tufts U.	75	2,922	2,383	377	162	75	2,264	1,902	277	85	85	658	481	100	77
Iowa State U.	76	2,870	1,953	892	25	89	1,772	1,184	567	21	41	1,098	769	325	4
U. Pennsylvania	77	2,868	2,177	640	51	57	2,818	2,152	616	50	438	50	25	24	1
U. Tennessee, Knoxville	78	2,808	1,561	1,025	222	117	1,439	851	475	113	30	1,369	710	550	109
Syracuse U.	79	2,806	2,327	437	42	72	2,333	1,930	364	39	125	473	397	73	3
San Jose State U.	80	2,773	1,016	1,609	148	91	1,752	638	999	115	48	1,021	378	610	33
U. Central Missouri	81	2,763	2,629	63	71	96	1,668	1,562	44	62	42	1,095	1,067	19	9
Florida International U.	82	2,760	1,791	532	437	76	2,149	1,437	413	299	95	611	354	119	138
U. Alabama, Birmingham	83	2,749	1,576	553	620	92	1,750	1,287	208	255	51	999	289	345	365
Drexel U.	84	2,652	1,756	648	248	99	1,604	1,061	412	131	46	1,048	695	236	117
U. Delaware	85	2,624	1,814	680	130	69	2,404	1,646	640	118	221	220	168	40	12
U. California, Riverside	86	2,599	1,894	705	0	66	2,461	1,874	587	0	300	138	20	118	0
New Jersey Institute of Technology	87	2,576	1,665	871	40	87	1,826	1,287	511	28	71	750	378	360	12
Georgia State U.	88	2,521	1,975	0	546	78	2,067	1,700	0	367	129	454	275	0	179
Princeton U.	89	2,520	1,910	610	0	65	2,520	1,910	610	0	628	0	0	0	0
Case Western Reserve U.	90	2,497	1,528	615	354	77	2,101	1,276	510	315	148	396	252	105	39
Brown U.	91	2,478	1,733	354	391	70	2,400	1,695	339	366	378	78	38	15	25
National U.	92	2,462	2,319	0	143	123	1,383	1,302	0	81	43	1,079	1,017	0	62
Yale U.	93	2,402	1,814	343	245	70	2,400	1,813	342	245	609	2	1	1	0
Illinois Institute of Technology	94	2,326	1,651	629	46	101	1,585	1,196	388	1	74	741	455	241	45
Rice U.	95	2,324	1,569	755	0	81	2,018	1,292	726	0	177	306	277	29	0
SUNY, Binghamton U.	96	2,307	1,636	596	75	88	1,823	1,336	438	49	122	484	300	158	26
U. Oklahoma	97	2,303	1,665	545	93	103	1,568	1,180	326	62	75	735	485	219	31
U. Kentucky	98	2,219	1,492	348	379	84	1,918	1,314	310	294	180	301	178	38	85
U. Missouri, Columbia	99	2,218	1,565	264	389	128	1,274	972	125	177	55	944	593	139	212
U. Kansas	100	2,184	1,550	361	273	90	1,758	1,267	292	199	138	426	283	69	74
Louisiana State U.	101	2,154	1,387	519	248	93	1,745	1,226	334	185	144	409	161	185	63
U. Miami	102	2,147	1,754	244	149	83	1,938	1,616	221	101	232	209	138	23	48
U. Texas Health Science Center, Houston	103	2,124	1,207	44	873	129	1,265	841	43	381	62	859	366	1	492
San Diego State U.	104	2,108	1,256	371	481	105	1,545	915	198	432	103	563	341	173	49

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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. Denver	105	2,091	1,855	129	107	122	1,391	1,278	57	56	77	700	577	72	51
Mississippi State U.	106	2,076	1,380	639	57	139	1,164	852	268	44	58	912	528	371	13
Columbia U., Teachers C.	107	2,070	1,887	0	183	100	1,595	1,467	0	128	123	475	420	0	55
Wayne State U.	108	2,028	1,261	416	351	111	1,489	1,004	239	246	108	539	257	177	105
SUNY, U. Albany	108	2,028	1,679	53	296	137	1,196	1,028	34	134	64	832	651	19	162
U. Nebraska-Lincoln	110	2,023	1,427	532	64	107	1,525	1,086	383	56	118	498	341	149	8
U. North Carolina, Charlotte	111	2,013	1,449	393	171	114	1,479	1,079	274	126	109	534	370	119	45
U. Texas, San Antonio	112	2,008	1,466	460	82	150	1,054	772	229	53	54	954	694	231	29
Oklahoma State U.	113	1,998	1,362	493	143	116	1,450	1,022	322	106	107	548	340	171	37
U. Memphis	114	1,988	1,513	201	274	112	1,488	1,192	130	166	116	500	321	71	108
U. California, Santa Barbara	115	1,965	1,569	396	0	82	1,965	1,569	396	0	628	0	0	0	0
CUNY, Graduate Center	116	1,950	1,896	0	54	95	1,689	1,635	0	54	192	261	261	0	0
U. New Haven	117	1,948	899	811	238	94	1,725	781	738	206	219	223	118	73	32
U. Massachusetts, Lowell	117	1,948	915	797	236	152	1,020	488	404	128	57	928	427	393	108
Vanderbilt U.	119	1,909	1,471	398	40	85	1,889	1,456	395	38	524	20	15	3	2
Wichita State U.	120	1,896	1,413	426	57	113	1,482	1,185	243	54	142	414	228	183	3
U. Wisconsin-Milwaukee	121	1,889	1,317	210	362	109	1,499	1,030	162	307	153	390	287	48	55
U. South Carolina	122	1,876	1,049	364	463	107	1,525	935	303	287	164	351	114	61	176
American U.	123	1,875	1,856	0	19	138	1,184	1,180	0	4	79	691	676	0	15
U. Iowa	124	1,862	1,277	277	308	98	1,607	1,126	225	256	201	255	151	52	52
Washington State U.	125	1,800	1,269	413	118	104	1,557	1,113	342	102	209	243	156	71	16
Tulane U.	126	1,753	980	100	673	119	1,431	926	97	408	172	322	54	3	265
Rochester Institute of Technology	127	1,741	1,264	458	19	127	1,333	1,008	324	1	145	408	256	134	18
DePaul U.	128	1,738	1,464	65	209	135	1,217	982	43	192	113	521	482	22	17
West Virginia U.	129	1,737	1,047	414	276	118	1,433	866	336	231	178	304	181	78	45
U. Alabama, Tuscaloosa	130	1,734	934	552	248	131	1,260	743	356	161	124	474	191	196	87
U. Notre Dame	131	1,731	1,038	693	0	97	1,654	967	687	0	380	77	71	6	0
Kansas State U.	132	1,728	1,406	274	48	141	1,159	965	171	23	102	569	441	103	25
U. Hawaii, Manoa	133	1,726	1,297	260	169	121	1,417	1,067	227	123	176	309	230	33	46
Temple U.	134	1,724	1,376	144	204	125	1,362	1,090	106	166	161	362	286	38	38
U. Missouri, Kansas City	135	1,721	1,475	175	71	129	1,265	1,132	101	32	128	456	343	74	39
California State U., Northridge	136	1,704	544	320	840	195	729	306	159	264	53	975	238	161	576
Old Dominion U.	137	1,692	835	748	109	205	654	418	158	78	47	1,038	417	590	31
U. Maryland, Baltimore County	138	1,642	1,436	206	0	132	1,249	1,106	143	0	151	393	330	63	0
Worcester Polytechnic Institute	138	1,642	575	1,067	0	182	782	294	488	0	61	860	281	579	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
California State U., Fullerton	140	1,641	967	514	160	190	750	513	115	122	59	891	454	399	38
Eastern U.	141	1,627	1,627	0	0	262	413	413	0	0	37	1,214	1,214	0	0
U. Rochester	142	1,616	1,241	319	56	106	1,531	1,194	314	23	366	85	47	5	33
U. California, Santa Cruz	143	1,614	1,503	111	0	102	1,580	1,475	105	0	471	34	28	6	0
U. Massachusetts, Boston	144	1,548	1,317	0	231	161	921	867	0	54	90	627	450	0	177
Northwest Missouri State U.	145	1,547	1,547	0	0	192	744	744	0	0	69	803	803	0	0
Saint Louis U.	146	1,541	1,131	94	316	115	1,471	1,093	85	293	397	70	38	9	23
U. Nevada, Reno	147	1,529	866	403	260	124	1,366	773	362	231	277	163	93	41	29
Kent State U.	148	1,520	1,028	26	466	148	1,077	828	24	225	133	443	200	2	241
Colorado School of Mines	149	1,519	504	1,015	0	134	1,233	433	800	0	186	286	71	215	0
Emory U.	150	1,513	1,164	234	115	126	1,353	1,159	100	94	279	160	5	134	21
Baylor U.	151	1,496	737	102	657	133	1,235	674	101	460	192	261	63	1	197
Virginia Commonwealth U.	151	1,496	802	275	419	142	1,154	620	175	359	167	342	182	100	60
Florida Atlantic U.	153	1,492	1,074	272	146	173	837	617	134	86	86	655	457	138	60
Cleveland State U.	154	1,489	846	576	67	136	1,211	685	459	67	187	278	161	117	0
Utah State U.	155	1,485	1,015	288	182	209	614	350	143	121	60	871	665	145	61
Pace U.	156	1,472	1,374	22	76	145	1,127	1,058	9	60	166	345	316	13	16
California State U., Long Beach	157	1,469	989	330	150	167	888	628	153	107	98	581	361	177	43
Kennesaw State U.	158	1,466	985	375	106	193	740	588	130	22	76	726	397	245	84
U. Louisville	159	1,454	650	541	263	156	949	513	230	206	114	505	137	311	57
Texas State U.	160	1,431	1,090	130	211	155	986	715	97	174	130	445	375	33	37
U. Arkansas, Fayetteville	160	1,431	823	525	83	188	756	480	207	69	81	675	343	318	14
Northern Illinois U.	162	1,429	934	157	338	166	904	709	93	102	111	525	225	64	236
New Mexico State U.	163	1,425	910	331	184	159	923	617	203	103	115	502	293	128	81
California Institute of Technology	164	1,419	852	567	0	120	1,419	852	567	0	628	0	0	0	0
U. Texas, El Paso	165	1,356	668	557	131	184	778	405	274	99	99	578	263	283	32
Wright State U.	166	1,341	964	334	43	139	1,164	869	256	39	261	177	95	78	4
Ohio U.	167	1,322	831	263	228	180	788	567	116	105	109	534	264	147	123
U. Dayton	168	1,297	806	491	0	143	1,148	742	406	0	288	149	64	85	0
Texas Woman's U.	169	1,293	819	0	474	227	523	297	0	226	70	770	522	0	248
Santa Clara U.	170	1,267	549	718	0	168	872	303	569	0	150	395	246	149	0
Naval Postgraduate School	171	1,250	448	802	0	176	824	448	376	0	138	426	0	426	0
Missouri U. of Science and Technology	172	1,234	465	769	0	162	919	394	525	0	175	315	71	244	0
Michigan Technological U.	173	1,214	497	675	42	163	912	365	514	33	179	302	132	161	9
Southern Methodist U.	173	1,214	762	452	0	212	600	446	154	0	94	614	316	298	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Maharishi U. of Management	175	1,210	1,210	0	0	153	998	998	0	0	228	212	212	0	0
Northern Arizona U.	176	1,187	600	372	215	157	941	498	345	98	206	246	102	27	117
U. Oregon	177	1,186	1,109	0	77	144	1,141	1,066	0	75	450	45	43	0	2
Miami U.	178	1,180	1,048	50	82	221	550	424	47	79	89	630	624	3	3
U. North Carolina, Greensboro	179	1,179	822	0	357	203	684	492	0	192	119	495	330	0	165
Brigham Young U.	180	1,173	727	349	97	237	507	325	116	66	82	666	402	233	31
Brandeis U.	181	1,170	1,163	0	7	151	1,023	1,022	0	1	291	147	141	0	6
U. Nevada, Las Vegas	182	1,161	824	163	174	179	792	583	107	102	156	369	241	56	72
U. San Francisco	183	1,142	992	0	150	206	643	584	0	59	117	499	408	0	91
Dartmouth C.	184	1,130	713	278	139	146	1,109	704	277	128	517	21	9	1	11
U. Idaho	185	1,127	873	254	0	207	633	519	114	0	120	494	354	140	0
Portland State U.	186	1,126	911	131	84	196	728	608	51	69	147	398	303	80	15
Harrisburg U. of Science and Technology	187	1,123	1,081	0	42	149	1,076	1,037	0	39	444	47	44	0	3
North Dakota State U.	188	1,102	772	268	62	194	735	515	171	49	159	367	257	97	13
Rush U.	189	1,099	156	0	943	160	922	137	0	785	261	177	19	0	158
U. North Dakota	190	1,098	561	374	163	222	549	271	179	99	106	549	290	195	64
U. Toledo	191	1,082	655	227	200	189	755	477	137	141	170	327	178	90	59
U. New Hampshire	192	1,078	797	192	89	165	908	683	157	68	264	170	114	35	21
U. Texas Rio Grande Valley	193	1,073	617	147	309	250	468	365	60	43	96	605	252	87	266
U. Alabama, Huntsville	194	1,071	457	597	17	252	454	300	151	3	91	617	157	446	14
Long Island U.	195	1,066	681	3	382	187	772	473	0	299	184	294	208	3	83
Lehigh U.	196	1,064	547	512	5	169	870	479	386	5	244	194	68	126	0
U. Bridgeport	197	1,061	693	128	240	177	814	652	97	65	205	247	41	31	175
California Baptist U.	198	1,054	793	11	250	183	779	618	2	159	188	275	175	9	91
Antioch U.	199	1,044	1,044	0	0	164	909	909	0	0	304	135	135	0	0
Western Michigan U.	200	1,038	705	221	112	158	924	643	192	89	327	114	62	29	23
Claremont Graduate U.	201	1,033	868	0	165	210	609	531	0	78	140	424	337	0	87
Southern Arkansas U.	202	1,018	1,018	0	0	213	597	597	0	0	141	421	421	0	0
U. Illinois, Springfield	203	1,017	939	0	78	215	572	533	0	39	130	445	406	0	39
Central Michigan U.	204	1,013	884	23	106	178	809	706	3	100	237	204	178	20	6
U. West Florida	205	1,009	794	42	173	389	174	127	4	43	63	835	667	38	130
Rowan U.	206	1,006	665	253	88	191	745	448	217	80	192	261	217	36	8
U. California, San Francisco	207	992	745	115	132	154	992	745	115	132	628	0	0	0	0
Troy U.	208	985	961	0	24	280	369	356	0	13	92	616	605	0	11
Southern Illinois U., Carbondale	209	984	737	150	97	186	774	576	108	90	230	210	161	42	7

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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. Wyoming	210	980	673	170	137	185	777	568	142	67	238	203	105	28	70
New School	211	975	975	0	0	173	837	837	0	0	300	138	138	0	0
Western Illinois U.	212	963	901	0	62	171	854	797	0	57	332	109	104	0	5
U. Rhode Island	213	935	651	164	120	196	728	514	111	103	234	207	137	53	17
Oakland U.	214	919	385	434	100	227	523	266	189	68	148	396	119	245	32
U. Southern Mississippi	215	898	561	72	265	200	714	447	66	201	255	184	114	6	64
U. Maine	216	897	676	184	37	172	852	635	180	37	450	45	41	4	0
U. Houston-Clear Lake	217	893	755	124	14	215	572	510	59	3	173	321	245	65	11
East Carolina U.	218	885	559	37	289	230	522	345	16	161	160	363	214	21	128
Rensselaer Polytechnic Institute, Troy	219	882	343	539	0	175	828	337	491	0	435	54	6	48	0
Montana State U.	220	881	688	193	0	198	726	560	166	0	283	155	128	27	0
U. Vermont	221	880	601	107	172	202	699	520	90	89	256	181	81	17	83
U. Mississippi	222	871	522	65	284	181	786	493	60	233	366	85	29	5	51
California State U., Los Angeles	223	870	579	165	126	241	491	349	59	83	154	379	230	106	43
Lewis U.	224	868	793	0	75	201	704	631	0	73	274	164	162	0	2
Southern Illinois U., Edwardsville	225	866	449	352	65	217	567	254	259	54	183	299	195	93	11
Texas A&M U.-Commerce	226	855	762	0	93	260	420	388	0	32	136	435	374	0	61
CUNY, Baruch C.	227	820	778	42	0	403	154	146	8	0	82	666	632	34	0
San Francisco State U.	228	808	710	98	0	223	545	475	70	0	191	263	235	28	0
Ball State U.	229	805	721	0	84	271	394	332	0	62	143	411	389	0	22
Sam Houston State U.	229	805	727	0	78	278	375	341	0	34	137	430	386	0	44
U. Nebraska, Omaha	231	793	793	0	0	292	349	349	0	0	132	444	444	0	0
California State Polytechnic U., Pomona	231	793	433	360	0	353	220	155	65	0	100	573	278	295	0
Rivier U.	233	779	500	0	279	246	478	475	0	3	180	301	25	0	276
Clark U.	234	778	778	0	0	199	715	715	0	0	411	63	63	0	0
Missouri State U.	235	770	560	0	210	235	510	339	0	171	195	260	221	0	39
U. San Diego	235	770	565	19	186	338	247	222	0	25	112	523	343	19	161
Boston C.	237	769	747	0	22	204	679	661	0	18	360	90	86	0	4
California State U., Sacramento	238	764	434	175	155	282	363	165	70	128	146	401	269	105	27
U. Northern Colorado	239	754	486	0	268	282	363	230	0	133	152	391	256	0	135
Grand Valley State U.	240	739	494	55	190	220	552	358	21	173	251	187	136	34	17
Texas A&M U.-Kingsville	241	732	399	245	88	232	516	313	140	63	223	216	86	105	25
Marquette U.	242	727	393	162	172	254	439	226	96	117	185	288	167	66	55
U. Massachusetts, Dartmouth	243	714	525	164	25	275	380	289	88	3	169	334	236	76	22
Bowling Green State U.	244	713	599	54	60	231	517	412	46	59	242	196	187	8	1

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Southeast Missouri State U.	245	705	664	0	41	225	539	506	0	33	269	166	158	0	8
East Tennessee State U.	246	702	275	0	427	249	471	210	0	261	212	231	65	0	166
U. South Dakota	247	688	427	14	247	239	500	357	7	136	249	188	70	7	111
Georgia Southern U.	248	687	326	100	261	240	499	240	68	191	249	188	86	32	70
Tarleton State U.	249	685	579	12	94	354	218	184	9	25	127	467	395	3	69
Villanova U.	250	681	253	413	15	266	406	194	203	9	188	275	59	210	6
Barry U.	251	678	559	0	119	259	423	359	0	64	201	255	200	0	55
U. Montana	252	676	486	1	189	294	338	244	0	94	168	338	242	1	95
U. Akron	253	671	367	209	95	242	485	271	153	61	252	186	96	56	34
South Dakota State U.	254	669	515	124	30	253	441	338	92	11	214	228	177	32	19
New York Institute of Technology	255	667	529	103	35	226	538	439	64	35	312	129	90	39	0
U. North Texas, Health Science Center	256	666	471	0	195	218	560	429	0	131	334	106	42	0	64
U. Puerto Rico, Mayaguez	257	665	403	242	20	210	609	375	223	11	429	56	28	19	9
Illinois State U.	258	663	581	0	82	219	559	491	0	68	337	104	90	0	14
Nova Southeastern U.	258	663	584	0	79	304	309	284	0	25	163	354	300	0	54
Azusa Pacific U.	260	653	576	0	77	248	475	419	0	56	260	178	157	0	21
Oregon Health and Science U.	261	647	309	81	257	244	483	260	80	143	274	164	49	1	114
Eastern Washington U.	262	642	271	0	371	227	523	205	0	318	320	119	66	0	53
U. Louisiana, Lafayette	263	639	420	154	65	224	543	361	124	58	347	96	59	30	7
Boise State U.	264	634	416	168	50	264	409	263	111	35	218	225	153	57	15
U. Puerto Rico, Rio Piedras	265	631	631	0	0	331	262	262	0	0	156	369	369	0	0
Towson U.	266	630	520	0	110	267	404	294	0	110	217	226	226	0	0
St. Cloud State U.	267	627	380	147	100	300	327	214	47	66	182	300	166	100	34
U. California, Merced	268	621	428	164	29	208	617	426	162	29	599	4	2	2	0
California Institute of Integral Studies	269	619	619	0	0	238	502	502	0	0	323	117	117	0	0
National Louis U.	270	617	617	0	0	255	438	438	0	0	259	179	179	0	0
North Carolina Agricultural and Technical State U.	271	604	255	349	0	269	401	181	220	0	238	203	74	129	0
Howard U.	272	601	478	44	79	251	460	360	32	68	297	141	118	12	11
Air Force Institute of Technology	273	600	129	468	3	256	434	103	329	2	269	166	26	139	1
Baylor C. of Medicine	274	597	581	0	16	213	597	581	0	16	628	0	0	0	0
CUNY, City C.	275	594	343	251	0	301	326	144	182	0	190	268	199	69	0
California State U., Fresno	276	589	402	70	117	285	361	228	31	102	214	228	174	39	15
California State U., San Bernardino	277	583	554	0	29	235	510	481	0	29	390	73	73	0	0
Idaho State U.	278	572	284	93	195	297	332	178	49	105	211	240	106	44	90
Fielding Graduate U.	279	567	567	0	0	245	479	479	0	0	361	88	88	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Saint Mary's U. Minnesota	280	564	515	0	49	288	359	325	0	34	235	205	190	0	15
Regis U.	281	563	548	0	15	263	410	403	0	7	284	153	145	0	8
Loyola U., Chicago	282	555	524	27	4	247	476	460	16	0	376	79	64	11	4
Middle Tennessee State U.	283	553	506	0	47	657	0	0	0	0	104	553	506	0	47
U. Texas, Tyler	284	547	317	73	157	296	333	231	47	55	227	214	86	26	102
Governors State U.	285	546	390	0	156	265	407	289	0	118	298	139	101	0	38
U. Puerto Rico, Medical Sciences Campus	286	542	149	0	393	243	484	140	0	344	427	58	9	0	49
U. Nebraska, Medical Center	287	534	418	0	116	319	279	228	0	51	201	255	190	0	65
U. Texas Southwestern Medical Center	288	530	446	61	23	233	512	445	61	6	532	18	1	0	17
Clarion U. Pennsylvania ^c	289	529	134	0	395	299	329	41	0	288	240	200	93	0	107
Marymount U.	290	524	504	0	20	281	365	353	0	12	280	159	151	0	8
Wake Forest U.	291	523	409	68	46	234	511	404	68	39	553	12	5	0	7
Fordham U.	291	523	523	0	0	298	330	330	0	0	246	193	193	0	0
U. Alaska, Fairbanks	291	523	468	55	0	374	197	170	27	0	171	326	298	28	0
Texas A&M U.-Corpus Christi	294	515	441	16	58	257	429	403	8	18	363	86	38	8	40
CUNY, Queens C.	295	512	434	0	78	317	285	226	0	59	216	227	208	0	19
California State U., East Bay	296	502	421	0	81	274	388	310	0	78	327	114	111	0	3
California State U., San Marcos	297	501	406	0	95	277	376	289	0	87	314	125	117	0	8
Marshall U.	297	501	361	22	118	278	375	256	13	106	313	126	105	9	12
St. John's U., Queens	299	495	318	0	177	271	394	238	0	156	341	101	80	0	21
Seton Hall U.	300	488	295	0	193	340	244	153	0	91	207	244	142	0	102
West Chester U. Pennsylvania	301	476	285	0	191	333	261	123	0	138	225	215	162	0	53
Palo Alto U.	302	473	473	0	0	270	400	400	0	0	390	73	73	0	0
Eastern Michigan U.	303	468	341	0	127	363	209	125	0	84	196	259	216	0	43
SUNY, Downstate Medical Center	304	467	57	6	404	357	216	55	6	155	204	251	2	0	249
Southern U. and A&M C.	305	466	389	19	58	324	270	207	11	52	242	196	182	8	6
A. T. Still U.	306	461	19	0	442	311	294	12	0	282	265	167	7	0	160
U. South Alabama	307	454	293	100	61	273	391	256	77	58	411	63	37	23	3
U. Texas Health Science Center, San Antonio	308	452	253	20	179	289	356	246	10	100	347	96	7	10	79
Saint Joseph's U. ^d	308	452	356	0	96	425	131	118	0	13	173	321	238	0	83
Morgan State U.	310	450	175	153	122	258	425	164	148	113	494	25	11	5	9
Embry-Riddle Aeronautical U.	311	447	119	328	0	261	414	110	304	0	475	33	9	24	0
Pontifical Catholic U. Puerto Rico	312	445	445	0	0	370	203	203	0	0	210	242	242	0	0
Loma Linda U.	313	438	200	0	238	309	302	144	0	158	303	136	56	0	80
Massachusetts C. of Pharmacy and Health Sciences	314	433	22	0	411	387	175	22	0	153	198	258	0	0	258

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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. North Carolina, Wilmington	315	427	427	0	0	290	352	352	0	0	386	75	75	0	0
California Polytechnic State U., San Luis Obispo	315	427	231	196	0	313	292	138	154	0	304	135	93	42	0
Clarkson U.	317	426	159	267	0	306	307	131	176	0	320	119	28	91	0
U. New England	318	424	205	0	219	315	289	155	0	134	304	135	50	0	85
Keiser U., Fort Lauderdale	319	420	420	0	0	295	334	334	0	0	363	86	86	0	0
William and Mary	320	417	417	0	0	268	402	402	0	0	542	15	15	0	0
U. Arkansas for Medical Sciences	320	417	137	0	280	354	218	103	0	115	241	199	34	0	165
Yeshiva U.	322	414	271	0	143	319	279	150	0	129	304	135	121	0	14
Dakota State U.	323	411	391	0	20	340	244	229	0	15	265	167	162	0	5
Touro C.	324	410	313	0	97	307	306	210	0	96	337	104	103	0	1
U. Tulsa	325	406	238	127	41	282	363	197	125	41	456	43	41	2	0
Tennessee State U.	326	404	253	61	90	344	240	158	37	45	274	164	95	24	45
Hofstra U.	327	402	212	0	190	303	310	174	0	136	356	92	38	0	54
Thomas Jefferson U.	328	400	283	7	110	365	206	162	5	39	244	194	121	2	71
CUNY, John Jay C. of Criminal Justice	329	399	399	0	0	402	155	155	0	0	207	244	244	0	0
Western Kentucky U.	330	396	175	0	221	318	281	101	0	180	324	115	74	0	41
U. Missouri, Saint Louis	331	392	372	0	20	365	206	203	0	3	252	186	169	0	17
U. Arkansas, Little Rock	332	391	361	25	5	350	224	209	15	0	265	167	152	10	5
Uniformed Services U. of the Health Sciences	333	389	131	0	258	275	380	131	0	249	577	9	0	0	9
Southern Connecticut State U.	334	386	180	10	196	348	236	81	6	149	286	150	99	4	47
Eastern Kentucky U.	334	386	286	0	100	385	176	95	0	81	230	210	191	0	19
Simmons U.	334	386	320	0	66	559	39	34	0	5	165	347	286	0	61
Gannon U.	337	383	298	85	0	291	350	279	71	0	475	33	19	14	0
Eastern Virginia Medical School	337	383	0	0	383	330	265	0	0	265	322	118	0	0	118
Angelo State U.	337	383	373	0	10	394	168	160	0	8	225	215	213	0	2
Fairleigh Dickinson U.	340	374	337	7	30	319	279	260	6	13	350	95	77	1	17
North Carolina Central U.	341	371	261	0	110	325	267	157	0	110	337	104	104	0	0
U. New Orleans	342	365	254	111	0	376	193	136	57	0	263	172	118	54	0
Murray State U.	343	362	316	0	46	308	303	257	0	46	423	59	59	0	0
Medical C. Wisconsin	343	362	225	44	93	310	297	216	43	38	409	65	9	1	55
Manhattan C.	343	362	0	362	0	311	294	0	294	0	404	68	0	68	0
Icahn School of Medicine at Mt. Sinai	346	361	361	0	0	285	361	361	0	0	628	0	0	0	0
U. Massachusetts, Medical School	346	361	361	0	0	287	360	360	0	0	615	1	1	0	0
Appalachian State U.	346	361	255	0	106	314	291	187	0	104	397	70	68	0	2
Seattle U.	346	361	328	33	0	387	175	169	6	0	252	186	159	27	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Kean U.	350	360	228	0	132	331	262	165	0	97	345	98	63	0	35
U. Texas Medical Branch	351	359	269	0	90	361	213	181	0	32	293	146	88	0	58
Augusta U.	352	355	245	0	110	335	260	187	0	73	350	95	58	0	37
U. Central Oklahoma	352	355	257	19	79	352	222	163	11	48	308	133	94	8	31
California State U., Chico	354	354	268	0	86	342	241	159	0	82	329	113	109	0	4
SUNY, C. of Environmental Science and Forestry	355	352	300	52	0	342	241	211	30	0	331	111	89	22	0
Albert Einstein C. of Medicine	356	348	298	0	50	293	348	298	0	50	628	0	0	0	0
Valparaiso U.	357	343	334	0	9	329	266	259	0	7	380	77	75	0	2
Mayo Clinic, Mayo Graduate School	358	338	288	45	5	325	267	225	42	0	396	71	63	3	5
Columbus State U.	358	338	324	10	4	429	122	114	5	3	223	216	210	5	1
Western Washington U.	360	336	278	0	58	325	267	219	0	48	402	69	59	0	10
Inter American U. Puerto Rico, Metro	361	335	253	0	82	351	223	162	0	61	330	112	91	0	21
U. of the Pacific	361	335	171	21	143	379	188	78	20	90	291	147	93	1	53
U. Louisiana, Monroe	363	329	207	0	122	360	214	109	0	105	324	115	98	0	17
Bradley U.	364	327	201	126	0	315	289	172	117	0	465	38	29	9	0
Stephen F. Austin State U.	365	323	227	0	96	357	216	122	0	94	333	107	105	0	2
Scripps Research Institute	366	322	322	0	0	302	322	322	0	0	628	0	0	0	0
Tennessee Technological U.	367	321	127	194	0	469	90	41	49	0	212	231	86	145	0
New Mexico Institute of Mining and Technology	368	320	145	175	0	346	238	118	120	0	371	82	27	55	0
Sage Colleges	369	318	318	0	0	520	60	60	0	0	198	258	258	0	0
CUNY, Brooklyn C.	370	317	228	0	89	440	109	44	0	65	233	208	184	0	24
Philadelphia C. of Osteopathic Medicine	371	315	315	0	0	325	267	267	0	0	442	48	48	0	0
Lawrence Technological U.	371	315	88	227	0	522	59	10	49	0	200	256	78	178	0
Louisiana Tech U.	373	314	175	100	39	337	253	136	78	39	417	61	39	22	0
Polytechnic U. Puerto Rico	374	313	49	264	0	396	167	29	138	0	293	146	20	126	0
U. Tennessee, Health Science Center	375	310	176	6	128	304	309	175	6	128	615	1	1	0	0
U. of Saint Joseph	375	310	289	0	21	466	91	89	0	2	222	219	200	0	19
Chapman U.	377	309	177	0	132	354	218	96	0	122	357	91	81	0	10
SUNY, Polytechnic Institute	377	309	208	75	26	385	176	132	36	8	308	133	76	39	18
Florida A&M U.	379	307	194	68	45	336	259	153	65	41	442	48	41	3	4
Eastern Illinois U.	380	306	208	0	98	371	201	114	0	87	336	105	94	0	11
Roosevelt U.	381	305	305	0	0	368	204	204	0	0	341	101	101	0	0
Minnesota State U., Mankato	381	305	198	16	91	382	183	98	8	77	317	122	100	8	14
Mercer U.	383	303	44	59	200	346	238	42	34	162	409	65	2	25	38
Endicott C.	383	303	289	0	14	547	44	44	0	0	196	259	245	0	14

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Arkansas State U.	385	301	223	8	70	398	164	98	1	65	302	137	125	7	5
U. North Florida	386	300	189	28	83	381	185	109	15	61	324	115	80	13	22
Jacksonville U.	387	292	94	0	198	357	216	20	0	196	383	76	74	0	2
U. Tennessee, Chattanooga	388	291	199	47	45	378	191	139	22	30	343	100	60	25	15
James Madison U.	389	290	196	0	94	365	206	139	0	67	369	84	57	0	27
Catholic U. of America	390	284	182	102	0	373	198	120	78	0	363	86	62	24	0
Indiana U. Pennsylvania	390	284	223	0	61	403	154	97	0	57	310	130	126	0	4
New Jersey City U.	392	282	157	0	125	488	77	65	0	12	235	205	92	0	113
South Dakota School of Mines and Technology	393	281	64	217	0	363	209	51	158	0	394	72	13	59	0
Morehouse School of Medicine	394	280	134	0	146	333	261	126	0	135	527	19	8	0	11
Northern Kentucky U.	395	279	176	0	103	453	98	66	0	32	256	181	110	0	71
Keck Graduate Institute	396	278	179	29	70	322	277	178	29	70	615	1	1	0	0
Central Washington U.	397	276	236	7	33	377	192	168	0	24	369	84	68	7	9
Emporia State U.	398	274	274	0	0	436	116	116	0	0	282	158	158	0	0
Rockefeller U.	399	273	273	0	0	323	273	273	0	0	628	0	0	0	0
Benedictine U.	399	273	110	0	163	462	93	72	0	21	258	180	38	0	142
Touro U., Vallejo	401	271	0	0	271	339	246	0	0	246	494	25	0	0	25
New York Medical C.	402	270	165	0	105	362	211	126	0	85	423	59	39	0	20
Midwestern State U.	402	270	270	0	0	394	168	168	0	0	340	102	102	0	0
U. Hartford	404	269	207	62	0	444	102	84	18	0	265	167	123	44	0
Central Connecticut State U.	405	265	237	28	0	490	76	73	3	0	247	189	164	25	0
Duquesne U.	406	264	163	0	101	349	232	136	0	96	479	32	27	0	5
Austin Peay State U.	407	262	262	0	0	455	97	97	0	0	273	165	165	0	0
Northeastern Illinois U.	408	258	182	0	76	459	95	53	0	42	277	163	129	0	34
U. Nebraska, Kearney	409	257	175	0	82	501	68	22	0	46	247	189	153	0	36
U. Northern Iowa	410	255	141	0	114	384	179	69	0	110	383	76	72	0	4
U. West Georgia	411	248	182	0	66	449	100	67	0	33	290	148	115	0	33
Loyola U., Maryland	412	247	150	0	97	392	169	72	0	97	378	78	78	0	0
Texas Christian U.	413	246	179	0	67	345	239	173	0	66	582	7	6	0	1
U. Wisconsin-La Crosse	414	239	209	18	12	494	73	49	12	12	269	166	160	6	0
Indiana State U.	415	238	187	0	51	415	143	92	0	51	350	95	95	0	0
U. Michigan, Flint	416	237	107	0	130	407	152	51	0	101	366	85	56	0	29
Humboldt State U.	417	236	236	0	0	392	169	169	0	0	408	67	67	0	0
Northeastern State U.	417	236	173	0	63	412	145	102	0	43	357	91	71	0	20
U. Indianapolis	417	236	115	0	121	476	84	64	0	20	285	152	51	0	101

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
William Paterson U.	420	235	111	0	124	406	153	70	0	83	371	82	41	0	41
Southeastern Louisiana U.	421	230	109	0	121	391	170	67	0	103	420	60	42	0	18
Fitchburg State U.	422	227	227	0	0	368	204	204	0	0	505	23	23	0	0
California State U., Dominguez Hills	423	226	226	0	0	397	166	166	0	0	420	60	60	0	0
Texas A&M U., San Antonio	423	226	218	0	8	479	80	78	0	2	293	146	140	0	6
Hood C.	425	224	224	0	0	461	94	94	0	0	310	130	130	0	0
U. North Alabama	425	224	164	30	30	481	79	55	1	23	296	145	109	29	7
Medical U. South Carolina	427	223	156	0	67	389	174	155	0	19	440	49	1	0	48
U. Central Arkansas	427	223	114	0	109	409	146	58	0	88	380	77	56	0	21
Andrews U.	429	221	55	0	166	416	142	52	0	90	376	79	3	0	76
Loyola Marymount U.	430	218	123	88	7	379	188	118	65	5	484	30	5	23	2
Eastern New Mexico U.	431	216	81	0	135	409	146	47	0	99	397	70	34	0	36
U. Wisconsin-Eau Claire	431	216	109	0	107	507	66	21	0	45	286	150	88	0	62
Midwestern U.	433	213	213	0	0	372	200	200	0	0	549	13	13	0	0
U. La Verne	434	208	208	0	0	444	102	102	0	0	334	106	106	0	0
Citadel Military C. South Carolina	434	208	163	30	15	522	59	51	4	4	288	149	112	26	11
Mississippi C.	436	206	204	2	0	409	146	146	0	0	420	60	58	2	0
SUNY, New Paltz	437	204	145	5	54	383	182	128	3	51	512	22	17	2	3
Kansas City U. of Medicine and Biosciences	437	204	138	0	66	419	136	136	0	0	404	68	2	0	66
C. of Saint Rose	439	200	120	0	80	403	154	75	0	79	446	46	45	0	1
Meharry Medical C.	440	195	152	0	43	375	194	151	0	43	615	1	1	0	0
U. Houston-Victoria	440	195	195	0	0	437	115	115	0	0	374	80	80	0	0
Monmouth U.	442	189	100	12	77	435	117	35	5	77	394	72	65	7	0
Avila U.	443	188	173	0	15	399	163	150	0	13	494	25	23	0	2
Texas Southern U.	443	188	170	0	18	408	148	132	0	16	462	40	38	0	2
Montana Tech of U. Montana	445	185	40	54	91	511	65	19	33	13	319	120	21	21	78
Butler U.	446	184	40	0	144	607	18	0	0	18	269	166	40	0	126
Chatham U.	447	183	183	0	0	417	141	141	0	0	457	42	42	0	0
C. Charleston	448	182	182	0	0	471	87	87	0	0	350	95	95	0	0
U. of the District of Columbia	449	180	119	21	40	428	124	70	18	36	429	56	49	3	4
Youngstown State U.	450	178	107	71	0	400	161	97	64	0	537	17	10	7	0
Quinnipiac U.	450	178	178	0	0	441	108	108	0	0	397	70	70	0	0
West Texas A&M U.	452	176	84	31	61	474	85	34	10	41	357	91	50	21	20
Oklahoma Christian U.	453	172	0	172	0	418	137	0	137	0	468	35	0	35	0
Valdosta State U.	454	171	72	0	99	412	145	46	0	99	492	26	26	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Weber State U.	454	171	50	22	99	432	121	21	6	94	438	50	29	16	5
Western New England U.	454	171	121	50	0	541	48	7	41	0	316	123	114	9	0
Commonwealth Medical C.	457	169	169	0	0	439	110	110	0	0	423	59	59	0	0
Abilene Christian U.	458	167	55	0	112	401	156	44	0	112	559	11	11	0	0
California State U., Monterey Bay	458	167	118	0	49	422	134	85	0	49	475	33	33	0	0
Oklahoma City U.	460	166	128	0	38	429	122	108	0	14	455	44	20	0	24
California Lutheran U.	461	163	163	0	0	412	145	145	0	0	532	18	18	0	0
U. Dallas	462	161	161	0	0	516	62	62	0	0	344	99	99	0	0
Calvin C.	463	160	10	0	150	455	97	4	0	93	411	63	6	0	57
La Salle U.	464	157	98	0	59	424	132	74	0	58	494	25	24	0	1
SUNY, Buffalo State	464	157	101	5	51	444	102	49	2	51	432	55	52	3	0
Stockton U.	464	157	95	0	62	459	95	37	0	58	415	62	58	0	4
McNeese State U.	467	156	115	10	31	429	122	88	9	25	471	34	27	1	6
Tuskegee U.	468	154	126	20	8	419	136	111	18	7	532	18	15	2	1
Salem State U.	468	154	154	0	0	492	74	74	0	0	374	80	80	0	0
Western Connecticut State U.	470	151	151	0	0	623	12	12	0	0	298	139	139	0	0
CUNY, Lehman C.	471	150	47	0	103	470	89	7	0	82	417	61	40	0	21
U. Alaska, Anchorage	471	150	96	22	32	527	57	41	5	11	355	93	55	17	21
Norfolk State U.	473	147	118	29	0	474	85	68	17	0	415	62	50	12	0
Western Carolina U.	474	146	85	0	61	419	136	75	0	61	567	10	10	0	0
Jackson State U.	475	144	99	45	0	497	71	49	22	0	390	73	50	23	0
Fayetteville State U.	476	141	121	0	20	497	71	60	0	11	397	70	61	0	9
Molloy C.	477	139	19	0	120	462	93	14	0	79	446	46	5	0	41
Lipscomb U.	478	137	130	0	7	444	102	95	0	7	468	35	35	0	0
U. Wisconsin-Stevens Point	478	137	78	0	59	485	78	19	0	59	423	59	59	0	0
SUNY, Upstate Medical U.	480	136	136	0	0	422	134	134	0	0	609	2	2	0	0
Radford U.	480	136	72	0	64	432	121	57	0	64	542	15	15	0	0
Seattle Pacific U.	482	135	135	0	0	477	82	82	0	0	436	53	53	0	0
Nicholls State U.	483	133	133	0	0	465	92	92	0	0	461	41	41	0	0
Iona C.	484	131	67	0	64	432	121	57	0	64	567	10	10	0	0
St. Mary's U., San Antonio	485	128	79	49	0	505	67	47	20	0	417	61	32	29	0
U. Wisconsin-Platteville	485	128	55	73	0	642	4	2	2	0	315	124	53	71	0
MGH Institute of Health Professions	487	126	0	0	126	426	126	0	0	126	628	0	0	0	0
Pardee RAND Graduate School	488	125	125	0	0	427	125	125	0	0	628	0	0	0	0
Creighton U.	489	124	70	0	54	453	98	67	0	31	492	26	3	0	23

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
East Stroudsburg U. Pennsylvania	490	123	28	0	95	443	103	16	0	87	524	20	12	0	8
Shippensburg U. Pennsylvania	491	121	121	0	0	449	100	100	0	0	517	21	21	0	0
U. Texas, Permian Basin	491	121	97	12	12	481	79	64	7	8	457	42	33	5	4
Robert Morris U.	491	121	121	0	0	657	0	0	0	0	318	121	121	0	0
Niagara U.	494	120	120	0	0	512	64	64	0	0	429	56	56	0	0
Fort Valley State U.	495	118	85	0	33	442	106	76	0	30	553	12	9	0	3
Western Colorado U.	496	117	110	0	7	451	99	94	0	5	532	18	16	0	2
Millersville U. Pennsylvania	497	116	116	0	0	553	41	41	0	0	386	75	75	0	0
Memorial Sloan Kettering Cancer Center	498	114	114	0	0	455	97	97	0	0	537	17	17	0	0
Marywood U.	498	114	80	0	34	462	93	62	0	31	517	21	18	0	3
U. Maryland, Eastern Shore	500	113	103	0	10	559	39	34	0	5	389	74	69	0	5
Campbell U.	501	111	0	0	111	438	111	0	0	111	628	0	0	0	0
Clark Atlanta U.	501	111	111	0	0	507	66	66	0	0	450	45	45	0	0
Southern U., New Orleans	503	110	110	0	0	494	73	73	0	0	466	37	37	0	0
Lincoln Memorial U.	503	110	110	0	0	497	71	71	0	0	464	39	39	0	0
Arcadia U.	503	110	90	0	20	517	61	45	0	16	440	49	45	0	4
Sonoma State U.	506	109	109	0	0	478	81	81	0	0	490	28	28	0	0
Hawaii Pacific U.	506	109	72	0	37	492	74	47	0	27	468	35	25	0	10
Pittsburg State U.	508	108	108	0	0	458	96	96	0	0	553	12	12	0	0
Slippery Rock U. Pennsylvania	509	107	80	0	27	488	77	54	0	23	484	30	26	0	4
Cameron U.	509	107	107	0	0	517	61	61	0	0	446	46	46	0	0
Bloomsburg U. Pennsylvania	511	106	45	0	61	491	75	18	0	57	482	31	27	0	4
SUNY, Oswego	511	106	48	0	58	512	64	42	0	22	457	42	6	0	36
Dominican U. California	513	105	105	0	0	479	80	80	0	0	494	25	25	0	0
Inter American U. Puerto Rico, San German	513	105	105	0	0	494	73	73	0	0	479	32	32	0	0
Frostburg State U.	515	104	104	0	0	544	47	47	0	0	428	57	57	0	0
Canisius C.	515	104	95	0	9	567	36	32	0	4	404	68	63	0	5
Florida Gulf Coast U.	517	103	74	13	16	555	40	36	1	3	411	63	38	12	13
Wesleyan U.	518	101	101	0	0	448	101	101	0	0	628	0	0	0	0
Worcester State U.	518	101	28	0	73	528	56	5	0	51	450	45	23	0	22
Des Moines U., Osteopathic Medical Center	518	101	39	0	62	575	32	30	0	2	402	69	9	0	60
U. del Turabo	521	99	93	6	0	451	99	93	6	0	628	0	0	0	0
U. Wisconsin-Green Bay	521	99	99	0	0	595	24	24	0	0	386	75	75	0	0
U. Hawaii, Hilo	523	98	94	0	4	501	68	67	0	1	484	30	27	0	3
Texas A&M U.-Central Texas	523	98	98	0	0	654	1	1	0	0	346	97	97	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Hampton U.	525	97	46	0	51	472	86	43	0	43	559	11	3	0	8
Lindenwood U.	525	97	59	0	38	485	78	49	0	29	527	19	10	0	9
Alcorn State U.	525	97	97	0	0	537	50	50	0	0	444	47	47	0	0
Salus U.	528	96	14	0	82	466	91	11	0	80	590	5	3	0	2
Northern Michigan U.	528	96	78	0	18	507	66	52	0	14	484	30	26	0	4
U. Wisconsin-Oshkosh	528	96	96	0	0	657	0	0	0	0	347	96	96	0	0
Framingham State U.	531	95	95	0	0	634	8	8	0	0	362	87	87	0	0
U. Guam	532	94	94	0	0	589	26	26	0	0	404	68	68	0	0
Suffolk U.	533	92	84	0	8	533	52	49	0	3	462	40	35	0	5
Arkansas Tech U.	533	92	84	8	0	545	46	39	7	0	446	46	45	1	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	535	91	91	0	0	466	91	91	0	0	628	0	0	0	0
CUNY, C. Staten Island	535	91	80	11	0	627	10	9	1	0	373	81	71	10	0
U. of the Incarnate Word	537	90	68	0	22	481	79	62	0	17	559	11	6	0	5
Delaware State U. ^e	538	88	80	0	8	485	78	72	0	6	567	10	8	0	2
Mississippi U. for Women	538	88	11	0	77	501	68	0	0	68	524	20	11	0	9
Wayland Baptist U.	540	87	87	0	0	528	56	56	0	0	482	31	31	0	0
Sul Ross State U.	540	87	66	0	21	575	32	32	0	0	432	55	34	0	21
Lake Erie C. of Osteopathic Medicine	542	86	16	0	70	472	86	16	0	70	628	0	0	0	0
Indiana Institute of Technology	542	86	85	0	1	481	79	78	0	1	582	7	7	0	0
Bridgewater State U.	542	86	86	0	0	533	52	52	0	0	471	34	34	0	0
Bowie State U.	545	83	83	0	0	561	38	38	0	0	450	45	45	0	0
Florida Polytechnic U.	546	82	41	41	0	522	59	30	29	0	505	23	11	12	0
New Mexico Highlands U.	547	81	81	0	0	535	51	51	0	0	484	30	30	0	0
Gallaudet U.	548	80	35	0	45	525	58	21	0	37	512	22	14	0	8
Evergreen State C.	549	79	79	0	0	501	68	68	0	0	559	11	11	0	0
Texas A&M International U.	549	79	79	0	0	595	24	24	0	0	432	55	55	0	0
Widener U.	551	77	0	38	39	549	43	0	27	16	471	34	0	11	23
Charles R. Drew U. of Medicine and Science	552	76	33	0	43	500	69	28	0	41	582	7	5	0	2
U. West Alabama	553	75	75	0	0	507	66	66	0	0	577	9	9	0	0
Minnesota State U., Moorhead	553	75	27	0	48	515	63	15	0	48	553	12	12	0	0
Virginia State U.	555	73	73	0	0	553	41	41	0	0	479	32	32	0	0
St. Thomas U.	556	72	61	0	11	517	61	50	0	11	559	11	11	0	0
Springfield C.	557	71	43	0	28	512	64	40	0	24	582	7	3	0	4
SUNY, C. Brockport	557	71	53	0	18	549	43	32	0	11	490	28	21	0	7

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Coastal Carolina U.	559	69	69	0	0	587	27	27	0	0	457	42	42	0	0
Truman State U.	560	68	29	0	39	532	53	21	0	32	542	15	8	0	7
Metropolitan State U.	560	68	62	0	6	614	16	10	0	6	437	52	52	0	0
Southern Nazarene U.	562	67	67	0	0	505	67	67	0	0	628	0	0	0	0
Roger Williams U.	563	65	65	0	0	531	54	54	0	0	559	11	11	0	0
Mercyhurst U.	563	65	65	0	0	538	49	49	0	0	540	16	16	0	0
DeSales U.	563	65	43	0	22	575	32	11	0	21	475	33	32	0	1
California State U., Bakersfield	566	63	63	0	0	555	40	40	0	0	505	23	23	0	0
U. Montevallo	567	61	0	0	61	525	58	0	0	58	603	3	0	0	3
Plymouth State U.	567	61	44	0	17	535	51	41	0	10	567	10	3	0	7
Gonzaga U.	567	61	33	28	0	567	36	25	11	0	494	25	8	17	0
California U. of Science and Medicine	570	60	60	0	0	520	60	60	0	0	628	0	0	0	0
Kettering U.	571	59	0	59	0	571	35	0	35	0	503	24	0	24	0
SUNY, C. Cortland	571	59	0	0	59	573	34	0	0	34	494	25	0	0	25
Cedars-Sinai Medical Center	573	58	58	0	0	564	37	37	0	0	517	21	21	0	0
Albany Medical C.	574	56	56	0	0	528	56	56	0	0	628	0	0	0	0
U. of Saint Mary	575	53	53	0	0	538	49	49	0	0	599	4	4	0	0
Northeastern Ohio Universities, C. of Medicine	576	52	17	0	35	571	35	17	0	18	537	17	0	0	17
Louisiana State U., Shreveport	577	50	50	0	0	583	28	28	0	0	512	22	22	0	0
Cold Spring Harbor Laboratory	578	49	49	0	0	538	49	49	0	0	628	0	0	0	0
U. of the Virgin Islands	578	49	49	0	0	541	48	48	0	0	615	1	1	0	0
South Carolina State U.	578	49	0	0	49	545	46	0	0	46	603	3	0	0	3
Van Andel Institute	581	48	48	0	0	541	48	48	0	0	628	0	0	0	0
SUNY, Fredonia	581	48	12	0	36	549	43	7	0	36	590	5	5	0	0
Winthrop U.	581	48	48	0	0	549	43	43	0	0	590	5	5	0	0
U. Arkansas, Pine Bluff	581	48	48	0	0	575	32	32	0	0	540	16	16	0	0
Cooper Union for the Advancement of Science and Art	581	48	0	48	0	592	25	0	25	0	505	23	0	23	0
Xavier U.	581	48	26	0	22	607	18	18	0	0	484	30	8	0	22
Georgia C. and State U.	587	47	18	0	29	583	28	16	0	12	527	19	2	0	17
Oregon Institute of Technology	587	47	16	31	0	595	24	13	11	0	505	23	3	20	0
Ithaca C.	589	46	46	0	0	564	37	37	0	0	577	9	9	0	0
SUNY, C. Plattsburgh	590	45	45	0	0	579	30	30	0	0	542	15	15	0	0
Sanford-Burnham Medical Research Institute	591	44	44	0	0	547	44	44	0	0	628	0	0	0	0
Oklahoma State U., Center for Health Sciences	591	44	44	0	0	602	21	21	0	0	505	23	23	0	0
Biola U.	593	43	43	0	0	555	40	40	0	0	603	3	3	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Loras C.	593	43	43	0	0	561	38	38	0	0	590	5	5	0	0
Drew U.	595	42	21	0	21	611	17	9	0	8	494	25	12	0	13
Bard C.	596	41	41	0	0	567	36	36	0	0	590	5	5	0	0
U. of Mary Hardin Baylor	596	41	41	0	0	567	36	36	0	0	590	5	5	0	0
Christopher Newport U.	596	41	41	0	0	600	22	22	0	0	527	19	19	0	0
Toyota Technological Institute, Chicago	599	40	40	0	0	555	40	40	0	0	628	0	0	0	0
Alfred U.	599	40	0	40	0	581	29	0	29	0	559	11	0	11	0
Lincoln U., Jefferson City	601	39	39	0	0	607	18	18	0	0	517	21	21	0	0
San Juan Bautista School of Medicine	602	38	0	0	38	561	38	0	0	38	628	0	0	0	0
Fisk U.	602	38	38	0	0	564	37	37	0	0	615	1	1	0	0
SUNY, C. of Optometry	602	38	38	0	0	614	16	16	0	0	512	22	22	0	0
Inter American U. Puerto Rico, Fajardo	605	37	37	0	0	654	1	1	0	0	467	36	36	0	0
Aurora U.	606	36	6	0	30	618	14	0	0	14	512	22	6	0	16
Smith C.	607	35	7	0	28	579	30	2	0	28	590	5	5	0	0
Bryn Mawr C.	607	35	35	0	0	583	28	28	0	0	582	7	7	0	0
Wilkes U.	607	35	3	15	17	618	14	1	13	0	517	21	2	2	17
American Museum of Natural History	610	33	33	0	0	574	33	33	0	0	628	0	0	0	0
U. South Carolina, Aiken	610	33	33	0	0	581	29	29	0	0	599	4	4	0	0
Bethune-Cookman U.	610	33	25	0	8	583	28	20	0	8	590	5	5	0	0
Kentucky State U.	610	33	33	0	0	607	18	18	0	0	542	15	15	0	0
Alabama State U.	614	32	32	0	0	605	19	19	0	0	549	13	13	0	0
California State U., Stanislaus	615	30	30	0	0	616	15	15	0	0	542	15	15	0	0
Saint Martin's U.	616	29	17	12	0	600	22	13	9	0	582	7	4	3	0
Northwestern State U. Louisiana	616	29	29	0	0	602	21	21	0	0	580	8	8	0	0
U. Arkansas, Monticello	616	29	29	0	0	642	4	4	0	0	494	25	25	0	0
Western U. of Health Sciences	619	28	12	0	16	595	24	10	0	14	599	4	2	0	2
LeTourneau U.	619	28	23	5	0	642	4	2	2	0	503	24	21	3	0
Bucknell U.	621	27	17	10	0	587	27	17	10	0	628	0	0	0	0
Savannah State U.	621	27	27	0	0	592	25	25	0	0	609	2	2	0	0
Morehead State U.	621	27	27	0	0	616	15	15	0	0	553	12	12	0	0
Kutztown U. Pennsylvania	621	27	27	0	0	621	13	13	0	0	548	14	14	0	0
U. Wisconsin-Parkside	621	27	27	0	0	637	6	6	0	0	517	21	21	0	0
Trinity C., Hartford	621	27	27	0	0	642	4	4	0	0	505	23	23	0	0
Williams C.	627	26	26	0	0	589	26	26	0	0	628	0	0	0	0
Vanguard U. of Southern California	627	26	26	0	0	592	25	25	0	0	615	1	1	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2022

(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
Clafin U.	629	24	24	0	0	595	24	24	0	0	628	0	0	0	0
John Carroll U.	629	24	24	0	0	621	13	13	0	0	559	11	11	0	0
Alaska Pacific U.	629	24	24	0	0	625	11	11	0	0	549	13	13	0	0
Milwaukee School of Engineering	632	23	0	23	0	642	4	0	4	0	527	19	0	19	0
Delta State U.	633	22	22	0	0	605	19	19	0	0	603	3	3	0	0
Colorado State U., Pueblo	633	22	16	6	0	623	12	8	4	0	567	10	8	2	0
Georgia Southwestern State U.	633	22	22	0	0	642	4	4	0	0	532	18	18	0	0
New England C. of Optometry	636	21	21	0	0	602	21	21	0	0	628	0	0	0	0
Elizabeth City State U.	636	21	21	0	0	634	8	8	0	0	549	13	13	0	0
Salisbury U.	638	18	18	0	0	627	10	10	0	0	580	8	8	0	0
U. Central del Caribe	639	17	17	0	0	611	17	17	0	0	628	0	0	0	0
West Virginia State U.	639	17	17	0	0	611	17	17	0	0	628	0	0	0	0
Point Loma Nazarene U.	641	16	16	0	0	642	4	4	0	0	553	12	12	0	0
Mississippi Valley State U.	642	15	7	0	8	618	14	7	0	7	615	1	0	0	1
Pontifical Catholic U. Puerto Rico, Mayaguez	642	15	15	0	0	627	10	10	0	0	590	5	5	0	0
SUNY, Oneonta	642	15	15	0	0	640	5	5	0	0	567	10	10	0	0
Albany C. of Pharmacy and Health Sciences	645	14	8	0	6	642	4	3	0	1	567	10	5	0	5
Rhode Island C.	646	13	13	0	0	650	3	3	0	0	567	10	10	0	0
Southern Oregon U.	647	12	12	0	0	625	11	11	0	0	615	1	1	0	0
Winston-Salem State U.	647	12	12	0	0	630	9	9	0	0	603	3	3	0	0
U. Southern Maine	647	12	12	0	0	653	2	2	0	0	567	10	10	0	0
Rose-Hulman Institute of Technology	650	11	0	11	0	630	9	0	9	0	609	2	0	2	0
Marietta C.	650	11	11	0	0	640	5	5	0	0	588	6	6	0	0
Marshall B. Ketchum U.	652	10	10	0	0	630	9	9	0	0	615	1	1	0	0
Wagner C.	652	10	10	0	0	630	9	9	0	0	615	1	1	0	0
U.S. Merchant Marine Academy	652	10	0	10	0	657	0	0	0	0	567	10	0	10	0
Elmezzi Graduate School of Molecular Medicine	655	8	8	0	0	634	8	8	0	0	628	0	0	0	0
Montana State U., Billings	656	7	7	0	0	637	6	6	0	0	615	1	1	0	0
Black Hills State U.	657	6	6	0	0	637	6	6	0	0	628	0	0	0	0
U. Portland	657	6	0	6	0	650	3	0	3	0	603	3	0	3	0
Walla Walla U.	657	6	6	0	0	657	0	0	0	0	588	6	6	0	0
Sitting Bull C.	660	3	3	0	0	650	3	3	0	0	628	0	0	0	0
Alderson-Broaddus U.	660	3	3	0	0	654	1	1	0	0	609	2	2	0	0
Vermont Technical C.	662	2	0	2	0	657	0	0	0	0	609	2	0	2	0
Point Park U.	663	1	1	0	0	657	0	0	0	0	615	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

^b In 2022, Mills C. merged into Northeastern U.

^c In 2022, Edinboro U. Pennsylvania merged into Clarion U. Pennsylvania.

^d In 2022, U. of the Sciences Philadelphia merged into Saint Joseph's U.

^e In 2022, Wesley C. merged into Delaware State U.

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, 2022.

TABLE 5-4b

Institutional rankings for master's students: 2022

(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	-	501,311	331,983	103,020	66,308	-	319,618	208,749	66,427	44,442	-	181,693	123,234	36,593	21,866
Georgia Institute of Technology	1	13,259	11,155	2,061	43	16	2,843	1,447	1,376	20	1	10,416	9,708	685	23
Johns Hopkins U.	2	11,172	6,121	3,141	1,910	10	3,492	1,883	658	951	2	7,680	4,238	2,483	959
Arizona State U.	3	10,063	6,554	3,417	92	5	5,896	3,555	2,250	91	3	4,167	2,999	1,167	1
Columbia U. in the City of New York	4	9,547	6,484	2,254	809	4	6,429	4,458	1,264	707	5	3,118	2,026	990	102
New York U.	5	9,489	6,907	1,965	617	2	7,001	4,852	1,710	439	9	2,488	2,055	255	178
U. Southern California	6	8,744	5,396	2,554	794	3	6,925	4,571	1,753	601	15	1,819	825	801	193
Northeastern U. ^b	7	7,571	3,199	4,298	74	1	7,159	2,925	4,162	72	114	412	274	136	2
U. Michigan	8	7,030	3,479	3,065	486	6	5,503	2,799	2,230	474	20	1,527	680	835	12
U. Illinois, Urbana-Champaign	9	5,816	4,423	1,272	121	8	4,301	3,162	1,020	119	22	1,515	1,261	252	2
U. Florida	10	5,650	3,854	1,324	472	19	2,789	1,813	695	281	6	2,861	2,041	629	191
George Washington U.	11	4,957	2,990	432	1,535	28	2,215	1,670	185	360	7	2,742	1,320	247	1,175
Texas A&M U.	12	4,683	2,450	1,959	274	11	3,482	1,782	1,446	254	26	1,201	668	513	20
Carnegie Mellon U.	13	4,624	2,613	2,011	0	7	4,440	2,534	1,906	0	219	184	79	105	0
Purdue U.	14	4,615	1,249	3,047	319	31	2,142	792	1,222	128	10	2,473	457	1,825	191
U. Washington	15	4,523	2,634	1,256	633	15	2,885	1,689	693	503	17	1,638	945	563	130
U. North Texas, Denton	16	4,453	3,865	420	168	9	3,496	2,986	356	154	39	957	879	64	14
Liberty U.	17	4,450	3,676	3	771	37	1,936	1,623	3	310	8	2,514	2,053	0	461
Boston U.	18	4,383	3,064	518	801	21	2,731	1,898	325	508	16	1,652	1,166	193	293
U. Texas, Austin	19	4,248	3,257	739	252	36	1,973	1,231	572	170	11	2,275	2,026	167	82
U. Colorado	20	4,227	2,054	1,564	609	12	3,341	1,724	1,107	510	46	886	330	457	99
U. Texas, Dallas	21	4,118	3,296	624	198	14	3,211	2,630	385	196	42	907	666	239	2
U. Texas, Arlington	22	4,024	2,567	1,412	45	13	3,253	2,206	1,019	28	50	771	361	393	17
George Mason U.	23	3,781	3,087	354	340	30	2,143	1,828	130	185	17	1,638	1,259	224	155
Indiana U.	24	3,763	2,511	170	1,082	16	2,843	1,917	110	816	40	920	594	60	266
SUNY, U. Buffalo	25	3,700	2,156	1,251	293	18	2,791	1,655	891	245	41	909	501	360	48
U. California, Berkeley	26	3,641	1,755	1,182	704	33	2,123	544	1,167	412	21	1,518	1,211	15	292
North Carolina State U.	27	3,519	1,892	1,627	0	23	2,516	1,394	1,122	0	35	1,003	498	505	0
Stevens Institute of Technology	28	3,427	2,208	1,219	0	22	2,532	1,840	692	0	44	895	368	527	0
Pennsylvania State U.	29	3,405	2,090	1,176	139	53	1,384	791	473	120	13	2,021	1,299	703	19
U. Maryland, College Park	30	3,332	1,456	1,034	842	35	1,987	993	691	303	23	1,345	463	343	539
U. South Florida, Tampa	31	3,249	1,755	487	1,007	26	2,255	1,390	355	510	36	994	365	132	497
U. Maryland, U. C.	32	3,228	3,228	0	0	558	26	26	0	0	4	3,202	3,202	0	0
U. Cincinnati	33	3,184	1,861	579	744	46	1,572	1,008	320	244	19	1,612	853	259	500
Pepperdine U.	34	3,023	3,023	0	0	102	859	859	0	0	12	2,164	2,164	0	0

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Lamar U.	35	2,939	2,410	257	272	38	1,852	1,456	211	185	29	1,087	954	46	87
Georgetown U.	36	2,844	2,735	0	109	27	2,254	2,205	0	49	72	590	530	0	60
San Jose State U.	37	2,773	1,016	1,609	148	39	1,752	638	999	115	34	1,021	378	610	33
U. California, Los Angeles	38	2,769	1,067	1,230	472	20	2,769	1,067	1,230	472	624	0	0	0	0
U. Central Missouri	39	2,763	2,629	63	71	41	1,668	1,562	44	62	28	1,095	1,067	19	9
Virginia Polytechnic Institute and State U.	40	2,750	1,660	1,019	71	41	1,668	828	774	66	30	1,082	832	245	5
U. Chicago	41	2,692	2,683	9	0	34	2,076	2,071	5	0	65	616	612	4	0
U. California, San Diego	42	2,596	1,299	1,278	19	25	2,276	1,132	1,125	19	145	320	167	153	0
Florida Institute of Technology	43	2,561	2,139	422	0	153	556	316	240	0	14	2,005	1,823	182	0
U. Minnesota	44	2,514	1,457	492	565	32	2,136	1,278	416	442	124	378	179	76	123
Stanford U.	45	2,507	1,259	1,109	139	24	2,293	1,167	1,009	117	195	214	92	100	22
National U.	46	2,462	2,319	0	143	54	1,383	1,302	0	81	31	1,079	1,017	0	62
U. Central Florida	47	2,413	1,153	718	542	69	1,174	660	182	332	24	1,239	493	536	210
U. Wisconsin-Madison	48	2,358	1,371	790	197	45	1,605	1,054	424	127	53	753	317	366	70
Texas Tech U.	49	2,213	1,476	497	240	43	1,662	1,136	334	192	86	551	340	163	48
Cornell U.	50	2,211	1,014	1,081	116	29	2,154	972	1,080	102	404	57	42	1	14
U. Illinois, Chicago	51	2,159	815	401	943	44	1,616	636	267	713	89	543	179	134	230
New Jersey Institute of Technology	52	2,155	1,451	664	40	51	1,444	1,088	328	28	58	711	363	336	12
Florida State U.	53	2,094	1,654	184	256	81	1,045	836	85	124	32	1,049	818	99	132
Tufts U.	54	2,083	1,730	205	148	48	1,500	1,298	131	71	74	583	432	74	77
U. North Carolina, Chapel Hill	55	2,081	498	14	1,569	49	1,494	448	14	1,032	73	587	50	0	537
Colorado State U., Fort Collins	56	1,995	1,540	424	31	106	829	659	145	25	27	1,166	881	279	6
U. Arizona	57	1,991	1,142	435	414	96	953	577	158	218	33	1,038	565	277	196
Ohio State U.	58	1,935	814	614	507	56	1,325	577	471	277	68	610	237	143	230
Auburn U.	59	1,926	1,418	425	83	85	1,025	804	160	61	43	901	614	265	22
Illinois Institute of Technology	60	1,919	1,403	470	46	62	1,203	966	236	1	57	716	437	234	45
U. New Haven	61	1,916	899	805	212	40	1,693	781	732	180	186	223	118	73	32
Washington U., Saint Louis	62	1,905	999	677	229	50	1,468	770	498	200	105	437	229	179	29
Rutgers, State U. New Jersey	63	1,901	1,538	359	4	58	1,308	1,095	209	4	69	593	443	150	0
Syracuse U.	64	1,881	1,584	267	30	47	1,502	1,261	214	27	122	379	323	53	3
U. Houston	65	1,876	784	1,024	68	57	1,311	494	756	61	80	565	290	268	7
U. Denver	66	1,867	1,655	105	107	66	1,190	1,092	42	56	62	677	563	63	51
U. Alabama, Birmingham	67	1,809	831	440	538	96	953	610	132	211	47	856	221	308	327
Drexel U.	68	1,770	1,249	334	187	108	812	608	128	76	38	958	641	206	111
Columbia U., Teachers C.	69	1,758	1,592	0	166	55	1,326	1,212	0	114	106	432	380	0	52

TABLE 5-4b

Institutional rankings for master's students: 2022

(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. Pittsburgh	70	1,750	1,120	289	341	65	1,194	799	162	233	84	556	321	127	108
U. Utah	71	1,710	1,013	389	308	61	1,209	764	225	220	92	501	249	164	88
California State U., Northridge	72	1,704	544	320	840	121	729	306	159	264	37	975	238	161	576
Northwestern U.	73	1,690	1,162	373	155	70	1,131	786	274	71	83	559	376	99	84
American U.	74	1,677	1,658	0	19	91	998	994	0	4	61	679	664	0	15
Wichita State U.	75	1,672	1,325	296	51	52	1,395	1,143	201	51	159	277	182	95	0
U. Massachusetts, Amherst	76	1,647	1,022	285	340	76	1,064	772	188	104	74	583	250	97	236
California State U., Fullerton	77	1,641	967	514	160	117	750	513	115	122	45	891	454	399	38
San Diego State U.	78	1,633	941	309	383	75	1,070	600	136	334	81	563	341	173	49
Eastern U.	79	1,627	1,627	0	0	199	413	413	0	0	25	1,214	1,214	0	0
Oregon State U.	80	1,622	1,067	346	209	89	1,009	651	265	93	67	613	416	81	116
Florida International U.	81	1,612	1,017	235	360	78	1,063	695	129	239	87	549	322	106	121
DePaul U.	82	1,598	1,324	65	209	68	1,175	940	43	192	109	423	384	22	17
Clemson U.	83	1,592	839	688	65	82	1,044	427	563	54	88	548	412	125	11
U. New Mexico	84	1,591	709	595	287	101	870	398	277	195	55	721	311	318	92
Georgia State U.	85	1,547	1,143	0	404	60	1,232	936	0	296	149	315	207	0	108
Northwest Missouri State U.	85	1,547	1,547	0	0	120	744	744	0	0	49	803	803	0	0
U. Georgia	87	1,517	1,254	84	179	63	1,198	958	74	166	146	319	296	10	13
U. Memphis	88	1,473	1,152	88	233	64	1,197	981	65	151	161	276	171	23	82
California State U., Long Beach	89	1,462	989	323	150	99	888	628	153	107	77	574	361	170	43
SUNY, Stony Brook U.	90	1,421	925	304	192	72	1,103	700	237	166	147	318	225	67	26
U. Missouri, Kansas City	91	1,412	1,265	136	11	73	1,088	1,009	79	0	142	324	256	57	11
Kennesaw State U.	92	1,395	928	361	106	126	695	557	116	22	59	700	371	245	84
U. North Carolina, Charlotte	93	1,392	1,032	228	132	80	1,046	778	159	109	136	346	254	69	23
U. Texas, San Antonio	94	1,381	1,070	235	76	134	620	488	81	51	52	761	582	154	25
Case Western Reserve U.	95	1,366	835	260	271	87	1,011	605	165	241	135	355	230	95	30
Pace U.	96	1,362	1,303	22	37	74	1,078	1,032	9	37	157	284	271	13	0
U. Massachusetts, Lowell	97	1,358	655	531	172	142	591	286	213	92	51	767	369	318	80
Rochester Institute of Technology	98	1,329	1,000	310	19	94	968	770	197	1	127	361	230	113	18
Harvard U.	99	1,324	407	254	663	95	965	269	244	452	131	359	138	10	211
Massachusetts Institute of Technology	100	1,314	484	830	0	59	1,244	484	760	0	368	70	0	70	0
Michigan State U.	101	1,311	831	193	287	141	594	336	92	166	56	717	495	101	121
Cleveland State U.	102	1,279	727	485	67	79	1,052	596	389	67	184	227	131	96	0
U. California, Davis	103	1,253	716	359	178	67	1,188	696	323	169	382	65	20	36	9
U. Virginia	104	1,249	812	271	166	110	802	538	111	153	102	447	274	160	13

TABLE 5-4b

Institutional rankings for master's students: 2022

(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. Connecticut	105	1,240	683	330	227	115	778	503	105	170	99	462	180	225	57
Texas State U.	106	1,231	933	87	211	105	833	595	64	174	118	398	338	23	37
U. Miami	107	1,224	1,012	108	104	84	1,033	886	89	58	206	191	126	19	46
Wright State U.	108	1,202	897	262	43	76	1,064	813	212	39	262	138	84	50	4
Brown U.	109	1,201	654	202	345	71	1,125	616	188	321	354	76	38	14	24
Santa Clara U.	109	1,201	549	652	0	104	842	303	539	0	131	359	246	113	0
Maharishi U. of Management	111	1,191	1,191	0	0	93	979	979	0	0	196	212	212	0	0
SUNY, Binghamton U.	112	1,176	795	325	56	92	989	682	268	39	213	187	113	57	17
Naval Postgraduate School	113	1,173	410	763	0	119	747	410	337	0	108	426	0	426	0
SUNY, U. Albany	114	1,167	887	28	252	109	806	667	18	121	127	361	220	10	131
U. Dayton	115	1,163	788	375	0	86	1,014	724	290	0	250	149	64	85	0
Worcester Polytechnic Institute	116	1,161	364	797	0	195	423	140	283	0	54	738	224	514	0
U. San Francisco	117	1,142	992	0	150	131	643	584	0	59	93	499	408	0	91
U. Oklahoma	118	1,140	792	304	44	152	557	407	124	26	74	583	385	180	18
U. Texas Health Science Center, Houston	119	1,134	423	4	707	146	571	266	3	302	81	563	157	1	405
U. Wisconsin-Milwaukee	120	1,126	844	80	202	112	794	581	45	168	140	332	263	35	34
Oklahoma State U.	121	1,117	696	278	143	113	779	516	157	106	139	338	180	121	37
Mississippi State U.	122	1,116	817	262	37	150	562	430	101	31	85	554	387	161	6
Saint Louis U.	123	1,085	783	67	235	83	1,039	760	62	217	419	46	23	5	18
U. California, Irvine	124	1,079	530	549	0	98	928	438	490	0	247	151	92	59	0
U. Missouri, Columbia	125	1,076	706	81	289	176	483	309	39	135	69	593	397	42	154
Wayne State U.	126	1,056	559	241	256	136	609	344	100	165	102	447	215	141	91
California Baptist U.	127	1,054	793	11	250	113	779	618	2	159	162	275	175	9	91
Old Dominion U.	128	1,051	458	527	66	216	365	224	80	61	60	686	234	447	5
Northern Illinois U.	129	1,050	624	147	279	127	694	513	87	94	134	356	111	60	185
Harrisburg U. of Science and Technology	130	1,047	1,005	0	42	90	1,003	964	0	39	425	44	41	0	3
Southern Arkansas U.	131	1,018	1,018	0	0	138	597	597	0	0	110	421	421	0	0
U. Illinois, Springfield	132	1,017	939	0	78	144	572	533	0	39	104	445	406	0	39
Duke U.	133	1,011	639	338	34	87	1,011	639	338	34	624	0	0	0	0
U. West Florida	134	1,009	794	42	173	334	174	127	4	43	48	835	667	38	130
U. Texas Rio Grande Valley	135	1,008	552	147	309	198	416	313	60	43	71	592	239	87	266
Iowa State U.	136	991	704	278	9	173	489	338	142	9	91	502	366	136	0
Antioch U.	137	987	987	0	0	100	874	874	0	0	293	113	113	0	0
Troy U.	138	985	961	0	24	215	369	356	0	13	65	616	605	0	11
Miami U.	139	984	852	50	82	220	360	234	47	79	64	624	618	3	3

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Florida Atlantic U.	140	983	720	157	106	137	601	447	78	76	120	382	273	79	30
Kansas State U.	141	960	758	154	48	170	499	408	68	23	100	461	350	86	25
Western Illinois U.	142	959	897	0	62	103	852	795	0	57	300	107	102	0	5
New Mexico State U.	143	953	585	198	170	161	537	343	102	92	113	416	242	96	78
Rush U.	144	949	90	0	859	107	818	73	0	745	268	131	17	0	114
U. Delaware	145	948	677	162	109	116	759	527	130	102	209	189	150	32	7
Tulane U.	146	943	354	22	567	122	706	337	21	348	179	237	17	1	219
U. Tennessee, Knoxville	147	939	458	335	146	175	485	250	160	75	101	454	208	175	71
Utah State U.	147	939	612	145	182	199	413	211	81	121	90	526	401	64	61
U. Maryland, Baltimore County	149	936	857	79	0	128	684	645	39	0	171	252	212	40	0
Rice U.	150	924	722	202	0	133	621	447	174	0	151	303	275	28	0
U. Massachusetts, Boston	150	924	796	0	128	158	548	524	0	24	125	376	272	0	104
U. Bridgeport	152	919	693	104	122	111	797	652	86	59	283	122	41	18	63
Kent State U.	153	918	499	14	405	169	501	313	13	175	112	417	186	1	230
Northern Arizona U.	154	896	321	360	215	125	697	266	333	98	202	199	55	27	117
Ohio U.	154	896	534	162	200	193	432	300	48	84	97	464	234	114	116
U. Houston-Clear Lake	156	893	755	124	14	144	572	510	59	3	143	321	245	65	11
Long Island U.	157	887	527	3	357	124	702	411	0	291	218	185	116	3	66
U. Kentucky	158	878	524	116	238	130	645	379	86	180	181	233	145	30	58
Temple U.	159	874	649	57	168	154	553	393	28	132	143	321	256	29	36
Central Michigan U.	160	871	742	23	106	117	750	647	3	100	285	121	95	20	6
Lewis U.	161	868	793	0	75	123	704	631	0	73	240	164	162	0	2
Southern Illinois U., Edwardsville	162	866	449	352	65	147	567	254	259	54	154	299	195	93	11
Texas Woman's U.	163	834	581	0	253	186	452	238	0	214	120	382	343	0	39
Texas A&M U.-Commerce	164	832	739	0	93	199	413	381	0	32	111	419	358	0	61
Southern Methodist U.	165	830	480	350	0	278	258	190	68	0	79	572	290	282	0
California State U., Los Angeles	166	829	579	165	85	187	450	349	59	42	122	379	230	106	43
U. Louisville	167	824	186	405	233	207	393	100	104	189	107	431	86	301	44
Colorado School of Mines	168	820	285	535	0	132	623	236	387	0	203	197	49	148	0
CUNY, Baruch C.	168	820	778	42	0	356	154	146	8	0	63	666	632	34	0
U. Hawaii, Manoa	170	808	518	149	141	135	618	391	123	104	208	190	127	26	37
San Francisco State U.	170	808	710	98	0	159	545	475	70	0	165	263	235	28	0
U. Nebraska-Lincoln	172	803	503	236	64	183	459	279	124	56	137	344	224	112	8
U. Kansas	173	799	506	157	136	177	482	293	98	91	148	317	213	59	45
Rowan U.	174	798	559	151	88	148	566	364	122	80	182	232	195	29	8

TABLE 5-4b

Institutional rankings for master's students: 2022

(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 U.	175	794	144	19	631	155	552	99	19	434	175	242	45	0	197
California State Polytechnic U., Pomona	176	793	433	360	0	294	220	155	65	0	78	573	278	295	0
U. Alabama, Tuscaloosa	177	791	360	218	213	188	448	227	82	139	138	343	133	136	74
U. California, Riverside	178	789	451	338	0	129	663	443	220	0	276	126	8	118	0
U. North Carolina, Greensboro	179	784	586	0	198	165	510	365	0	145	163	274	221	0	53
Rivier U.	180	779	500	0	279	178	478	475	0	3	152	301	25	0	276
U. Alabama, Huntsville	180	779	326	453	0	262	285	200	85	0	94	494	126	368	0
Missouri State U.	182	770	560	0	210	165	510	339	0	171	167	260	221	0	39
U. Texas, El Paso	182	770	319	353	98	205	403	170	153	80	126	367	149	200	18
California State U., Sacramento	184	764	434	175	155	218	363	165	70	128	117	401	269	105	27
Sam Houston State U.	185	759	681	0	78	224	352	318	0	34	115	407	363	0	44
Portland State U.	186	757	569	108	80	179	471	366	36	69	156	286	203	72	11
Brandeis U.	187	742	735	0	7	140	595	594	0	1	254	147	141	0	6
Michigan Technological U.	187	742	264	436	42	162	524	164	327	33	190	218	100	109	9
Grand Valley State U.	189	739	494	55	190	155	552	358	21	173	213	187	136	34	17
East Carolina U.	190	738	449	37	252	202	412	239	16	157	141	326	210	21	95
West Virginia U.	191	732	360	200	172	149	564	268	145	151	232	168	92	55	21
U. San Diego	192	726	565	19	142	283	242	222	0	20	95	484	343	19	122
U. Idaho	193	721	561	160	0	236	319	264	55	0	116	402	297	105	0
Louisiana State U.	194	718	326	229	163	185	455	261	80	114	165	263	65	149	49
Missouri U. of Science and Technology	195	712	312	400	0	182	460	254	206	0	171	252	58	194	0
U. South Carolina	196	709	302	114	293	179	471	242	76	153	178	238	60	38	140
Southeast Missouri State U.	197	705	664	0	41	160	539	506	0	33	236	166	158	0	8
Brigham Young U.	198	695	405	195	95	229	336	198	73	65	131	359	207	122	30
Georgia Southern U.	199	687	326	100	261	170	499	240	68	191	212	188	86	32	70
U. Nevada, Reno	200	683	282	163	238	143	584	235	138	211	311	99	47	25	27
U. Nebraska, Omaha	200	683	683	0	0	254	296	296	0	0	119	387	387	0	0
Texas A&M U.-Kingsville	202	680	385	207	88	173	489	301	125	63	206	191	84	82	25
Ball State U.	203	678	594	0	84	238	318	256	0	62	129	360	338	0	22
Tarleton State U.	204	660	554	12	94	315	197	163	9	25	98	463	391	3	69
Clark U.	205	657	657	0	0	138	597	597	0	0	394	60	60	0	0
New School	205	657	657	0	0	157	550	550	0	0	300	107	107	0	0
New York Institute of Technology	207	650	526	97	27	164	521	436	58	27	270	129	90	39	0
Western Michigan U.	208	644	428	139	77	151	560	374	118	68	335	84	54	21	9
Eastern Washington U.	209	642	271	0	371	163	523	205	0	318	286	119	66	0	53

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
St. Cloud State U.	210	627	380	147	100	232	327	214	47	66	153	300	166	100	34
California Institute of Integral Studies	211	619	619	0	0	168	502	502	0	0	287	117	117	0	0
Azusa Pacific U.	212	605	576	0	29	191	436	419	0	17	231	169	157	0	12
U. Arkansas, Fayetteville	213	603	289	232	82	242	313	171	73	69	155	290	118	159	13
California State U., Fresno	214	589	402	70	117	219	361	228	31	102	183	228	174	39	15
California State U., San Bernardino	215	583	554	0	29	165	510	481	0	29	363	73	73	0	0
Washington State U.	215	583	390	127	66	191	436	292	79	65	254	147	98	48	1
Illinois State U.	217	580	511	0	69	172	493	425	0	68	327	87	86	0	1
U. New Hampshire	218	579	404	86	89	196	421	300	53	68	244	158	104	33	21
U. North Dakota	219	576	340	134	102	297	216	104	42	70	129	360	236	92	32
Villanova U.	220	575	253	322	0	230	330	194	136	0	173	245	59	186	0
U. North Texas, Health Science Center	221	572	388	0	184	181	466	346	0	120	304	106	42	0	64
Towson U.	222	571	461	0	110	217	364	254	0	110	199	207	207	0	0
U. Northern Colorado	222	571	377	0	194	261	287	171	0	116	157	284	206	0	78
Saint Mary's U. Minnesota	224	564	515	0	49	221	359	325	0	34	200	205	190	0	15
Regis U.	225	563	548	0	15	203	410	403	0	7	246	153	145	0	8
Barry U.	226	558	510	0	48	210	381	335	0	46	226	177	175	0	2
U. Toledo	227	556	273	123	160	213	378	201	65	112	225	178	72	58	48
Oakland U.	228	551	230	249	72	246	310	152	107	51	176	241	78	142	21
Governors State U.	229	546	390	0	156	204	407	289	0	118	260	139	101	0	38
U. Massachusetts, Dartmouth	230	534	446	88	0	252	297	250	47	0	179	237	196	41	0
East Tennessee State U.	231	533	194	0	339	222	357	149	0	208	227	176	45	0	131
Southern Illinois U., Carbondale	232	529	355	77	97	189	445	295	60	90	335	84	60	17	7
National Louis U.	232	529	529	0	0	210	381	381	0	0	252	148	148	0	0
Virginia Commonwealth U.	234	524	308	126	90	248	308	184	41	83	191	216	124	85	7
U. Wyoming	235	520	339	104	77	196	421	284	89	48	311	99	55	15	29
Clarion U. Pennsylvania ^C	236	515	120	0	395	231	329	41	0	288	216	186	79	0	107
North Dakota State U.	237	514	368	110	36	246	310	229	56	25	201	204	139	54	11
CUNY, Queens C.	238	512	434	0	78	262	285	226	0	59	184	227	208	0	19
U. Southern Mississippi	239	507	314	1	192	194	428	274	0	154	346	79	40	1	38
U. Puerto Rico, Mayaguez	240	503	348	135	20	183	459	324	124	11	425	44	24	11	9
California State U., East Bay	241	502	421	0	81	208	388	310	0	78	292	114	111	0	3
California State U., San Marcos	242	501	406	0	95	214	376	289	0	87	278	125	117	0	8
U. Texas, Tyler	243	493	296	73	124	244	312	211	47	54	221	181	85	26	70
U. Rhode Island	244	487	335	89	63	228	339	230	48	61	252	148	105	41	2

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Air Force Institute of Technology	245	476	105	368	3	227	340	86	252	2	263	136	19	116	1
West Chester U. Pennsylvania	245	476	285	0	191	277	261	123	0	138	193	215	162	0	53
U. Maine	247	472	331	104	37	190	438	300	101	37	442	34	31	3	0
U. Iowa	248	470	220	75	175	206	397	194	53	150	363	73	26	22	25
Eastern Michigan U.	249	468	341	0	127	303	209	125	0	84	168	259	216	0	43
Middle Tennessee State U.	249	468	421	0	47	643	0	0	0	0	96	468	421	0	47
CUNY, City C.	251	461	343	118	0	316	196	144	52	0	164	265	199	66	0
U. Nevada, Las Vegas	252	459	270	77	112	274	266	151	42	73	205	193	119	35	39
South Dakota State U.	253	451	355	76	20	264	284	225	57	2	233	167	130	19	18
Lehigh U.	254	449	211	233	5	264	284	156	123	5	238	165	55	110	0
Marshall U.	255	448	308	22	118	235	324	205	13	106	279	124	103	9	12
Texas A&M U.-Corpus Christi	256	436	362	16	58	222	357	331	8	18	346	79	31	8	40
Montana State U.	257	434	332	102	0	232	327	242	85	0	300	107	90	17	0
Bowling Green State U.	258	431	319	54	58	248	308	205	46	57	281	123	114	8	1
California Polytechnic State U., San Luis Obispo	259	427	231	196	0	256	292	138	154	0	265	135	93	42	0
U. New England	260	424	205	0	219	259	289	155	0	134	265	135	50	0	85
Touro C.	261	410	313	0	97	250	306	210	0	96	309	104	103	0	1
U. South Dakota	262	405	274	4	127	242	313	232	2	79	323	92	42	2	48
Dartmouth C.	263	402	138	136	128	210	381	129	135	117	497	21	9	1	11
CUNY, John Jay C. of Criminal Justice	264	399	399	0	0	355	155	155	0	0	174	244	244	0	0
U. California, Santa Cruz	265	397	348	49	0	209	385	339	46	0	538	12	9	3	0
U. Vermont	265	397	193	56	148	270	269	145	45	79	273	128	48	11	69
Western Kentucky U.	267	396	175	0	221	266	281	101	0	180	290	115	74	0	41
U. North Carolina, Wilmington	268	392	392	0	0	238	318	318	0	0	360	74	74	0	0
U. Puerto Rico, Medical Sciences Campus	269	391	99	0	292	226	349	91	0	258	428	42	8	0	34
Idaho State U.	270	387	185	47	155	288	227	114	34	79	242	160	71	13	76
Southern Connecticut State U.	271	386	180	10	196	286	236	81	6	149	248	150	99	4	47
Eastern Kentucky U.	271	386	286	0	100	330	176	95	0	81	197	210	191	0	19
Gannon U.	273	383	298	85	0	225	350	279	71	0	447	33	19	14	0
Nova Southeastern U.	274	381	373	0	8	352	158	151	0	7	186	223	222	0	1
U. Montana	275	380	225	0	155	293	221	130	0	91	243	159	95	0	64
Angelo State U.	276	377	367	0	10	347	162	154	0	8	193	215	213	0	2
Fairleigh Dickinson U.	277	374	337	7	30	267	279	260	6	13	320	95	77	1	17
Loyola U., Chicago	278	371	340	27	4	252	297	281	16	0	360	74	59	11	4
Marquette U.	278	371	163	71	137	313	199	63	31	105	229	172	100	40	32

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
CUNY, Graduate Center	280	370	370	0	0	397	116	116	0	0	170	254	254	0	0
Murray State U.	281	362	316	0	46	251	303	257	0	46	399	59	59	0	0
Manhattan C.	281	362	0	362	0	255	294	0	294	0	376	68	0	68	0
Appalachian State U.	283	361	255	0	106	258	291	187	0	104	368	70	68	0	2
Seattle U.	283	361	328	33	0	331	175	169	6	0	216	186	159	27	0
Marymount U.	285	359	339	0	20	267	279	267	0	12	342	80	72	0	8
Kean U.	285	359	228	0	131	276	262	165	0	97	315	97	63	0	34
Southern U. and A&M C.	287	358	285	19	54	296	217	156	11	50	258	141	129	8	4
Saint Joseph's U. ^d	287	358	285	0	73	438	81	76	0	5	159	277	209	0	68
North Carolina Central U.	289	356	246	0	110	279	257	147	0	110	311	99	99	0	0
U. Central Oklahoma	290	355	257	19	79	292	222	163	11	48	267	133	94	8	31
California State U., Chico	291	354	268	0	86	285	241	159	0	82	293	113	109	0	4
Boise State U.	292	353	228	75	50	304	207	137	35	35	256	146	91	40	15
U. Mississippi	293	349	157	21	171	240	315	144	21	150	442	34	13	0	21
Simmons U.	294	345	294	0	51	527	39	34	0	5	150	306	260	0	46
SUNY, Downstate Medical Center	295	344	10	0	334	347	162	10	0	152	220	182	0	0	182
U. Louisiana, Lafayette	296	343	226	69	48	256	292	184	60	48	414	51	42	9	0
Valparaiso U.	296	343	334	0	9	274	266	259	0	7	351	77	75	0	2
Columbus State U.	298	338	324	10	4	387	122	114	5	3	191	216	210	5	1
St. John's U., Queens	299	336	246	0	90	271	267	182	0	85	373	69	64	0	5
Western Washington U.	299	336	278	0	58	271	267	219	0	48	373	69	59	0	10
U. Oregon	301	335	265	0	70	236	319	249	0	70	520	16	16	0	0
Inter American U. Puerto Rico, Metro	301	335	253	0	82	291	223	162	0	61	296	112	91	0	21
U. Akron	303	330	178	59	93	304	207	120	26	61	281	123	58	33	32
Yale U.	304	327	173	20	134	234	325	172	19	134	603	2	1	1	0
Bradley U.	304	327	201	126	0	259	289	172	117	0	436	38	29	9	0
Yeshiva U.	306	319	176	0	143	300	214	85	0	129	307	105	91	0	14
Massachusetts C. of Pharmacy and Health Sciences	307	318	10	0	308	368	142	10	0	132	227	176	0	0	176
Sage Colleges	307	318	318	0	0	486	60	60	0	0	169	258	258	0	0
CUNY, Brooklyn C.	309	317	228	0	89	406	109	44	0	65	198	208	184	0	24
U. Puerto Rico, Rio Piedras	310	316	316	0	0	360	149	149	0	0	233	167	167	0	0
Philadelphia C. of Osteopathic Medicine	311	315	315	0	0	271	267	267	0	0	417	48	48	0	0
U. California, Santa Barbara	312	314	247	67	0	241	314	247	67	0	624	0	0	0	0
Claremont Graduate U.	313	313	239	0	74	383	126	104	0	22	213	187	135	0	52
Princeton U.	314	311	264	47	0	245	311	264	47	0	624	0	0	0	0

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Eastern Virginia Medical School	314	311	0	0	311	289	226	0	0	226	332	85	0	0	85
U. of Saint Joseph	316	310	289	0	21	431	91	89	0	2	189	219	200	0	19
Eastern Illinois U.	317	306	208	0	98	310	201	114	0	87	307	105	94	0	11
Minnesota State U., Mankato	318	305	198	16	91	325	183	98	8	77	283	122	100	8	14
Oregon Health and Science U.	319	304	96	0	208	331	175	54	0	121	270	129	42	0	87
Roosevelt U.	320	301	301	0	0	306	204	204	0	0	315	97	97	0	0
U. North Florida	321	300	189	28	83	322	185	109	15	61	290	115	80	13	22
U. Louisiana, Monroe	322	299	200	0	99	320	189	103	0	86	297	110	97	0	13
Lawrence Technological U.	322	299	88	211	0	491	58	10	48	0	176	241	78	163	0
Tennessee State U.	324	298	171	37	90	335	171	100	26	45	275	127	71	11	45
Embry-Riddle Aeronautical U.	325	297	104	193	0	269	274	95	179	0	483	23	9	14	0
Seton Hall U.	326	296	204	0	92	295	218	127	0	91	349	78	77	0	1
North Carolina Agricultural and Technical State U.	327	293	143	150	0	287	229	113	116	0	383	64	30	34	0
Hofstra U.	327	293	103	0	190	301	213	77	0	136	342	80	26	0	54
Jacksonville U.	329	292	94	0	198	297	216	20	0	196	354	76	74	0	2
Polytechnic U. Puerto Rico	330	289	49	240	0	345	163	29	134	0	276	126	20	106	0
U. Rochester	331	287	171	78	38	302	210	132	73	5	351	77	39	5	33
U. South Alabama	332	277	163	65	49	280	256	151	56	49	497	21	12	9	0
U. Alaska, Fairbanks	332	277	235	42	0	408	106	84	22	0	230	171	151	20	0
Central Washington U.	334	276	236	7	33	318	192	168	0	24	335	84	68	7	9
Stephen F. Austin State U.	334	276	180	0	96	319	191	97	0	94	332	85	83	0	2
Northern Kentucky U.	336	275	176	0	99	424	94	66	0	28	221	181	110	0	71
Emporia State U.	337	274	274	0	0	397	116	116	0	0	244	158	158	0	0
Benedictine U.	338	273	110	0	163	426	93	72	0	21	224	180	38	0	142
Touro U., Vallejo	339	271	0	0	271	282	246	0	0	246	470	25	0	0	25
Thomas Jefferson U.	339	271	154	7	110	449	77	33	5	39	204	194	121	2	71
U. Notre Dame	341	270	180	90	0	306	204	115	89	0	381	66	65	1	0
Midwestern State U.	341	270	270	0	0	341	168	168	0	0	310	102	102	0	0
U. Hartford	343	269	207	62	0	412	102	84	18	0	233	167	123	44	0
Central Connecticut State U.	344	265	237	28	0	453	76	73	3	0	209	189	164	25	0
Austin Peay State U.	345	262	262	0	0	419	97	97	0	0	238	165	165	0	0
U. of the Pacific	346	261	142	21	98	338	169	64	20	85	323	92	78	1	13
Boston C.	347	260	260	0	0	327	181	181	0	0	346	79	79	0	0
Northeastern Illinois U.	348	258	182	0	76	422	95	53	0	42	241	163	129	0	34
New Jersey City U.	348	258	133	0	125	449	77	65	0	12	221	181	68	0	113

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(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. Nebraska, Kearney	350	257	175	0	82	468	68	22	0	46	209	189	153	0	36
Vanderbilt U.	351	253	225	28	0	283	242	216	26	0	546	11	9	2	0
U. Tennessee, Chattanooga	351	253	161	47	45	335	171	119	22	30	339	82	42	25	15
Keck Graduate Institute	353	250	151	29	70	281	249	150	29	70	611	1	1	0	0
Indiana U. Pennsylvania	353	250	189	0	61	371	140	83	0	57	297	110	106	0	4
A. T. Still U.	353	250	19	0	231	374	137	12	0	125	293	113	7	0	106
Loyola U., Maryland	356	247	150	0	97	338	169	72	0	97	349	78	78	0	0
Augusta U.	357	246	153	0	93	350	160	99	0	61	330	86	54	0	32
Endicott C.	358	244	244	0	0	566	24	24	0	0	188	220	220	0	0
Mercer U.	359	241	44	59	138	322	185	42	34	109	407	56	2	25	29
Rensselaer Polytechnic Institute, Troy	360	240	97	143	0	317	194	91	103	0	419	46	6	40	0
U. Northern Iowa	360	240	126	0	114	342	167	57	0	110	363	73	69	0	4
U. Arkansas for Medical Sciences	362	239	49	0	190	410	103	29	0	74	263	136	20	0	116
U. Wisconsin-La Crosse	362	239	209	18	12	459	73	49	12	12	236	166	160	6	0
James Madison U.	364	238	144	0	94	344	164	97	0	67	360	74	47	0	27
New York Medical C.	365	236	131	0	105	328	177	92	0	85	399	59	39	0	20
Humboldt State U.	365	236	236	0	0	338	169	169	0	0	380	67	67	0	0
Northeastern State U.	365	236	173	0	63	364	145	102	0	43	325	91	71	0	20
SUNY, Polytechnic Institute	365	236	201	9	26	372	138	126	4	8	314	98	75	5	18
William Paterson U.	369	235	111	0	124	358	153	70	0	83	339	82	41	0	41
Chapman U.	370	233	129	0	104	328	177	75	0	102	407	56	54	0	2
Southeastern Louisiana U.	371	230	109	0	121	337	170	67	0	103	394	60	42	0	18
Arkansas State U.	372	228	150	8	70	387	122	56	1	65	304	106	94	7	5
Clarkson U.	372	228	77	151	0	394	120	52	68	0	299	108	25	83	0
Fitchburg State U.	374	227	227	0	0	306	204	204	0	0	483	23	23	0	0
Uniformed Services U. of the Health Sciences	375	226	0	0	226	289	226	0	0	226	624	0	0	0	0
Wake Forest U.	375	226	172	8	46	299	215	168	8	39	546	11	4	0	7
California State U., Dominguez Hills	375	226	226	0	0	343	166	166	0	0	394	60	60	0	0
Texas A&M U., San Antonio	375	226	218	0	8	441	80	78	0	2	256	146	140	0	6
Hood C.	379	224	224	0	0	424	94	94	0	0	269	130	130	0	0
U. Tulsa	380	222	123	58	41	310	201	102	58	41	497	21	21	0	0
Morehouse School of Medicine	381	219	91	0	128	306	204	85	0	119	524	15	6	0	9
Loyola Marymount U.	382	218	123	88	7	321	188	118	65	5	455	30	5	23	2
Eastern New Mexico U.	383	216	81	0	135	361	146	47	0	99	368	70	34	0	36
U. Wisconsin-Eau Claire	383	216	109	0	107	475	66	21	0	45	248	150	88	0	62

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(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. West Georgia	385	214	148	0	66	436	85	52	0	33	270	129	96	0	33
Midwestern U.	386	213	213	0	0	312	200	200	0	0	535	13	13	0	0
U. Missouri, Saint Louis	387	210	210	0	0	437	82	82	0	0	273	128	128	0	0
U. North Alabama	387	210	164	30	16	465	70	55	1	14	259	140	109	29	2
Dakota State U.	389	209	189	0	20	378	134	119	0	15	357	75	70	0	5
Indiana State U.	389	209	158	0	51	386	124	73	0	51	332	85	85	0	0
U. New Orleans	389	209	154	55	0	426	93	72	21	0	289	116	82	34	0
Fordham U.	392	208	208	0	0	361	146	146	0	0	389	62	62	0	0
U. La Verne	392	208	208	0	0	412	102	102	0	0	304	106	106	0	0
Citadel Military C. South Carolina	392	208	163	30	15	488	59	51	4	4	250	149	112	26	11
William and Mary	395	207	207	0	0	314	198	198	0	0	567	9	9	0	0
Mississippi C.	396	206	204	2	0	361	146	146	0	0	394	60	58	2	0
SUNY, New Paltz	397	204	145	5	54	326	182	128	3	51	492	22	17	2	3
Kansas City U. of Medicine and Biosciences	397	204	138	0	66	376	136	136	0	0	376	68	2	0	66
Pontifical Catholic U. Puerto Rico	399	203	203	0	0	402	112	112	0	0	325	91	91	0	0
Loma Linda U.	400	202	67	0	135	331	175	57	0	118	463	27	10	0	17
South Dakota School of Mines and Technology	400	202	41	161	0	372	138	31	107	0	383	64	10	54	0
C. of Saint Rose	402	200	120	0	80	356	154	75	0	79	419	46	45	0	1
Keiser U., Fort Lauderdale	403	195	195	0	0	322	185	185	0	0	554	10	10	0	0
U. Houston-Victoria	403	195	195	0	0	399	115	115	0	0	342	80	80	0	0
Monmouth U.	405	189	100	12	77	396	117	35	5	77	366	72	65	7	0
Avila U.	406	188	173	0	15	345	163	150	0	13	470	25	23	0	2
U. Central Arkansas	406	188	88	0	100	382	128	40	0	88	394	60	48	0	12
New Mexico Institute of Mining and Technology	408	187	66	121	0	380	133	51	82	0	412	54	15	39	0
SUNY, C. of Environmental Science and Forestry	409	185	165	20	0	351	159	142	17	0	466	26	23	3	0
Chatham U.	410	183	183	0	0	369	141	141	0	0	428	42	42	0	0
C. Charleston	411	182	182	0	0	434	87	87	0	0	320	95	95	0	0
Quinnipiac U.	412	178	178	0	0	407	108	108	0	0	368	70	70	0	0
Tennessee Technological U.	413	176	102	74	0	488	59	39	20	0	287	117	63	54	0
Oklahoma Christian U.	414	172	0	172	0	374	137	0	137	0	440	35	0	35	0
Valdosta State U.	415	171	72	0	99	364	145	46	0	99	466	26	26	0	0
Weber State U.	415	171	50	22	99	390	121	21	6	94	415	50	29	16	5
Commonwealth Medical C.	417	169	169	0	0	405	110	110	0	0	399	59	59	0	0
Youngstown State U.	418	168	97	71	0	358	153	89	64	0	524	15	8	7	0
Abilene Christian U.	419	167	55	0	112	353	156	44	0	112	546	11	11	0	0

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Institutional rankings for master's students: 2022

(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
California State U., Monterey Bay	419	167	118	0	49	378	134	85	0	49	447	33	33	0	0
West Texas A&M U.	421	164	72	31	61	449	77	26	10	41	327	87	46	21	20
California Lutheran U.	422	163	163	0	0	364	145	145	0	0	513	18	18	0	0
Meharry Medical C.	423	162	119	0	43	349	161	118	0	43	611	1	1	0	0
Texas Christian U.	424	161	107	0	54	353	156	102	0	54	581	5	5	0	0
U. Texas Health Science Center, San Antonio	424	161	51	11	99	367	144	49	1	94	517	17	2	10	5
Montana Tech of U. Montana	424	161	26	44	91	497	54	14	27	13	300	107	12	17	78
Calvin C.	427	160	10	0	150	419	97	4	0	93	385	63	6	0	57
Florida A&M U.	428	158	140	18	0	385	125	110	15	0	447	33	30	3	0
Morgan State U.	429	157	71	38	48	369	141	64	35	42	520	16	7	3	6
La Salle U.	429	157	98	0	59	381	132	74	0	58	470	25	24	0	1
SUNY, Buffalo State	429	157	101	5	51	412	102	49	2	51	409	55	52	3	0
Stockton U.	429	157	95	0	62	422	95	37	0	58	389	62	58	0	4
McNeese State U.	433	156	115	10	31	387	122	88	9	25	442	34	27	1	6
U. of the District of Columbia	433	156	95	21	40	401	113	59	18	36	427	43	36	3	4
Salem State U.	435	154	154	0	0	456	74	74	0	0	342	80	80	0	0
Oklahoma City U.	436	153	128	0	25	402	112	108	0	4	432	41	20	0	21
Texas Southern U.	437	151	151	0	0	394	120	120	0	0	452	31	31	0	0
Western Connecticut State U.	437	151	151	0	0	598	12	12	0	0	260	139	139	0	0
CUNY, Lehman C.	439	150	47	0	103	433	89	7	0	82	391	61	40	0	21
Louisiana Tech U.	440	147	84	24	39	390	121	68	14	39	466	26	16	10	0
Western Carolina U.	441	146	85	0	61	376	136	75	0	61	554	10	10	0	0
Fayetteville State U.	442	141	121	0	20	464	71	60	0	11	368	70	61	0	9
U. Dallas	442	141	141	0	0	515	44	44	0	0	315	97	97	0	0
Howard U.	444	140	82	9	49	399	115	63	7	45	470	25	19	2	4
U. Michigan, Flint	444	140	107	0	33	480	63	51	0	12	351	77	56	0	21
U. Wisconsin-Stevens Point	446	137	78	0	59	446	78	19	0	59	399	59	59	0	0
U. Arkansas, Little Rock	446	137	130	2	5	456	74	72	2	0	385	63	58	0	5
Radford U.	448	136	72	0	64	390	121	57	0	64	524	15	15	0	0
U. Indianapolis	448	136	115	0	21	446	78	64	0	14	403	58	51	0	7
Western New England U.	450	135	86	49	0	523	40	0	40	0	320	95	86	9	0
Nicholls State U.	451	133	133	0	0	430	92	92	0	0	432	41	41	0	0
Iona C.	452	131	67	0	64	390	121	57	0	64	554	10	10	0	0
St. Mary's U., San Antonio	453	128	79	49	0	472	67	47	20	0	391	61	32	29	0
U. Alaska, Anchorage	453	128	74	22	32	514	45	29	5	11	338	83	45	17	21

TABLE 5-4b

Institutional rankings for master's students: 2022

(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. Wisconsin-Platteville	453	128	55	73	0	625	4	2	2	0	279	124	53	71	0
MGH Institute of Health Professions	456	126	0	0	126	383	126	0	0	126	624	0	0	0	0
Catholic U. of America	457	124	92	32	0	482	61	47	14	0	385	63	45	18	0
East Stroudsburg U. Pennsylvania	458	123	28	0	95	410	103	16	0	87	506	20	12	0	8
Lipscomb U.	458	123	116	0	7	416	99	92	0	7	480	24	24	0	0
Shippensburg U. Pennsylvania	460	121	121	0	0	415	100	100	0	0	497	21	21	0	0
U. Texas, Permian Basin	460	121	97	12	12	444	79	64	7	8	428	42	33	5	4
Norfolk State U.	460	121	92	29	0	478	64	47	17	0	404	57	45	12	0
Fort Valley State U.	463	118	85	0	33	408	106	76	0	30	538	12	9	0	3
Western Colorado U.	464	117	110	0	7	416	99	94	0	5	513	18	16	0	2
Millersville U. Pennsylvania	465	116	116	0	0	521	41	41	0	0	357	75	75	0	0
Marywood U.	466	114	80	0	34	426	93	62	0	31	497	21	18	0	3
Campbell U.	467	111	0	0	111	404	111	0	0	111	624	0	0	0	0
Southern U., New Orleans	468	110	110	0	0	459	73	73	0	0	437	37	37	0	0
Arcadia U.	468	110	90	0	20	482	61	45	0	16	416	49	45	0	4
Sonoma State U.	470	109	109	0	0	438	81	81	0	0	460	28	28	0	0
Hawaii Pacific U.	470	109	72	0	37	456	74	47	0	27	440	35	25	0	10
Pittsburg State U.	472	108	108	0	0	421	96	96	0	0	538	12	12	0	0
Slippery Rock U. Pennsylvania	473	107	80	0	27	449	77	54	0	23	455	30	26	0	4
Cameron U.	473	107	107	0	0	482	61	61	0	0	419	46	46	0	0
Bloomsburg U. Pennsylvania	475	106	45	0	61	455	75	18	0	57	452	31	27	0	4
SUNY, Oswego	475	106	48	0	58	478	64	42	0	22	428	42	6	0	36
Dominican U. California	477	105	105	0	0	441	80	80	0	0	470	25	25	0	0
Lincoln Memorial U.	477	105	105	0	0	468	68	68	0	0	437	37	37	0	0
Frostburg State U.	479	104	104	0	0	509	47	47	0	0	404	57	57	0	0
Canisius C.	479	104	95	0	9	533	36	32	0	4	376	68	63	0	5
Florida Gulf Coast U.	481	103	74	13	16	523	40	36	1	3	385	63	38	12	13
Tuskegee U.	482	101	80	13	8	435	86	68	11	7	524	15	12	2	1
Worcester State U.	482	101	28	0	73	494	56	5	0	51	424	45	23	0	22
Molloy C.	484	100	19	0	81	426	93	14	0	79	574	7	5	0	2
Icahn School of Medicine at Mt. Sinai	485	99	99	0	0	416	99	99	0	0	624	0	0	0	0
Inter American U. Puerto Rico, San German	485	99	99	0	0	459	73	73	0	0	466	26	26	0	0
U. Wisconsin-Green Bay	485	99	99	0	0	566	24	24	0	0	357	75	75	0	0
U. Texas Medical Branch	485	99	94	0	5	573	23	22	0	1	354	76	72	0	4
Texas A&M U.-Central Texas	489	98	98	0	0	640	1	1	0	0	315	97	97	0	0

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Lindenwood U.	490	97	59	0	38	446	78	49	0	29	508	19	10	0	9
Alcorn State U.	490	97	97	0	0	504	50	50	0	0	418	47	47	0	0
Des Moines U., Osteopathic Medical Center	490	97	35	0	62	552	28	26	0	2	373	69	9	0	60
Northern Michigan U.	493	96	78	0	18	475	66	52	0	14	455	30	26	0	4
U. Wisconsin-Oshkosh	493	96	96	0	0	643	0	0	0	0	319	96	96	0	0
Framingham State U.	495	95	95	0	0	614	8	8	0	0	327	87	87	0	0
U. Hawaii, Hilo	496	94	94	0	0	472	67	67	0	0	463	27	27	0	0
U. Guam	496	94	94	0	0	558	26	26	0	0	376	68	68	0	0
U. Tennessee, Health Science Center	498	92	44	6	42	431	91	43	6	42	611	1	1	0	0
Emory U.	498	92	56	0	36	466	69	54	0	15	483	23	2	0	21
Arkansas Tech U.	498	92	84	8	0	511	46	39	7	0	419	46	45	1	0
CUNY, C. Staten Island	501	91	80	11	0	604	10	9	1	0	341	81	71	10	0
Mississippi U. for Women	502	88	11	0	77	468	68	0	0	68	506	20	11	0	9
Wayland Baptist U.	503	87	87	0	0	494	56	56	0	0	452	31	31	0	0
Sul Ross State U.	503	87	66	0	21	542	32	32	0	0	409	55	34	0	21
Indiana Institute of Technology	505	86	85	0	1	444	79	78	0	1	574	7	7	0	0
U. of the Incarnate Word	505	86	64	0	22	453	76	59	0	17	554	10	5	0	5
Bridgewater State U.	505	86	86	0	0	500	52	52	0	0	442	34	34	0	0
Robert Morris U.	505	86	86	0	0	643	0	0	0	0	330	86	86	0	0
Salus U.	509	83	1	0	82	438	81	1	0	80	603	2	0	0	2
Florida Polytechnic U.	510	82	41	41	0	488	59	30	29	0	483	23	11	12	0
Creighton U.	510	82	28	0	54	493	57	26	0	31	470	25	2	0	23
New Mexico Highlands U.	512	81	81	0	0	502	51	51	0	0	455	30	30	0	0
Lake Erie C. of Osteopathic Medicine	513	80	11	0	69	441	80	11	0	69	624	0	0	0	0
U. Nebraska, Medical Center	513	80	74	0	6	500	52	46	0	6	460	28	28	0	0
Evergreen State C.	515	79	79	0	0	468	68	68	0	0	546	11	11	0	0
Texas A&M International U.	515	79	79	0	0	566	24	24	0	0	409	55	55	0	0
Charles R. Drew U. of Medicine and Science	517	76	33	0	43	466	69	28	0	41	574	7	5	0	2
Hampton U.	518	75	36	0	39	462	72	34	0	38	597	3	2	0	1
U. West Alabama	518	75	75	0	0	475	66	66	0	0	567	9	9	0	0
Minnesota State U., Moorhead	518	75	27	0	48	480	63	15	0	48	538	12	12	0	0
Niagara U.	521	74	74	0	0	509	47	47	0	0	463	27	27	0	0
U. California, San Francisco	522	72	0	17	55	462	72	0	17	55	624	0	0	0	0
St. Thomas U.	522	72	61	0	11	482	61	50	0	11	546	11	11	0	0
SUNY, C. Brockport	524	71	53	0	18	516	43	32	0	11	460	28	21	0	7

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Medical U. South Carolina	524	71	35	0	36	519	42	35	0	7	459	29	0	0	29
Mayo Clinic, Mayo Graduate School	524	71	63	3	5	643	0	0	0	0	367	71	63	3	5
U. Maryland, Eastern Shore	527	69	68	0	1	548	30	29	0	1	435	39	39	0	0
Truman State U.	528	68	29	0	39	499	53	21	0	32	524	15	8	0	7
Metropolitan State U.	528	68	62	0	6	586	16	10	0	6	413	52	52	0	0
Southern Nazarene U.	530	67	67	0	0	472	67	67	0	0	624	0	0	0	0
Roger Williams U.	531	65	65	0	0	497	54	54	0	0	546	11	11	0	0
Mercyhurst U.	531	65	65	0	0	505	49	49	0	0	520	16	16	0	0
Jackson State U.	531	65	40	25	0	519	42	28	14	0	483	23	12	11	0
DeSales U.	531	65	43	0	22	542	32	11	0	21	447	33	32	0	1
California State U., Bakersfield	535	63	63	0	0	523	40	40	0	0	483	23	23	0	0
Duquesne U.	536	62	61	0	1	523	40	39	0	1	492	22	22	0	0
U. Montevallo	537	61	0	0	61	491	58	0	0	58	597	3	0	0	3
Plymouth State U.	537	61	44	0	17	502	51	41	0	10	554	10	3	0	7
Gonzaga U.	537	61	33	28	0	533	36	25	11	0	470	25	8	17	0
Palo Alto U.	537	61	61	0	0	643	0	0	0	0	391	61	61	0	0
California U. of Science and Medicine	541	60	60	0	0	486	60	60	0	0	624	0	0	0	0
U. Pennsylvania	542	59	59	0	0	505	49	49	0	0	554	10	10	0	0
Kettering U.	542	59	0	59	0	537	35	0	35	0	480	24	0	24	0
SUNY, C. Cortland	542	59	0	0	59	538	34	0	0	34	470	25	0	0	25
Virginia State U.	545	58	58	0	0	541	33	33	0	0	470	25	25	0	0
Coastal Carolina U.	545	58	58	0	0	558	26	26	0	0	451	32	32	0	0
U. del Turabo	547	56	50	6	0	494	56	50	6	0	624	0	0	0	0
Medical C. Wisconsin	548	54	13	0	41	579	20	4	0	16	442	34	9	0	25
U. of Saint Mary	549	53	53	0	0	505	49	49	0	0	591	4	4	0	0
Springfield C.	550	52	43	0	9	511	46	40	0	6	578	6	3	0	3
Clark Atlanta U.	550	52	52	0	0	538	34	34	0	0	513	18	18	0	0
Louisiana State U., Shreveport	552	50	50	0	0	552	28	28	0	0	492	22	22	0	0
U. of the Virgin Islands	553	49	49	0	0	508	48	48	0	0	611	1	1	0	0
South Carolina State U.	553	49	0	0	49	511	46	0	0	46	597	3	0	0	3
SUNY, Fredonia	555	48	12	0	36	516	43	7	0	36	581	5	5	0	0
Winthrop U.	555	48	48	0	0	516	43	43	0	0	581	5	5	0	0
U. Arkansas, Pine Bluff	555	48	48	0	0	542	32	32	0	0	520	16	16	0	0
Cooper Union for the Advancement of Science and Art	555	48	0	48	0	562	25	0	25	0	483	23	0	23	0
Georgia C. and State U.	559	47	18	0	29	552	28	16	0	12	508	19	2	0	17

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Oregon Institute of Technology	559	47	16	31	0	566	24	13	11	0	483	23	3	20	0
Ithaca C.	561	46	46	0	0	531	37	37	0	0	567	9	9	0	0
SUNY, C. Plattsburgh	562	45	45	0	0	548	30	30	0	0	524	15	15	0	0
Suffolk U.	563	44	36	0	8	562	25	22	0	3	508	19	14	0	5
Loras C.	564	43	43	0	0	528	38	38	0	0	581	5	5	0	0
Albert Einstein C. of Medicine	565	41	0	0	41	521	41	0	0	41	624	0	0	0	0
Bard C.	565	41	41	0	0	533	36	36	0	0	581	5	5	0	0
U. of Mary Hardin Baylor	565	41	41	0	0	533	36	36	0	0	581	5	5	0	0
Christopher Newport U.	565	41	41	0	0	574	22	22	0	0	508	19	19	0	0
Butler U.	565	41	40	0	1	643	0	0	0	0	432	41	40	0	1
Northeastern Ohio Universities, C. of Medicine	570	40	17	0	23	547	31	17	0	14	567	9	0	0	9
Lincoln U., Jefferson City	571	39	39	0	0	581	18	18	0	0	497	21	21	0	0
San Juan Bautista School of Medicine	572	38	0	0	38	528	38	0	0	38	624	0	0	0	0
Wesleyan U.	572	38	38	0	0	528	38	38	0	0	624	0	0	0	0
Fisk U.	572	38	38	0	0	531	37	37	0	0	611	1	1	0	0
Widener U.	572	38	0	38	0	556	27	0	27	0	546	11	0	11	0
Delaware State U. ^e	576	37	29	0	8	542	32	26	0	6	581	5	3	0	2
Inter American U. Puerto Rico, Fajardo	576	37	37	0	0	640	1	1	0	0	439	36	36	0	0
Gallaudet U.	578	36	0	0	36	538	34	0	0	34	603	2	0	0	2
Aurora U.	578	36	6	0	30	591	14	0	0	14	492	22	6	0	16
Smith C.	580	35	7	0	28	548	30	2	0	28	581	5	5	0	0
U. California, Merced	581	34	11	23	0	542	32	11	21	0	603	2	0	2	0
U. South Carolina, Aiken	582	33	33	0	0	551	29	29	0	0	591	4	4	0	0
Bethune-Cookman U.	582	33	25	0	8	552	28	20	0	8	581	5	5	0	0
Seattle Pacific U.	582	33	33	0	0	576	21	21	0	0	538	12	12	0	0
Kentucky State U.	582	33	33	0	0	581	18	18	0	0	524	15	15	0	0
Andrews U.	582	33	7	0	26	598	12	7	0	5	497	21	0	0	21
California State U., Stanislaus	587	30	30	0	0	587	15	15	0	0	524	15	15	0	0
Saint Martin's U.	588	29	17	12	0	574	22	13	9	0	574	7	4	3	0
Northwestern State U. Louisiana	588	29	29	0	0	576	21	21	0	0	571	8	8	0	0
Bowie State U.	588	29	29	0	0	587	15	15	0	0	533	14	14	0	0
U. Arkansas, Monticello	588	29	29	0	0	625	4	4	0	0	470	25	25	0	0
Western U. of Health Sciences	592	28	12	0	16	566	24	10	0	14	591	4	2	0	2
LeTourneau U.	592	28	23	5	0	625	4	2	2	0	480	24	21	3	0
Bucknell U.	594	27	17	10	0	556	27	17	10	0	624	0	0	0	0

TABLE 5-4b

Institutional rankings for master's students: 2022

(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
Savannah State U.	594	27	27	0	0	562	25	25	0	0	603	2	2	0	0
Morehead State U.	594	27	27	0	0	587	15	15	0	0	538	12	12	0	0
Kutztown U. Pennsylvania	594	27	27	0	0	596	13	13	0	0	533	14	14	0	0
U. Wisconsin-Parkside	594	27	27	0	0	618	6	6	0	0	497	21	21	0	0
Trinity C., Hartford	594	27	27	0	0	625	4	4	0	0	483	23	23	0	0
Williams C.	600	26	26	0	0	558	26	26	0	0	624	0	0	0	0
Vanguard U. of Southern California	600	26	26	0	0	562	25	25	0	0	611	1	1	0	0
Xavier U.	600	26	26	0	0	581	18	18	0	0	571	8	8	0	0
California Institute of Technology	603	24	0	24	0	566	24	0	24	0	624	0	0	0	0
Clafin U.	603	24	24	0	0	566	24	24	0	0	624	0	0	0	0
Alfred U.	603	24	0	24	0	591	14	0	14	0	554	10	0	10	0
John Carroll U.	603	24	24	0	0	596	13	13	0	0	546	11	11	0	0
Alaska Pacific U.	603	24	24	0	0	601	11	11	0	0	535	13	13	0	0
U. Texas Southwestern Medical Center	603	24	1	0	23	616	7	1	0	6	517	17	0	0	17
SUNY, C. of Optometry	603	24	24	0	0	637	2	2	0	0	492	22	22	0	0
Milwaukee School of Engineering	610	23	0	23	0	625	4	0	4	0	508	19	0	19	0
Delta State U.	611	22	22	0	0	580	19	19	0	0	597	3	3	0	0
Colorado State U., Pueblo	611	22	16	6	0	598	12	8	4	0	554	10	8	2	0
Georgia Southwestern State U.	611	22	22	0	0	625	4	4	0	0	513	18	18	0	0
New England C. of Optometry	614	21	21	0	0	576	21	21	0	0	624	0	0	0	0
Drew U.	614	21	21	0	0	609	9	9	0	0	538	12	12	0	0
Elizabeth City State U.	614	21	21	0	0	614	8	8	0	0	535	13	13	0	0
Fielding Graduate U.	614	21	21	0	0	618	6	6	0	0	524	15	15	0	0
Cedars-Sinai Medical Center	614	21	21	0	0	643	0	0	0	0	497	21	21	0	0
Rockefeller U.	619	18	18	0	0	581	18	18	0	0	624	0	0	0	0
Wilkes U.	619	18	3	15	0	591	14	1	13	0	591	4	2	2	0
Salisbury U.	619	18	18	0	0	604	10	10	0	0	571	8	8	0	0
West Virginia State U.	622	17	17	0	0	585	17	17	0	0	624	0	0	0	0
Memorial Sloan Kettering Cancer Center	622	17	17	0	0	643	0	0	0	0	517	17	17	0	0
Point Loma Nazarene U.	624	16	16	0	0	625	4	4	0	0	538	12	12	0	0
American Museum of Natural History	625	15	15	0	0	587	15	15	0	0	624	0	0	0	0
Mississippi Valley State U.	625	15	7	0	8	591	14	7	0	7	611	1	0	0	1
Alabama State U.	625	15	15	0	0	601	11	11	0	0	591	4	4	0	0
Pontifical Catholic U. Puerto Rico, Mayaguez	625	15	15	0	0	604	10	10	0	0	581	5	5	0	0
SUNY, Oneonta	625	15	15	0	0	622	5	5	0	0	554	10	10	0	0

TABLE 5-4b

Institutional rankings for master's students: 2022

(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	14	0	0	14	591	14	0	0	14	624	0	0	0	0
Albany C. of Pharmacy and Health Sciences	630	14	8	0	6	625	4	3	0	1	554	10	5	0	5
Rhode Island C.	632	13	13	0	0	634	3	3	0	0	554	10	10	0	0
Southern Oregon U.	633	12	12	0	0	601	11	11	0	0	611	1	1	0	0
Winston-Salem State U.	633	12	12	0	0	609	9	9	0	0	597	3	3	0	0
U. Southern Maine	633	12	12	0	0	637	2	2	0	0	554	10	10	0	0
Rose-Hulman Institute of Technology	636	11	0	11	0	609	9	0	9	0	603	2	0	2	0
Oklahoma State U., Center for Health Sciences	636	11	11	0	0	616	7	7	0	0	591	4	4	0	0
Marietta C.	636	11	11	0	0	622	5	5	0	0	578	6	6	0	0
Albany Medical C.	639	10	10	0	0	604	10	10	0	0	624	0	0	0	0
U. Massachusetts, Medical School	639	10	10	0	0	604	10	10	0	0	624	0	0	0	0
Marshall B. Ketchum U.	639	10	10	0	0	609	9	9	0	0	611	1	1	0	0
Wagner C.	639	10	10	0	0	609	9	9	0	0	611	1	1	0	0
U.S. Merchant Marine Academy	639	10	0	10	0	643	0	0	0	0	554	10	0	10	0
Montana State U., Billings	644	7	7	0	0	618	6	6	0	0	611	1	1	0	0
Black Hills State U.	645	6	6	0	0	618	6	6	0	0	624	0	0	0	0
U. Portland	645	6	0	6	0	634	3	0	3	0	597	3	0	3	0
Walla Walla U.	645	6	6	0	0	643	0	0	0	0	578	6	6	0	0
Pardee RAND Graduate School	648	5	5	0	0	622	5	5	0	0	624	0	0	0	0
Bryn Mawr C.	649	4	4	0	0	625	4	4	0	0	624	0	0	0	0
Sitting Bull C.	650	3	3	0	0	634	3	3	0	0	624	0	0	0	0
SUNY, Upstate Medical U.	650	3	3	0	0	637	2	2	0	0	611	1	1	0	0
Alderson-Broaddus U.	650	3	3	0	0	640	1	1	0	0	603	2	2	0	0
Vermont Technical C.	653	2	0	2	0	643	0	0	0	0	603	2	0	2	0
Point Park U.	654	1	1	0	0	643	0	0	0	0	611	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

^b In 2022, Mills C. merged into Northeastern U.

^c In 2022, Edinboro U. Pennsylvania merged into Clarion U. Pennsylvania.

^d In 2022, U. of the Sciences Philadelphia merged into Saint Joseph's U.

^e In 2022, Wesley C. merged into Delaware State U.

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, 2022.

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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	-	297,223	206,183	72,980	18,060	-	259,683	183,443	64,020	12,220	-	37,540	22,740	8,960	5,840
U. Michigan	1	4,733	2,790	1,691	252	1	4,664	2,774	1,642	248	147	69	16	49	4
U. Illinois, Urbana-Champaign	2	4,505	2,754	1,663	88	2	4,429	2,705	1,640	84	137	76	49	23	4
Texas A&M U.	3	4,326	2,512	1,672	142	6	3,830	2,243	1,462	125	12	496	269	210	17
Purdue U.	4	4,323	2,065	2,058	200	15	3,386	1,697	1,505	184	4	937	368	553	16
U. California, Berkeley	5	4,144	3,099	1,002	43	3	4,144	3,099	1,002	43	356	0	0	0	0
U. Wisconsin-Madison	6	4,133	3,035	798	300	10	3,686	2,659	753	274	17	447	376	45	26
Pennsylvania State U.	7	3,997	2,534	1,371	92	5	3,855	2,449	1,332	74	78	142	85	39	18
Stanford U.	8	3,992	2,589	1,343	60	4	3,983	2,585	1,338	60	291	9	4	5	0
U. Washington	9	3,905	2,684	840	381	9	3,718	2,582	794	342	56	187	102	46	39
U. Texas, Austin	10	3,897	2,141	1,518	238	12	3,623	2,025	1,403	195	32	274	116	115	43
Cornell U.	11	3,739	2,892	847	0	7	3,723	2,877	846	0	262	16	15	1	0
U. California, Los Angeles	12	3,723	2,676	879	168	7	3,723	2,676	879	168	356	0	0	0	0
U. Maryland, College Park	13	3,716	2,600	827	289	14	3,467	2,460	761	246	37	249	140	66	43
Ohio State U.	14	3,642	2,444	1,015	183	13	3,568	2,420	976	172	140	74	24	39	11
Massachusetts Institute of Technology	15	3,634	2,078	1,556	0	11	3,628	2,077	1,551	0	312	6	1	5	0
Johns Hopkins U.	16	3,559	2,065	863	631	23	2,930	1,894	856	180	8	629	171	7	451
Georgia Institute of Technology	17	3,538	1,356	2,182	0	16	3,302	1,270	2,032	0	41	236	86	150	0
U. Colorado	18	3,492	2,427	917	148	21	3,159	2,237	812	110	26	333	190	105	38
U. Minnesota	19	3,417	2,383	806	228	20	3,244	2,271	761	212	61	173	112	45	16
U. California, San Diego	20	3,311	2,495	816	0	18	3,262	2,472	790	0	174	49	23	26	0
U. California, Davis	21	3,289	2,613	627	49	19	3,260	2,598	614	48	220	29	15	13	1
Harvard U.	22	3,283	2,869	319	95	17	3,282	2,868	319	95	344	1	1	0	0
U. Florida	23	3,260	2,210	858	192	22	3,018	2,052	796	170	38	242	158	62	22
Arizona State U.	24	2,908	1,953	887	68	38	2,097	1,378	671	48	6	811	575	216	20
North Carolina State U.	25	2,907	1,586	1,321	0	26	2,677	1,488	1,189	0	42	230	98	132	0
Indiana U.	26	2,884	2,161	204	519	45	1,820	1,358	99	363	1	1,064	803	105	156
U. Pennsylvania	27	2,809	2,118	640	51	25	2,769	2,103	616	50	190	40	15	24	1
Northwestern U.	28	2,790	1,859	891	40	24	2,777	1,850	887	40	268	13	9	4	0
Virginia Polytechnic Institute and State U.	29	2,673	1,480	1,193	0	30	2,400	1,341	1,059	0	33	273	139	134	0
U. Southern California	30	2,666	1,750	756	160	27	2,637	1,739	739	159	220	29	11	17	1
U. North Carolina, Chapel Hill	31	2,568	2,203	102	263	28	2,515	2,171	93	251	168	53	32	9	12
Columbia U. in the City of New York	32	2,516	1,813	640	63	29	2,444	1,770	619	55	144	72	43	21	8
Michigan State U.	33	2,473	1,962	444	67	31	2,379	1,880	435	64	116	94	82	9	3
Rutgers, State U. New Jersey	34	2,448	2,044	378	26	43	1,963	1,622	315	26	13	485	422	63	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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	2,359	2,102	257	0	32	2,359	2,102	257	0	356	0	0	0	0
U. Pittsburgh	36	2,335	1,538	541	256	33	2,250	1,491	527	232	125	85	47	14	24
Boston U.	37	2,253	1,420	559	274	35	2,212	1,403	557	252	185	41	17	2	22
U. California, Irvine	38	2,238	1,604	634	0	34	2,230	1,598	632	0	300	8	6	2	0
Princeton U.	39	2,209	1,646	563	0	36	2,209	1,646	563	0	356	0	0	0	0
U. Arizona	40	2,192	1,726	315	151	51	1,692	1,326	258	108	11	500	400	57	43
New York U.	41	2,182	1,745	321	116	40	2,006	1,609	310	87	59	176	136	11	29
U. Georgia	42	2,163	1,873	136	154	41	1,991	1,718	132	141	62	172	155	4	13
U. New Mexico	43	2,131	1,369	473	289	81	1,149	784	179	186	2	982	585	294	103
Duke U.	44	2,126	1,488	592	46	37	2,126	1,488	592	46	356	0	0	0	0
Yale U.	45	2,075	1,641	323	111	39	2,075	1,641	323	111	356	0	0	0	0
U. Connecticut	46	2,027	1,328	563	136	44	1,829	1,207	509	113	51	198	121	54	23
U. Illinois, Chicago	47	2,007	1,165	394	448	57	1,554	940	339	275	15	453	225	55	173
Carnegie Mellon U.	48	1,998	1,081	917	0	42	1,970	1,065	905	0	226	28	16	12	0
U. Massachusetts, Amherst	49	1,975	1,484	427	64	49	1,745	1,321	376	48	42	230	163	51	16
U. Utah	50	1,974	1,269	533	172	52	1,668	1,089	451	128	29	306	180	82	44
Iowa State U.	51	1,879	1,249	614	16	68	1,283	846	425	12	10	596	403	189	4
U. Tennessee, Knoxville	52	1,869	1,103	690	76	91	954	601	315	38	5	915	502	375	38
U. Virginia	53	1,827	1,170	634	23	46	1,806	1,157	627	22	247	21	13	7	1
U. California, Riverside	54	1,810	1,443	367	0	47	1,798	1,431	367	0	273	12	12	0	0
Washington U., Saint Louis	55	1,790	1,342	435	13	48	1,789	1,342	434	13	344	1	0	1	0
SUNY, Stony Brook U.	55	1,790	1,410	339	41	50	1,733	1,397	314	22	161	57	13	25	19
Liberty U.	57	1,688	1,325	24	339	87	1,062	761	21	280	9	626	564	3	59
U. Delaware	58	1,676	1,137	518	21	55	1,645	1,119	510	16	209	31	18	8	5
Vanderbilt U.	59	1,656	1,246	370	40	54	1,647	1,240	369	38	291	9	6	1	2
U. California, Santa Barbara	60	1,651	1,322	329	0	53	1,651	1,322	329	0	356	0	0	0	0
Colorado State U., Fort Collins	61	1,623	1,168	434	21	115	670	547	110	13	3	953	621	324	8
U. Houston	62	1,621	956	558	107	64	1,380	802	481	97	39	241	154	77	10
CUNY, Graduate Center	63	1,580	1,526	0	54	56	1,573	1,519	0	54	307	7	7	0	0
Florida State U.	64	1,545	1,261	206	78	63	1,386	1,149	189	48	67	159	112	17	30
George Mason U.	65	1,528	1,309	186	33	79	1,184	1,008	149	27	25	344	301	37	6
SUNY, U. Buffalo	66	1,519	1,058	355	106	60	1,409	998	333	78	103	110	60	22	28
Northeastern U. ^b	67	1,494	756	674	64	58	1,469	753	657	59	232	25	3	17	5
U. South Florida, Tampa	68	1,488	902	367	219	76	1,228	794	325	109	35	260	108	42	110
Texas Tech U.	69	1,478	1,026	396	56	69	1,280	911	322	47	51	198	115	74	9

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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
Auburn U.	70	1,462	787	622	53	90	1,009	498	467	44	15	453	289	155	9
U. Notre Dame	71	1,461	858	603	0	59	1,450	852	598	0	279	11	6	5	0
Louisiana State U.	72	1,436	1,061	290	85	66	1,290	965	254	71	76	146	96	36	14
Emory U.	73	1,421	1,108	234	79	67	1,284	1,105	100	79	82	137	3	134	0
Oregon State U.	74	1,402	942	377	83	73	1,269	864	334	71	85	133	78	43	12
Rice U.	75	1,400	847	553	0	61	1,397	845	552	0	326	3	2	1	0
California Institute of Technology	76	1,395	852	543	0	62	1,395	852	543	0	356	0	0	0	0
U. Iowa	77	1,392	1,057	202	133	77	1,210	932	172	106	57	182	125	30	27
U. Kansas	78	1,385	1,044	204	137	70	1,276	974	194	108	104	109	70	10	29
U. Central Florida	79	1,382	780	560	42	74	1,234	710	495	29	75	148	70	65	13
Clemson U.	80	1,380	781	558	41	75	1,231	684	513	34	73	149	97	45	7
U. Kentucky	81	1,341	968	232	141	72	1,273	935	224	114	149	68	33	8	27
U. Rochester	82	1,329	1,070	241	18	65	1,321	1,062	241	18	300	8	8	0	0
U. Cincinnati	83	1,312	745	380	187	84	1,086	668	277	141	45	226	77	103	46
George Washington U.	84	1,278	808	239	231	125	570	431	80	59	7	708	377	159	172
Brown U.	85	1,277	1,079	152	46	71	1,275	1,079	151	45	336	2	0	1	1
U. Texas, Dallas	86	1,265	767	477	21	80	1,151	707	425	19	99	114	60	52	2
U. Nebraska-Lincoln	87	1,220	924	296	0	86	1,066	807	259	0	70	154	117	37	0
U. California, Santa Cruz	88	1,217	1,155	62	0	78	1,195	1,136	59	0	242	22	19	3	0
Washington State U.	88	1,217	879	286	52	82	1,121	821	263	37	114	96	58	23	15
U. South Carolina	90	1,167	747	250	170	88	1,054	693	227	134	101	113	54	23	36
U. Oklahoma	91	1,163	873	241	49	89	1,011	773	202	36	71	152	100	39	13
Florida International U.	92	1,148	774	297	77	84	1,086	742	284	60	154	62	32	13	17
U. Missouri, Columbia	93	1,142	859	183	100	106	791	663	86	42	23	351	196	97	58
Case Western Reserve U.	94	1,131	693	355	83	83	1,090	671	345	74	185	41	22	10	9
SUNY, Binghamton U.	94	1,131	841	271	19	98	834	654	170	10	30	297	187	101	9
West Virginia U.	96	1,005	687	214	104	95	869	598	191	80	84	136	89	23	24
U. Texas Health Science Center, Houston	97	990	784	40	166	112	694	575	40	79	31	296	209	0	87
Georgia State U.	98	974	832	0	142	97	835	764	0	71	80	139	68	0	71
Wayne State U.	99	972	702	175	95	94	880	660	139	81	119	92	42	36	14
Virginia Commonwealth U.	99	972	494	149	329	96	846	436	134	276	90	126	58	15	53
Mississippi State U.	101	960	563	377	20	119	602	422	167	13	21	358	141	210	7
U. Alabama, Tuscaloosa	102	943	574	334	35	101	812	516	274	22	87	131	58	60	13
U. Alabama, Birmingham	103	940	745	113	82	104	797	677	76	44	77	143	68	37	38
Syracuse U.	104	925	743	170	12	99	831	669	150	12	116	94	74	20	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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. Miami	105	923	742	136	45	93	905	730	132	43	257	18	12	4	2
U. California, San Francisco	106	920	745	98	77	92	920	745	98	77	356	0	0	0	0
U. Hawaii, Manoa	107	918	779	111	28	103	799	676	104	19	96	119	103	7	9
U. Texas, Arlington	108	891	476	370	45	122	583	309	260	14	27	308	167	110	31
Drexel U.	109	882	507	314	61	105	792	453	284	55	122	90	54	30	6
Oklahoma State U.	110	881	666	215	0	114	671	506	165	0	49	210	160	50	0
U. North Texas, Denton	111	875	715	129	31	138	470	377	82	11	18	405	338	47	20
SUNY, U. Albany	112	861	792	25	44	152	390	361	16	13	14	471	431	9	31
U. Oregon	113	851	844	0	7	100	822	817	0	5	220	29	27	0	2
Temple U.	114	850	727	87	36	102	809	697	78	34	185	41	30	9	2
U. Nevada, Reno	115	846	584	240	22	107	782	538	224	20	150	64	46	16	2
Tufts U.	116	839	653	172	14	108	764	604	146	14	139	75	49	26	0
U. Arkansas, Fayetteville	117	828	534	293	1	140	443	309	134	0	20	385	225	159	1
Tulane U.	118	810	626	78	106	110	725	589	76	60	125	85	37	2	46
Kansas State U.	119	768	648	120	0	116	660	557	103	0	107	108	91	17	0
U. Wisconsin-Milwaukee	120	763	473	130	160	111	705	449	117	139	158	58	24	13	21
Dartmouth C.	121	728	575	142	11	109	728	575	142	11	356	0	0	0	0
Claremont Graduate U.	122	720	629	0	91	134	483	427	0	56	40	237	202	0	35
U. Maryland, Baltimore County	123	706	579	127	0	127	565	461	104	0	79	141	118	23	0
Baylor U.	124	702	593	83	26	113	683	575	82	26	253	19	18	1	0
U. Nevada, Las Vegas	124	702	554	86	62	130	526	432	65	29	59	176	122	21	33
Colorado School of Mines	126	699	219	480	0	118	610	197	413	0	123	89	22	67	0
Rensselaer Polytechnic Institute, Troy	127	642	246	396	0	117	634	246	388	0	300	8	0	8	0
Old Dominion U.	128	641	377	221	43	177	289	194	78	17	22	352	183	143	26
U. Louisville	129	630	464	136	30	128	556	413	126	17	140	74	51	10	13
U. Texas, San Antonio	130	627	396	225	6	142	434	284	148	2	53	193	112	77	4
U. Massachusetts, Boston	131	624	521	0	103	160	373	343	0	30	36	251	178	0	73
U. North Carolina, Charlotte	132	621	417	165	39	143	433	301	115	17	55	188	116	50	22
Lehigh U.	133	615	336	279	0	120	586	323	263	0	220	29	13	16	0
Kent State U.	134	602	529	12	61	124	576	515	11	50	230	26	14	1	11
U. Massachusetts, Lowell	135	590	260	266	64	146	429	202	191	36	66	161	58	75	28
North Dakota State U.	136	588	404	158	26	148	425	286	115	24	65	163	118	43	2
U. California, Merced	137	587	417	141	29	121	585	415	141	29	336	2	2	0	0
U. Texas, El Paso	138	586	349	204	33	159	375	235	121	19	48	211	114	83	14
Baylor C. of Medicine	139	583	581	0	2	122	583	581	0	2	356	0	0	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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	578	573	0	5	126	568	563	0	5	284	10	10	0	0
Florida Institute of Technology	141	552	354	198	0	129	529	342	187	0	237	23	12	11	0
Fielding Graduate U.	142	546	546	0	0	136	473	473	0	0	142	73	73	0	0
Utah State U.	142	546	403	143	0	200	201	139	62	0	24	345	264	81	0
U. Toledo	144	526	382	104	40	158	377	276	72	29	73	149	106	32	11
U. Mississippi	145	522	365	44	113	137	471	349	39	83	170	51	16	5	30
Missouri U. of Science and Technology	145	522	153	369	0	139	459	140	319	0	151	63	13	50	0
U. North Dakota	145	522	221	240	61	169	333	167	137	29	54	189	54	103	32
U. Memphis	148	515	361	113	41	176	291	211	65	15	46	224	150	48	26
Boston C.	149	509	487	0	22	132	498	480	0	18	279	11	7	0	4
Florida Atlantic U.	149	509	354	115	40	191	236	170	56	10	33	273	184	59	30
U. Texas Southwestern Medical Center	151	506	445	61	0	131	505	444	61	0	344	1	1	0	0
U. New Hampshire	152	499	393	106	0	133	487	383	104	0	273	12	10	2	0
U. Vermont	153	483	408	51	24	145	430	375	45	10	168	53	33	6	14
Worcester Polytechnic Institute	154	481	211	270	0	163	359	154	205	0	95	122	57	65	0
Brigham Young U.	155	478	322	154	2	214	171	127	43	1	28	307	195	111	1
San Diego State U.	156	475	315	62	98	135	475	315	62	98	356	0	0	0	0
Michigan Technological U.	157	472	233	239	0	154	388	201	187	0	129	84	32	52	0
New Mexico State U.	157	472	325	133	14	155	386	274	101	11	124	86	51	32	3
Stevens Institute of Technology	159	470	184	286	0	141	436	177	259	0	205	34	7	27	0
Howard U.	160	461	396	35	30	167	345	297	25	23	97	116	99	10	7
U. Wyoming	161	460	334	66	60	164	356	284	53	19	110	104	50	13	41
Texas Woman's U.	162	459	238	0	221	274	71	59	0	12	19	388	179	0	209
Saint Louis U.	163	456	348	27	81	144	432	333	23	76	235	24	15	4	5
Southern Illinois U., Carbondale	164	455	382	73	0	170	329	281	48	0	90	126	101	25	0
U. Nebraska, Medical Center	165	454	344	0	110	192	227	182	0	45	44	227	162	0	65
U. Rhode Island	166	448	316	75	57	153	389	284	63	42	157	59	32	12	15
Montana State U.	167	447	356	91	0	151	399	318	81	0	175	48	38	10	0
Brandeis U.	168	428	428	0	0	147	428	428	0	0	356	0	0	0	0
Ohio U.	169	426	297	101	28	164	356	267	68	21	145	70	30	33	7
U. Maine	170	425	345	80	0	149	414	335	79	0	279	11	10	1	0
New Jersey Institute of Technology	171	421	214	207	0	156	382	199	183	0	191	39	15	24	0
Palo Alto U.	172	412	412	0	0	150	400	400	0	0	273	12	12	0	0
Rochester Institute of Technology	172	412	264	148	0	161	365	238	127	0	176	47	26	21	0
Illinois Institute of Technology	174	407	248	159	0	156	382	230	152	0	232	25	18	7	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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. Idaho	175	406	312	94	0	172	314	255	59	0	119	92	57	35	0
U. North Carolina, Greensboro	176	395	236	0	159	212	174	127	0	47	47	221	109	0	112
Western Michigan U.	177	394	277	82	35	162	364	269	74	21	216	30	8	8	14
U. Southern Mississippi	178	391	247	71	73	179	286	173	66	47	109	105	74	5	26
Southern Methodist U.	179	384	282	102	0	168	342	256	86	0	183	42	26	16	0
Northern Illinois U.	180	379	310	10	59	196	210	196	6	8	63	169	114	4	51
Portland State U.	181	369	342	23	4	186	257	242	15	0	102	112	100	8	4
Oakland U.	182	368	155	185	28	194	213	114	82	17	68	155	41	103	11
Marquette U.	183	356	230	91	35	190	240	163	65	12	97	116	67	26	23
U. Massachusetts, Medical School	184	351	351	0	0	166	350	350	0	0	344	1	1	0	0
Oregon Health and Science U.	185	343	213	81	49	173	308	206	80	22	199	35	7	1	27
U. Akron	186	341	189	150	2	181	278	151	127	0	151	63	38	23	2
Scripps Research Institute	187	322	322	0	0	171	322	322	0	0	356	0	0	0	0
New School	188	318	318	0	0	178	287	287	0	0	209	31	31	0	0
Fordham U.	189	315	315	0	0	208	184	184	0	0	87	131	131	0	0
U. Puerto Rico, Rio Piedras	189	315	315	0	0	246	113	113	0	0	50	202	202	0	0
Columbia U., Teachers C.	191	312	295	0	17	183	269	255	0	14	182	43	40	0	3
North Carolina Agricultural and Technical State U.	192	311	112	199	0	213	172	68	104	0	80	139	44	95	0
U. Missouri, Kansas City	193	309	210	39	60	211	177	123	22	32	86	132	87	17	28
Medical C. Wisconsin	194	308	212	44	52	182	277	212	43	22	209	31	0	1	30
Albert Einstein C. of Medicine	195	307	298	0	9	174	307	298	0	9	356	0	0	0	0
Wake Forest U.	196	297	237	60	0	175	296	236	60	0	344	1	1	0	0
U. Louisiana, Lafayette	197	296	194	85	17	188	251	177	64	10	180	45	17	21	7
U. Montana	197	296	261	1	34	243	117	114	0	3	58	179	147	1	31
Morgan State U.	199	293	104	115	74	180	284	100	113	71	291	9	4	2	3
U. Alabama, Huntsville	200	292	131	144	17	215	169	100	66	3	94	123	31	78	14
Northern Arizona U.	201	291	279	12	0	189	244	232	12	0	176	47	47	0	0
U. Texas Health Science Center, San Antonio	201	291	202	9	80	195	212	197	9	6	133	79	5	0	74
U. South Dakota	203	283	153	10	120	205	187	125	5	57	114	96	28	5	63
Bowling Green State U.	204	282	280	0	2	197	209	207	0	2	142	73	73	0	0
Nova Southeastern U.	204	282	211	0	71	222	151	133	0	18	87	131	78	0	53
Boise State U.	206	281	188	93	0	199	202	126	76	0	133	79	62	17	0
Mayo Clinic, Mayo Graduate School	207	267	225	42	0	184	267	225	42	0	356	0	0	0	0
Icahn School of Medicine at Mt. Sinai	208	262	262	0	0	185	262	262	0	0	356	0	0	0	0
U. Texas Medical Branch	209	260	175	0	85	203	190	159	0	31	145	70	16	0	54

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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	255	255	0	0	187	255	255	0	0	356	0	0	0	0
U. Arkansas, Little Rock	211	254	231	23	0	223	150	137	13	0	110	104	94	10	0
U. Alaska, Fairbanks	212	246	233	13	0	259	91	86	5	0	68	155	147	8	0
Pontifical Catholic U. Puerto Rico	213	242	242	0	0	259	91	91	0	0	72	151	151	0	0
Loma Linda U.	214	236	133	0	103	238	127	87	0	40	104	109	46	0	63
Keiser U., Fort Lauderdale	215	225	225	0	0	225	149	149	0	0	137	76	76	0	0
U. Denver	216	224	200	24	0	200	201	186	15	0	237	23	14	9	0
Wichita State U.	216	224	88	130	6	263	87	42	42	3	82	137	46	88	3
U. Tennessee, Health Science Center	218	218	132	0	86	193	218	132	0	86	356	0	0	0	0
South Dakota State U.	218	218	160	48	10	218	157	113	35	9	155	61	47	13	1
A. T. Still U.	220	211	0	0	211	218	157	0	0	157	167	54	0	0	54
William and Mary	221	210	210	0	0	198	204	204	0	0	312	6	6	0	0
Cleveland State U.	221	210	119	91	0	217	159	89	70	0	170	51	30	21	0
Rowan U.	223	208	106	102	0	209	179	84	95	0	220	29	22	7	0
Duquesne U.	224	202	102	0	100	202	192	97	0	95	284	10	5	0	5
Dakota State U.	224	202	202	0	0	247	110	110	0	0	119	92	92	0	0
Texas State U.	226	200	157	43	0	221	153	120	33	0	176	47	37	10	0
Clarkson U.	227	198	82	116	0	205	187	79	108	0	279	11	3	8	0
American U.	227	198	198	0	0	207	186	186	0	0	273	12	12	0	0
Miami U.	229	196	196	0	0	203	190	190	0	0	312	6	6	0	0
Seton Hall U.	230	192	91	0	101	330	26	26	0	0	64	166	65	0	101
Andrews U.	231	188	48	0	140	235	130	45	0	85	158	58	3	0	55
Idaho State U.	232	185	99	46	40	249	105	64	15	26	132	80	35	31	14
Loyola U., Chicago	233	184	184	0	0	209	179	179	0	0	316	5	5	0	0
U. Tulsa	233	184	115	69	0	216	162	95	67	0	242	22	20	2	0
U. Northern Colorado	235	183	109	0	74	269	76	59	0	17	108	107	50	0	57
U. Missouri, Saint Louis	236	182	162	0	20	240	124	121	0	3	158	58	41	0	17
U. Massachusetts, Dartmouth	237	180	79	76	25	265	83	39	41	3	113	97	40	35	22
Long Island U.	238	179	154	0	25	276	70	62	0	8	104	109	92	0	17
U. Arkansas for Medical Sciences	239	178	88	0	90	244	115	74	0	41	151	63	14	0	49
U. South Alabama	240	177	130	35	12	228	135	105	21	9	183	42	25	14	3
East Tennessee State U.	241	169	81	0	88	245	114	61	0	53	164	55	20	0	35
Louisiana Tech U.	242	167	91	76	0	232	132	68	64	0	199	35	23	12	0
SUNY, C. of Environmental Science and Forestry	242	167	135	32	0	267	82	69	13	0	125	85	66	19	0
Marymount U.	244	165	165	0	0	264	86	86	0	0	133	79	79	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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
Uniformed Services U. of the Health Sciences	245	163	131	0	32	220	154	131	0	23	291	9	0	0	9
U. Puerto Rico, Mayaguez	246	162	55	107	0	223	150	51	99	0	273	12	4	8	0
Catholic U. of America	247	160	90	70	0	227	137	73	64	0	237	23	17	6	0
St. John's U., Queens	248	159	72	0	87	238	127	56	0	71	208	32	16	0	16
U. New Orleans	249	156	100	56	0	252	100	64	36	0	163	56	36	20	0
Medical U. South Carolina	250	152	121	0	31	232	132	120	0	12	249	20	1	0	19
U. Puerto Rico, Medical Sciences Campus	251	151	50	0	101	228	135	49	0	86	262	16	1	0	15
Embry-Riddle Aeronautical U.	252	150	15	135	0	226	140	15	125	0	284	10	0	10	0
Rush U.	252	150	66	0	84	251	104	64	0	40	179	46	2	0	44
Florida A&M U.	254	149	54	50	45	230	134	43	50	41	265	15	11	0	4
East Carolina U.	255	147	110	0	37	247	110	106	0	4	196	37	4	0	33
Tennessee Technological U.	256	145	25	120	0	323	31	2	29	0	99	114	23	91	0
Butler U.	257	143	0	0	143	345	18	0	0	18	92	125	0	0	125
Central Michigan U.	258	142	142	0	0	282	59	59	0	0	130	83	83	0	0
U. Bridgeport	258	142	0	24	118	350	17	0	11	6	92	125	0	13	112
DePaul U.	260	140	140	0	0	301	42	42	0	0	112	98	98	0	0
Wright State U.	261	139	67	72	0	252	100	56	44	0	191	39	11	28	0
U. Dayton	262	134	18	116	0	230	134	18	116	0	356	0	0	0	0
SUNY, Upstate Medical U.	263	133	133	0	0	232	132	132	0	0	344	1	1	0	0
CUNY, City C.	263	133	0	133	0	235	130	0	130	0	326	3	0	3	0
New Mexico Institute of Mining and Technology	263	133	79	54	0	249	105	67	38	0	226	28	12	16	0
Thomas Jefferson U.	266	129	129	0	0	237	129	129	0	0	356	0	0	0	0
Ball State U.	267	127	127	0	0	269	76	76	0	0	170	51	51	0	0
Air Force Institute of Technology	268	124	24	100	0	257	94	17	77	0	216	30	7	23	0
SUNY, Downstate Medical Center	269	123	47	6	70	285	54	45	6	3	147	69	2	0	67
Clark U.	270	121	121	0	0	242	118	118	0	0	326	3	3	0	0
Pardee RAND Graduate School	271	120	120	0	0	241	120	120	0	0	356	0	0	0	0
Barry U.	271	120	49	0	71	301	42	24	0	18	136	78	25	0	53
Massachusetts C. of Pharmacy and Health Sciences	273	115	12	0	103	319	33	12	0	21	131	82	0	0	82
U. Nebraska, Omaha	274	110	110	0	0	286	53	53	0	0	161	57	57	0	0
Pace U.	274	110	71	0	39	293	49	26	0	23	155	61	45	0	16
Augusta U.	276	109	92	0	17	252	100	88	0	12	291	9	4	0	5
Hofstra U.	276	109	109	0	0	255	97	97	0	0	273	12	12	0	0
Southern U. and A&M C.	278	108	104	0	4	286	53	51	0	2	164	55	53	0	2
Villanova U.	279	106	0	91	15	269	76	0	67	9	216	30	0	24	6

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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
Tennessee State U.	279	106	82	24	0	277	69	58	11	0	196	37	24	13	0
Seattle Pacific U.	281	102	102	0	0	281	61	61	0	0	185	41	41	0	0
U. Indianapolis	282	100	0	0	100	378	6	0	0	6	116	94	0	0	94
Memorial Sloan Kettering Cancer Center	283	97	97	0	0	255	97	97	0	0	356	0	0	0	0
U. Michigan, Flint	283	97	0	0	97	262	89	0	0	89	300	8	0	0	8
Yeshiva U.	285	95	95	0	0	279	65	65	0	0	216	30	30	0	0
U. North Texas, Health Science Center	286	94	83	0	11	257	94	83	0	11	356	0	0	0	0
Saint Joseph's U. ^c	286	94	71	0	23	291	50	42	0	8	181	44	29	0	15
City of Hope, Irell and Manella Graduate School of Biological Sciences	288	91	91	0	0	259	91	91	0	0	356	0	0	0	0
National Louis U.	289	88	88	0	0	283	57	57	0	0	209	31	31	0	0
Texas Christian U.	290	85	72	0	13	265	83	71	0	12	336	2	1	0	1
Middle Tennessee State U.	290	85	85	0	0	393	0	0	0	0	125	85	85	0	0
Illinois State U.	292	83	70	0	13	278	66	66	0	0	259	17	4	0	13
Texas A&M U.-Corpus Christi	293	79	79	0	0	273	72	72	0	0	307	7	7	0	0
South Dakota School of Mines and Technology	293	79	23	56	0	274	71	20	51	0	300	8	3	5	0
Jackson State U.	293	79	59	20	0	325	29	21	8	0	173	50	38	12	0
Naval Postgraduate School	296	77	38	39	0	268	77	38	39	0	356	0	0	0	0
Harrisburg U. of Science and Technology	297	76	76	0	0	272	73	73	0	0	326	3	3	0	0
Chapman U.	297	76	48	0	28	305	41	21	0	20	199	35	27	0	8
U. of the Pacific	299	74	29	0	45	342	19	14	0	5	164	55	15	0	40
Arkansas State U.	300	73	73	0	0	301	42	42	0	0	209	31	31	0	0
SUNY, Polytechnic Institute	300	73	7	66	0	313	38	6	32	0	199	35	1	34	0
Eastern Virginia Medical School	302	72	0	0	72	311	39	0	0	39	206	33	0	0	33
Kennesaw State U.	303	71	57	14	0	298	45	31	14	0	230	26	26	0	0
Santa Clara U.	304	66	0	66	0	324	30	0	30	0	198	36	0	36	0
U. Texas Rio Grande Valley	305	65	65	0	0	289	52	52	0	0	268	13	13	0	0
Lamar U.	305	65	0	65	0	316	34	0	34	0	209	31	0	31	0
Wesleyan U.	307	63	63	0	0	280	63	63	0	0	356	0	0	0	0
Mercer U.	308	62	0	0	62	286	53	0	0	53	291	9	0	0	9
Morehouse School of Medicine	309	61	43	0	18	283	57	41	0	16	322	4	2	0	2
Towson U.	310	59	59	0	0	308	40	40	0	0	253	19	19	0	0
Clark Atlanta U.	310	59	59	0	0	321	32	32	0	0	229	27	27	0	0
Endicott C.	310	59	45	0	14	340	20	20	0	0	191	39	25	0	14
Antioch U.	313	57	57	0	0	315	35	35	0	0	242	22	22	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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
Bowie State U.	314	54	54	0	0	335	23	23	0	0	209	31	31	0	0
U. Texas, Tyler	314	54	21	0	33	337	21	20	0	1	206	33	1	0	32
Marshall U.	316	53	53	0	0	290	51	51	0	0	336	2	2	0	0
Tuskegee U.	316	53	46	7	0	291	50	43	7	0	326	3	3	0	0
James Madison U.	318	52	52	0	0	301	42	42	0	0	284	10	10	0	0
Texas A&M U.-Kingsville	318	52	14	38	0	328	27	12	15	0	232	25	2	23	0
Delaware State U. ^d	320	51	51	0	0	296	46	46	0	0	316	5	5	0	0
Cold Spring Harbor Laboratory	321	49	49	0	0	293	49	49	0	0	356	0	0	0	0
Van Andel Institute	322	48	48	0	0	295	48	48	0	0	356	0	0	0	0
Azusa Pacific U.	322	48	0	0	48	311	39	0	0	39	291	9	0	0	9
Suffolk U.	322	48	48	0	0	328	27	27	0	0	247	21	21	0	0
Stephen F. Austin State U.	325	47	47	0	0	331	25	25	0	0	242	22	22	0	0
Albany Medical C.	326	46	46	0	0	296	46	46	0	0	356	0	0	0	0
Sam Houston State U.	326	46	46	0	0	335	23	23	0	0	237	23	23	0	0
Niagara U.	326	46	46	0	0	350	17	17	0	0	220	29	29	0	0
Sanford-Burnham Medical Research Institute	329	44	44	0	0	299	44	44	0	0	356	0	0	0	0
Gallaudet U.	329	44	35	0	9	333	24	21	0	3	249	20	14	0	6
U. Maryland, Eastern Shore	329	44	35	0	9	368	9	5	0	4	199	35	30	0	5
U. San Diego	329	44	0	0	44	381	5	0	0	5	191	39	0	0	39
U. del Turabo	333	43	43	0	0	300	43	43	0	0	356	0	0	0	0
Biola U.	333	43	43	0	0	308	40	40	0	0	326	3	3	0	0
Creighton U.	335	42	42	0	0	305	41	41	0	0	344	1	1	0	0
California State U., Los Angeles	336	41	0	0	41	305	41	0	0	41	356	0	0	0	0
Simmons U.	336	41	26	0	15	393	0	0	0	0	185	41	26	0	15
Toyota Technological Institute, Chicago	338	40	40	0	0	308	40	40	0	0	356	0	0	0	0
Widener U.	339	39	0	0	39	354	16	0	0	16	237	23	0	0	23
Molloy C.	339	39	0	0	39	393	0	0	0	0	191	39	0	0	39
U. Tennessee, Chattanooga	341	38	38	0	0	340	20	20	0	0	257	18	18	0	0
Cedars-Sinai Medical Center	342	37	37	0	0	314	37	37	0	0	356	0	0	0	0
Texas Southern U.	342	37	19	0	18	326	28	12	0	16	291	9	7	0	2
Western New England U.	344	36	35	1	0	370	8	7	1	0	226	28	28	0	0
U. North Carolina, Wilmington	345	35	35	0	0	316	34	34	0	0	344	1	1	0	0
U. Central Arkansas	345	35	26	0	9	345	18	18	0	0	259	17	8	0	9
Robert Morris U.	345	35	35	0	0	393	0	0	0	0	199	35	35	0	0
New York Medical C.	348	34	34	0	0	316	34	34	0	0	356	0	0	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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. West Georgia	348	34	34	0	0	355	15	15	0	0	253	19	19	0	0
Indiana U. Pennsylvania	348	34	34	0	0	357	14	14	0	0	249	20	20	0	0
Meharry Medical C.	351	33	33	0	0	319	33	33	0	0	356	0	0	0	0
Oklahoma State U., Center for Health Sciences	351	33	33	0	0	357	14	14	0	0	253	19	19	0	0
U. New Haven	353	32	0	6	26	321	32	0	6	26	356	0	0	0	0
Bryn Mawr C.	354	31	31	0	0	333	24	24	0	0	307	7	7	0	0
U. Louisiana, Monroe	355	30	7	0	23	331	25	6	0	19	316	5	1	0	4
Indiana State U.	356	29	29	0	0	342	19	19	0	0	284	10	10	0	0
Keck Graduate Institute	357	28	28	0	0	326	28	28	0	0	356	0	0	0	0
Norfolk State U.	358	26	26	0	0	337	21	21	0	0	316	5	5	0	0
Tarleton State U.	359	25	25	0	0	337	21	21	0	0	322	4	4	0	0
Montana Tech of U. Montana	360	24	14	10	0	363	11	5	6	0	268	13	9	4	0
U. of the District of Columbia	360	24	24	0	0	363	11	11	0	0	268	13	13	0	0
Polytechnic U. Puerto Rico	360	24	0	24	0	382	4	0	4	0	249	20	0	20	0
New Jersey City U.	360	24	24	0	0	393	0	0	0	0	235	24	24	0	0
Texas A&M U.-Commerce	364	23	23	0	0	377	7	7	0	0	262	16	16	0	0
Hampton U.	365	22	10	0	12	357	14	9	0	5	300	8	1	0	7
U. Alaska, Anchorage	365	22	22	0	0	361	12	12	0	0	284	10	10	0	0
Xavier U.	365	22	0	0	22	393	0	0	0	0	242	22	0	0	22
Drew U.	368	21	0	0	21	370	8	0	0	8	268	13	0	0	13
U. Dallas	369	20	20	0	0	345	18	18	0	0	336	2	2	0	0
Maharishi U. of Management	370	19	19	0	0	342	19	19	0	0	356	0	0	0	0
Springfield C.	370	19	0	0	19	345	18	0	0	18	344	1	0	0	1
American Museum of Natural History	372	18	18	0	0	345	18	18	0	0	356	0	0	0	0
New York Institute of Technology	373	17	3	6	8	350	17	3	6	8	356	0	0	0	0
U. Central del Caribe	373	17	17	0	0	350	17	17	0	0	356	0	0	0	0
Alabama State U.	373	17	17	0	0	370	8	8	0	0	291	9	9	0	0
Wilkes U.	373	17	0	0	17	393	0	0	0	0	259	17	0	0	17
Alfred U.	377	16	0	16	0	355	15	0	15	0	344	1	0	1	0
Lawrence Technological U.	377	16	0	16	0	390	1	0	1	0	265	15	0	15	0
U. Northern Iowa	379	15	15	0	0	361	12	12	0	0	326	3	3	0	0
North Carolina Central U.	379	15	15	0	0	365	10	10	0	0	316	5	5	0	0
Virginia State U.	379	15	15	0	0	370	8	8	0	0	307	7	7	0	0
SUNY, C. of Optometry	382	14	14	0	0	357	14	14	0	0	356	0	0	0	0
U. North Alabama	382	14	0	0	14	368	9	0	0	9	316	5	0	0	5

TABLE 5-4c

Institutional rankings for doctoral students: 2022

(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
Lipscomb U.	382	14	14	0	0	386	3	3	0	0	279	11	11	0	0
Clarion U. Pennsylvania ^e	382	14	14	0	0	393	0	0	0	0	267	14	14	0	0
Oklahoma City U.	386	13	0	0	13	365	10	0	0	10	326	3	0	0	3
Salus U.	386	13	13	0	0	365	10	10	0	0	326	3	3	0	0
West Texas A&M U.	388	12	12	0	0	370	8	8	0	0	322	4	4	0	0
Northeastern Ohio Universities, C. of Medicine	388	12	0	0	12	382	4	0	0	4	300	8	0	0	8
Coastal Carolina U.	390	11	11	0	0	390	1	1	0	0	284	10	10	0	0
Youngstown State U.	391	10	10	0	0	370	8	8	0	0	336	2	2	0	0
Elmezzzi Graduate School of Molecular Medicine	392	8	8	0	0	370	8	8	0	0	356	0	0	0	0
California State U., Long Beach	393	7	0	7	0	393	0	0	0	0	307	7	0	7	0
Angelo State U.	394	6	6	0	0	378	6	6	0	0	356	0	0	0	0
Lake Erie C. of Osteopathic Medicine	394	6	5	0	1	378	6	5	0	1	356	0	0	0	0
Inter American U. Puerto Rico, San German	394	6	6	0	0	393	0	0	0	0	312	6	6	0	0
Lincoln Memorial U.	397	5	5	0	0	386	3	3	0	0	336	2	2	0	0
Des Moines U., Osteopathic Medical Center	398	4	4	0	0	382	4	4	0	0	356	0	0	0	0
Northern Kentucky U.	398	4	0	0	4	382	4	0	0	4	356	0	0	0	0
U. of the Incarnate Word	398	4	4	0	0	386	3	3	0	0	344	1	1	0	0
Western Illinois U.	398	4	4	0	0	389	2	2	0	0	336	2	2	0	0
U. Hawaii, Hilo	398	4	0	0	4	390	1	0	0	1	326	3	0	0	3
Roosevelt U.	398	4	4	0	0	393	0	0	0	0	322	4	4	0	0
Kean U.	404	1	0	0	1	393	0	0	0	0	344	1	0	0	1

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

^b In 2022, Mills C. merged into Northeastern U.

^c In 2022, U. of the Sciences Philadelphia merged into Saint Joseph's U.

^d In 2022, Wesley C. merged into Delaware State U.

^e In 2022, Edinboro U. Pennsylvania merged into Clarion U. Pennsylvania.

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, 2022.

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
All institutions ^a	-	62,750	36,673	8,335	17,742
Harvard U.	1	5,174	1,819	183	3,172
Stanford U.	2	2,397	1,088	376	933
Johns Hopkins U.	3	1,740	686	126	928
U. Minnesota	4	1,475	776	145	554
U. California, Berkeley	5	1,464	1,146	288	30
Massachusetts Institute of Technology	6	1,358	712	646	0
Yale U.	7	1,316	744	83	489
U. Pennsylvania	8	1,234	699	111	424
U. California, San Diego	9	1,155	509	172	474
U. California, San Francisco	10	1,146	227	55	864
U. Michigan	11	1,097	527	208	362
Cornell U.	12	988	552	128	308
Columbia U. in the City of New York	13	978	369	118	491
Northwestern U.	14	961	564	130	267
Washington U., Saint Louis	15	942	384	49	509
U. California, Los Angeles	16	936	590	114	232
New York U.	17	816	576	22	218
Mayo Clinic, Mayo Graduate School	18	766	141	35	590
U. Washington	19	744	470	87	187
U. Pittsburgh	20	731	222	54	455
U. Wisconsin-Madison	21	728	436	105	187
U. Florida	22	725	442	67	216
U. North Carolina, Chapel Hill	23	714	408	9	297
U. Colorado	24	684	410	83	191
U. California, Davis	25	667	493	86	88
Princeton U.	26	645	485	160	0
U. Chicago	27	609	537	0	72
Duke U.	28	601	385	91	125
Michigan State U.	29	567	484	44	39
Ohio State U.	30	563	283	103	177
U. Texas Southwestern Medical Center	31	552	289	0	263
California Institute of Technology	32	551	426	125	0
Icahn School of Medicine at Mt. Sinai	33	534	534	0	0
Texas A&M U.	34	531	410	99	22
Emory U.	35	505	228	31	246
North Carolina State U.	36	495	249	148	98
U. Texas M. D. Anderson Cancer Center	37	494	91	0	403
Purdue U.	38	485	257	182	46
U. Texas, Austin	39	478	330	127	21
Baylor C. of Medicine	40	465	420	0	45
U. Southern California	41	455	216	60	179
U. Illinois, Urbana-Champaign	42	451	279	164	8
Indiana U.	43	439	267	6	166
Pennsylvania State U.	44	434	346	82	6
U. Maryland, College Park	45	419	325	90	4
Rutgers, State U. New Jersey	46	414	222	17	175
U. California, Irvine	47	412	262	83	67
U. Arizona	48	391	340	36	15
Vanderbilt U.	49	389	245	30	114
U. Virginia	50	348	237	41	70

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Boston U.	51	307	183	58	66
U. California, Santa Barbara	51	307	204	103	0
U. Iowa	53	305	128	31	146
U. Missouri, Columbia	54	303	155	22	126
Georgia Institute of Technology	55	301	123	177	1
SUNY, U. Buffalo	56	300	236	41	23
Brown U.	57	289	218	52	19
SUNY, Stony Brook U.	58	287	209	39	39
Arizona State U.	59	277	191	76	10
Iowa State U.	60	275	241	34	0
Scripps Research Institute	61	263	263	0	0
Florida International U.	62	262	191	54	17
Florida State U.	63	259	215	41	3
U. Georgia	63	259	229	11	19
U. Massachusetts, Medical School	65	256	256	0	0
Cedars-Sinai Medical Center	66	253	253	0	0
U. South Florida, Tampa	66	253	198	19	36
Virginia Polytechnic Institute and State U.	68	247	174	69	4
U. Miami	69	243	122	5	116
U. Alabama, Birmingham	70	234	88	8	138
U. Illinois, Chicago	71	233	100	21	112
Case Western Reserve U.	72	232	128	45	59
Oregon Health and Science U.	73	231	148	10	73
Carnegie Mellon U.	74	230	151	79	0
U. California, Riverside	74	230	193	35	2
Albert Einstein C. of Medicine	76	225	158	0	67
U. Utah	77	224	172	18	34
U. Cincinnati	78	223	70	14	139
U. Connecticut	79	222	162	28	32
U. Kentucky	80	221	178	22	21
Colorado State U., Fort Collins	81	214	181	18	15
U. Oklahoma	82	212	123	34	55
Rice U.	83	209	127	82	0
U. Texas Health Science Center, Houston	84	208	0	0	208
Oregon State U.	85	207	153	32	22
Northeastern U. ^b	86	204	104	41	59
Rockefeller U.	87	199	199	0	0
Dartmouth C.	88	196	158	34	4
Louisiana State U.	89	195	188	6	1
U. Rochester	90	178	114	14	50
City of Hope, Irell and Manella Graduate School of Biological Sciences	91	176	176	0	0
U. Massachusetts, Amherst	92	174	123	45	6
Virginia Commonwealth U.	92	174	83	18	73
U. Houston	94	173	104	54	15
U. Hawaii, Manoa	95	169	135	23	11
U. Nebraska-Lincoln	96	164	127	35	2
U. Texas Health Science Center, San Antonio	97	161	97	0	64
U. Kansas	98	158	85	14	59
Washington State U.	99	157	115	26	16
U. Delaware	100	154	83	69	2
Auburn U.	101	149	100	39	10

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Central Florida	101	149	58	90	1
Tufts U.	103	146	94	45	7
U. California, Santa Cruz	103	146	137	9	0
U. Notre Dame	105	144	86	58	0
U. Tennessee, Knoxville	106	138	84	53	1
Cold Spring Harbor Laboratory	107	137	137	0	0
Thomas Jefferson U.	108	136	68	0	68
Georgetown U.	109	128	127	0	1
Temple U.	110	126	90	4	32
Tulane U.	110	126	116	3	7
Rensselaer Polytechnic Institute, Troy	112	122	49	73	0
Medical C. Wisconsin	113	119	55	5	59
Woods Hole Oceanographic Institution	114	118	98	20	0
Medical U. South Carolina	115	115	59	0	56
U. South Carolina	115	115	63	39	13
Clemson U.	117	114	71	39	4
Wake Forest U.	117	114	52	14	48
Wayne State U.	117	114	80	10	24
U. Nebraska, Medical Center	120	106	40	0	66
U. Nevada, Reno	121	100	89	11	0
Brandeis U.	122	98	98	0	0
U. Texas Medical Branch	123	96	96	0	0
Augusta U.	124	93	61	0	32
Texas Tech U.	125	90	66	11	13
Kansas State U.	126	87	79	8	0
Georgia State U.	127	85	84	0	1
U. Idaho	127	85	77	8	0
New Jersey Institute of Technology	129	84	40	44	0
U. Tennessee, Health Science Center	130	82	41	0	41
U. Texas, San Antonio	130	82	64	15	3
U. Vermont	132	81	62	3	16
U. Arkansas, Fayetteville	133	80	54	26	0
U. New Mexico	134	79	54	14	11
Utah State U.	135	78	66	9	3
U. Oregon	136	76	74	0	2
U. Mississippi	137	75	40	6	29
Howard U.	138	74	24	6	44
Baylor U.	139	73	63	6	4
Syracuse U.	140	72	62	10	0
George Mason U.	141	71	55	16	0
U. Texas, Arlington	142	70	31	33	6
CUNY, City C.	143	69	40	29	0
U. Toledo	144	66	50	6	10
Boston C.	145	65	60	2	3
George Washington U.	145	65	38	14	13
Van Andel Institute	147	64	64	0	0
Drexel U.	148	63	34	21	8
Lehigh U.	149	62	22	40	0
U. Texas, Dallas	149	62	31	25	6
North Dakota State U.	151	61	46	9	6
Oklahoma State U.	152	58	47	11	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
SUNY, U. Albany	152	58	31	3	24
Sanford-Burnham Medical Research Institute	152	58	58	0	0
U. Alabama, Tuscaloosa	152	58	34	22	2
U. California, Merced	152	58	36	20	2
U. Texas, El Paso	157	56	32	16	8
U. Louisiana, Lafayette	158	55	30	14	11
Colorado School of Mines	159	54	8	46	0
U. New Hampshire	159	54	42	12	0
U. Louisville	161	53	23	0	30
U. North Texas, Denton	161	53	37	15	1
U. Wyoming	163	52	42	10	0
San Diego State U.	164	51	35	11	5
Florida Atlantic U.	165	50	39	10	1
U. Arkansas for Medical Sciences	165	50	36	7	7
Loyola U., Chicago	167	49	29	0	20
Old Dominion U.	168	48	41	7	0
U. Alaska, Fairbanks	168	48	47	0	1
Montana State U.	170	47	35	12	0
New Mexico State U.	170	47	37	10	0
U. Massachusetts, Lowell	170	47	23	21	3
U. Wisconsin-Milwaukee	173	46	38	8	0
Southern Methodist U.	174	45	34	11	0
U. Maine	175	43	30	13	0
U. Maryland, Baltimore County	175	43	40	3	0
Mississippi State U.	177	41	30	11	0
West Virginia U.	178	40	31	9	0
CUNY, Graduate Center	179	39	35	0	4
Saint Louis U.	179	39	39	0	0
Worcester Polytechnic Institute	179	39	23	16	0
Missouri U. of Science and Technology	182	37	6	31	0
U. Memphis	182	37	21	10	6
U. Nevada, Las Vegas	182	37	31	2	4
U. North Dakota	182	37	32	5	0
U. Rhode Island	186	36	29	1	6
Northern Arizona U.	187	35	31	3	1
U. Montana	187	35	31	0	4
American Museum of Natural History	189	33	33	0	0
Boise State U.	190	31	19	11	1
U. North Carolina, Charlotte	191	30	20	9	1
Catholic U. of America	192	28	26	2	0
SUNY, C. of Environmental Science and Forestry	193	27	24	3	0
SUNY, Upstate Medical U.	193	27	12	0	15
Albany Medical C.	195	26	26	0	0
Chapman U.	195	26	22	0	4
East Carolina U.	195	26	22	2	2
Michigan Technological U.	195	26	16	10	0
Morgan State U.	195	26	24	1	1
Rowan U.	195	26	15	10	1
Stevens Institute of Technology	195	26	3	23	0
Uniformed Services U. of the Health Sciences	195	26	18	0	8
William and Mary	195	26	26	0	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Texas, Tyler	204	25	20	0	5
Texas State U.	205	24	17	7	0
U. North Texas, Health Science Center	205	24	23	0	1
U. South Alabama	205	24	21	1	2
Marquette U.	208	23	10	9	4
Rush U.	208	23	11	1	11
U. North Carolina, Greensboro	208	23	21	1	1
Villanova U.	208	23	15	7	1
South Dakota State U.	212	22	16	3	3
U. Alabama, Huntsville	213	21	19	2	0
Creighton U.	214	19	16	0	3
Kent State U.	214	19	16	2	1
Saint Joseph's U. ^c	214	19	0	0	19
Northeastern Ohio Universities, C. of Medicine	217	18	15	0	3
U. Missouri, Kansas City	217	18	2	7	9
Loma Linda U.	219	17	5	0	12
Ohio U.	219	17	15	1	1
Embry-Riddle Aeronautical U.	221	16	0	16	0
Rochester Institute of Technology	221	16	11	5	0
Texas A&M U.-Corpus Christi	221	16	15	1	0
U. South Dakota	221	16	14	2	0
U. Southern Mississippi	221	16	13	3	0
U. Nebraska, Omaha	226	15	15	0	0
U. Puerto Rico, Medical Sciences Campus	226	15	12	0	3
Keck Graduate Institute	228	14	3	0	11
New York Medical C.	228	14	14	0	0
North Carolina Agricultural and Technical State U.	228	14	10	4	0
U. Texas Rio Grande Valley	228	14	11	2	1
Marshall U.	232	13	10	0	3
Northern Illinois U.	232	13	11	2	0
Nova Southeastern U.	232	13	6	0	7
U. Massachusetts, Boston	232	13	12	0	1
Meharry Medical C.	236	12	12	0	0
Oakland U.	236	12	7	0	5
Portland State U.	236	12	10	2	0
San Francisco State U.	236	12	10	1	1
Wesleyan U.	236	12	12	0	0
Charles R. Drew U. of Medicine and Science	241	11	11	0	0
SUNY, Binghamton U.	241	11	7	4	0
SUNY, Downstate Medical Center	241	11	8	0	3
U. Dayton	241	11	11	0	0
Clarkson U.	245	10	1	9	0
Naval Postgraduate School	245	10	3	7	0
U. Tulsa	245	10	2	8	0
Bowling Green State U.	248	9	9	0	0
Cleveland State U.	248	9	9	0	0
Louisiana Tech U.	248	9	3	6	0
Miami U.	248	9	9	0	0
SUNY, Polytechnic Institute	248	9	0	9	0
U. Massachusetts, Dartmouth	248	9	6	3	0
West Virginia State U.	248	9	9	0	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Western U. of Health Sciences	248	9	2	0	7
American U.	256	8	8	0	0
Kennesaw State U.	256	8	8	0	0
Morehouse School of Medicine	256	8	8	0	0
Tennessee State U.	256	8	7	1	0
Air Force Institute of Technology	260	7	3	4	0
Hampton U.	260	7	4	0	3
U. Akron	260	7	4	3	0
Western Michigan U.	260	7	3	4	0
Central Michigan U.	264	6	4	1	1
South Dakota School of Mines and Technology	264	6	2	4	0
Southern Illinois U., Carbondale	264	6	5	1	0
Tuskegee U.	264	6	5	1	0
U. Alaska, Anchorage	264	6	5	1	0
U. Denver	264	6	6	0	0
U. Puerto Rico, Rio Piedras	264	6	6	0	0
Western Washington U.	264	6	6	0	0
Illinois State U.	272	5	5	0	0
Midwestern U.	272	5	3	0	2
Texas Christian U.	272	5	5	0	0
U. Missouri, Saint Louis	272	5	5	0	0
Wichita State U.	272	5	4	1	0
Wright State U.	272	5	4	1	0
CUNY, Brooklyn C.	278	4	4	0	0
Clark U.	278	4	4	0	0
Florida Gulf Coast U.	278	4	4	0	0
Florida Institute of Technology	278	4	1	3	0
Tennessee Technological U.	278	4	2	2	0
Texas A&M U.-Kingsville	278	4	3	1	0
Texas A&M U., San Antonio	278	4	4	0	0
U. Central del Caribe	278	4	4	0	0
U. Guam	278	4	4	0	0
U. North Carolina, Wilmington	278	4	4	0	0
U. Puerto Rico, Mayaguez	278	4	0	4	0
U. of the Pacific	278	4	2	0	2
DePaul U.	290	3	3	0	0
Florida A&M U.	290	3	3	0	0
Loyola Marymount U.	290	3	3	0	0
Mercer U.	290	3	3	0	0
New School	290	3	3	0	0
Oklahoma State U., Center for Health Sciences	290	3	2	0	1
Smith C.	290	3	2	1	0
Trinity C., Hartford	290	3	3	0	0
U. Louisiana, Monroe	290	3	1	0	2
U. Maryland, Eastern Shore	290	3	3	0	0
U. New Orleans	290	3	3	0	0
U. San Diego	290	3	3	0	0
Alfred U.	302	2	0	2	0
Ball State U.	302	2	2	0	0
Colorado State U., Pueblo	302	2	2	0	0
East Tennessee State U.	302	2	2	0	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Idaho State U.	302	2	2	0	0
Montana Tech of U. Montana	302	2	2	0	0
Norfolk State U.	302	2	0	2	0
Southern U. and A&M C.	302	2	1	1	0
Texas A&M U.-Central Texas	302	2	2	0	0
Texas A&M U.-Commerce	302	2	2	0	0
Toyota Technological Institute, Chicago	302	2	2	0	0
U. Alaska, Southeast	302	2	2	0	0
A. T. Still U.	314	1	1	0	0
Arkansas State U.	314	1	1	0	0
CUNY, C. Staten Island	314	1	1	0	0
Canisius C.	314	1	1	0	0
Des Moines U., Osteopathic Medical Center	314	1	1	0	0
Hofstra U.	314	1	0	1	0
Lincoln U., Jefferson City	314	1	1	0	0
Murray State U.	314	1	1	0	0
New Mexico Institute of Mining and Technology	314	1	0	1	0
SUNY, C. of Optometry	314	1	1	0	0
Seton Hall U.	314	1	1	0	0
U. Arkansas, Little Rock	314	1	1	0	0
U. Arkansas, Pine Bluff	314	1	1	0	0
U. Dallas	314	1	1	0	0
U. New England	314	1	0	0	1
Williams C.	314	1	1	0	0
Winston-Salem State U.	314	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

^b In 2022, Mills C. merged into Northeastern U.

^c In 2022, U. of the Sciences Philadelphia merged into Saint Joseph's U.

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, 2022.

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
All institutions ^a	-	32,279	19,423	4,355	8,501
U. Wisconsin-Madison	1	1,197	652	80	465
U. California, Davis	2	1,114	775	209	130
Harvard U.	3	1,019	442	47	530
U. Minnesota	4	884	433	94	357
U. California, Los Angeles	5	867	437	58	372
U. Colorado	6	859	690	70	99
U. California, San Diego	7	830	324	107	399
Stanford U.	8	821	405	95	321
U. Illinois, Chicago	9	804	190	37	577
U. Washington	10	617	379	45	193
Indiana U.	11	566	365	0	201
U. California, Berkeley	12	531	423	68	40
Georgia Institute of Technology	13	521	136	385	0
Washington U., Saint Louis	14	519	218	13	288
U. Maryland, College Park	15	481	391	70	20
U. North Carolina, Chapel Hill	16	463	184	2	277
Columbia U. in the City of New York	17	445	245	82	118
Duke U.	18	436	254	53	129
U. Pennsylvania	19	428	220	4	204
U. Iowa	20	417	167	59	191
U. Texas, Austin	21	403	283	111	9
Ohio State U.	22	379	131	95	153
U. Arizona	23	375	292	30	53
Northwestern U.	24	363	139	32	192
Cornell U.	25	357	234	43	80
U. California, Irvine	26	356	171	36	149
North Carolina State U.	27	350	241	82	27
Princeton U.	28	343	272	71	0
U. Chicago	29	340	218	1	121
U. Michigan	30	333	158	56	119
U. Miami	31	312	171	4	137
Texas A&M U.	32	308	273	19	16
City of Hope, Irell and Manella Graduate School of Biological Sciences	33	286	286	0	0
California Institute of Technology	34	277	247	30	0
New York U.	35	269	120	6	143
U. Oregon	36	244	215	0	29
U. Alabama, Birmingham	37	242	96	9	137
Boston U.	38	239	112	70	57
Emory U.	39	238	84	13	141
U. Cincinnati	39	238	32	2	204
Virginia Polytechnic Institute and State U.	41	229	145	82	2
Arizona State U.	42	221	161	46	14
U. Oklahoma	43	213	190	19	4
U. South Florida, Tampa	43	213	154	20	39
Case Western Reserve U.	45	212	107	24	81
Oregon Health and Science U.	46	211	92	7	112
U. Kansas	47	209	115	11	83
U. California, Santa Barbara	48	208	168	40	0
Colorado State U., Fort Collins	49	204	170	27	7
U. Virginia	49	204	125	24	55

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Mayo Clinic, Mayo Graduate School	51	193	61	15	117
U. Louisiana, Lafayette	52	192	62	100	30
U. Maine	53	182	149	30	3
U. California, San Francisco	54	181	32	5	144
Georgetown U.	55	176	139	0	37
U. Illinois, Urbana-Champaign	55	176	128	42	6
U. California, Riverside	57	174	170	4	0
Brown U.	58	167	154	6	7
U. Maryland, Baltimore County	58	167	160	7	0
Rockefeller U.	60	166	166	0	0
U. Southern California	61	163	74	12	77
U. Nevada, Reno	62	161	122	20	19
U. Pittsburgh	63	159	58	12	89
West Virginia U.	64	158	98	18	42
Vanderbilt U.	65	154	73	12	69
Oregon State U.	66	149	127	17	5
Old Dominion U.	67	146	107	37	2
U. Missouri, Columbia	68	145	113	12	20
U. California, Santa Cruz	69	138	133	5	0
Catholic U. of America	70	132	129	3	0
U. Dayton	71	131	116	15	0
George Mason U.	72	129	85	32	12
Utah State U.	72	129	60	68	1
Massachusetts Institute of Technology	74	128	41	87	0
Iowa State U.	75	121	101	20	0
Rice U.	76	117	89	26	2
Montana State U.	77	116	93	23	0
Texas Tech U.	78	106	63	25	18
SUNY, Stony Brook U.	79	105	65	8	32
U. Texas, San Antonio	80	102	97	5	0
U. Louisville	81	99	26	15	58
U. Montana	82	98	66	0	32
U. Houston	83	97	64	19	14
U. Utah	84	96	67	19	10
Wayne State U.	84	96	61	3	32
Purdue U.	86	94	45	39	10
Scripps Research Institute	86	94	94	0	0
U. Rochester	88	93	50	6	37
Stevens Institute of Technology	89	92	6	86	0
Brandeis U.	90	86	86	0	0
George Washington U.	90	86	61	10	15
Morgan State U.	92	85	64	16	5
U. Hawaii, Manoa	92	85	82	3	0
Michigan Technological U.	94	83	28	55	0
U. Nebraska-Lincoln	95	82	72	10	0
Florida Atlantic U.	96	81	68	3	10
Tufts U.	96	81	72	7	2
Sanford-Burnham Medical Research Institute	98	78	78	0	0
Clemson U.	99	76	49	27	0
U. Tennessee, Knoxville	100	72	36	32	4
U. Toledo	101	70	42	9	19

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Wyoming	101	70	49	20	1
Auburn U.	103	68	47	20	1
U. Arkansas for Medical Sciences	103	68	65	2	1
U. Arkansas, Fayetteville	103	68	58	10	0
Michigan State U.	106	67	56	4	7
Medical C. Wisconsin	107	66	22	6	38
U. Alabama, Huntsville	107	66	48	18	0
Thomas Jefferson U.	109	64	38	0	26
U. Texas, Dallas	110	63	31	27	5
Van Andel Institute	111	62	62	0	0
Woods Hole Oceanographic Institution	112	61	43	18	0
U. New Hampshire	113	60	58	1	1
New Jersey Institute of Technology	114	59	35	24	0
SUNY, U. Albany	114	59	57	1	1
U. Texas Health Science Center, San Antonio	114	59	35	0	24
Northeastern U. ^b	117	55	34	18	3
U. Nevada, Las Vegas	117	55	33	6	16
Kansas State U.	119	52	49	3	0
Medical U. South Carolina	119	52	30	0	22
Oklahoma State U.	119	52	44	8	0
Rutgers, State U. New Jersey	119	52	47	5	0
San Diego State U.	123	50	31	4	15
U. Mississippi	123	50	5	12	33
U. Missouri, Kansas City	123	50	23	7	20
Louisiana State U.	126	48	37	8	3
North Dakota State U.	126	48	41	7	0
U. Memphis	126	48	38	4	6
U. North Dakota	129	47	10	36	1
Drexel U.	130	46	22	11	13
U. Texas, Arlington	130	46	12	31	3
Boston C.	132	45	41	0	4
U. Wisconsin-Milwaukee	132	45	32	7	6
U. Alabama, Tuscaloosa	134	44	40	4	0
Colorado School of Mines	135	43	7	36	0
New Mexico State U.	135	43	39	3	1
Ohio U.	137	42	25	12	5
U. Massachusetts, Amherst	137	42	34	8	0
Cold Spring Harbor Laboratory	139	41	41	0	0
Mercer U.	139	41	16	23	2
U. South Carolina	139	41	26	1	14
Carnegie Mellon U.	142	38	28	10	0
Augusta U.	143	37	25	0	12
SUNY, Polytechnic Institute	143	37	0	37	0
U. Idaho	143	37	35	2	0
Wake Forest U.	143	37	20	6	11
Claremont Graduate U.	147	35	34	0	1
Dartmouth C.	147	35	29	6	0
Florida International U.	147	35	21	10	4
Missouri U. of Science and Technology	147	35	13	22	0
U. California, Merced	147	35	18	16	1
Lehigh U.	152	34	16	18	0

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Georgia	152	34	33	1	0
Johns Hopkins U.	154	32	14	0	18
Kent State U.	154	32	26	2	4
Boise State U.	156	31	15	13	3
SUNY, U. Buffalo	156	31	20	3	8
Tulane U.	156	31	31	0	0
Florida State U.	159	29	29	0	0
Howard U.	159	29	19	1	9
U. Tennessee, Health Science Center	161	27	12	0	15
U. Delaware	162	26	22	4	0
Texas State U.	163	25	22	3	0
U. Central Florida	163	25	20	5	0
Air Force Institute of Technology	165	24	9	15	0
Baylor U.	166	23	18	4	1
CUNY, City C.	166	23	9	14	0
U. Texas, El Paso	166	23	15	5	3
Northern Illinois U.	169	21	21	0	0
Rensselaer Polytechnic Institute, Troy	170	20	10	10	0
Portland State U.	171	19	13	6	0
U. North Texas, Denton	171	19	16	3	0
William and Mary	171	19	19	0	0
Northern Arizona U.	174	18	16	0	2
U. Vermont	174	18	8	2	8
Pennsylvania State U.	176	17	12	4	1
U. Denver	176	17	16	1	0
U. Nebraska, Medical Center	176	17	1	0	16
U. North Carolina, Charlotte	176	17	15	2	0
U. Rhode Island	176	17	16	0	1
Florida A&M U.	181	16	5	1	10
South Dakota School of Mines and Technology	181	16	0	16	0
Southern Methodist U.	181	16	16	0	0
U. Massachusetts, Lowell	184	15	7	7	1
U. Texas Rio Grande Valley	184	15	12	3	0
Marquette U.	186	14	6	6	2
SUNY, C. of Environmental Science and Forestry	186	14	13	1	0
U. Puerto Rico, Rio Piedras	186	14	14	0	0
Albert Einstein C. of Medicine	189	13	5	0	8
Chapman U.	189	13	11	0	2
Miami U.	189	13	13	0	0
Nova Southeastern U.	189	13	10	0	3
San Francisco State U.	189	13	13	0	0
Texas A&M U.-Corpus Christi	189	13	13	0	0
U. Alaska, Fairbanks	189	13	13	0	0
U. New Mexico	189	13	12	1	0
Worcester Polytechnic Institute	189	13	6	7	0
Wright State U.	189	13	9	4	0
Embry-Riddle Aeronautical U.	199	12	0	12	0
Wichita State U.	199	12	4	8	0
South Dakota State U.	201	11	8	1	2
Syracuse U.	201	11	10	1	0
California State U., Long Beach	203	10	3	7	0

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Charles R. Drew U. of Medicine and Science	203	10	10	0	0
Keck Graduate Institute	203	10	7	0	3
Rochester Institute of Technology	203	10	7	3	0
Rowan U.	203	10	8	2	0
Tennessee State U.	203	10	10	0	0
U. Massachusetts, Dartmouth	203	10	10	0	0
U. Southern Mississippi	203	10	9	1	0
Texas Christian U.	211	9	9	0	0
Albany C. of Pharmacy and Health Sciences	212	8	0	0	8
Florida Institute of Technology	212	8	5	3	0
Midwestern U.	212	8	5	0	3
SUNY, C. of Optometry	212	8	8	0	0
Clark U.	216	7	7	0	0
Mississippi State U.	216	7	5	2	0
Texas Southern U.	216	7	1	0	6
U. Akron	216	7	4	3	0
U. South Alabama	216	7	7	0	0
Clarkson U.	221	6	1	5	0
Marshall U.	221	6	3	2	1
Morehouse School of Medicine	221	6	6	0	0
U. North Carolina, Greensboro	221	6	6	0	0
U. Puerto Rico, Medical Sciences Campus	221	6	6	0	0
Louisiana Tech U.	226	5	2	3	0
SUNY, Binghamton U.	226	5	5	0	0
U. South Dakota	226	5	4	1	0
California State U., Fullerton	229	4	1	2	1
Southern U. and A&M C.	229	4	4	0	0
Texas A&M U.-Kingsville	229	4	4	0	0
U. North Carolina, Wilmington	229	4	4	0	0
U. Tulsa	229	4	1	3	0
West Virginia State U.	229	4	4	0	0
Ball State U.	235	3	3	0	0
California State U., Monterey Bay	235	3	3	0	0
Creighton U.	235	3	3	0	0
Kennesaw State U.	235	3	3	0	0
New Mexico Institute of Mining and Technology	235	3	0	3	0
Smith C.	235	3	3	0	0
Southern Illinois U., Carbondale	235	3	3	0	0
Tuskegee U.	235	3	3	0	0
U. Connecticut	235	3	3	0	0
U. Kentucky	235	3	0	0	3
Western Michigan U.	235	3	2	1	0
Western Washington U.	235	3	3	0	0
Alfred U.	247	2	0	2	0
Christopher Newport U.	247	2	2	0	0
Colorado State U., Pueblo	247	2	2	0	0
Lincoln U., Jefferson City	247	2	2	0	0
Montana Tech of U. Montana	247	2	2	0	0
Tennessee Technological U.	247	2	2	0	0
Texas A&M U.-Central Texas	247	2	2	0	0
Trinity C., Hartford	247	2	2	0	0

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2022

(Number)

Institution	Rank	Total	Science	Engineering	Health
Virginia Commonwealth U.	247	2	2	0	0
Cleveland State U.	256	1	1	0	0
CUNY, C. Staten Island	256	1	1	0	0
Grand Valley State U.	256	1	0	1	0
Hampton U.	256	1	1	0	0
Idaho State U.	256	1	1	0	0
Monmouth U.	256	1	1	0	0
New Mexico Highlands U.	256	1	1	0	0
Northeastern Ohio Universities, C. of Medicine	256	1	0	0	1
U. Alaska, Anchorage	256	1	1	0	0
U. Maryland, Eastern Shore	256	1	0	0	1
U. Missouri, Saint Louis	256	1	1	0	0
U. North Texas, Health Science Center	256	1	0	0	1
Western U. of Health Sciences	256	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

^b In 2022, Mills C. merged into Northeastern U.

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, 2022.

Technical Notes

Survey Overview (2022 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 National Science Foundation (NSF) 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 31 August 2023.

Survey contractor. RTI International.

Survey sponsors. NCSES and NIH.

Key Survey Information

Frequency. Annual.

Initial survey year. 1966.

Reference period. Fall 2022.

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 22,519 organizational units at 690 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 2022, the survey universe included 690 institutions with 775 schools and 22,519 organizational units. There were 502 schools and 20,698 units within 417 institutions awarding master's or doctoral degrees and 273 schools and 1,821 units within 273 institutions that only award 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 2022 included 22,519 units at 690 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 2022, the GSS received complete responses from 19,112 of the 22,519 eligible organizational units (84.9%). An additional 3,115 organizational units (13.8%) were partial respondents. The remaining 292 organizational units (1.3%) were nonrespondents.
- *School response.* Of the 775 eligible schools, 742 schools (95.7%) were complete respondents, 4 schools (0.5%) were partial respondents, and 29 schools (3.7%) were nonrespondents.
- *Institutional response.* Institutional response rates were calculated using the same criteria for schools. Of the 690 eligible institutions, 660 institutions (95.7%) were complete respondents, 1 institution (0.1%) was a partial respondent, and 29 institutions (4.2%) 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 only contain 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 auto filled 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 2022 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 1.23% to 5.74%. 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 2022 CIP codes and the GSS codes are provided in 17 technical tables for the 2022 GSS, which include three tables with information on the taxonomy change.

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 2022, 98.7% of units provided complete or partial data and the overall institutional response rate was 95.8%. Of the 543 data items collected in the GSS, the item imputation rates ranged from 1.23% to 5.74%. 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. Nonresponse rates for source and mechanism of support items typically range between 1% to 7% for graduate students and 4% to 5% for postdocs.

- *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. The percentage of coordinators that select this option is generally less than 2% for postdoc data and 3% for NFR data since the option was added in 2018.

Data Comparability

Changes in survey coverage and population.

- *Eligibility and fields of study.*

2020: Starting in 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 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). The 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 2022, seven institutions became ineligible for the GSS. The 2022 survey cycle also saw four institutions merge into a single institution, combining a Health Science Center campus with that of the university's main campus. In addition, 12 institutions changed GSS degree-granting status: 2 from doctorate-granting to master's-granting institutions, and 10 from master's-granting to doctorate-granting institutions. As a result, the total number of institutions included in the GSS decreased from 699 in 2021 to 690 in 2022 (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 whom 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 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 that 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 other U.S. sources, such as support from 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.

Note

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 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

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Table Title

[A-17](#) Mapping of 2022 GSS codes and fields

TABLE A-1

Changes in the organizational unit listing: 2020–22

(Number)

Activity	2020 ^a	2021	2022
Units at start of data collection	20,249	21,156	21,365
Units added	6,328	4,012	4,512
Units deleted	5,421	3,803	3,358
Units at end of data collection	21,156	21,365	22,519
Net difference	907	209	1,154

^a In 2020, the Survey of Graduate Students and Postdoctorates in Science and Engineering taxonomy was revised to reflect changes in the Classification of Instructional Programs 2020 and to improve the level of detail in several fields.

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: 2021–22

(Number and detail)

Institution status
New institutions (2)
Louisiana State U., Shreveport
U. Alaska, Southeast
Became ineligible for the survey (7)
Caldwell U.
Coppin State U.
Longwood U.
Missouri Western State U.
Pacific States U.
Tougaloo C.
U. Wisconsin-Stout
Merged institutions (4)
Edinboro U. Pennsylvania merged into Clarion U. Pennsylvania
Mills C. merged into Northeastern U.
U. of the Sciences Philadelphia merged into Saint Joseph's U.
Wesley C. merged into Delaware State U.
Changed from a doctorate-granting to master's-granting institution (4) ^a
California Institute of Integral Studies
East Stroudsburg U. Pennsylvania
Rivier U.
Sage Colleges
Changed from a master's-granting to doctorate-granting institution (7) ^a
Angelo State U.
Clarion U. Pennsylvania
Eastern Virginia Medical School
Kean U.
Northern Kentucky U.
Saint Joseph's U.
U. Northern Iowa

^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.

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2022

(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
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

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2022

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
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
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
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

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2022

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
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
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
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
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

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2022

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
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

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 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.

^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: 2020–22

(Number)

Field	2020			2021			2022		
	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 ^a	13,659	10,704	7,205	13,928	10,864	7,346	14,354	11,148	7,545
Science	9,720	7,364	5,161	9,898	7,467	5,256	10,192	7,666	5,393
Agricultural and veterinary sciences	333	299	212	331	297	211	352	308	223
Agricultural sciences	300	275	187	298	271	187	318	283	201
Veterinary biomedical and clinical sciences ^b	33	24	25	33	26	24	34	25	22
Biological and biomedical sciences	2,632	1,591	1,814	2,694	1,604	1,860	2,776	1,696	1,890
Biochemistry	180	87	150	183	85	153	187	90	158
Biology	382	336	162	383	338	157	389	341	158
Biomedical sciences	174	119	100	175	112	106	185	130	107
Biophysics	39	6	39	42	6	41	38	6	38
Biostatistics and bioinformatics	194	139	120	196	146	123	204	153	126
Biotechnology	85	80	7	85	78	9	88	82	8
Botany and plant biology	68	55	58	61	51	55	65	55	57
Cell, cellular biology, and anatomical sciences	186	76	154	199	81	161	195	92	157
Ecology and population biology	108	74	78	109	73	80	113	74	80
Epidemiology	86	61	63	88	61	65	101	69	70
Genetics	93	49	71	93	46	72	99	50	76
Microbiological sciences and immunology	172	82	143	180	84	149	184	88	150
Molecular biology	54	20	41	54	21	40	53	22	39
Neurobiology and neuroscience	169	42	153	175	41	159	187	47	167
Nutrition science	103	87	56	112	97	55	116	100	58
Pathology and experimental pathology	43	12	37	45	16	39	40	13	34
Pharmacology and toxicology	135	56	117	141	57	122	147	61	129
Physiology	192	107	137	202	107	146	206	111	148
Zoology and animal biology	72	59	64	70	59	60	79	65	66
Biological and biomedical sciences nec	97	44	64	101	45	68	100	47	64
Computer and information sciences	976	899	275	1,023	945	288	1,075	982	308
Artificial intelligence, informatics, and computer and information science topics	78	69	18	84	77	20	92	81	21
Computer and information sciences	209	180	81	215	185	86	213	178	91
Computer and information systems security	123	121	6	142	140	7	160	157	8
Computer science	268	252	116	273	254	125	291	266	137

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2020–22

(Number)

Field	2020			2021			2022		
	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
Information science and studies	129	118	31	127	117	29	131	120	31
Information technology	84	81	10	90	86	11	98	94	11
Computer and information sciences nec	85	78	13	92	86	10	90	86	9
Geosciences, atmospheric sciences, and ocean sciences	396	338	267	391	331	267	396	335	266
Atmospheric sciences and meteorology	51	43	43	51	41	42	59	48	46
Geological and earth sciences	260	225	166	258	223	166	260	224	163
Ocean and marine sciences	85	70	58	82	67	59	77	63	57
Mathematics and statistics	710	614	331	724	628	335	748	644	345
Applied mathematics	200	162	79	212	176	80	218	183	80
Mathematics	318	278	163	313	270	165	323	275	171
Statistics	192	174	89	199	182	90	207	186	94
Multidisciplinary and interdisciplinary sciences ^c	354	279	124	396	311	136	439	354	145
Biological and physical sciences	37	31	15	34	26	16	38	29	17
Computational science	47	37	15	50	41	17	56	48	15
Data science and data analytics	35	34	2	50	49	2	70	69	5
International and global studies	30	27	7	34	29	9	33	30	8
Multidisciplinary and interdisciplinary sciences nec	205	150	85	228	166	92	242	178	100
Natural resources and conservation	354	302	152	362	316	154	381	320	168
Environmental science and studies	199	163	70	207	179	70	218	177	81
Forestry, natural resources, and conservation	155	139	82	155	137	84	163	143	87
Physical sciences	783	572	545	779	570	544	806	577	565
Astronomy and astrophysics	58	15	51	58	15	51	61	15	54
Chemistry	354	284	224	355	287	228	356	292	229
Materials sciences	59	37	47	54	37	41	63	36	48
Physics	284	215	210	282	209	211	298	216	219
Physical sciences nec	28	21	13	30	22	13	28	18	15
Psychology	1,143	827	503	1,141	818	509	1,158	828	518
Applied psychology	391	330	141	399	337	143	416	352	148
Clinical psychology	126	65	71	122	61	67	123	63	66
Counseling psychology	130	97	44	127	94	48	121	90	47
Human development ^d	71	63	27	72	61	29	70	60	27
Psychology, general	274	204	117	267	199	110	264	197	109

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2020–22

(Number)

Field	2020			2021			2022		
	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
Research and experimental psychology	151	68	103	154	66	112	164	66	121
Social sciences	2,039	1,643	938	2,057	1,647	952	2,061	1,622	965
Agricultural and natural resource economics	42	36	20	40	36	17	37	32	16
Anthropology	173	134	103	175	127	108	178	128	111
Area, ethnic, cultural, gender, and group studies	311	249	121	309	246	116	292	227	116
Criminal justice and safety studies	112	108	21	115	110	22	119	114	23
Criminology	42	39	14	43	41	13	46	43	14
Economics (except agricultural and natural resource)	268	211	146	276	219	157	295	229	164
Geography and cartography	169	162	69	173	166	69	164	157	65
International relations and national security studies	98	94	13	104	98	16	100	96	12
Linguistics	104	74	63	106	77	63	107	77	64
Political science and government	211	161	127	210	166	125	213	158	131
Public policy analysis	148	112	60	141	106	58	148	112	60
Sociology	230	162	127	228	154	129	224	148	127
Urban studies and affairs	37	30	14	38	29	15	39	30	15
Social sciences, other ^e	94	71	40	99	72	44	99	71	47
Engineering ^f	2,459	2,188	1,416	2,479	2,204	1,437	2,545	2,250	1,455
Aerospace, aeronautical, and astronautical engineering	69	65	51	72	70	51	73	71	52
Biological, biomedical, and biosystems engineering ^e	220	186	155	228	191	163	234	193	167
Chemical, petroleum, and chemical-related engineering	189	169	144	193	174	144	202	182	147
Chemical engineering	163	145	128	169	152	128	174	157	130
Petroleum engineering	26	24	16	24	22	16	28	25	17
Civil, environmental, transportation and related engineering fields	379	350	203	367	336	205	388	357	209
Civil engineering	249	233	151	239	223	146	249	233	148
Architectural, environmental, construction and surveying engineering	130	117	52	128	113	59	139	124	61
Electrical, electronics, communications and computer engineering	466	434	242	469	433	242	481	441	247

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2020–22

(Number)

Field	2020			2021			2022		
	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
Electrical, electronics, and communications engineering	287	265	172	290	265	174	299	272	178
Computer engineering	179	169	70	179	168	68	182	169	69
Industrial, manufacturing, systems engineering and operations research	243	222	110	248	225	115	241	224	107
Industrial and manufacturing engineering	134	129	61	129	125	60	125	121	61
Systems engineering and operations research	109	93	49	119	100	55	116	103	46
Mechanical engineering	284	263	169	298	279	174	301	279	178
Metallurgical, mining, materials and related engineering fields ^e	152	133	109	154	133	114	147	127	106
Other engineering	457	366	233	450	363	229	478	376	242
Agricultural engineering	32	29	27	31	29	26	34	31	27
Engineering mechanics, physics, and science	72	51	45	68	47	45	68	46	47
Nuclear engineering	33	31	30	32	30	28	29	27	26
Engineering, other ^e	320	255	131	319	257	130	347	272	142
Health	1,480	1,152	628	1,551	1,193	653	1,617	1,232	697
Clinical medicine	538	473	195	585	500	211	600	513	218
Medical clinical sciences and clinical and medical laboratory sciences	62	50	23	80	61	29	75	56	30
Public health	476	423	172	505	439	182	525	457	188
Other health	942	679	433	966	693	442	1,017	719	479
Communication disorders sciences	249	228	68	250	234	67	259	240	72
Dental sciences	87	79	19	90	78	21	97	84	23
Kinesiology and exercise science	159	151	42	170	158	46	176	162	47
Nursing science	137	22	121	140	24	125	149	24	136
Pharmaceutical sciences	127	83	95	127	83	94	135	88	101
Other health nec	183	116	88	189	116	89	201	121	100

nec = not elsewhere classified.

^a Several field names changed in 2020; the field names listed in this table are the field names used in the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) collection and reporting for 2020. For a complete list of field names used from 2017 to 2020, see <https://nces.nsf.gov/pubs/nsf21318/table/A-17>.

^b In 2020, veterinary biomedical and clinical sciences moved from other health to agriculture and veterinary sciences.

^c Prior to 2020, multidisciplinary and interdisciplinary studies was reported as a single broad field with no detailed fields; the detailed fields were added in 2020.

^d In 2020, human development moved from social sciences to psychology.

^e Starting in 2020, some fields were combined for reporting. See [technical table A-17](#) for more information.

^f In 2020, broad fields were added to engineering.

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: 2020–22

(Number)

Field	2020	2021	2022
All surveyed fields ^a	5,671	5,690	6,204
Science	3,258	3,326	3,638
Agricultural and veterinary sciences	236	241	274
Agricultural sciences	169	169	195
Veterinary biomedical and clinical sciences ^b	67	72	79
Biological and biomedical sciences	1,271	1,284	1,329
Biochemistry	118	118	122
Biology	139	147	151
Biomedical sciences	33	51	56
Biophysics	13	9	13
Biostatistics and bioinformatics	64	59	71
Biotechnology	14	14	18
Botany and plant biology	31	29	35
Cell, cellular biology, and anatomical sciences	83	79	82
Ecology and population biology	42	53	48
Epidemiology	28	26	26
Genetics	80	76	80
Microbiological sciences and immunology	122	107	112
Molecular biology	30	32	32
Neurobiology and neuroscience	101	96	98
Nutrition science	25	41	24
Pathology and experimental pathology	46	39	46
Pharmacology and toxicology	73	69	64
Physiology	116	106	117
Zoology and animal biology	37	31	34
Biological and biomedical sciences nec	76	102	100
Computer and information sciences	138	137	167
Artificial intelligence, informatics, and computer and information science topics	18	15	17
Computer and information sciences	28	29	38
Computer and information systems security	1	4	6
Computer science	57	54	61
Information science and studies	10	9	14
Information technology	4	4	2
Computer and information sciences nec	20	22	29
Geosciences, atmospheric sciences, and ocean sciences	219	235	241
Atmospheric sciences and meteorology	43	42	40
Geological and earth sciences	117	124	122
Ocean and marine sciences	43	50	56
Geosciences, atmospheric sciences, and ocean sciences nec	16	19	23
Mathematics and statistics	68	72	81
Applied mathematics	13	16	19
Mathematics	28	31	37
Statistics	27	25	25
Multidisciplinary and interdisciplinary sciences ^c	151	178	218
Biological and physical sciences	13	12	14
Computational science	6	7	6
Data science and data analytics	10	8	14
International and global studies	10	7	8
Multidisciplinary and interdisciplinary sciences nec	112	144	176
Natural resources and conservation	126	135	152
Environmental science and studies	44	48	57

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2020–22

(Number)

Field	2020	2021	2022
Forestry, natural resources, and conservation	82	87	95
Physical sciences	420	410	449
Astronomy and astrophysics	55	53	58
Chemistry	164	161	174
Materials sciences	24	20	25
Physics	155	156	167
Physical sciences nec	22	20	25
Psychology	167	172	210
Applied psychology	21	25	29
Clinical psychology	7	7	6
Counseling psychology	5	6	6
Human development ^d	32	29	53
Psychology, general	77	75	88
Research and experimental psychology	25	30	28
Social sciences	462	462	517
Agricultural and natural resource economics	18	15	15
Anthropology	39	39	40
Area, ethnic, cultural, gender, and group studies	57	47	52
Criminal justice and safety studies	8	7	10
Criminology	3	4	5
Economics (except agricultural and natural resource)	48	48	47
Geography and cartography	32	30	22
International relations and national security studies	11	19	18
Linguistics	14	13	16
Political science and government	27	24	31
Public policy analysis	73	72	89
Sociology	47	49	56
Urban studies and affairs	8	10	17
Social sciences, other ^e	77	85	99
Engineering ^f	851	829	928
Aerospace, aeronautical, and astronautical engineering	29	28	36
Biological, biomedical, and biosystems engineering ^e	102	102	124
Chemical, petroleum, and chemical-related engineering	86	81	97
Chemical engineering	75	70	87
Petroleum engineering	11	11	10
Civil, environmental, transportation and related engineering fields	127	123	134
Civil engineering	112	108	119
Architectural, environmental, construction and surveying engineering	15	15	15
Electrical, electronics, communications and computer engineering	139	137	140
Electrical, electronics, and communications engineering	127	125	129
Computer engineering	12	12	11
Industrial, manufacturing, systems engineering and operations research	43	38	49
Industrial and manufacturing engineering	22	23	31
Systems engineering and operations research	21	15	18
Mechanical engineering	99	102	110
Metallurgical, mining, materials and related engineering fields ^e	64	59	62
Other engineering	162	159	176
Agricultural engineering	15	16	16
Engineering mechanics, physics, and science	20	20	27
Nuclear engineering	11	8	11

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2020–22

(Number)

Field	2020	2021	2022
Engineering, other ^e	116	115	122
Health	1,562	1,535	1,638
Clinical medicine	1,268	1,268	1,332
Anesthesiology	38	30	33
Cardiology	34	35	35
Endocrinology	29	27	28
Gastroenterology	20	27	25
Hematology	27	25	24
Medical clinical sciences and clinical and medical laboratory sciences	55	45	44
Neurology	75	82	87
Obstetrics and gynecology	33	35	39
Oncology and cancer research	65	56	65
Ophthalmology	46	40	41
Otorhinolaryngology	28	29	29
Pediatrics	96	89	104
Psychiatry	51	49	54
Public health	137	141	164
Pulmonary disease	28	26	28
Radiological sciences	70	63	86
Surgery	127	133	141
Clinical medicine nec	309	336	305
Other health	294	267	306
Communication disorders sciences	24	24	30
Dental sciences	35	31	42
Kinesiology and exercise science	20	11	17
Nursing science	38	36	52
Pharmaceutical sciences	83	75	78
Other health nec	94	90	87

nec = not elsewhere classified.

^a Several field names changed in 2020; the field names listed in this table are the field names used in the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) collection and reporting for 2020. For a complete list of field names used from 2017 to 2020, see <https://nces.nsf.gov/pubs/nsf21318/table/A-17>.

^b In 2020, veterinary biomedical and clinical sciences moved from other health to agriculture and veterinary sciences.

^c Prior to 2020, multidisciplinary and interdisciplinary studies was reported as a single broad field with no detailed fields; the detailed fields were added in 2020.

^d In 2020, human development moved from social sciences to psychology.

^e Starting in 2020, some fields were combined for reporting. See [technical table A-17](#) for more information.

^f In 2020, broad fields were added to engineering.

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 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.

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2020–22

(Number)

Field	2020	2021	2022
All surveyed fields ^a	7,613	7,624	7,962
Science	4,399	4,457	4,677
Agricultural and veterinary sciences	259	276	337
Agricultural sciences	179	198	220
Veterinary biomedical and clinical sciences ^b	80	78	117
Biological and biomedical sciences	1,796	1,808	1,800
Biochemistry	140	139	138
Biology	186	188	204
Biomedical sciences	71	116	70
Biophysics	19	19	12
Biostatistics and bioinformatics	89	77	87
Biotechnology	20	18	23
Botany and plant biology	48	44	48
Cell, cellular biology, and anatomical sciences	116	118	125
Ecology and population biology	53	57	61
Epidemiology	40	43	51
Genetics	100	105	97
Microbiological sciences and immunology	156	161	173
Molecular biology	50	48	40
Neurobiology and neuroscience	146	137	140
Nutrition science	42	32	36
Pathology and experimental pathology	80	69	69
Pharmacology and toxicology	100	96	97
Physiology	188	172	174
Zoology and animal biology	46	49	43
Biological and biomedical sciences nec	106	120	112
Computer and information sciences	169	196	192
Artificial intelligence, informatics, and computer and information science topics	16	17	19
Computer and information sciences	47	49	47
Computer and information systems security	3	4	5
Computer science	76	88	83
Information science and studies	10	13	18
Information technology	5	3	3
Computer and information sciences nec	12	22	17
Geosciences, atmospheric sciences, and ocean sciences	258	256	270
Atmospheric sciences and meteorology	42	42	47
Geological and earth sciences	140	134	143
Ocean and marine sciences	52	53	56
Geosciences, atmospheric sciences, and ocean sciences nec	24	27	24
Mathematics and statistics	176	186	200
Applied mathematics	31	34	36
Mathematics	104	102	114
Statistics	41	50	50
Multidisciplinary and interdisciplinary sciences ^c	179	174	189
Biological and physical sciences	17	20	17
Computational science	8	9	11
Data science and data analytics	14	13	14
International and global studies	6	5	5
Multidisciplinary and interdisciplinary sciences nec	134	127	142
Natural resources and conservation	139	144	162
Environmental science and studies	55	49	59

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2020–22

(Number)

Field	2020	2021	2022
Forestry, natural resources, and conservation	84	95	103
Physical sciences	565	557	593
Astronomy and astrophysics	66	67	70
Chemistry	223	220	221
Materials sciences	29	29	24
Physics	226	225	258
Physical sciences nec	21	16	20
Psychology	249	246	266
Applied psychology	36	44	42
Clinical psychology	17	20	16
Counseling psychology	8	6	8
Human development ^d	41	35	39
Psychology, general	104	102	118
Research and experimental psychology	43	39	43
Social sciences	609	614	668
Agricultural and natural resource economics	20	22	23
Anthropology	66	57	65
Area, ethnic, cultural, gender, and group studies	102	106	120
Criminal justice and safety studies	10	9	8
Criminology	2	2	5
Economics (except agricultural and natural resource)	56	63	58
Geography and cartography	46	43	44
International relations and national security studies	16	18	18
Linguistics	27	29	30
Political science and government	48	49	56
Public policy analysis	61	59	64
Sociology	61	66	77
Urban studies and affairs	4	6	9
Social sciences, other ^e	90	85	91
Engineering ^f	1,108	1,090	1,152
Aerospace, aeronautical, and astronautical engineering	35	35	39
Biological, biomedical, and biosystems engineering ^e	156	146	145
Chemical, petroleum, and chemical-related engineering	139	133	144
Chemical engineering	127	120	135
Petroleum engineering	12	13	9
Civil, environmental, transportation and related engineering fields	175	174	190
Civil engineering	152	154	169
Architectural, environmental, construction and surveying engineering	23	20	21
Electrical, electronics, communications and computer engineering	160	159	165
Electrical, electronics, and communications engineering	144	144	146
Computer engineering	16	15	19
Industrial, manufacturing, systems engineering and operations research	49	44	44
Industrial and manufacturing engineering	30	31	31
Systems engineering and operations research	19	13	13
Mechanical engineering	148	158	163
Metallurgical, mining, materials and related engineering fields ^e	85	78	82
Other engineering	161	163	180
Agricultural engineering	20	19	25
Engineering mechanics, physics, and science	20	24	25
Nuclear engineering	13	12	13

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2020–22

(Number)

Field	2020	2021	2022
Engineering, other ^e	108	108	117
Health	2,106	2,077	2,133
Clinical medicine	1,743	1,713	1,730
Anesthesiology	56	47	46
Cardiology	54	54	60
Endocrinology	43	41	43
Gastroenterology	41	37	43
Hematology	30	27	31
Medical clinical sciences and clinical and medical laboratory sciences	46	48	31
Neurology	121	126	118
Obstetrics and gynecology	54	48	43
Oncology and cancer research	110	107	105
Ophthalmology	70	63	61
Otorhinolaryngology	37	34	35
Pediatrics	132	127	135
Psychiatry	83	88	86
Public health	177	180	185
Pulmonary disease	43	37	35
Radiological sciences	110	102	113
Surgery	175	182	189
Clinical medicine nec	361	365	371
Other health	363	364	403
Communication disorders sciences	32	31	32
Dental sciences	56	62	66
Kinesiology and exercise science	29	25	25
Nursing science	49	41	55
Pharmaceutical sciences	93	100	109
Other health nec	104	105	116

nec = not elsewhere classified.

^a Several field names changed in 2020; the field names listed in this table are the field names used in the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) collection and reporting for 2020. For a complete list of field names used from 2017 to 2020, see <https://nces.nsf.gov/pubs/nsf21318/table/A-17>.

^b In 2020, veterinary biomedical and clinical sciences moved from other health to agriculture and veterinary sciences.

^c Prior to 2020, multidisciplinary and interdisciplinary studies was reported as a single broad field with no detailed fields; the detailed fields were added in 2020.

^d In 2020, human development moved from social sciences to psychology.

^e Starting in 2020, some fields were combined for reporting. See [technical table A-17](#) for more information.

^f In 2020, broad fields were added to engineering.

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: 1975–2022

(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
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

TABLE A-6

Response rates for science, engineering, and health organizational units: 1975–2022

(Number and percent)

Year	Total	Total response		Complete response		Partial response		Nonresponse	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
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

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, "[Technical Notes](#)."

^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, "[Technical Notes](#)."

^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: 2020–22

(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						
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 sciences, 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
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 sciences, 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

TABLE A-7

Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2020–22

(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						
Engineering	58,790	36,336	64,063	8,861	346	219	502	58	0.6	0.6	0.8	0.7
Aerospace, aeronautical, and aeronautical 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
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
Fall 2020, all surveyed fields ^a	243,859	170,619	247,656	35,679	6,582	3,837	6,512	993	2.7	2.2	2.6	2.8
Science	155,502	112,402	175,039	21,703	4,867	2,712	5,558	558	3.1	2.4	3.2	2.6
Agricultural and veterinary sciences	3,731	2,756	3,540	773	64	52	40	6	1.7	1.9	1.1	0.8
Biological and biomedical sciences	26,473	13,447	51,107	3,798	618	383	1,650	108	2.3	2.8	3.2	2.8
Computer and information sciences	39,929	40,761	15,473	2,701	1,970	692	560	109	4.9	1.7	3.6	4.0
Geosciences, atmospheric sciences, and ocean sciences	3,649	1,628	5,807	708	90	58	216	16	2.5	3.6	3.7	2.3
Mathematics and statistics	11,622	6,662	12,419	1,268	124	96	316	36	1.1	1.4	2.5	2.8
Multidisciplinary and interdisciplinary sciences	6,169	4,811	2,870	683	901	609	53	7	14.6	12.7	1.8	1.0
Natural resources and conservation	5,536	3,257	2,912	793	139	57	107	28	2.5	1.8	3.7	3.5
Physical sciences	3,686	2,589	33,952	2,389	91	48	1,065	27	2.5	1.9	3.1	1.1
Psychology	28,716	18,563	17,452	3,663	559	422	364	131	1.9	2.3	2.1	3.6
Social sciences	25,991	17,928	29,507	4,927	311	295	1,187	90	1.2	1.6	4.0	1.8
Engineering	49,179	37,271	62,061	9,218	640	740	765	149	1.3	2.0	1.2	1.6
Aerospace, aeronautical, and aeronautical engineering	2,298	2,028	2,301	344	11	1	37	0	0.5	*	1.6	0.0
Biological, biomedical, and biosystems engineering	3,416	1,120	7,659	580	116	35	105	7	3.4	3.1	1.4	1.2
Chemical, petroleum, and chemical- related engineering	1,898	1,044	7,132	480	24	5	104	9	1.3	0.5	1.5	1.9
Civil, environmental, transportation and related engineering fields	6,487	4,332	6,374	1,111	31	26	48	5	0.5	0.6	0.8	0.5
Electrical, electronics, communications and computer engineering	15,329	9,983	15,174	2,546	262	328	209	54	1.7	3.3	1.4	2.1
Industrial, manufacturing, systems engineering and operations research	4,820	6,210	2,908	931	12	82	22	2	0.2	1.3	0.8	0.2
Mechanical engineering	8,461	5,844	10,219	1,258	132	218	94	42	1.6	3.7	0.9	3.3

TABLE A-7

Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2020–22

(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						
Metallurgical, mining, materials and related engineering fields	1,566	733	4,497	385	18	29	58	3	1.1	4.0	1.3	0.8
Other engineering	4,904	5,977	5,797	1,583	34	16	88	27	0.7	0.3	1.5	1.7
Health	39,178	20,946	10,556	4,758	1,075	385	189	286	2.7	1.8	1.8	6.0
Clinical medicine	17,186	12,562	3,342	1,454	414	309	25	94	2.4	2.5	0.7	6.5
Other health	21,992	8,384	7,214	3,304	661	76	164	192	3.0	0.9	2.3	5.8

* = 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: 2020–22

(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 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 sciences, 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
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 ^a	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

TABLE A-8

Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2020–22

(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
Computer and information sciences	880	457	20	24	2.3	5.3
Geosciences, atmospheric sciences, 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
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 ^a	15,561	6,751	285	150	1.8	2.2
Other health	2,238	1,077	83	8	3.7	0.7
Fall 2020, all surveyed fields ^b	65,681	29,661	2,927	1,935	4.5	6.5
Science	38,741	18,212	2,162	1,304	5.6	7.2
Agricultural and veterinary sciences	1,678	964	81	62	4.8	6.4
Biological and biomedical sciences	21,902	8,112	1,583	667	7.2	8.2
Computer and information sciences	823	458	25	22	3.0	4.8
Geosciences, atmospheric sciences, and ocean sciences	1,790	2,150	31	102	1.7	4.7
Mathematics and statistics	1,076	201	39	11	3.6	5.5

TABLE A-8

Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2020–22

(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
Multidisciplinary and interdisciplinary sciences	832	679	83	52	10.0	7.7
Natural resources and conservation	845	573	56	75	6.6	13.1
Physical sciences	6,937	2,890	149	176	2.1	6.1
Psychology	1,312	749	66	53	5.0	7.1
Social sciences	1,546	1,436	49	84	3.2	5.8
Engineering	8,462	3,921	134	288	1.6	7.3
Aerospace, aeronautical, and astronautical engineering	233	149	2	5	0.9	3.4
Biological, biomedical, and biosystems engineering	1,696	525	39	65	2.3	12.4
Chemical, petroleum, and chemical-related engineering	1,157	330	5	45	0.4	13.6
Civil, environmental, transportation and related engineering fields	1,006	488	12	29	1.2	5.9
Electrical, electronics, communications and computer engineering	1,302	706	16	36	1.2	5.1
Industrial, manufacturing, systems engineering and operations research	194	155	17	53	8.8	34.2
Mechanical engineering	1,149	469	26	16	2.3	3.4
Metallurgical, mining, materials and related engineering fields	630	299	11	15	1.7	5.0
Other engineering	1,095	800	6	24	0.5	3.0
Health	18,478	7,528	631	343	3.4	4.6
Clinical medicine ^a	16,287	6,500	522	262	3.2	4.0
Other health	2,191	1,028	109	81	5.0	7.9

^a 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.

^b For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

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). 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: 2022

(Number and percent)

Citizenship, ethnicity, and race	Part time			Full time						
				First time						
	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Doctoral students, imputation rate (%)										
All doctoral students	0.8	1.0	1.3	0.6	3.5	3.5	1.1	2.7	3.1	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	1.9	0.9	2.8	3.2	3.4	5.1	3.2	3.3	5.0	
Not Hispanic or Latino										
American Indian or Alaska Native	4.6	0.0	7.3	2.8	1.8	3.7	0.0	0.0	0.0	
Asian	0.9	1.0	1.1	1.9	3.3	3.3	2.1	2.4	2.8	
Black or African American	1.7	1.2	2.1	1.9	1.8	2.4	2.2	2.1	2.6	
Native Hawaiian or Other Pacific Islander	13.2	18.2	6.3	4.4	1.6	6.3	3.8	8.3	0.0	
White	1.4	1.6	1.7	1.5	3.4	3.1	1.7	3.0	3.0	
More than one race	2.3	0.7	3.6	1.9	2.2	2.0	1.4	1.1	1.6	
Unknown ethnicity and race	0.8	1.0	0.8	2.2	2.0	3.2	3.3	2.8	4.5	
Temporary visa holders	0.6	0.9	0.4	1.0	2.0	1.8	0.7	1.0	1.1	
Doctoral students, number imputed ^b										
All doctoral students	305	193	233	1,444	4,932	4,148	519	674	695	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	56	12	46	591	290	495	114	53	100	
Not Hispanic or Latino										
American Indian or Alaska Native	8	0	8	16	4	13	0	0	0	
Asian	22	11	13	353	301	297	71	39	50	
Black or African American	50	14	38	182	66	141	41	14	31	
Native Hawaiian or Other Pacific Islander	5	4	1	7	1	6	1	1	0	
White	241	136	146	1,387	1,547	1,411	267	218	242	
More than one race	20	3	17	125	63	71	18	6	12	
Unknown ethnicity and race	14	9	6	140	68	97	37	16	25	
Temporary visa holders	57	51	15	1,067	1,354	756	153	124	92	
Master's students, imputation rate (%)										
All master's students	1.3	1.7	4.1	1.3	2.6	3.7	1.3	1.7	2.8	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	2.1	2.1	6.9	4.2	3.5	6.5	4.0	2.9	5.7	
Not Hispanic or Latino										
American Indian or Alaska Native	3.2	1.8	4.1	16.5	6.7	21.1	26.6	6.3	34.9	
Asian	0.7	0.7	1.3	1.4	1.8	2.4	1.2	1.2	1.6	
Black or African American	3.4	2.9	5.4	4.7	5.0	5.1	5.3	6.0	5.3	
Native Hawaiian or Other Pacific Islander	0.7	0.8	0.7	1.8	1.8	1.9	0.0	0.0	0.0	
White	1.4	1.6	4.1	2.5	3.0	4.2	2.6	2.2	3.5	
More than one race	0.7	0.8	2.7	1.9	2.2	2.5	1.2	1.7	1.3	
Unknown ethnicity and race	2.1	2.6	5.7	3.6	2.8	4.4	4.2	3.4	5.0	
Temporary visa holders	1.0	1.3	1.4	0.9	1.6	1.6	0.7	1.1	0.8	
Master's students, number imputed ^b										
All master's students	2,305	1,592	3,594	4,004	4,041	5,928	1,843	1,239	2,023	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	468	217	827	1,103	319	1,107	430	114	399	
Not Hispanic or Latino										
American Indian or Alaska Native	17	4	13	131	16	117	94	6	90	
Asian	138	77	114	302	174	278	117	53	91	
Black or African American	533	185	501	749	248	560	356	129	241	

TABLE A-9

Imputation for graduate students in science, engineering, and health fields, by citizenship, ethnicity, race, enrollment status, and sex: 2022

(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	2	1	1	5	2	3	0	0	0
White	1,134	681	1,654	2,271	1,044	2,328	983	325	818
More than one race	38	19	70	131	61	104	37	22	24
Unknown ethnicity and race	181	114	235	242	76	178	119	39	83
Temporary visa holders	270	229	148	1,389	1,505	916	511	514	238

^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, 2022.

TABLE A-10

Imputation for full-time graduate students in science, engineering, and health fields, by mechanism of support, sex, and source of support: 2022

(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	0.6	6.7	8.1	11.3	13.5	8.0	9.6	11.3	9.2	10.9	8.4	9.2	13.1
Fellowships	13.1	5.4	4.1	13.3	3.0	8.8	16.5	5.2	25.5	22.3	16.2	12.1	na
Research assistantships	8.3	7.3	8.7	10.0	11.5	8.4	8.5	12.1	7.2	9.4	4.2	7.6	na
Teaching assistantships	10.3	na	9.6	na	4.7	15.0	7.8	11.8	7.1	9.9	9.7	10.5	na
Traineeships	11.3	0.0	0.0	16.3	32.2	12.1	4.6	0.0	0.9	4.7	10.5	6.2	na
Other types of support	9.8	2.8	10.2	8.6	6.8	0.0	6.9	7.1	8.0	10.2	10.0	5.8	13.1
Male	3.5	7.4	8.2	11.4	10.8	8.2	10.0	10.9	9.0	11.3	8.3	11.1	11.8
Female	3.5	6.7	8.7	11.5	16.0	8.6	11.6	11.7	9.9	12.2	8.9	11.7	14.4
Doctoral students, number imputed ^a													
All full-time doctoral students	1,444	419	430	2,504	391	149	1,833	225	595	1,609	182	14,267	2,852
Fellowships	5,169	18	8	312	3	21	572	5	204	428	68	3,577	na
Research assistantships	8,900	394	435	1,533	258	127	1,199	210	325	1,018	41	3,495	na
Teaching assistantships	6,256	na	7	na	2	3	55	6	8	42	25	6,223	na
Traineeships	1,097	0	0	633	119	8	16	0	2	20	2	268	na
Other types of support	4,099	14	6	40	9	0	25	7	68	124	51	921	2,852
Male	4,932	338	322	1,142	151	96	1,168	105	320	976	112	9,207	1,267
Female	4,148	115	122	1,396	240	58	853	120	290	752	74	8,400	1,594
Master's students, imputation rate (%)													
All full-time master's students	1.3	5.9	8.1	13.3	11.3	5.9	10.6	8.8	11.9	12.8	14.7	10.3	11.6
Fellowships	20.2	9.8	0.0	9.6	94.1	6.3	11.9	9.4	49.3	36.7	3.4	15.2	na
Research assistantships	9.7	11.7	8.5	14.0	7.1	6.6	11.7	8.8	7.0	10.8	10.5	9.8	na
Teaching assistantships	12.0	na	0.0	na	0.0	16.7	7.8	14.8	37.6	21.6	5.4	12.1	na
Traineeships	6.8	40.0	0.0	9.0	17.3	0.0	0.0	66.7	5.1	3.6	0.0	6.2	na
Other types of support	11.1	2.7	18.2	12.3	10.7	0.0	8.9	8.5	5.8	8.9	19.7	8.6	11.6
Male	2.6	6.3	7.8	14.1	7.2	6.2	11.5	8.1	18.0	13.2	12.6	10.3	12.3
Female	3.7	5.2	9.5	13.5	13.8	4.5	9.6	9.7	8.2	13.6	17.6	11.3	14.0
Master's students, number imputed ^a													
All full-time master's students	4,004	166	45	147	71	19	225	116	833	696	140	7,748	25,889
Fellowships	1,642	5	0	5	16	1	19	3	454	205	4	937	na
Research assistantships	2,184	106	41	119	30	17	178	99	112	268	18	1,254	na
Teaching assistantships	2,871	na	0	na	0	1	13	4	32	47	3	2,811	na
Traineeships	137	8	0	7	17	0	0	2	7	5	0	91	na
Other types of support	29,223	49	6	16	9	0	21	11	247	181	118	2,696	25,889
Male	4,041	131	30	60	16	13	139	46	532	361	70	3,767	13,485
Female	5,928	37	16	92	56	5	87	72	331	365	70	4,328	15,838

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, 2022.

TABLE A-11

Imputation for postdoctoral appointees in science, engineering, and health fields, by citizenship, ethnicity, race, and sex: 2022

(Number and percent)

Citizenship, ethnicity, and race	Total	Male	Female
Imputation rate (%)			
All postdoctoral appointees	0.7	3.5	4.2
U.S. citizens and permanent residents ^a			
Hispanic or Latino	4.1	4.4	5.6
Not Hispanic or Latino			
American Indian or Alaska Native	6.5	5.0	7.7
Asian	4.8	4.7	5.2
Black or African American	4.3	3.2	5.5
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.0
White	3.6	4.1	4.9
More than one race	3.0	2.9	3.3
Unknown ethnicity and race	3.4	5.3	5.3
Temporary visa holders	3.9	4.5	4.9
Number imputed ^b			
All postdoctoral appointees	468	1,276	1,125
U.S. citizens and permanent residents ^a			
Hispanic or Latino	90	47	63
Not Hispanic or Latino			
American Indian or Alaska Native	6	2	4
Asian	252	140	120
Black or African American	49	15	37
Native Hawaiian or Other Pacific Islander	0	0	0
White	548	328	360
More than one race	19	9	11
Unknown ethnicity and race	91	77	66
Temporary visa holders	1,399	979	675

^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, 2022.

TABLE A-12

Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, source of support, and sex: 2022

(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	0.7	6.0	3.8	9.7	5.9	2.1	8.0	2.4	7.9	9.4	6.7	4.4	3.8	10.8	3.5	4.2
Fellowships	10.8	15.2	26.1	12.2	13.3	17.1	15.0	29.8	13.6	6.2	12.5	5.6	na	23.2	11.3	11.8
Research grant	7.4	5.8	4.2	9.5	4.4	2.6	8.3	3.4	11.3	6.2	7.4	4.7	na	6.1	8.6	9.1
Traineeship	9.7	0.0	20.0	12.4	13.1	0.0	19.4	0.0	0.0	4.7	13.3	3.7	na	4.5	8.7	10.4
Other support	10.4	23.2	6.1	16.8	6.1	4.8	11.3	1.5	14.2	23.7	2.3	5.9	3.8	11.5	10.6	10.8
Number imputed ^a																
All postdoctoral appointees	468	129	80	1,808	53	14	312	23	190	908	78	638	24	550	1,276	1,125
Fellowships	654	14	18	161	11	7	43	17	32	80	33	94	na	148	365	335
Research grant	2,855	114	83	1,397	31	16	285	26	218	363	37	255	na	37	1,977	1,413
Traineeship	329	0	1	267	8	0	7	0	0	12	2	30	na	2	141	185
Other support	1,523	19	2	55	3	1	12	2	32	536	9	390	24	438	863	705

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, 2022.

TABLE A-13

Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, citizenship, and type of doctoral degree: 2022

(Number and percent)

Mechanism of support	All doctoral degree types	Doctoral degree	Professional degree	Dual degree	Doctoral degree type unknown
Imputation rate (%)					
All postdoctoral appointees	0.7	5.8	4.9	6.7	3.4
Fellowships	10.8	8.0	13.9	5.6	18.3
Research grant	7.4	8.1	15.3	12.3	10.8
Traineeship	9.7	13.4	10.9	3.7	9.9
Other support	10.4	14.4	10.5	13.0	11.6
U.S. citizens and permanent residents	3.9	6.0	7.2	4.2	7.5
Foreign nationals with temporary visa	3.9	6.5	3.5	9.1	7.8
Number imputed ^a					
All postdoctoral appointees	468	2,653	236	95	355
Fellowships	654	312	93	7	247
Research grant	2,855	2,421	270	87	657
Traineeship	329	294	63	5	49
Other support	1,523	1,426	194	59	290
U.S. citizens and permanent residents	1055	1,154	182	24	372
Foreign nationals with temporary visa	1,399	1,749	81	77	431

^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, 2022.

TABLE A-14

Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, citizenship, and type of doctoral degree: 2022

(Number and percent)

Origin of doctoral degree	Imputation rate (%)	Number imputed
All postdoctoral appointees	0.7	468
United States	7.2	1,701
Foreign country	5.2	1,067
Unknown origin	15.4	2,867

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2022.

TABLE A-15

Imputation for doctorate-holding nonfaculty researchers in science, engineering, and health, by type of doctoral degree and sex: 2022

(Number and percent)

Type of doctoral degree	Total	Male	Female
Imputation rate (%)			
All nonfaculty researchers	2.4	3.5	3.7
Doctoral degree	5.9	6.3	6.1
Professional degree	7.0	8.2	5.9
Dual degree	18.8	20.9	13.9
Doctoral degree type unknown	3.7	7.7	6.7
Number imputed ^a			
All nonfaculty researchers	763	656	511
Doctoral degree	1,325	853	549
Professional degree	165	93	73
Dual degree	106	68	33
Doctoral degree type unknown	251	271	218

^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, 2022.

TABLE A-16

Crosswalk between 2020 Classification of Instructional Program codes and 2022 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
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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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

TABLE A-16

Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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

TABLE A-16

Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
05.0211	Deaf studies		916	Area, ethnic, cultural, gender, and group studies
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

TABLE A-16

Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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
14.4201	Mechatronics, robotics, and automation engineering		109	Mechanical engineering
14.4301	Biochemical engineering		104	Chemical engineering
14.4401	Engineering chemistry		104	Chemical engineering

TABLE A-16

Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
26.0210	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
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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
26.0910	Pathology/ experimental pathology		613	Pathology/experimental pathology
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
26.1310	Ecology and evolutionary biology		620	Ecology and population biology
26.1311	Epidemiology and biostatistics		621	Epidemiology

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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
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

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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
40.0510	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

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
40.0810	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
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
42.2710	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
42.2810	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

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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
45.1501	Geography and anthropology		910	Social sciences, not elsewhere classified
45.9999	Social sciences, other		910	Social sciences, not elsewhere classified
51.0000	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

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
51.0510	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
51.1010	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
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
51.2010	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

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(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
51.2210	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
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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
60.0310	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
60.0320	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 Program codes and 2022 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
60.0710	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
60.0720	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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
60.0730	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
60.0739	Public/ community health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0740	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
60.0750	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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
60.0810	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
60.0820	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
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
60.0830	Pharmacy informatics pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0831	Psychiatric pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
61.0110	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
61.0120	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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 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
61.0220	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
61.0230	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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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
61.0810	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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
61.1810	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
61.1910	Pediatric gastroenterology	Postdocs and NFRs only	711	Pediatrics

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 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

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Crosswalk between 2020 Classification of Instructional Program codes and 2022 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
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
61.2610	Radiologic physics	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
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 Program; 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 or 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, 2022.

TABLE A-17

Mapping of 2022 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
Geosciences, atmospheric sciences, 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	Geosciences, atmospheric sciences, and ocean sciences	304	Geosciences, atmospheric sciences, and ocean sciences	Postdocs and NFRs only
Mathematics and statistics	404	Applied mathematics	404	Applied mathematics	
	405	Mathematics	405	Mathematics	
	403	Statistics	403	Statistics	
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	

TABLE A-17

Mapping of 2022 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
	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	
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	

TABLE A-17

Mapping of 2022 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
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	
Clinical medicine	701	Anesthesiology	701	Anesthesiology	Postdocs and NFRs only
	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

TABLE A-17

Mapping of 2022 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
	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
	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, not elsewhere classified	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, 2022.

Correction(s)

16 May 2024: Four of the technical tables were updated by correcting data or adding missing data. For [table A-4](#), 2022 data were corrected for all unit counts for the following fields: agricultural sciences; chemical, petroleum, and chemical-related engineering; civil, environmental, transportation and related engineering fields; electrical, electronics, communications and computer engineering; industrial, manufacturing, systems engineering and operations research; metallurgical, mining, materials and related engineering fields; other engineering; and other health.

For [table A-8](#), detailed fields were added under the broad fields of science, engineering, and health for fall 2022.

For [table A-11](#), imputation rate data for Total, Unknown ethnicity and race (Excel cell B16) was corrected from 18.3 to 3.4 and the number imputed for Total, Unknown ethnicity and race (Excel cell B29) was corrected from 600 to 91.

For [table A-16](#), Classification of Instructional Program (CIP) codes with fewer than six characters were corrected by appending trailing zeros. Missing labels for CIP code 60.0750 were provided.

Acknowledgments and Suggested Citation

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