

TABLE 1-3a

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

(Number and percent)

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

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(Number and percent)

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

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

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

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

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

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

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

Note(s):

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

Source(s):

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