

TABLE 1-3b

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

(Number and percent)

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

TABLE 1-3b

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

(Number and percent)

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

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

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

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

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

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

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

Note(s):

Percentages may not add to total because of rounding.

Source(s):

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