

## **Graduate Students and Postdoctorates in Science and Engineering: Fall 2005**

Detailed Statistical Tables | NSF 07-321 | May 2007

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### **General Notes**

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Data presented here are derived from the fall 2005 National Science Foundation-National Institutes of Health Survey of Graduate Students and Postdoctorates in Science and Engineering. Unless otherwise specified, the published data represent estimates of total enrollment in science, engineering, and health-related programs in 12,396 graduate departments at 588 institutions in the United States and outlying areas.

Collection of graduate enrollment and postdoctoral employment data began in 1966. Given the need to remain relevant to the needs of those who use the resulting data, the survey has been modified since its inception. These modifications include changes in coverage of institutions and fields, definitions, and the kinds of demographic data collected. (See appendix A, Technical Notes, for further information.) Because survey modifications occur and institutions may revise their data for earlier years, only the latest trend data published in this report should be used in historical analyses.

## Data Tables

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Table	<b>Graduate enrollment in all institutions</b>
	<b>Trends: 1975–2005</b>
	by level of enrollment, broad field, and location
1	total: 1975–2005 (selected years)
	by field
2	total: 1975–2005
3	male: 1977–2005
4	female: 1977–2005
	full-time enrollment, by field
5	total: 1975–2005
6	male: 1976–2005
7	female: 1976–2005
8	U.S. citizen or permanent resident: 1980–2005
9	temporary-visa holder: 1980–2005
	<b>Trends by field: 1998–2005</b>
	detailed fields
10	total
11	male
12	female
13	public institutions
14	private institutions
	by citizenship and race/ethnicity of U.S. citizens and permanent residents
15	total
16	male
17	female
	<b>Full time, by field: 1998–2005</b>
	detailed fields
18	total
19	male
20	female
21	temporary-visa holders
	by citizenship and race/ethnicity of U.S. citizens and permanent residents
22	total
	support
23	primary source, by field
24	primary mechanism, by field
25	primary mechanism and primary source
	<b>First time, full time, by field: 1998–2005</b>
	detailed fields

26	total: 1998–2005
27	U.S. citizen or permanent resident: 2000–05
28	temporary-visa holder: 2000–05
	by citizenship and race/ethnicity of U.S. citizens and permanent residents
29	total: 2000–05
	<b>By citizenship and race/ethnicity of U.S. citizens and permanent residents: 2005</b>
	detailed fields
30	total
31	male
32	female
	by region, state, and institution
33	science fields
34	engineering fields

Table **Doctorate-granting institutions**  
**Graduate enrollment, by field: 1998–2005**

	detailed fields
35	total
36	public institutions
37	private institutions
	citizenship and race/ethnicity of U.S. citizens and permanent residents
38	enrollment status
39	detailed field: 2005
	full-time enrollment
	by detailed field
40	total
41	U.S. citizen or permanent resident
42	temporary-visa holder
	by primary source of support
43	by field
44	by sex and field: 2005
	by primary mechanism of support
45	by field
46	by detailed field: 2005
47	by primary source
	institutional rankings
48	by graduate enrollment in 2005
	<b>Postdoctoral appointees</b>
	by detailed field
49	1998–2005
50	by primary source of support and citizenship: 2005

	by area of study
51	institutions ranked by number of appointees: 2005
	<b>Nonfaculty research staff with doctorates</b>
52	by detailed field: 1998–2005
Table	<b>Historically black colleges and universities (HCBUs)</b>
	<b>All graduate enrollment: 2005</b>
53	by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents
	<b>Black, non-Hispanic U.S. citizens or permanent residents</b>
	in all institutions and HBCUs, by field
54	total: 1998–2005
55	by sex: 2000–05
	full-time enrollment
56	total: 1998–2005
57	by sex: 2000–05

TABLE 1. Total enrollment in all institutions of higher education, by level of enrollment, broad field, and location: 1975–2005 (selected years)

Location	Undergraduate		Graduate enrollment					First professional enrollment
	Total	enrollment	All fields	Science	Engineering	Health fields	Other	
All U.S. institutions								
1975	11,289,129	9,777,634	1,267,537	234,649	68,332	25,529	939,027	243,958
1980	12,234,644	10,603,579	1,351,268	251,265	74,335	41,478	984,190	279,797
1985	12,411,945	10,749,752	1,384,862	261,973	96,018	46,030	980,841	277,331
1990	13,983,255	12,110,847	1,596,037	289,383	107,658	55,072	1,143,924	276,371
1991	14,527,724	12,595,335	1,648,952	299,057	113,535	58,620	1,177,740	283,437
1992	14,657,118	12,693,778	1,679,644	312,478	118,039	63,005	1,186,122	283,696
1993	14,477,792	12,482,813	1,699,292	318,851	116,872	68,581	1,194,988	295,687
1994	14,449,476	12,417,701	1,734,371	318,118	113,024	73,257	1,229,972	297,404
1995	14,445,438	12,399,826	1,745,130	315,265	107,201	77,174	1,245,490	300,482
1996	14,550,056	12,492,977	1,755,635	311,957	103,224	78,898	1,261,556	301,444
1997	14,680,488	12,612,475	1,766,705	306,482	101,148	79,578	1,279,497	301,308
1998	14,711,280	12,624,375	1,781,327	304,818	100,038	80,771	1,295,700	305,578
1999	NA	NA	NA	309,491	101,691	82,074	NA	NA
2000	15,506,922	13,329,803	1,867,092	309,424	104,112	79,775	1,373,781	310,027
2001	16,129,629	13,895,335	1,922,155	319,749	109,493	80,378	1,412,535	312,139
2002	16,822,915	14,444,738	2,055,584	335,179	119,668	85,570	1,515,167	322,593
2003	17,118,126	14,666,119	2,119,244	347,317	127,377	92,476	1,552,074	332,763
2004	17,492,964	14,974,136	2,180,524	352,629	123,566	98,742	1,605,587	338,304
2005	NA	NA	NA	358,309	120,473	104,444	NA	NA
50 U.S. states and DC								
1975	11,184,859	9,679,455	1,263,137	233,774	68,278	25,183	935,902	242,267
1980	12,096,895	10,475,055	1,344,073	249,767	74,287	41,142	978,877	277,767
1985	12,247,055	10,596,674	1,376,181	260,075	95,916	45,478	974,712	274,200
1990	13,818,637	11,959,106	1,586,165	287,713	107,549	54,476	1,136,427	273,366
1991	14,358,953	12,439,287	1,639,135	297,252	113,367	57,991	1,170,525	280,531
1992	14,487,359	12,537,700	1,668,737	310,664	117,829	62,269	1,177,975	280,922
1993	14,304,803	12,323,959	1,688,413	316,991	116,659	67,842	1,186,921	292,431
1994	14,278,790	12,262,608	1,721,469	316,234	112,827	72,483	1,219,925	294,713
1995	14,261,781	12,231,719	1,732,470	313,241	106,984	76,280	1,235,965	297,592
1996	14,367,520	12,326,948	1,742,260	309,948	102,970	78,082	1,251,260	298,312
1997	14,502,334	12,450,587	1,753,489	304,442	100,865	78,994	1,269,188	298,258
1998	14,530,036	12,460,006	1,767,557	302,544	99,771	80,193	1,285,049	302,473
1999	NA	NA	NA	307,055	101,444	81,291	NA	NA
2000	15,312,289	13,155,393	1,850,271	306,672	103,833	78,791	1,360,975	306,625
2001	15,927,987	13,715,610	1,903,730	316,917	109,190	79,330	1,398,293	308,647
2002	16,611,711	14,257,077	2,035,652	332,058	119,342	84,592	1,499,660	318,982
2003	16,900,471	14,473,884	2,097,511	344,237	127,011	91,433	1,534,830	329,076
2004	17,272,044	14,780,620	2,156,885	349,526	123,210	97,829	1,586,320	334,529
2005	NA	NA	NA	354,940	120,117	103,471	NA	NA
Outlying areas								
1975	104,270	98,179	4,400	875	54	346	3,125	1,691
1980	137,749	128,524	7,195	1,498	48	336	5,313	2,030
1985	164,890	153,078	8,681	1,898	102	552	6,129	3,131
1990	164,618	151,741	9,872	1,670	109	596	7,497	3,005
1991	168,771	156,048	9,817	1,805	168	629	7,215	2,906
1992	169,759	156,078	10,907	1,814	210	736	8,147	2,774
1993	172,989	158,854	10,879	1,860	213	739	8,067	3,256
1994	170,686	155,093	12,902	1,884	197	774	10,047	2,691
1995	183,657	168,107	12,660	2,024	217	894	9,525	2,890
1996	182,536	166,029	13,375	2,009	254	816	10,296	3,132
1997	178,154	161,888	13,216	2,040	283	584	10,309	3,050
1998	181,244	164,369	13,770	2,274	267	578	10,651	3,105
1999	NA	NA	NA	2,436	247	783	NA	NA
2000	194,633	174,410	16,821	2,752	279	984	12,806	3,402

TABLE 1. Total enrollment in all institutions of higher education, by level of enrollment, broad field, and location: 1975–2005 (selected years)

Location	Total	Undergraduate	Graduate enrollment					First professional enrollment
		enrollment	All fields	Science	Engineering	Health fields	Other	
2001	201,642	179,725	18,425	2,832	303	1,048	14,242	3,492
2002	211,204	187,661	19,932	3,121	326	978	15,507	3,611
2003	217,655	192,235	21,733	3,080	366	1,043	17,244	3,687
2004	220,920	193,506	23,639	3,103	356	913	19,267	3,775
2005	NA	NA	NA	3,369	356	973	NA	NA

NA = not available; data were not provided.

NOTE: Outlying areas include American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Palau, Puerto Rico, and U.S. Virgin Islands.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, and National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 2. Graduate students in science, engineering, and health fields in all institutions, by field: 1975–2005

Year	Science										Engineering								Health fields	
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other
1975	302,981	234,649	10,804	46,185	8,415	12,079	16,892	26,310	36,191	77,773	68,332	1,670	5,095	12,560	16,320	11,663	8,601	2,376	10,047	25,529
1976	305,398	238,675	11,427	47,453	8,627	12,809	17,071	26,641	37,458	77,189	66,723	1,477	5,271	11,995	15,926	10,687	8,313	2,398	10,656	28,318
1977	311,689	242,932	11,812	48,975	9,108	13,446	16,052	26,864	38,617	78,058	68,757	1,518	5,273	12,335	17,406	10,438	8,722	2,585	10,480	33,685
1978 <sup>a</sup>	304,252	236,465	11,981	47,665	9,847	13,268	14,812	26,282	37,522	75,088	67,787	1,463	5,431	12,358	17,127	9,494	8,638	2,592	10,684	35,660
1979	319,043	247,235	12,365	47,932	11,690	13,731	15,031	26,701	39,766	80,019	71,808	1,481	5,685	12,822	17,715	10,729	9,251	2,778	11,347	38,535
1980	325,600	251,265	12,689	47,261	13,578	14,051	15,311	26,934	40,610	80,831	74,335	1,737	6,038	13,097	19,132	9,698	9,888	2,934	11,811	41,478
1981	331,989	252,404	12,585	46,302	16,437	14,263	15,881	27,360	40,666	78,910	79,585	1,883	6,526	14,089	20,113	9,737	10,618	3,152	13,467	43,141
1982	338,866	255,146	12,826	45,627	19,812	15,018	17,157	28,188	40,073	76,445	83,720	1,941	7,222	14,122	21,927	9,577	11,467	3,154	14,310	43,425
1983	346,966	255,820	12,728	45,253	23,333	15,443	17,358	29,463	40,905	71,337	91,146	2,305	7,590	14,910	25,295	9,247	12,911	3,477	15,411	43,466
1984	349,642	256,903	12,528	45,353	25,526	15,500	17,443	30,061	40,931	69,561	92,739	2,340	7,400	15,192	26,388	9,282	13,855	3,673	14,609	45,028
1985	357,991	261,973	11,846	45,709	29,769	15,414	17,563	30,987	40,721	69,964	96,018	2,538	7,177	14,902	28,203	10,525	14,157	3,959	14,557	46,030
1986	367,982	266,077	11,771	46,302	31,349	15,053	17,949	32,259	41,241	70,153	101,905	2,804	7,043	14,976	29,969	11,569	15,713	4,236	15,595	47,538
1987	373,239	269,256	11,405	46,317	32,051	14,357	18,508	32,741	42,612	71,265	103,983	3,015	7,141	14,682	31,399	12,353	16,366	4,397	14,630	48,258
1988	375,163	272,309	11,438	47,126	32,227	13,854	19,077	32,975	43,963	71,649	102,854	3,223	6,643	14,811	32,035	11,575	16,151	4,381	14,035	49,360
1989	382,642	278,577	11,461	48,449	32,482	13,630	19,247	33,629	45,528	74,151	104,065	3,524	6,482	14,909	33,257	11,333	16,265	4,635	13,660	51,836
1990	397,041	289,383	11,563	49,602	34,257	13,977	19,774	34,082	48,167	77,961	107,658	3,934	6,768	15,542	33,722	11,555	16,879	4,983	14,275	55,072
1991	412,592	299,057	11,766	51,365	34,681	14,466	19,952	34,724	51,343	80,760	113,535	4,120	7,157	17,398	35,111	12,996	17,730	5,203	13,820	58,620
1992	430,517	312,478	12,153	53,693	36,325	15,324	20,355	35,357	53,484	85,787	118,039	4,036	7,433	19,572	36,428	13,826	18,637	5,550	12,557	63,005
1993	435,723	318,851	12,305	55,950	36,213	15,721	20,000	35,328	54,557	88,777	116,872	3,940	7,554	19,583	35,290	13,905	18,477	5,410	12,713	68,581
1994	431,142	318,118	12,611	57,676	34,158	15,957	19,573	34,466	54,554	89,123	113,024	3,715	7,639	19,925	33,067	13,992	17,761	5,228	11,697	73,257
1995	422,466	315,265	12,768	58,344	33,458	15,716	18,504	33,399	53,641	89,435	107,201	3,343	7,452	19,218	30,861	13,475	16,363	4,956	11,533	77,174
1996	415,181	311,957	12,301	57,749	34,626	15,183	18,008	32,333	53,122	88,635	103,224	3,208	7,408	18,528	29,941	12,675	15,509	4,747	11,208	78,898
1997	407,630	306,482	12,203	56,705	35,991	14,548	16,719	31,105	53,126	86,085	101,148	3,083	7,288	17,193	30,787	11,957	15,045	4,688	11,107	79,578
1998	404,856	304,818	12,168	56,695	38,027	14,258	16,485	30,575	52,557	84,053	100,038	3,137	7,093	16,517	31,384	11,221	14,696	4,680	11,310	80,771
1999	411,182	309,491	12,312	56,959	42,478	14,083	16,257	30,691	51,727	84,984	101,691	3,349	6,883	16,226	31,822	11,803	14,956	4,481	12,171	82,074
2000	413,536	309,424	12,023	56,282	47,350	13,941	15,650	30,385	50,466	83,327	104,112	3,407	7,056	16,451	33,611	12,119	15,235	4,377	11,856	79,775
2001	429,242	319,749	12,235	57,639	52,196	13,841	16,651	31,038	50,467	85,682	109,493	3,451	6,913	16,665	36,100	12,940	15,852	4,721	12,851	80,378
2002	454,847	335,179	12,698	61,088	55,269	14,240	18,163	32,341	51,165	90,215	119,668	3,685	7,414	17,713	39,948	14,033	17,139	4,992	14,744	85,570
2003	474,694	347,317	13,197	64,701	53,696	14,620	19,465	34,298	52,211	95,129	127,377	4,048	7,516	18,890	41,763	14,313	18,393	5,131	17,323	92,476
2004	476,195	352,629	13,445	66,548	50,016	15,131	19,931	35,761	54,218	97,579	123,566	4,089	7,452	18,561	38,995	13,852	17,852	5,059	17,706	98,742
2005	478,782	358,309	13,123	68,449	48,046	14,827	20,210	36,396	57,412	99,846	120,473	4,170	7,173	18,050	37,444	13,614	17,387	5,160	17,475	104,444

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

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 3. Male graduate students in science, engineering, and health fields in all institutions, by field: 1977–2005

Year	Science										Engineering									Health fields
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering	Other	
1977	233,775	168,724	9,671	32,301	7,549	11,169	11,933	22,823	20,518	52,760	65,051	1,485	4,893	11,507	16,696	9,683	8,449	2,401	9,937	11,149
1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	229,766	163,845	9,660	30,115	9,367	10,846	11,009	22,206	19,424	51,218	65,921	1,432	5,060	11,503	16,782	9,473	8,782	2,489	10,400	11,073
1980	231,207	163,212	9,783	29,034	10,491	10,844	11,247	22,338	19,027	50,448	67,995	1,663	5,358	11,732	18,149	8,343	9,354	2,629	10,767	11,749
1981	232,144	160,306	9,700	27,743	12,228	10,847	11,400	22,349	17,900	48,139	71,838	1,816	5,747	12,515	18,837	8,194	9,987	2,758	11,984	11,414
1982	235,297	160,354	9,671	26,549	14,366	11,295	12,079	22,769	16,976	46,649	74,943	1,831	6,319	12,373	20,376	7,958	10,748	2,729	12,609	11,001
1983	240,463	159,126	9,506	26,013	16,719	11,548	12,158	23,580	16,648	42,954	81,337	2,182	6,572	13,051	23,227	7,729	12,106	3,025	13,445	10,465
1984	242,112	159,672	9,308	25,959	18,653	11,628	12,275	23,902	16,180	41,767	82,440	2,208	6,426	13,165	24,175	7,674	12,899	3,201	12,692	10,541
1985	247,370	162,435	8,769	25,932	22,208	11,489	12,209	24,478	15,597	41,753	84,935	2,375	6,170	12,755	25,768	8,743	13,146	3,352	12,626	10,846
1986	253,607	164,075	8,722	25,974	23,497	11,108	12,470	25,395	15,377	41,532	89,532	2,604	5,996	12,829	27,061	9,472	14,554	3,552	13,464	11,126
1987	256,072	165,060	8,367	26,013	24,036	10,581	12,912	25,624	15,683	41,844	91,012	2,791	5,979	12,579	28,301	10,085	15,070	3,659	12,548	11,869
1988	253,925	164,199	8,249	25,997	24,033	10,054	13,301	25,473	15,502	41,590	89,726	2,996	5,564	12,517	28,757	9,449	14,749	3,618	12,076	11,465
1989	256,770	166,313	8,224	26,348	24,494	9,776	13,262	25,824	15,673	42,712	90,457	3,281	5,445	12,474	29,742	9,180	14,867	3,820	11,648	11,955
1990	263,319	170,340	8,138	26,687	26,058	9,860	13,575	26,012	15,822	44,188	92,979	3,645	5,615	12,853	30,007	9,367	15,437	4,085	11,970	12,353
1991	271,762	173,925	8,098	27,372	26,391	10,015	13,654	26,156	16,556	45,683	97,837	3,793	5,897	14,296	31,260	10,594	16,219	4,208	11,570	13,135
1992	280,305	179,486	8,245	28,397	27,854	10,478	13,806	26,508	16,650	47,548	100,819	3,688	6,036	15,918	32,151	11,118	16,939	4,476	10,493	13,917
1993	279,185	180,001	8,058	29,081	27,782	10,695	13,362	26,122	16,567	48,334	99,184	3,583	6,050	15,725	30,977	11,260	16,703	4,373	10,513	15,291
1994	272,031	177,057	8,160	29,670	26,071	10,638	13,042	25,299	16,416	47,761	94,974	3,357	6,110	15,714	28,958	11,135	15,938	4,145	9,617	16,324
1995	262,256	173,068	8,169	29,629	25,325	10,282	12,246	24,314	15,877	47,226	89,188	2,992	5,885	14,986	26,707	10,652	14,686	3,882	9,398	17,049
1996	253,510	168,540	7,716	29,107	25,829	9,736	11,789	23,288	15,375	45,700	84,970	2,856	5,757	14,228	25,712	9,906	13,873	3,670	8,968	18,150
1997	245,619	163,191	7,497	28,229	26,110	9,132	10,851	22,257	15,507	43,608	82,428	2,712	5,568	13,029	26,237	9,301	13,266	3,571	8,744	18,878
1998	241,429	160,379	7,316	27,742	27,225	8,690	10,497	21,822	15,095	41,992	81,050	2,755	5,366	12,415	26,512	8,769	12,934	3,550	8,749	19,590
1999	242,786	160,982	7,263	27,338	29,933	8,358	10,214	21,776	14,456	41,644	81,804	2,926	5,150	12,069	26,689	9,144	13,168	3,397	9,261	19,889
2000	243,057	159,691	6,935	26,475	33,270	8,188	9,870	21,270	13,594	40,089	83,366	2,938	5,181	12,174	28,075	9,406	13,403	3,336	8,853	19,052
2001	251,812	164,576	6,892	26,590	36,894	7,949	10,381	21,702	13,149	41,019	87,236	2,966	5,084	12,162	29,888	10,132	13,908	3,548	9,548	19,345
2002	266,219	171,518	7,045	27,677	39,244	7,993	11,277	22,275	13,437	42,570	94,701	3,169	5,419	12,808	32,678	10,957	15,056	3,741	10,873	20,842
2003	276,260	176,470	7,171	28,818	38,880	8,082	12,176	23,520	13,395	44,428	99,790	3,445	5,416	13,492	33,969	11,047	16,039	3,800	12,582	22,434
2004	274,113	177,819	7,187	29,270	36,739	8,199	12,434	24,461	13,992	45,537	96,294	3,489	5,346	13,120	31,794	10,622	15,396	3,738	12,789	22,734
2005	272,119	178,524	6,921	29,946	35,985	7,939	12,773	24,670	13,993	46,297	93,595	3,563	5,094	12,655	30,656	10,327	14,977	3,812	12,511	23,428

NA = not available; master's granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 4. Female graduate students in science, engineering, and health fields in all institutions, by field: 1977–2005

Year	Science										Engineering								Health fields		
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other	
1977	77,914	74,208	2,141	16,674	1,559	2,277	4,119	4,041	18,099	25,298	3,706	33	380	828	710	755	273	184	543	22,536	
1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	89,277	83,390	2,705	17,817	2,323	2,885	4,022	4,495	20,342	28,801	5,887	49	625	1,319	933	1,256	469	289	947	27,462	
1980	94,393	88,053	2,906	18,227	3,087	3,207	4,064	4,596	21,583	30,383	6,340	74	680	1,365	983	1,355	534	305	1,044	29,729	
1981	99,845	92,098	2,885	18,559	4,209	3,416	4,481	5,011	22,766	30,771	7,747	67	779	1,574	1,276	1,543	631	394	1,483	31,727	
1982	103,569	94,792	3,155	19,078	5,446	3,723	5,078	5,419	23,097	29,796	8,777	110	903	1,749	1,551	1,619	719	425	1,701	32,424	
1983	106,503	96,694	3,222	19,240	6,614	3,895	5,200	5,883	24,257	28,383	9,809	123	1,018	1,859	2,068	1,518	805	452	1,966	33,001	
1984	107,530	97,231	3,220	19,394	6,873	3,872	5,168	6,159	24,751	27,794	10,299	132	974	2,027	2,213	1,608	956	472	1,917	34,487	
1985	110,621	99,538	3,077	19,777	7,561	3,925	5,354	6,509	25,124	28,211	11,083	163	1,007	2,147	2,435	1,782	1,011	607	1,931	35,184	
1986	114,375	102,002	3,049	20,328	7,852	3,945	5,479	6,864	25,864	28,621	12,373	200	1,047	2,147	2,908	2,097	1,159	684	2,131	36,412	
1987	117,167	104,196	3,038	20,304	8,015	3,776	5,596	7,117	26,929	29,421	12,971	224	1,162	2,103	3,098	2,268	1,296	738	2,082	36,389	
1988	121,238	108,110	3,189	21,129	8,194	3,800	5,776	7,502	28,461	30,059	13,128	227	1,079	2,294	3,278	2,126	1,402	763	1,959	37,895	
1989	125,872	112,264	3,237	22,101	7,988	3,854	5,985	7,805	29,855	31,439	13,608	243	1,037	2,435	3,515	2,153	1,398	815	2,012	39,881	
1990	133,722	119,043	3,425	22,915	8,199	4,117	6,199	8,070	32,345	33,773	14,679	289	1,153	2,689	3,715	2,188	1,442	898	2,305	42,719	
1991	140,830	125,132	3,668	23,993	8,290	4,451	6,298	8,568	34,787	35,077	15,698	327	1,260	3,102	3,851	2,402	1,511	995	2,250	45,485	
1992	150,212	132,992	3,908	25,296	8,471	4,846	6,549	8,849	36,834	38,239	17,220	348	1,397	3,654	4,277	2,708	1,698	1,074	2,064	49,088	
1993	156,538	138,850	4,247	26,869	8,431	5,026	6,638	9,206	37,990	40,443	17,688	357	1,504	3,858	4,313	2,645	1,774	1,037	2,200	53,290	
1994	159,111	141,061	4,451	28,006	8,087	5,319	6,531	9,167	38,138	41,362	18,050	358	1,529	4,211	4,109	2,857	1,823	1,083	2,080	56,933	
1995	160,210	142,197	4,599	28,715	8,133	5,434	6,258	9,085	37,764	42,209	18,013	351	1,567	4,232	4,154	2,823	1,677	1,074	2,135	60,125	
1996	161,671	143,417	4,585	28,642	8,797	5,447	6,219	9,045	37,747	42,935	18,254	352	1,651	4,300	4,229	2,769	1,636	1,077	2,240	60,748	
1997	162,011	143,291	4,706	28,476	9,881	5,416	5,868	8,848	37,619	42,477	18,720	371	1,720	4,164	4,550	2,656	1,779	1,117	2,363	60,700	
1998	163,427	144,439	4,852	28,953	10,802	5,568	5,988	8,753	37,462	42,061	18,988	382	1,727	4,102	4,872	2,452	1,762	1,130	2,561	61,181	
1999	168,396	148,509	5,049	29,621	12,545	5,725	6,043	8,915	37,271	43,340	19,887	423	1,733	4,157	5,133	2,659	1,788	1,084	2,910	62,185	
2000	170,479	149,733	5,088	29,807	14,080	5,753	5,780	9,115	36,872	43,238	20,746	469	1,875	4,277	5,536	2,713	1,832	1,041	3,003	60,723	
2001	177,430	155,173	5,343	31,049	15,302	5,892	6,270	9,336	37,318	44,663	22,257	485	1,829	4,503	6,212	2,808	1,944	1,173	3,303	61,033	
2002	188,628	163,661	5,653	33,411	16,025	6,247	6,886	10,066	37,728	47,645	24,967	516	1,995	4,905	7,270	3,076	2,083	1,251	3,871	64,728	
2003	198,434	170,847	6,026	35,883	14,816	6,538	7,289	10,778	38,816	50,701	27,587	603	2,100	5,398	7,794	3,266	2,354	1,331	4,741	70,042	
2004	202,082	174,810	6,258	37,278	13,277	6,932	7,497	11,300	40,226	52,042	27,272	600	2,106	5,441	7,201	3,230	2,456	1,321	4,917	76,008	
2005	206,663	179,785	6,202	38,503	12,061	6,888	7,437	11,726	43,419	53,549	26,878	607	2,079	5,395	6,788	3,287	2,410	1,348	4,964	81,016	

NA = not available; master's granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 5. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975–2005

Year	All science and engineering	Science									Engineering								Health fields	
		Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other
1975	202,260	164,437	8,970	36,692	4,473	9,557	10,694	21,916	24,105	48,030	37,823	1,245	3,576	7,363	8,278	4,152	4,931	1,808	6,470	17,388
1976	204,815	167,867	9,548	37,681	4,748	10,082	10,952	22,261	25,643	46,952	36,948	1,165	3,757	7,025	8,147	3,578	4,919	1,879	6,478	18,597
1977	206,411	169,184	9,820	38,194	4,604	10,415	10,365	22,514	25,703	47,569	37,227	1,187	3,944	7,094	8,528	3,343	4,883	1,976	6,272	20,327
1978 <sup>a</sup>	201,737	164,151	9,815	37,572	4,930	10,361	9,769	22,143	24,754	44,807	37,586	1,140	4,019	7,335	8,509	3,249	4,950	1,995	6,389	21,293
1979	209,000	168,959	10,053	37,773	5,853	10,619	9,667	22,541	25,848	46,605	40,041	1,152	4,292	7,623	9,039	3,743	5,428	2,157	6,607	22,760
1980	214,417	171,767	10,349	37,422	6,587	10,871	9,901	22,917	26,671	47,049	42,650	1,327	4,513	7,958	9,963	3,736	5,841	2,274	7,038	23,999
1981	217,952	172,200	10,480	37,022	7,445	10,931	10,152	23,310	26,570	46,290	45,752	1,483	5,016	8,799	10,450	3,603	6,422	2,478	7,501	24,097
1982	221,874	172,090	10,325	36,415	9,171	11,317	10,813	24,040	25,667	44,342	49,784	1,522	5,637	9,381	11,533	3,807	7,267	2,505	8,132	22,883
1983	229,404	175,472	10,230	36,405	10,600	11,961	10,955	25,211	26,561	43,549	53,932	1,840	5,893	9,804	13,265	3,288	8,330	2,731	8,781	22,613
1984	230,957	175,766	10,170	36,759	11,436	11,732	11,309	25,854	25,969	42,537	55,191	1,854	5,758	10,086	13,925	3,393	8,698	2,888	8,589	22,965
1985	233,938	178,020	9,490	36,677	13,861	11,331	11,816	26,672	25,335	42,838	55,918	1,994	5,568	9,749	14,799	3,456	8,875	3,109	8,368	23,349
1986	242,729	182,532	9,596	37,435	15,020	11,241	12,388	27,770	26,255	42,827	60,197	2,154	5,625	9,971	16,290	3,810	9,789	3,398	9,160	23,439
1987	247,105	185,143	9,316	37,885	15,336	10,424	13,043	28,423	27,256	43,460	61,962	2,372	5,704	9,628	17,101	4,165	10,230	3,467	9,295	23,951
1988	250,557	187,525	9,372	38,840	15,133	10,181	13,512	28,585	28,118	43,784	63,032	2,533	5,384	9,946	17,706	4,313	10,416	3,509	9,225	24,570
1989	256,820	192,424	9,293	40,019	15,606	10,012	13,681	29,216	29,348	45,249	64,396	2,772	5,303	9,964	18,466	4,684	10,492	3,760	8,955	25,828
1990	265,323	199,313	9,288	40,648	16,689	10,239	13,865	29,490	30,618	48,476	66,010	3,010	5,476	10,128	18,675	4,806	10,867	3,969	9,079	27,459
1991	277,070	206,036	9,472	42,385	16,546	10,364	14,256	30,126	32,258	50,629	71,034	3,325	5,818	11,328	19,874	5,639	11,687	4,094	9,269	29,940
1992	290,408	215,965	9,672	44,040	17,505	10,976	14,679	30,681	34,162	54,250	74,443	3,306	5,982	12,454	20,977	6,113	12,383	4,309	8,919	32,147
1993	293,905	220,097	9,712	46,101	17,401	11,346	14,530	30,616	34,782	55,609	73,808	3,262	6,079	12,458	20,343	5,950	12,395	4,294	9,027	35,739
1994	292,979	221,409	9,746	47,694	16,701	11,446	14,226	30,049	35,288	56,259	71,570	3,000	6,136	12,641	19,408	5,960	11,875	4,143	8,407	39,109
1995	287,171	219,389	9,835	48,055	16,510	11,259	13,410	28,879	35,222	56,219	67,782	2,693	5,985	12,248	18,254	5,389	11,128	3,912	8,173	42,112
1996	284,039	218,180	9,527	47,454	17,195	10,795	12,966	27,931	35,412	56,900	65,859	2,576	5,939	11,791	18,107	5,166	10,690	3,724	7,866	44,497
1997	280,669	214,981	9,362	46,657	18,335	10,510	12,144	26,882	35,551	55,540	65,688	2,529	5,821	11,406	18,999	5,116	10,432	3,694	7,691	46,620
1998	278,943	213,508	9,199	46,779	19,972	10,444	11,751	26,391	35,148	53,824	65,435	2,565	5,630	11,154	19,608	4,894	10,073	3,736	7,775	48,446
1999	283,893	215,870	9,371	46,946	22,687	10,484	11,796	26,635	34,658	53,293	68,023	2,645	5,593	11,237	20,521	5,500	10,331	3,563	8,633	50,530
2000	291,355	219,079	9,357	46,787	26,558	10,558	11,740	26,492	34,919	52,668	72,276	2,759	5,861	11,754	22,962	6,049	10,795	3,601	8,495	49,928
2001	304,021	226,573	9,405	48,138	30,087	10,504	12,467	27,179	34,487	54,306	77,448	2,821	5,829	12,102	25,240	6,534	11,436	3,977	9,509	50,501
2002	325,472	240,020	9,685	51,551	32,579	11,116	13,709	28,619	34,707	58,054	85,452	3,003	6,279	12,981	28,240	7,200	12,512	4,242	10,995	53,519
2003	339,028	248,812	10,003	54,350	30,708	11,497	14,627	30,441	35,774	61,412	90,216	3,243	6,414	13,710	28,929	7,098	13,356	4,386	13,080	58,392
2004	340,545	253,590	10,040	55,816	29,162	11,685	14,916	31,675	37,872	62,424	86,955	3,243	6,379	13,588	26,732	6,591	12,718	4,359	13,345	62,085
2005	341,778	257,403	9,710	57,651	28,317	11,370	15,261	32,386	38,957	63,751	84,375	3,241	6,139	13,118	25,843	6,113	12,178	4,507	13,236	64,875

<sup>a</sup> Master's granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 6. Male full-time graduate students in science, engineering, and health fields in all institutions, by field: 1976–2005

Year	Science										Engineering								Health fields	
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other
1976	156,134	121,218	8,031	26,003	4,006	8,450	8,476	19,212	14,591	32,449	34,916	1,142	3,516	6,512	7,850	3,199	4,797	1,769	6,131	7,536
1977	154,365	119,401	7,983	25,688	3,845	8,634	8,083	19,300	13,949	31,919	34,964	1,160	3,660	6,553	8,146	2,967	4,742	1,833	5,903	7,520
1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	151,945	115,345	7,812	24,314	4,803	8,400	7,497	19,048	13,277	30,194	36,600	1,116	3,852	6,729	8,585	3,164	5,170	1,943	6,041	7,630
1980	153,101	114,306	7,920	23,600	5,184	8,388	7,595	19,214	12,779	29,626	38,795	1,273	4,047	7,059	9,405	3,071	5,525	2,041	6,374	7,758
1981	154,034	112,896	8,007	22,997	5,718	8,360	7,612	19,307	12,007	28,888	41,138	1,432	4,482	7,673	9,739	2,915	6,075	2,187	6,635	7,442
1982	156,369	111,834	7,724	21,949	6,860	8,530	8,022	19,643	11,223	27,883	44,535	1,449	4,963	8,140	10,715	3,042	6,834	2,192	7,200	6,904
1983	161,506	113,195	7,637	21,717	7,961	8,992	8,037	20,374	11,361	27,116	48,311	1,760	5,122	8,509	12,302	2,673	7,847	2,403	7,695	6,709
1984	162,368	113,226	7,526	21,759	8,693	8,875	8,328	20,756	10,714	26,575	49,142	1,768	5,024	8,648	12,775	2,769	8,137	2,530	7,491	6,706
1985	164,162	114,528	7,026	21,570	10,806	8,498	8,614	21,243	10,232	26,539	49,634	1,868	4,811	8,257	13,591	2,821	8,316	2,666	7,304	6,783
1986	169,812	116,593	7,136	21,730	11,703	8,329	8,984	22,029	10,263	26,419	53,219	2,006	4,829	8,484	14,823	3,076	9,162	2,868	7,971	6,764
1987	172,077	117,406	6,877	21,853	12,005	7,750	9,481	22,393	10,422	26,625	54,671	2,205	4,822	8,230	15,552	3,430	9,498	2,889	8,045	7,353
1988	172,280	116,871	6,819	22,143	11,795	7,438	9,794	22,214	10,199	26,469	55,409	2,365	4,588	8,381	16,024	3,572	9,581	2,923	7,975	7,275
1989	175,047	118,795	6,708	22,514	12,355	7,263	9,746	22,552	10,467	27,190	56,252	2,592	4,499	8,315	16,644	3,772	9,637	3,116	7,677	7,738
1990	178,645	121,340	6,572	22,595	13,218	7,313	9,821	22,668	10,642	28,511	57,305	2,811	4,573	8,347	16,719	3,893	10,019	3,273	7,670	8,074
1991	185,020	123,664	6,537	23,287	13,057	7,190	10,035	22,852	10,957	29,749	61,356	3,071	4,830	9,309	17,717	4,591	10,745	3,345	7,748	8,519
1992	191,722	127,940	6,573	24,012	13,949	7,585	10,250	23,176	11,171	31,224	63,782	3,043	4,882	10,126	18,557	4,931	11,297	3,497	7,449	9,096
1993	190,785	128,174	6,429	24,678	13,811	7,799	10,096	22,891	11,189	31,281	62,611	2,971	4,908	9,934	17,906	4,770	11,210	3,482	7,430	9,993
1994	186,623	126,631	6,319	25,276	13,152	7,659	9,810	22,281	11,131	31,003	59,992	2,722	4,940	9,855	17,014	4,651	10,658	3,289	6,863	10,802
1995	179,770	123,490	6,275	25,123	12,860	7,379	9,213	21,222	10,903	30,515	56,280	2,417	4,756	9,431	15,768	4,229	9,993	3,082	6,604	11,430
1996	174,689	120,657	5,971	24,554	13,102	6,941	8,797	20,395	10,775	30,122	54,032	2,293	4,615	8,937	15,497	4,069	9,500	2,893	6,228	12,427
1997	170,168	116,988	5,734	23,819	13,536	6,650	8,171	19,454	10,833	28,791	53,180	2,226	4,451	8,495	16,102	4,009	9,143	2,819	5,935	13,224
1998	167,320	114,712	5,507	23,487	14,520	6,374	7,797	19,034	10,509	27,484	52,608	2,251	4,233	8,213	16,471	3,810	8,840	2,829	5,961	13,673
1999	169,055	114,555	5,486	23,097	16,313	6,171	7,662	19,065	10,073	26,688	54,500	2,320	4,197	8,192	17,147	4,364	9,069	2,715	6,496	13,885
2000	172,783	115,359	5,298	22,604	19,098	6,119	7,669	18,750	9,841	25,980	57,424	2,385	4,315	8,454	19,073	4,710	9,451	2,751	6,285	13,478
2001	179,863	118,608	5,201	22,707	21,776	5,936	8,085	19,093	9,303	26,507	61,255	2,435	4,289	8,677	20,767	5,105	9,998	2,988	6,996	13,602
2002	191,809	124,774	5,253	23,819	23,743	6,194	8,807	19,816	9,303	27,839	67,035	2,591	4,613	9,201	22,884	5,628	10,932	3,180	8,006	14,343
2003	198,485	128,345	5,360	24,684	22,858	6,314	9,488	21,014	9,414	29,213	70,140	2,790	4,604	9,592	23,361	5,467	11,608	3,258	9,460	15,556
2004	196,818	129,682	5,304	24,934	21,962	6,329	9,728	21,790	9,989	29,646	67,136	2,789	4,562	9,427	21,645	4,996	10,947	3,218	9,552	16,034
2005	195,624	130,707	5,011	25,577	21,689	6,106	10,081	22,050	9,875	30,318	64,917	2,779	4,363	9,010	21,084	4,508	10,446	3,319	9,408	16,133

NA = not available; master's granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 7. Female full-time graduate students in science, engineering, and health fields in all institutions, by field: 1976–2005

Year	Science										Engineering									Health fields
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering	Other	
1976	48,681	46,649	1,517	11,678	742	1,632	2,476	3,049	11,052	14,503	2,032	23	241	513	297	379	122	110	347	11,061
1977	52,046	49,783	1,837	12,506	759	1,781	2,282	3,214	11,754	15,650	2,263	27	284	541	382	376	141	143	369	12,807
1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	57,055	53,614	2,241	13,459	1,050	2,219	2,170	3,493	12,571	16,411	3,441	36	440	894	454	579	258	214	566	15,130
1980	61,316	57,461	2,429	13,822	1,403	2,483	2,306	3,703	13,892	17,423	3,855	54	466	899	558	665	316	233	664	16,241
1981	63,918	59,304	2,473	14,025	1,727	2,571	2,540	4,003	14,563	17,402	4,614	51	534	1,126	711	688	347	291	866	16,655
1982	65,505	60,256	2,601	14,466	2,311	2,787	2,791	4,397	14,444	16,459	5,249	73	674	1,241	818	765	433	313	932	15,979
1983	67,898	62,277	2,593	14,688	2,639	2,969	2,918	4,837	15,200	16,433	5,621	80	771	1,295	963	615	483	328	1,086	15,904
1984	68,589	62,540	2,644	15,000	2,743	2,857	2,981	5,098	15,255	15,962	6,049	86	734	1,438	1,150	624	561	358	1,098	16,259
1985	69,776	63,492	2,464	15,107	3,055	2,833	3,202	5,429	15,103	16,299	6,284	126	757	1,492	1,208	635	559	443	1,064	16,566
1986	72,917	65,939	2,460	15,705	3,317	2,912	3,404	5,741	15,992	16,408	6,978	148	796	1,487	1,467	734	627	530	1,189	16,675
1987	75,028	67,737	2,439	16,032	3,331	2,674	3,562	6,030	16,834	16,835	7,291	167	882	1,398	1,549	735	732	578	1,250	16,598
1988	78,277	70,654	2,553	16,697	3,338	2,743	3,718	6,371	17,919	17,315	7,623	168	796	1,565	1,682	741	835	586	1,250	17,295
1989	81,773	73,629	2,585	17,505	3,251	2,749	3,935	6,664	18,881	18,059	8,144	180	804	1,649	1,822	912	855	644	1,278	18,090
1990	86,678	77,973	2,716	18,053	3,471	2,926	4,044	6,822	19,976	19,965	8,705	199	903	1,781	1,956	913	848	696	1,409	19,385
1991	92,050	82,372	2,935	19,098	3,489	3,174	4,221	7,274	21,301	20,880	9,678	254	988	2,019	2,157	1,048	942	749	1,521	21,421
1992	98,686	88,025	3,099	20,028	3,556	3,391	4,429	7,505	22,991	23,026	10,661	263	1,100	2,328	2,420	1,182	1,086	812	1,470	23,051
1993	103,120	91,923	3,283	21,423	3,590	3,547	4,434	7,725	23,593	24,328	11,197	291	1,171	2,524	2,437	1,180	1,185	812	1,597	25,746
1994	106,356	94,778	3,427	22,418	3,549	3,787	4,416	7,768	24,157	25,256	11,578	278	1,196	2,786	2,394	1,309	1,217	854	1,544	28,307
1995	107,401	95,899	3,560	22,932	3,650	3,880	4,197	7,657	24,319	25,704	11,502	276	1,229	2,817	2,486	1,160	1,135	830	1,569	30,682
1996	109,350	97,523	3,556	22,900	4,093	3,854	4,169	7,536	24,637	26,778	11,827	283	1,324	2,854	2,610	1,097	1,190	831	1,638	32,070
1997	110,501	97,993	3,628	22,838	4,799	3,860	3,973	7,428	24,718	26,749	12,508	303	1,370	2,911	2,897	1,107	1,289	875	1,756	33,396
1998	111,623	98,796	3,692	23,292	5,452	4,070	3,954	7,357	24,639	26,340	12,827	314	1,397	2,941	3,137	1,084	1,233	907	1,814	34,773
1999	114,838	101,315	3,885	23,849	6,374	4,313	4,134	7,570	24,585	26,605	13,523	325	1,396	3,045	3,374	1,136	1,262	848	2,137	36,645
2000	118,572	103,720	4,059	24,183	7,460	4,439	4,071	7,742	25,078	26,688	14,852	374	1,546	3,300	3,889	1,339	1,344	850	2,210	36,450
2001	124,158	107,965	4,204	25,431	8,311	4,568	4,382	8,086	25,184	27,799	16,193	386	1,540	3,425	4,473	1,429	1,438	989	2,513	36,899
2002	133,663	115,246	4,432	27,732	8,836	4,922	4,902	8,803	25,404	30,215	18,417	412	1,666	3,780	5,356	1,572	1,580	1,062	2,989	39,176
2003	140,543	120,467	4,643	29,666	7,850	5,183	5,139	9,427	26,360	32,199	20,076	453	1,810	4,118	5,568	1,631	1,748	1,128	3,620	42,836
2004	143,727	123,908	4,736	30,882	7,200	5,356	5,188	9,885	27,883	32,778	19,819	454	1,817	4,161	5,087	1,595	1,771	1,141	3,793	46,051
2005	146,154	126,696	4,699	32,074	6,628	5,264	5,180	10,336	29,082	33,433	19,458	462	1,776	4,108	4,759	1,605	1,732	1,188	3,828	48,742

NA = not available; master's granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 8. U.S. citizen or permanent resident full-time graduate students in science, engineering, and health fields in all institutions, by field: 1980–2005

Year	Science										Engineering								Health fields	
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other
1980	166,158	141,405	8,007	32,969	4,521	9,484	6,647	17,186	25,461	37,130	24,753	759	2,517	4,670	5,666	2,297	3,211	1,165	4,468	21,956
1981	165,623	139,558	7,995	32,299	4,887	9,436	6,511	17,052	25,566	35,812	26,065	882	2,808	5,162	5,665	2,029	3,363	1,361	4,795	21,951
1982	166,705	138,209	7,805	31,522	5,981	9,691	6,926	17,586	24,588	34,110	28,496	945	3,290	5,428	6,421	2,190	3,767	1,319	5,136	20,585
1983	169,889	138,714	7,603	31,063	6,677	10,292	6,714	18,016	25,468	32,881	31,175	1,088	3,650	5,544	7,398	1,933	4,327	1,553	5,682	20,202
1984	169,870	137,903	7,579	31,138	6,982	10,162	6,772	18,294	24,924	32,052	31,967	1,115	3,623	5,687	7,890	1,934	4,591	1,679	5,448	20,607
1985	168,239	136,402	7,009	30,497	8,327	9,666	6,995	18,189	24,179	31,540	31,837	1,258	3,350	5,282	8,137	1,874	4,858	1,821	5,257	20,804
1986	170,382	137,132	6,905	30,424	8,912	9,374	7,243	18,272	25,085	30,917	33,250	1,343	3,432	5,303	8,572	2,056	5,218	1,882	5,444	20,717
1987	171,095	137,154	6,575	30,024	8,863	8,485	7,549	18,395	26,044	31,219	33,941	1,559	3,371	5,090	9,002	2,152	5,559	1,860	5,348	21,167
1988	170,144	136,619	6,601	29,986	8,415	8,029	7,738	18,141	26,802	30,907	33,525	1,502	2,971	5,208	9,295	2,239	5,299	1,848	5,163	21,512
1989	173,343	139,256	6,527	30,139	8,616	7,708	7,697	18,116	28,021	32,432	34,087	1,757	2,686	5,097	9,723	2,438	5,632	1,923	4,831	22,535
1990	177,747	143,255	6,313	30,103	8,742	7,808	7,961	17,841	29,133	35,354	34,492	1,870	2,696	5,375	9,652	2,389	5,781	2,015	4,714	23,885
1991	185,408	148,329	6,507	30,906	8,455	7,793	8,380	18,276	30,634	37,378	37,079	2,201	2,815	6,140	9,947	2,780	6,120	2,100	4,976	26,154
1992	197,399	157,510	6,726	32,337	8,881	8,299	8,939	18,767	32,548	41,013	39,889	2,246	2,968	7,003	10,548	3,088	6,803	2,278	4,955	28,437
1993	204,405	163,195	6,835	34,271	9,019	8,661	9,056	19,236	33,196	42,921	41,210	2,178	3,128	7,440	10,394	3,236	7,228	2,298	5,308	31,886
1994	206,809	165,657	6,864	36,020	8,757	8,586	8,876	19,136	33,430	43,988	41,152	1,862	3,381	7,848	10,446	3,211	7,090	2,364	4,950	35,456
1995	204,113	165,521	7,023	37,013	8,627	8,673	8,291	18,403	33,574	43,917	38,592	1,611	3,314	7,652	9,399	2,885	6,548	2,190	4,993	38,459
1996	200,674	164,198	6,905	37,032	8,400	8,399	7,885	17,632	33,789	44,156	36,476	1,417	3,382	7,509	8,758	2,528	6,024	1,988	4,870	40,486
1997	195,974	161,097	6,951	36,498	8,578	8,289	7,262	16,805	33,881	42,833	34,877	1,327	3,281	7,082	8,524	2,443	5,591	1,922	4,707	42,608
1998	191,945	158,559	6,915	36,384	9,042	8,258	7,061	16,468	33,410	41,021	33,386	1,268	3,059	6,871	8,139	2,255	5,212	1,894	4,688	44,423
1999	190,076	157,735	7,176	36,739	9,939	8,268	6,588	16,300	32,921	39,804	32,341	1,278	2,826	6,492	7,595	2,447	5,007	1,712	4,984	46,171
2000	185,673	154,545	7,259	35,967	9,630	8,155	6,345	15,601	33,059	38,529	31,128	1,358	2,792	6,313	7,253	2,324	4,614	1,645	4,829	45,397
2001	188,225	156,361	7,178	36,668	10,164	8,032	6,656	15,719	32,471	39,473	31,864	1,284	2,630	6,299	7,750	2,163	4,795	1,776	5,167	45,428
2002	200,200	164,874	7,363	38,712	11,919	8,579	7,390	16,236	32,512	42,163	35,326	1,434	2,874	6,703	8,654	2,565	5,186	1,880	6,030	47,511
2003	212,988	173,674	7,653	40,561	12,744	8,984	7,923	17,235	33,316	45,258	39,314	1,680	2,935	7,301	9,601	2,750	5,861	1,960	7,226	52,212
2004	217,620	178,661	7,613	41,206	12,738	9,129	8,260	18,135	35,227	46,353	38,959	1,695	3,014	7,467	8,792	2,582	5,852	1,996	7,561	56,066
2005	221,403	182,465	7,314	42,402	12,298	8,887	8,579	18,691	36,492	47,802	38,938	1,763	2,936	7,475	8,805	2,572	5,737	2,066	7,584	58,642

NOTES: Distribution by citizenship status was not requested before 1980. Figures for 1991 and earlier years do not include permanent residents.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 9. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by field: 1980–2005

Year	Science										Engineering									Health fields
	All science and engineering	Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering	Other	
1980	48,259	30,362	2,342	4,453	2,066	1,387	3,254	5,731	1,210	9,919	17,897	568	1,996	3,288	4,297	1,439	2,630	1,109	2,570	2,043
1981	52,329	32,642	2,485	4,723	2,558	1,495	3,641	6,258	1,004	10,478	19,687	601	2,208	3,637	4,785	1,574	3,059	1,117	2,706	2,146
1982	55,169	33,881	2,520	4,893	3,190	1,626	3,887	6,454	1,079	10,232	21,288	577	2,347	3,953	5,112	1,617	3,500	1,186	2,996	2,298
1983	59,515	36,758	2,627	5,342	3,923	1,669	4,241	7,195	1,093	10,668	22,757	752	2,243	4,260	5,867	1,355	4,003	1,178	3,099	2,411
1984	61,087	37,863	2,591	5,621	4,454	1,570	4,537	7,560	1,045	10,485	23,224	739	2,135	4,399	6,035	1,459	4,107	1,209	3,141	2,358
1985	65,699	41,618	2,481	6,180	5,534	1,665	4,821	8,483	1,156	11,298	24,081	736	2,218	4,467	6,662	1,582	4,017	1,288	3,111	2,545
1986	72,347	45,400	2,691	7,011	6,108	1,867	5,145	9,498	1,170	11,910	26,947	811	2,193	4,668	7,718	1,754	4,571	1,516	3,716	2,722
1987	76,010	47,989	2,741	7,861	6,473	1,939	5,494	10,028	1,212	12,241	28,021	813	2,333	4,538	8,099	2,013	4,671	1,607	3,947	2,784
1988	80,413	50,906	2,771	8,854	6,718	2,152	5,774	10,444	1,316	12,877	29,507	1,031	2,413	4,738	8,411	2,074	5,117	1,661	4,062	3,058
1989	83,477	53,168	2,766	9,880	6,990	2,304	5,984	11,100	1,327	12,817	30,309	1,015	2,617	4,867	8,743	2,246	4,860	1,837	4,124	3,293
1990	87,576	56,058	2,975	10,545	7,947	2,431	5,904	11,649	1,485	13,122	31,518	1,140	2,780	4,753	9,023	2,417	5,086	1,954	4,365	3,574
1991	91,662	57,707	2,965	11,479	8,091	2,571	5,876	11,850	1,624	13,251	33,955	1,124	3,003	5,188	9,927	2,859	5,567	1,994	4,293	3,786
1992	93,009	58,455	2,946	11,703	8,624	2,677	5,740	11,914	1,614	13,237	34,554	1,060	3,014	5,451	10,429	3,025	5,580	2,031	3,964	3,710
1993	89,500	56,902	2,877	11,830	8,382	2,685	5,474	11,380	1,586	12,688	32,598	1,084	2,951	5,018	9,949	2,714	5,167	1,996	3,719	3,853
1994	86,170	55,752	2,882	11,674	7,944	2,860	5,350	10,913	1,858	12,271	30,418	1,138	2,755	4,793	8,962	2,749	4,785	1,779	3,457	3,653
1995	83,058	53,868	2,812	11,042	7,883	2,586	5,119	10,476	1,648	12,302	29,190	1,082	2,671	4,596	8,855	2,504	4,580	1,722	3,180	3,653
1996	83,365	53,982	2,622	10,422	8,795	2,396	5,081	10,299	1,623	12,744	29,383	1,159	2,557	4,282	9,349	2,638	4,666	1,736	2,996	4,011
1997	84,695	53,884	2,411	10,159	9,757	2,221	4,882	10,077	1,670	12,707	30,811	1,202	2,540	4,324	10,475	2,673	4,841	1,772	2,984	4,012
1998	86,998	54,949	2,284	10,395	10,930	2,186	4,690	9,923	1,738	12,803	32,049	1,297	2,571	4,283	11,469	2,639	4,861	1,842	3,087	4,023
1999	93,817	58,135	2,195	10,207	12,748	2,216	5,208	10,335	1,737	13,489	35,682	1,367	2,767	4,745	12,926	3,053	5,324	1,851	3,649	4,359
2000	105,682	64,534	2,098	10,820	16,928	2,403	5,395	10,891	1,860	14,139	41,148	1,401	3,069	5,441	15,709	3,725	6,181	1,956	3,666	4,531
2001	115,796	70,212	2,227	11,470	19,923	2,472	5,811	11,460	2,016	14,833	45,584	1,537	3,199	5,803	17,490	4,371	6,641	2,201	4,342	5,073
2002	125,272	75,146	2,322	12,839	20,660	2,537	6,319	12,383	2,195	15,891	50,126	1,569	3,405	6,278	19,586	4,635	7,326	2,362	4,965	6,008
2003	126,040	75,138	2,350	13,789	17,964	2,513	6,704	13,206	2,458	16,154	50,902	1,563	3,479	6,409	19,328	4,348	7,495	2,426	5,854	6,180
2004	122,925	74,929	2,427	14,610	16,424	2,556	6,656	13,540	2,645	16,071	47,996	1,548	3,365	6,121	17,940	4,009	6,866	2,363	5,784	6,019
2005	120,375	74,938	2,396	15,249	16,019	2,483	6,682	13,695	2,465	15,949	45,437	1,478	3,203	5,643	17,038	3,541	6,441	2,441	5,652	6,233

NOTE: Distribution by citizenship status was not requested before 1980.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 10. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	485,627	493,256	493,311	509,620	540,417	567,170	574,937	583,226
Science and engineering	404,856	411,182	413,536	429,242	454,847	474,694	476,195	478,782
Science	304,818	309,491	309,424	319,749	335,179	347,317	352,629	358,309
Agricultural sciences	12,168	12,312	12,023	12,235	12,698	13,197	13,445	13,123
Biological sciences	56,695	56,959	56,282	57,639	61,088	64,701	66,548	68,449
Anatomy	785	749	795	735	906	908	897	938
Biochemistry	5,148	5,101	4,966	4,917	5,190	5,552	5,612	5,814
Biology	14,277	13,989	13,407	13,352	13,822	14,770	15,458	15,668
Biometry/epidemiology	3,514	3,704	3,615	3,817	4,071	4,439	4,674	4,805
Biophysics	737	710	751	877	953	1,032	1,180	1,183
Botany	2,042	1,974	1,904	1,921	1,973	1,901	1,831	1,860
Cell biology	4,379	4,637	4,820	4,911	5,375	5,689	5,830	6,177
Ecology	1,670	1,704	1,762	1,888	1,967	2,230	2,185	2,165
Entomology/parasitology	1,168	1,145	1,104	1,170	1,191	1,206	1,241	1,126
Genetics	1,727	1,783	1,712	1,841	1,909	2,073	2,129	2,155
Microbiology/immunology/virology	4,773	4,815	4,814	4,798	5,208	5,256	5,375	5,401
Nutrition	4,486	4,508	4,413	4,429	4,539	4,695	4,771	4,817
Pathology	1,580	1,580	1,531	1,637	1,613	1,541	1,540	1,576
Pharmacology	2,730	2,757	2,963	3,140	3,234	3,357	3,122	3,114
Physiology	2,151	2,083	2,015	1,967	2,076	2,328	2,409	2,399
Zoology	1,586	1,523	1,445	1,411	1,349	1,301	1,236	1,264
Biosciences, nec	3,942	4,197	4,265	4,828	5,712	6,423	7,058	7,987
Computer sciences	38,027	42,478	47,350	52,196	55,269	53,696	50,016	48,046
Earth, atmospheric, and ocean sciences	14,258	14,083	13,941	13,841	14,240	14,620	15,131	14,827
Atmospheric sciences	965	913	963	924	1,036	1,150	1,086	1,146
Geosciences	6,687	6,637	6,596	6,544	6,712	6,889	7,358	7,212
Oceanography	2,562	2,624	2,668	2,585	2,618	2,695	2,801	2,760
Earth/atmospheric/ocean sciences, nec	4,044	3,909	3,714	3,788	3,874	3,886	3,886	3,709
Mathematical sciences	16,485	16,257	15,650	16,651	18,163	19,465	19,931	20,210
Mathematics/applied mathematics	13,827	13,521	12,823	13,569	14,702	15,569	15,964	16,106
Statistics	2,658	2,736	2,827	3,082	3,461	3,896	3,967	4,104
Physical sciences	30,575	30,691	30,385	31,038	32,341	34,298	35,761	36,396
Astronomy	820	832	888	916	990	1,080	1,119	1,191
Chemistry	18,482	18,416	18,105	18,366	19,045	20,049	20,776	21,122
Physics	10,809	10,869	10,841	11,248	11,701	12,555	13,298	13,472
Physical sciences, nec	464	574	551	508	605	614	568	611
Psychology	52,557	51,727	50,466	50,467	51,165	52,211	54,218	57,412
Clinical psychology	12,733	12,798	12,488	12,488	12,609	13,118	13,771	14,283
Psychology, general	17,098	16,238	15,624	15,837	15,159	15,580	16,276	16,786
Psychology, nec	22,726	22,691	22,354	22,142	23,397	23,513	24,171	26,343
Social sciences	84,053	84,984	83,327	85,682	90,215	95,129	97,579	99,846
Agricultural economics	1,995	2,014	2,079	2,161	2,187	2,318	2,195	2,118
Anthropology (cultural/social)	7,577	7,633	7,626	7,491	7,481	7,789	7,826	7,706
Economics (except agricultural)	10,701	10,562	10,748	11,408	12,009	12,316	12,318	11,805
Geography	4,326	4,250	4,036	4,304	4,383	4,721	4,809	4,772
History and philosophy of science	508	557	532	571	663	737	994	965
Linguistics	2,935	2,799	2,674	2,744	2,875	3,028	2,941	3,187
Political science	30,828	31,372	31,131	31,805	34,934	36,880	39,270	41,106
Sociology	9,058	8,966	8,652	8,812	8,946	9,127	8,874	9,037
Sociology/anthropology	857	741	745	808	719	773	839	848
Social sciences, nec	15,268	16,090	15,104	15,578	16,018	17,440	17,513	18,302

TABLE 10. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	100,038	101,691	104,112	109,493	119,668	127,377	123,566	120,473
Aerospace engineering	3,137	3,349	3,407	3,451	3,685	4,048	4,089	4,170
Agricultural engineering	975	986	943	947	952	1,058	1,041	1,059
Biomedical engineering	2,855	3,069	3,197	3,599	4,338	5,301	5,807	6,067
Chemical engineering	7,093	6,883	7,056	6,913	7,414	7,516	7,452	7,173
Civil engineering	16,517	16,226	16,451	16,665	17,713	18,890	18,561	18,050
Electrical engineering	31,384	31,822	33,611	36,100	39,948	41,763	38,995	37,444
Engineering science	1,701	1,627	1,632	1,798	2,121	2,240	2,198	1,951
Industrial engineering	11,221	11,803	12,119	12,940	14,033	14,313	13,852	13,614
Mechanical engineering	14,696	14,956	15,235	15,852	17,139	18,393	17,852	17,387
Metallurgical/materials engineering	4,680	4,481	4,377	4,721	4,992	5,131	5,059	5,160
Mining engineering	304	328	287	240	267	278	308	279
Nuclear engineering	821	830	792	801	795	885	971	1,013
Petroleum engineering	571	642	627	656	766	849	845	808
Engineering, nec	4,083	4,689	4,378	4,810	5,505	6,712	6,536	6,298
Health fields	80,771	82,074	79,775	80,378	85,570	92,476	98,742	104,444
Medical fields	16,643	17,276	16,407	17,363	19,166	20,574	20,879	21,566
Anesthesiology	907	897	863	917	1,011	1,216	1,337	1,363
Cardiology	36	63	53	50	43	36	39	33
Endocrinology	58	67	57	53	60	80	63	56
Gastroenterology	6	7	14	7	7	11	16	7
Hematology	1	5	6	6	13	25	30	13
Neurology	1,825	1,907	1,982	2,136	2,513	2,665	2,642	2,783
Obstetrics/gynecology	13	16	16	28	23	28	17	21
Oncology/cancer research	209	250	239	261	231	234	274	331
Ophthalmology	38	49	58	46	181	413	423	394
Otorhinolaryngology	0	3	9	4	8	9	12	12
Pediatrics	328	316	403	380	463	429	424	278
Preventive medicine/community health	11,494	11,907	10,757	11,038	11,821	12,312	12,335	12,714
Psychiatry	136	119	184	266	364	277	403	250
Pulmonary disease	0	6	7	8	5	14	7	27
Radiology	249	229	232	262	258	302	275	276
Surgery	122	122	147	130	86	84	75	88
Clinical medicine, nec	1,221	1,313	1,380	1,771	2,079	2,439	2,507	2,920
Other health	64,128	64,798	63,368	63,015	66,404	71,902	77,863	82,878
Dental sciences	1,518	1,467	1,430	1,494	1,446	1,654	1,978	1,783
Nursing	25,591	25,074	23,457	23,609	24,715	26,649	29,781	31,670
Pharmaceutical sciences	2,882	3,422	3,611	3,679	4,538	5,493	5,218	6,091
Speech pathology/audiology	13,198	13,600	13,636	13,193	13,368	13,694	14,152	14,975
Veterinary sciences	1,288	1,314	1,367	1,476	1,691	1,719	1,732	1,970
Health related, nec	19,651	19,921	19,867	19,564	20,646	22,693	25,002	26,389

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 11. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	261,019	262,675	262,109	271,157	287,061	298,694	296,847	295,547
Science and engineering	241,429	242,786	243,057	251,812	266,219	276,260	274,113	272,119
Science	160,379	160,982	159,691	164,576	171,518	176,470	177,819	178,524
Agricultural sciences	7,316	7,263	6,935	6,892	7,045	7,171	7,187	6,921
Biological sciences	27,742	27,338	26,475	26,590	27,677	28,818	29,270	29,946
Anatomy	443	404	428	383	455	442	430	472
Biochemistry	2,919	2,835	2,735	2,694	2,768	2,957	2,969	2,996
Biology	7,064	6,846	6,401	6,163	6,308	6,612	6,841	7,037
Biometry/epidemiology	1,361	1,381	1,374	1,390	1,519	1,668	1,807	1,796
Biophysics	528	497	520	615	647	693	746	775
Botany	1,031	992	918	947	954	905	857	875
Cell biology	2,238	2,277	2,326	2,390	2,584	2,683	2,735	2,887
Ecology	840	823	846	909	928	1,022	993	955
Entomology/parasitology	754	739	662	690	699	669	676	606
Genetics	744	767	739	795	797	857	846	846
Microbiology/immunology/virology	2,402	2,365	2,382	2,303	2,400	2,323	2,322	2,319
Nutrition	1,073	1,077	1,034	993	1,027	1,037	1,050	1,026
Pathology	776	776	702	742	707	631	629	629
Pharmacology	1,405	1,414	1,447	1,482	1,461	1,539	1,429	1,401
Physiology	1,265	1,185	1,133	1,056	1,082	1,184	1,180	1,144
Zoology	892	853	803	744	711	656	596	628
Biosciences, nec	2,007	2,107	2,025	2,294	2,630	2,940	3,164	3,554
Computer sciences	27,225	29,933	33,270	36,894	39,244	38,880	36,739	35,985
Earth, atmospheric, and ocean sciences	8,690	8,358	8,188	7,949	7,993	8,082	8,199	7,939
Atmospheric sciences	731	671	695	626	703	776	723	758
Geosciences	4,372	4,237	4,141	4,061	4,099	4,125	4,299	4,169
Oceanography	1,400	1,402	1,401	1,330	1,309	1,303	1,292	1,279
Earth/atmospheric/ocean sciences, nec	2,187	2,048	1,951	1,932	1,882	1,878	1,885	1,733
Mathematical sciences	10,497	10,214	9,870	10,381	11,277	12,176	12,434	12,773
Mathematics/applied mathematics	8,932	8,659	8,315	8,751	9,463	10,163	10,351	10,546
Statistics	1,565	1,555	1,555	1,630	1,814	2,013	2,083	2,227
Physical sciences	21,822	21,776	21,270	21,702	22,275	23,520	24,461	24,670
Astronomy	590	607	621	651	688	735	764	797
Chemistry	11,918	11,799	11,349	11,511	11,720	12,210	12,544	12,699
Physics	9,029	8,993	8,931	9,206	9,500	10,189	10,797	10,803
Physical sciences, nec	285	377	369	334	367	386	356	371
Psychology	15,095	14,456	13,594	13,149	13,437	13,395	13,992	13,993
Clinical psychology	3,560	3,513	3,205	3,089	3,142	3,163	3,148	3,271
Psychology, general	5,251	4,851	4,597	4,554	4,483	4,582	5,169	4,725
Psychology, nec	6,284	6,092	5,792	5,506	5,812	5,650	5,675	5,997
Social sciences	41,992	41,644	40,089	41,019	42,570	44,428	45,537	46,297
Agricultural economics	1,315	1,299	1,290	1,326	1,343	1,418	1,341	1,245
Anthropology (cultural/social)	3,021	2,989	2,941	2,929	2,864	2,919	2,853	2,782
Economics (except agricultural)	7,237	7,063	6,983	7,413	7,741	7,808	7,833	7,551
Geography	2,663	2,547	2,409	2,503	2,540	2,693	2,801	2,759
History and philosophy of science	315	345	313	327	362	425	580	525
Linguistics	982	966	930	951	984	1,023	1,014	1,132
Political science	15,867	15,799	15,204	15,304	16,315	17,038	18,292	19,020
Sociology	3,362	3,227	3,072	3,080	3,178	3,226	3,080	3,237
Sociology/anthropology	335	271	282	308	266	267	292	303
Social sciences, nec	6,895	7,138	6,665	6,878	6,977	7,611	7,451	7,743

TABLE 11. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	81,050	81,804	83,366	87,236	94,701	99,790	96,294	93,595
Aerospace engineering	2,755	2,926	2,938	2,966	3,169	3,445	3,489	3,563
Agricultural engineering	715	717	661	647	664	743	730	736
Biomedical engineering	2,002	2,083	2,141	2,361	2,825	3,357	3,624	3,770
Chemical engineering	5,366	5,150	5,181	5,084	5,419	5,416	5,346	5,094
Civil engineering	12,415	12,069	12,174	12,162	12,808	13,492	13,120	12,655
Electrical engineering	26,512	26,689	28,075	29,888	32,678	33,969	31,794	30,656
Engineering science	1,370	1,308	1,290	1,435	1,691	1,775	1,733	1,532
Industrial engineering	8,769	9,144	9,406	10,132	10,957	11,047	10,622	10,327
Mechanical engineering	12,934	13,168	13,403	13,908	15,056	16,039	15,396	14,977
Metallurgical/materials engineering	3,550	3,397	3,336	3,548	3,741	3,800	3,738	3,812
Mining engineering	249	273	241	204	230	236	266	240
Nuclear engineering	687	686	636	644	647	703	775	802
Petroleum engineering	516	560	540	565	659	720	711	687
Engineering, nec	3,210	3,634	3,344	3,692	4,157	5,048	4,950	4,744
Health fields	19,590	19,889	19,052	19,345	20,842	22,434	22,734	23,428
Medical fields	6,922	7,075	6,497	6,775	7,391	7,751	7,402	7,354
Anesthesiology	406	421	437	413	422	498	469	463
Cardiology	28	37	38	31	24	26	28	20
Endocrinology	33	35	29	25	28	47	24	25
Gastroenterology	6	2	8	1	1	1	7	2
Hematology	0	1	4	4	3	10	14	8
Neurology	1,058	1,086	1,090	1,123	1,330	1,348	1,311	1,357
Obstetrics/gynecology	8	6	10	15	9	16	7	12
Oncology/cancer research	97	113	109	119	86	90	117	142
Ophthalmology	14	19	27	23	106	142	148	130
Otorhinolaryngology	0	3	3	2	7	7	11	7
Pediatrics	55	55	90	53	66	64	61	49
Preventive medicine/community health	4,306	4,353	3,711	3,798	4,099	4,099	3,825	3,686
Psychiatry	21	23	34	65	69	60	82	52
Pulmonary disease	0	4	5	3	3	6	1	14
Radiology	164	162	140	156	156	172	146	138
Surgery	57	68	77	89	61	58	45	61
Clinical medicine, nec	669	687	685	855	921	1,107	1,106	1,188
Other health	12,668	12,814	12,555	12,570	13,451	14,683	15,332	16,074
Dental sciences	952	918	880	931	882	998	1,125	986
Nursing	2,159	2,261	2,195	2,258	2,559	2,752	2,800	2,939
Pharmaceutical sciences	1,518	1,732	1,764	1,820	2,097	2,481	2,314	2,645
Speech pathology/audiology	1,060	1,060	1,027	1,006	963	958	987	970
Veterinary sciences	609	578	607	610	675	687	692	729
Health related, nec	6,370	6,265	6,082	5,945	6,275	6,807	7,414	7,805

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 12. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	224,608	230,581	231,202	238,463	253,356	268,476	278,090	287,679
Science and engineering	163,427	168,396	170,479	177,430	188,628	198,434	202,082	206,663
Science	144,439	148,509	149,733	155,173	163,661	170,847	174,810	179,785
Agricultural sciences	4,852	5,049	5,088	5,343	5,653	6,026	6,258	6,202
Biological sciences	28,953	29,621	29,807	31,049	33,411	35,883	37,278	38,503
Anatomy	342	345	367	352	451	466	467	466
Biochemistry	2,229	2,266	2,231	2,223	2,422	2,595	2,643	2,818
Biology	7,213	7,143	7,006	7,189	7,514	8,158	8,617	8,631
Biometry/epidemiology	2,153	2,323	2,241	2,427	2,552	2,771	2,867	3,009
Biophysics	209	213	231	262	306	339	434	408
Botany	1,011	982	986	974	1,019	996	974	985
Cell biology	2,141	2,360	2,494	2,521	2,791	3,006	3,095	3,290
Ecology	830	881	916	979	1,039	1,208	1,192	1,210
Entomology/parasitology	414	406	442	480	492	537	565	520
Genetics	983	1,016	973	1,046	1,112	1,216	1,283	1,309
Microbiology/immunology/virology	2,371	2,450	2,432	2,495	2,808	2,933	3,053	3,082
Nutrition	3,413	3,431	3,379	3,436	3,512	3,658	3,721	3,791
Pathology	804	804	829	895	906	910	911	947
Pharmacology	1,325	1,343	1,516	1,658	1,773	1,818	1,693	1,713
Physiology	886	898	882	911	994	1,144	1,229	1,255
Zoology	694	670	642	667	638	645	640	636
Biosciences, nec	1,935	2,090	2,240	2,534	3,082	3,483	3,894	4,433
Computer sciences	10,802	12,545	14,080	15,302	16,025	14,816	13,277	12,061
Earth, atmospheric, and ocean sciences	5,568	5,725	5,753	5,892	6,247	6,538	6,932	6,888
Atmospheric sciences	234	242	268	298	333	374	363	388
Geosciences	2,315	2,400	2,455	2,483	2,613	2,764	3,059	3,043
Oceanography	1,162	1,222	1,267	1,255	1,309	1,392	1,509	1,481
Earth/atmospheric/ocean sciences, nec	1,857	1,861	1,763	1,856	1,992	2,008	2,001	1,976
Mathematical sciences	5,988	6,043	5,780	6,270	6,886	7,289	7,497	7,437
Mathematics/applied mathematics	4,895	4,862	4,508	4,818	5,239	5,406	5,613	5,560
Statistics	1,093	1,181	1,272	1,452	1,647	1,883	1,884	1,877
Physical sciences	8,753	8,915	9,115	9,336	10,066	10,778	11,300	11,726
Astronomy	230	225	267	265	302	345	355	394
Chemistry	6,564	6,617	6,756	6,855	7,325	7,839	8,232	8,423
Physics	1,780	1,876	1,910	2,042	2,201	2,366	2,501	2,669
Physical sciences, nec	179	197	182	174	238	228	212	240
Psychology	37,462	37,271	36,872	37,318	37,728	38,816	40,226	43,419
Clinical psychology	9,173	9,285	9,283	9,399	9,467	9,955	10,623	11,012
Psychology, general	11,847	11,387	11,027	11,283	10,676	10,998	11,107	12,061
Psychology, nec	16,442	16,599	16,562	16,636	17,585	17,863	18,496	20,346
Social sciences	42,061	43,340	43,238	44,663	47,645	50,701	52,042	53,549
Agricultural economics	680	715	789	835	844	900	854	873
Anthropology (cultural/social)	4,556	4,644	4,685	4,562	4,617	4,870	4,973	4,924
Economics (except agricultural)	3,464	3,499	3,765	3,995	4,268	4,508	4,485	4,254
Geography	1,663	1,703	1,627	1,801	1,843	2,028	2,008	2,013
History and philosophy of science	193	212	219	244	301	312	414	440
Linguistics	1,953	1,833	1,744	1,793	1,891	2,005	1,927	2,055
Political science	14,961	15,573	15,927	16,501	18,619	19,842	20,978	22,086
Sociology	5,696	5,739	5,580	5,732	5,768	5,901	5,794	5,800
Sociology/anthropology	522	470	463	500	453	506	547	545
Social sciences, nec	8,373	8,952	8,439	8,700	9,041	9,829	10,062	10,559

TABLE 12. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	18,988	19,887	20,746	22,257	24,967	27,587	27,272	26,878
Aerospace engineering	382	423	469	485	516	603	600	607
Agricultural engineering	260	269	282	300	288	315	311	323
Biomedical engineering	853	986	1,056	1,238	1,513	1,944	2,183	2,297
Chemical engineering	1,727	1,733	1,875	1,829	1,995	2,100	2,106	2,079
Civil engineering	4,102	4,157	4,277	4,503	4,905	5,398	5,441	5,395
Electrical engineering	4,872	5,133	5,536	6,212	7,270	7,794	7,201	6,788
Engineering science	331	319	342	363	430	465	465	419
Industrial engineering	2,452	2,659	2,713	2,808	3,076	3,266	3,230	3,287
Mechanical engineering	1,762	1,788	1,832	1,944	2,083	2,354	2,456	2,410
Metallurgical/materials engineering	1,130	1,084	1,041	1,173	1,251	1,331	1,321	1,348
Mining engineering	55	55	46	36	37	42	42	39
Nuclear engineering	134	144	156	157	148	182	196	211
Petroleum engineering	55	82	87	91	107	129	134	121
Engineering, nec	873	1,055	1,034	1,118	1,348	1,664	1,586	1,554
Health fields	61,181	62,185	60,723	61,033	64,728	70,042	76,008	81,016
Medical fields	9,721	10,201	9,910	10,588	11,775	12,823	13,477	14,212
Anesthesiology	501	476	426	504	589	718	868	900
Cardiology	8	26	15	19	19	10	11	13
Endocrinology	25	32	28	28	32	33	39	31
Gastroenterology	0	5	6	6	6	10	9	5
Hematology	1	4	2	2	10	15	16	5
Neurology	767	821	892	1,013	1,183	1,317	1,331	1,426
Obstetrics/gynecology	5	10	6	13	14	12	10	9
Oncology/cancer research	112	137	130	142	145	144	157	189
Ophthalmology	24	30	31	23	75	271	275	264
Otorhinolaryngology	0	0	6	2	1	2	1	5
Pediatrics	273	261	313	327	397	365	363	229
Preventive medicine/community health	7,188	7,554	7,046	7,240	7,722	8,213	8,510	9,028
Psychiatry	115	96	150	201	295	217	321	198
Pulmonary disease	0	2	2	5	2	8	6	13
Radiology	85	67	92	106	102	130	129	138
Surgery	65	54	70	41	25	26	30	27
Clinical medicine, nec	552	626	695	916	1,158	1,332	1,401	1,732
Other health	51,460	51,984	50,813	50,445	52,953	57,219	62,531	66,804
Dental sciences	566	549	550	563	564	656	853	797
Nursing	23,432	22,813	21,262	21,351	22,156	23,897	26,981	28,731
Pharmaceutical sciences	1,364	1,690	1,847	1,859	2,441	3,012	2,904	3,446
Speech pathology/audiology	12,138	12,540	12,609	12,187	12,405	12,736	13,165	14,005
Veterinary sciences	679	736	760	866	1,016	1,032	1,040	1,241
Health related, nec	13,281	13,656	13,785	13,619	14,371	15,886	17,588	18,584

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 13. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	338,608	344,372	346,658	359,608	384,604	406,741	406,114	408,997
Science and engineering	280,579	285,028	288,310	300,953	322,181	339,157	335,973	336,153
Science	210,033	212,909	213,082	221,321	233,171	243,839	244,790	248,207
Agricultural sciences	11,678	11,842	11,517	11,681	12,093	12,508	12,766	12,446
Biological sciences	40,738	40,685	40,224	41,069	43,390	46,436	46,788	48,422
Anatomy	584	562	591	552	655	643	611	646
Biochemistry	3,633	3,585	3,516	3,513	3,646	3,951	3,894	4,088
Biology	10,564	10,459	10,096	10,071	10,468	11,245	11,647	11,951
Biometry/epidemiology	2,143	2,200	2,192	2,356	2,635	2,856	2,724	2,782
Biophysics	417	416	449	533	613	680	732	739
Botany	1,903	1,832	1,811	1,834	1,907	1,827	1,759	1,788
Cell biology	2,709	2,849	3,013	3,118	3,427	3,649	3,684	3,960
Ecology	1,526	1,526	1,582	1,678	1,683	1,952	1,933	1,893
Entomology/parasitology	1,109	1,087	1,055	1,119	1,138	1,158	1,197	1,094
Genetics	1,097	1,124	1,064	1,136	1,129	1,272	1,247	1,302
Microbiology/immunology/virology	3,258	3,220	3,206	3,195	3,395	3,383	3,398	3,420
Nutrition	3,676	3,650	3,447	3,445	3,451	3,655	3,718	3,889
Pathology	1,074	1,053	1,015	1,033	984	995	998	958
Pharmacology	1,829	1,848	2,058	2,039	2,070	2,283	2,025	2,104
Physiology	1,341	1,324	1,197	1,134	1,202	1,397	1,443	1,450
Zoology	1,522	1,461	1,406	1,354	1,287	1,244	1,204	1,254
Biosciences, nec	2,353	2,489	2,526	2,959	3,700	4,246	4,574	5,104
Computer sciences	23,601	26,530	29,276	32,262	34,798	34,754	31,861	30,917
Earth, atmospheric, and ocean sciences	12,049	11,866	11,793	11,649	11,991	12,368	12,766	12,446
Atmospheric sciences	942	896	938	897	1,000	1,114	1,042	1,089
Geosciences	5,501	5,478	5,458	5,390	5,535	5,736	6,131	5,997
Oceanography	2,179	2,217	2,265	2,222	2,224	2,276	2,372	2,282
Earth/atmospheric/ocean sciences, nec	3,427	3,275	3,132	3,140	3,232	3,242	3,221	3,078
Mathematical sciences	12,520	12,355	12,286	13,185	14,400	15,546	15,734	15,988
Mathematics/applied mathematics	10,413	10,138	10,074	10,767	11,634	12,416	12,558	12,760
Statistics	2,107	2,217	2,212	2,418	2,766	3,130	3,176	3,228
Physical sciences	22,559	22,544	22,436	22,880	23,950	25,340	26,511	27,230
Astronomy	509	511	542	538	566	637	663	690
Chemistry	13,769	13,607	13,476	13,641	14,165	14,859	15,436	15,897
Physics	7,842	7,860	7,876	8,206	8,634	9,237	9,851	10,039
Physical sciences, nec	439	566	542	495	585	607	561	604
Psychology	28,101	27,479	26,722	27,318	28,232	28,817	28,765	29,726
Clinical psychology	3,900	3,910	3,860	3,837	3,948	3,957	3,908	3,758
Psychology, general	11,263	10,684	10,221	10,221	10,273	11,065	11,026	11,515
Psychology, nec	12,938	12,885	12,641	13,260	14,011	13,795	13,831	14,453
Social sciences	58,787	59,608	58,828	61,277	64,317	68,070	69,599	71,032
Agricultural economics	1,928	1,949	2,019	2,099	2,126	2,246	2,110	2,046
Anthropology (cultural/social)	5,514	5,640	5,642	5,547	5,552	5,879	5,959	5,860
Economics (except agricultural)	6,896	6,923	6,990	7,480	8,111	8,445	8,546	8,181
Geography	4,018	3,925	3,715	4,002	4,107	4,422	4,513	4,499
History and philosophy of science	281	350	332	373	449	508	756	708
Linguistics	2,149	2,063	1,979	2,044	2,197	2,324	2,295	2,329
Political science	19,373	20,067	19,850	20,737	22,370	23,693	24,959	25,638
Sociology	7,066	6,842	6,618	6,815	6,950	7,063	6,908	7,016
Sociology/anthropology	693	616	610	633	601	639	704	710
Social sciences, nec	10,869	11,233	11,073	11,547	11,854	12,851	12,849	14,045

TABLE 13. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	70,546	72,119	75,228	79,632	89,010	95,318	91,183	87,946
Aerospace engineering	2,311	2,339	2,385	2,415	2,644	2,908	2,995	3,030
Agricultural engineering	930	940	889	879	888	993	979	999
Biomedical engineering	1,792	1,939	2,004	2,158	2,732	3,498	3,688	3,793
Chemical engineering	5,089	4,887	5,088	4,911	5,414	5,519	5,422	5,142
Civil engineering	12,651	12,695	12,965	13,271	14,097	15,266	14,967	14,548
Electrical engineering	20,225	21,170	23,130	25,158	28,764	30,365	27,945	26,618
Engineering science	1,069	1,110	1,000	1,096	1,234	1,482	1,362	1,088
Industrial engineering	7,682	7,967	8,469	9,112	10,050	9,798	9,223	8,647
Mechanical engineering	11,117	11,235	11,617	12,120	13,537	14,342	13,565	12,911
Metallurgical/materials engineering	3,227	3,108	3,147	3,453	3,703	3,803	3,802	3,992
Mining engineering	211	222	275	235	263	273	308	279
Nuclear engineering	715	716	672	691	686	773	872	913
Petroleum engineering	463	543	531	538	638	729	708	692
Engineering, nec	3,064	3,248	3,056	3,595	4,360	5,569	5,347	5,294
Health fields	58,029	59,344	58,348	58,655	62,423	67,584	70,141	72,844
Medical fields	10,172	10,611	10,417	10,910	12,019	12,791	12,644	13,037
Anesthesiology	325	303	352	405	510	619	655	634
Cardiology	10	34	26	25	16	9	0	0
Endocrinology	58	67	57	53	58	78	62	56
Gastroenterology	6	7	14	7	7	11	16	7
Hematology	1	5	6	6	7	13	23	13
Neurology	889	999	1,073	1,173	1,430	1,540	1,419	1,497
Obstetrics/gynecology	8	13	8	20	13	13	3	10
Oncology/cancer research	139	145	143	146	123	116	137	186
Ophthalmology	31	49	58	46	178	399	404	392
Otorhinolaryngology	0	3	6	4	8	9	12	12
Pediatrics	226	243	257	287	362	361	355	211
Preventive medicine/community health	7,343	7,534	7,052	7,191	7,551	7,753	7,546	7,942
Psychiatry	64	58	78	189	267	232	357	197
Pulmonary disease	0	1	1	1	5	14	6	26
Radiology	206	177	190	217	216	237	236	230
Surgery	118	118	139	122	78	75	68	81
Clinical medicine, nec	748	855	957	1,018	1,190	1,312	1,345	1,543
Other health	47,857	48,733	47,931	47,745	50,404	54,793	57,497	59,807
Dental sciences	1,204	1,199	1,213	1,239	1,205	1,365	1,661	1,482
Nursing	20,424	19,979	18,857	18,965	19,837	21,464	23,522	24,043
Pharmaceutical sciences	2,202	2,672	2,949	2,972	3,707	4,517	3,964	4,302
Speech pathology/audiology	10,887	11,342	11,298	10,915	10,662	10,821	10,903	11,413
Veterinary sciences	1,235	1,267	1,322	1,430	1,638	1,667	1,674	1,858
Health related, nec	11,905	12,274	12,292	12,224	13,355	14,959	15,773	16,709

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 14. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	147,019	148,884	146,653	150,012	155,813	160,429	168,823	174,229
Science and engineering	124,277	126,154	125,226	128,289	132,666	135,537	140,222	142,629
Science	94,785	96,582	96,342	98,428	102,008	103,478	107,839	110,102
Agricultural sciences	490	470	506	554	605	689	679	677
Biological sciences	15,957	16,274	16,058	16,570	17,698	18,265	19,760	20,027
Anatomy	201	187	204	183	251	265	286	292
Biochemistry	1,515	1,516	1,450	1,404	1,544	1,601	1,718	1,726
Biology	3,713	3,530	3,311	3,281	3,354	3,525	3,811	3,717
Biometry/epidemiology	1,371	1,504	1,423	1,461	1,436	1,583	1,950	2,023
Biophysics	320	294	302	344	340	352	448	444
Botany	139	142	93	87	66	74	72	72
Cell biology	1,670	1,788	1,807	1,793	1,948	2,040	2,146	2,217
Ecology	144	178	180	210	284	278	252	272
Entomology/parasitology	59	58	49	51	53	48	44	32
Genetics	630	659	648	705	780	801	882	853
Microbiology/immunology/virology	1,515	1,595	1,608	1,603	1,813	1,873	1,977	1,981
Nutrition	810	858	966	984	1,088	1,040	1,053	928
Pathology	506	527	516	604	629	546	542	618
Pharmacology	901	909	905	1,101	1,164	1,074	1,097	1,010
Physiology	810	759	818	833	874	931	966	949
Zoology	64	62	39	57	62	57	32	10
Biosciences, nec	1,589	1,708	1,739	1,869	2,012	2,177	2,484	2,883
Computer sciences	14,426	15,948	18,074	19,934	20,471	18,942	18,155	17,129
Earth, atmospheric, and ocean sciences	2,209	2,217	2,148	2,192	2,249	2,252	2,365	2,381
Atmospheric sciences	23	17	25	27	36	36	44	57
Geosciences	1,186	1,159	1,138	1,154	1,177	1,153	1,227	1,215
Oceanography	383	407	403	363	394	419	429	478
Earth/atmospheric/ocean sciences, nec	617	634	582	648	642	644	665	631
Mathematical sciences	3,965	3,902	3,364	3,466	3,763	3,919	4,197	4,222
Mathematics/applied mathematics	3,414	3,383	2,749	2,802	3,068	3,153	3,406	3,346
Statistics	551	519	615	664	695	766	791	876
Physical sciences	8,016	8,147	7,949	8,158	8,391	8,958	9,250	9,166
Astronomy	311	321	346	378	424	443	456	501
Chemistry	4,713	4,809	4,629	4,725	4,880	5,190	5,340	5,225
Physics	2,967	3,009	2,965	3,042	3,067	3,318	3,447	3,433
Physical sciences, nec	25	8	9	13	20	7	7	7
Psychology	24,456	24,248	23,744	23,149	22,933	23,394	25,453	27,686
Clinical psychology	8,833	8,888	8,628	8,651	8,661	9,161	9,863	10,525
Psychology, general	5,835	5,554	5,403	5,616	4,886	4,515	5,250	5,271
Psychology, nec	9,788	9,806	9,713	8,882	9,386	9,718	10,340	11,890
Social sciences	25,266	25,376	24,499	24,405	25,898	27,059	27,980	28,814
Agricultural economics	67	65	60	62	61	72	85	72
Anthropology (cultural/social)	2,063	1,993	1,984	1,944	1,929	1,910	1,867	1,846
Economics (except agricultural)	3,805	3,639	3,758	3,928	3,898	3,871	3,772	3,624
Geography	308	325	321	302	276	299	296	273
History and philosophy of science	227	207	200	198	214	229	238	257
Linguistics	786	736	695	700	678	704	646	858
Political science	11,455	11,305	11,281	11,068	12,564	13,187	14,311	15,468
Sociology	1,992	2,124	2,034	1,997	1,996	2,064	1,966	2,021
Sociology/anthropology	164	125	135	175	118	134	135	138
Social sciences, nec	4,399	4,857	4,031	4,031	4,164	4,589	4,664	4,257

TABLE 14. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	29,492	29,572	28,884	29,861	30,658	32,059	32,383	32,527
Aerospace engineering	826	1,010	1,022	1,036	1,041	1,140	1,094	1,140
Agricultural engineering	45	46	54	68	64	65	62	60
Biomedical engineering	1,063	1,130	1,193	1,441	1,606	1,803	2,119	2,274
Chemical engineering	2,004	1,996	1,968	2,002	2,000	1,997	2,030	2,031
Civil engineering	3,866	3,531	3,486	3,394	3,616	3,624	3,594	3,502
Electrical engineering	11,159	10,652	10,481	10,942	11,184	11,398	11,050	10,826
Engineering science	632	517	632	702	887	758	836	863
Industrial engineering	3,539	3,836	3,650	3,828	3,983	4,515	4,629	4,967
Mechanical engineering	3,579	3,721	3,618	3,732	3,602	4,051	4,287	4,476
Metallurgical/materials engineering	1,453	1,373	1,230	1,268	1,289	1,328	1,257	1,168
Mining engineering	93	106	12	5	4	5	0	0
Nuclear engineering	106	114	120	110	109	112	99	100
Petroleum engineering	108	99	96	118	128	120	137	116
Engineering, nec	1,019	1,441	1,322	1,215	1,145	1,143	1,189	1,004
Health fields	22,742	22,730	21,427	21,723	23,147	24,892	28,601	31,600
Medical fields	6,471	6,665	5,990	6,453	7,147	7,783	8,235	8,529
Anesthesiology	582	594	511	512	501	597	682	729
Cardiology	26	29	27	25	27	27	39	33
Endocrinology	0	0	0	0	2	2	1	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	6	12	7	0
Neurology	936	908	909	963	1,083	1,125	1,223	1,286
Obstetrics/gynecology	5	3	8	8	10	15	14	11
Oncology/cancer research	70	105	96	115	108	118	137	145
Ophthalmology	7	0	0	0	3	14	19	2
Otorhinolaryngology	0	0	3	0	0	0	0	0
Pediatrics	102	73	146	93	101	68	69	67
Preventive medicine/community health	4,151	4,373	3,705	3,847	4,270	4,559	4,789	4,772
Psychiatry	72	61	106	77	97	45	46	53
Pulmonary disease	0	5	6	7	0	0	1	1
Radiology	43	52	42	45	42	65	39	46
Surgery	4	4	8	8	8	9	7	7
Clinical medicine, nec	473	458	423	753	889	1,127	1,162	1,377
Other health	16,271	16,065	15,437	15,270	16,000	17,109	20,366	23,071
Dental sciences	314	268	217	255	241	289	317	301
Nursing	5,167	5,095	4,600	4,644	4,878	5,185	6,259	7,627
Pharmaceutical sciences	680	750	662	707	831	976	1,254	1,789
Speech pathology/audiology	2,311	2,258	2,338	2,278	2,706	2,873	3,249	3,562
Veterinary sciences	53	47	45	46	53	52	58	112
Health related, nec	7,746	7,647	7,575	7,340	7,291	7,734	9,229	9,680

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 15. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	485,627	493,256	493,311	509,620	540,417	567,170	574,937	583,226
U.S. citizens and permanent residents	378,560	377,802	364,954	368,840	387,532	412,282	424,147	436,530
American Indian/Alaska Native	2,036	1,994	2,021	2,136	2,239	2,399	2,368	2,651
Asian/Pacific Islander	31,615	32,717	30,250	32,035	35,021	38,290	38,080	38,737
Black, non-Hispanic	24,261	25,200	25,928	27,075	28,719	31,242	32,619	33,708
Hispanic	18,765	20,322	21,327	22,329	24,282	26,687	28,126	29,457
White, non-Hispanic	279,450	275,325	261,112	260,380	270,034	283,276	288,866	292,510
Other or unknown	22,433	22,244	24,316	24,885	27,237	30,388	34,088	39,467
Temporary-visa holders	107,067	115,454	128,357	140,780	152,885	154,888	150,790	146,696
Science and engineering	404,856	411,182	413,536	429,242	454,847	474,694	476,195	478,782
U.S. citizens and permanent residents	302,879	301,254	290,711	294,711	309,235	327,358	332,624	339,550
American Indian/Alaska Native	1,607	1,553	1,602	1,683	1,734	1,879	1,863	2,124
Asian/Pacific Islander	26,726	27,570	25,058	26,584	29,332	31,921	30,881	30,852
Black, non-Hispanic	19,651	20,273	20,834	21,459	22,672	24,174	24,684	25,346
Hispanic	15,487	16,520	17,203	17,974	19,634	21,244	22,277	23,481
White, non-Hispanic	220,667	216,750	205,569	206,027	213,144	222,709	225,039	226,137
Other or unknown	18,741	18,588	20,445	20,984	22,719	25,431	27,880	31,610
Temporary-visa holders	101,977	109,928	122,825	134,531	145,612	147,336	143,571	139,232
Science	304,818	309,491	309,424	319,749	335,179	347,317	352,629	358,309
U.S. citizens and permanent residents	240,630	241,066	234,000	237,740	247,873	259,965	266,168	272,912
American Indian/Alaska Native	1,371	1,311	1,394	1,456	1,490	1,575	1,585	1,695
Asian/Pacific Islander	18,714	19,409	17,784	18,577	19,948	21,151	21,097	21,185
Black, non-Hispanic	16,830	17,308	17,857	18,544	19,598	20,962	21,285	21,876
Hispanic	12,587	13,596	14,185	14,791	16,173	17,265	18,113	19,391
White, non-Hispanic	176,569	174,687	166,486	167,568	172,585	179,240	181,804	183,301
Other or unknown	14,559	14,755	16,294	16,804	18,079	19,772	22,284	25,464
Temporary-visa holders	64,188	68,425	75,424	82,009	87,306	87,352	86,461	85,397
Agricultural sciences	12,168	12,312	12,023	12,235	12,698	13,197	13,445	13,123
U.S. citizens and permanent residents	9,514	9,774	9,612	9,722	10,085	10,601	10,750	10,474
American Indian/Alaska Native	71	69	56	58	76	77	82	76
Asian/Pacific Islander	315	310	250	262	286	316	329	300
Black, non-Hispanic	344	310	292	327	375	460	394	417
Hispanic	391	422	440	425	406	490	524	506
White, non-Hispanic	8,093	8,383	8,152	8,147	8,486	8,799	8,936	8,662
Other or unknown	300	280	422	503	456	459	485	513
Temporary-visa holders	2,654	2,538	2,411	2,513	2,613	2,596	2,695	2,649
Biological sciences	56,695	56,959	56,282	57,639	61,088	64,701	66,548	68,449
U.S. citizens and permanent residents	45,359	45,770	44,521	45,205	47,262	49,865	50,755	52,047
American Indian/Alaska Native	191	186	189	205	210	236	249	278
Asian/Pacific Islander	4,439	4,476	4,246	4,710	4,835	5,158	5,300	5,461
Black, non-Hispanic	2,141	2,218	2,241	2,351	2,479	2,757	2,893	2,980
Hispanic	2,053	2,185	2,183	2,338	2,585	2,830	2,998	3,146
White, non-Hispanic	34,323	34,319	33,255	33,193	34,568	35,809	36,057	36,635
Other or unknown	2,212	2,386	2,407	2,408	2,585	3,075	3,258	3,547
Temporary-visa holders	11,336	11,189	11,761	12,434	13,826	14,836	15,793	16,402
Computer sciences	38,027	42,478	47,350	52,196	55,269	53,696	50,016	48,046
U.S. citizens and permanent residents	23,605	25,323	25,088	26,142	28,203	29,420	28,286	27,555
American Indian/Alaska Native	92	74	80	87	83	104	92	100
Asian/Pacific Islander	5,219	6,144	5,332	5,427	5,953	5,767	5,118	4,671
Black, non-Hispanic	1,355	1,485	1,512	1,709	1,898	1,951	1,802	1,761
Hispanic	754	865	863	894	1,004	1,101	1,143	1,202
White, non-Hispanic	13,948	14,377	14,468	15,057	15,962	17,260	16,954	16,595
Other or unknown	2,237	2,378	2,833	2,968	3,303	3,237	3,177	3,226
Temporary-visa holders	14,422	17,155	22,262	26,054	27,066	24,276	21,730	20,491

TABLE 15. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences	14,258	14,083	13,941	13,841	14,240	14,620	15,131	14,827
U.S. citizens and permanent residents	11,759	11,563	11,249	11,059	11,472	11,845	12,344	12,066
American Indian/Alaska Native	84	63	61	70	81	63	67	61
Asian/Pacific Islander	424	400	351	341	355	363	436	415
Black, non-Hispanic	202	213	220	227	266	270	261	262
Hispanic	370	400	355	397	413	484	537	507
White, non-Hispanic	10,098	10,007	9,812	9,573	9,799	9,963	10,342	10,120
Other or unknown	581	480	450	451	558	702	701	701
Temporary-visa holders	2,499	2,520	2,692	2,782	2,768	2,775	2,787	2,761
Mathematical sciences	16,485	16,257	15,650	16,651	18,163	19,465	19,931	20,210
U.S. citizens and permanent residents	11,064	10,330	9,593	10,167	11,139	12,057	12,560	12,814
American Indian/Alaska Native	34	30	25	38	24	25	39	38
Asian/Pacific Islander	1,174	1,002	948	985	1,184	1,364	1,335	1,419
Black, non-Hispanic	613	594	572	590	626	655	696	721
Hispanic	454	447	460	482	542	604	625	633
White, non-Hispanic	8,097	7,659	6,955	7,386	7,923	8,414	8,859	8,915
Other or unknown	692	598	633	686	840	995	1,006	1,088
Temporary-visa holders	5,421	5,927	6,057	6,484	7,024	7,408	7,371	7,396
Physical sciences	30,575	30,691	30,385	31,038	32,341	34,298	35,761	36,396
U.S. citizens and permanent residents	19,837	19,559	18,730	18,835	19,251	20,213	21,206	21,780
American Indian/Alaska Native	64	69	75	81	83	79	78	82
Asian/Pacific Islander	1,760	1,682	1,524	1,458	1,424	1,619	1,735	1,706
Black, non-Hispanic	913	903	918	875	893	939	995	1,008
Hispanic	832	895	844	896	981	1,094	1,232	1,240
White, non-Hispanic	15,218	15,037	14,343	14,248	14,620	15,107	15,725	16,327
Other or unknown	1,050	973	1,026	1,277	1,250	1,375	1,441	1,417
Temporary-visa holders	10,738	11,132	11,655	12,203	13,090	14,085	14,555	14,616
Psychology	52,557	51,727	50,466	50,467	51,165	52,211	54,218	57,412
U.S. citizens and permanent residents	50,371	49,488	48,203	47,946	48,308	49,099	51,045	54,384
American Indian/Alaska Native	311	300	360	334	320	324	324	334
Asian/Pacific Islander	2,019	2,038	2,063	2,176	2,186	2,376	2,447	2,569
Black, non-Hispanic	3,813	3,749	4,214	4,347	4,491	4,692	5,001	5,251
Hispanic	3,228	3,567	4,145	4,309	4,655	4,680	4,800	5,119
White, non-Hispanic	37,622	36,267	33,801	33,578	33,473	33,587	33,655	34,479
Other or unknown	3,378	3,567	3,620	3,202	3,183	3,440	4,818	6,632
Temporary-visa holders	2,186	2,239	2,263	2,521	2,857	3,112	3,173	3,028
Social sciences	84,053	84,984	83,327	85,682	90,215	95,129	97,579	99,846
U.S. citizens and permanent residents	69,121	69,259	67,004	68,664	72,153	76,865	79,222	81,792
American Indian/Alaska Native	524	520	548	583	613	667	654	726
Asian/Pacific Islander	3,364	3,357	3,070	3,218	3,725	4,188	4,397	4,644
Black, non-Hispanic	7,449	7,836	7,888	8,118	8,570	9,238	9,243	9,476
Hispanic	4,505	4,815	4,895	5,050	5,587	5,982	6,254	7,038
White, non-Hispanic	49,170	48,638	45,700	46,386	47,754	50,301	51,276	51,568
Other or unknown	4,109	4,093	4,903	5,309	5,904	6,489	7,398	8,340
Temporary-visa holders	14,932	15,725	16,323	17,018	18,062	18,264	18,357	18,054
Engineering	100,038	101,691	104,112	109,493	119,668	127,377	123,566	120,473
U.S. citizens and permanent residents	62,249	60,188	56,711	56,971	61,362	67,393	66,456	66,638
American Indian/Alaska Native	236	242	208	227	244	304	278	429
Asian/Pacific Islander	8,012	8,161	7,274	8,007	9,384	10,770	9,784	9,667
Black, non-Hispanic	2,821	2,965	2,977	2,915	3,074	3,212	3,399	3,470
Hispanic	2,900	2,924	3,018	3,183	3,461	3,979	4,164	4,090
White, non-Hispanic	44,098	42,063	39,083	38,459	40,559	43,469	43,235	42,836
Other or unknown	4,182	3,833	4,151	4,180	4,640	5,659	5,596	6,146
Temporary-visa holders	37,789	41,503	47,401	52,522	58,306	59,984	57,110	53,835

TABLE 15. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Chemical engineering	7,093	6,883	7,056	6,913	7,414	7,516	7,452	7,173
U.S. citizens and permanent residents	4,208	3,869	3,726	3,418	3,701	3,753	3,768	3,690
American Indian/Alaska Native	21	16	20	13	21	19	27	24
Asian/Pacific Islander	469	486	501	494	566	557	468	508
Black, non-Hispanic	185	147	168	167	160	173	169	146
Hispanic	179	182	182	180	206	249	249	240
White, non-Hispanic	3,124	2,805	2,627	2,417	2,565	2,554	2,666	2,561
Other or unknown	230	233	228	147	183	201	189	211
Temporary-visa holders	2,885	3,014	3,330	3,495	3,713	3,763	3,684	3,483
Civil engineering	16,517	16,226	16,451	16,665	17,713	18,890	18,561	18,050
U.S. citizens and permanent residents	11,555	10,801	10,306	10,072	10,553	11,458	11,436	11,417
American Indian/Alaska Native	43	56	39	43	58	65	51	52
Asian/Pacific Islander	1,104	931	744	771	855	1,024	997	1,006
Black, non-Hispanic	410	450	448	431	453	428	453	456
Hispanic	723	701	776	747	778	846	898	896
White, non-Hispanic	8,665	8,088	7,759	7,492	7,707	8,333	8,270	8,139
Other or unknown	610	575	540	588	702	762	767	868
Temporary-visa holders	4,962	5,425	6,145	6,593	7,160	7,432	7,125	6,633
Electrical engineering	31,384	31,822	33,611	36,100	39,948	41,763	38,995	37,444
U.S. citizens and permanent residents	17,459	16,517	15,315	15,534	16,579	18,118	16,878	16,706
American Indian/Alaska Native	33	47	37	45	39	63	54	54
Asian/Pacific Islander	3,443	3,491	3,119	3,454	4,079	4,606	3,823	3,788
Black, non-Hispanic	874	886	830	812	846	812	850	843
Hispanic	812	769	717	825	941	1,094	1,097	1,090
White, non-Hispanic	10,729	9,897	8,982	8,876	9,121	9,709	9,444	9,144
Other or unknown	1,568	1,427	1,630	1,522	1,553	1,834	1,610	1,787
Temporary-visa holders	13,925	15,305	18,296	20,566	23,369	23,645	22,117	20,738
Industrial engineering	11,221	11,803	12,119	12,940	14,033	14,313	13,852	13,614
U.S. citizens and permanent residents	7,869	8,073	7,574	7,607	8,318	8,845	8,783	9,065
American Indian/Alaska Native	34	39	41	43	34	52	48	51
Asian/Pacific Islander	643	784	628	686	878	1,023	949	1,046
Black, non-Hispanic	465	541	557	591	616	685	714	764
Hispanic	364	426	439	469	477	562	629	579
White, non-Hispanic	5,764	5,761	5,329	5,255	5,668	5,680	5,484	5,632
Other or unknown	599	522	580	563	645	843	959	993
Temporary-visa holders	3,352	3,730	4,545	5,333	5,715	5,468	5,069	4,549
Mechanical engineering	14,696	14,956	15,235	15,852	17,139	18,393	17,852	17,387
U.S. citizens and permanent residents	9,046	8,760	8,097	8,183	8,604	9,643	9,766	9,744
American Indian/Alaska Native	25	33	27	32	32	42	24	28
Asian/Pacific Islander	973	1,008	804	945	912	1,035	1,015	987
Black, non-Hispanic	412	375	396	354	358	382	369	411
Hispanic	389	388	366	407	450	537	566	575
White, non-Hispanic	6,657	6,491	6,005	5,932	6,254	6,883	6,998	6,898
Other or unknown	590	465	499	513	598	764	794	845
Temporary-visa holders	5,650	6,196	7,138	7,669	8,535	8,750	8,086	7,643
Other engineering	19,127	20,001	19,640	21,023	23,421	26,502	26,854	26,805
U.S. citizens and permanent residents	12,112	12,168	11,693	12,157	13,607	15,576	15,825	16,016
American Indian/Alaska Native	80	51	44	51	60	63	74	220
Asian/Pacific Islander	1,380	1,461	1,478	1,657	2,094	2,525	2,532	2,332
Black, non-Hispanic	475	566	578	560	641	732	844	850
Hispanic	433	458	538	555	609	691	725	710
White, non-Hispanic	9,159	9,021	8,381	8,487	9,244	10,310	10,373	10,462
Other or unknown	585	611	674	847	959	1,255	1,277	1,442
Temporary-visa holders	7,015	7,833	7,947	8,866	9,814	10,926	11,029	10,789

TABLE 15. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Health fields	80,771	82,074	79,775	80,378	85,570	92,476	98,742	104,444
U.S. citizens and permanent residents	75,681	76,548	74,243	74,129	78,297	84,924	91,523	96,980
American Indian/Alaska Native	429	441	419	453	505	520	505	527
Asian/Pacific Islander	4,889	5,147	5,192	5,451	5,689	6,369	7,199	7,885
Black, non-Hispanic	4,610	4,927	5,094	5,616	6,047	7,068	7,935	8,362
Hispanic	3,278	3,802	4,124	4,355	4,648	5,443	5,849	5,976
White, non-Hispanic	58,783	58,575	55,543	54,353	56,890	60,567	63,827	66,373
Other or unknown	3,692	3,656	3,871	3,901	4,518	4,957	6,208	7,857
Temporary-visa holders	5,090	5,526	5,532	6,249	7,273	7,552	7,219	7,464

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 16. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	261,019	262,675	262,109	271,157	287,061	298,694	296,847	295,547
U.S. citizens and permanent residents	186,588	183,127	173,637	174,516	182,423	193,767	196,055	198,423
American Indian/Alaska Native	891	850	843	929	930	1,017	964	1,047
Asian/Pacific Islander	17,564	17,750	16,079	16,927	18,433	19,999	19,072	19,055
Black, non-Hispanic	9,245	9,528	9,289	9,436	10,022	10,758	11,194	11,161
Hispanic	8,756	9,178	9,352	9,648	10,324	11,458	11,982	12,311
White, non-Hispanic	138,292	134,388	125,512	124,759	128,786	135,089	136,097	136,377
Other or unknown	11,840	11,433	12,562	12,817	13,928	15,446	16,746	18,472
Temporary-visa holders	74,431	79,548	88,472	96,641	104,638	104,927	100,792	97,124
Science and engineering	241,429	242,786	243,057	251,812	266,219	276,260	274,113	272,119
U.S. citizens and permanent residents	169,490	165,823	157,023	158,015	164,975	174,927	176,556	178,372
American Indian/Alaska Native	797	744	734	808	810	890	853	959
Asian/Pacific Islander	15,896	16,046	14,404	15,189	16,665	18,062	17,079	16,896
Black, non-Hispanic	8,320	8,565	8,298	8,383	8,909	9,456	9,799	9,653
Hispanic	7,842	8,196	8,268	8,514	9,188	10,183	10,602	10,949
White, non-Hispanic	125,734	121,810	113,782	113,259	116,606	122,137	123,015	123,310
Other or unknown	10,901	10,462	11,537	11,862	12,797	14,199	15,208	16,605
Temporary-visa holders	71,939	76,963	86,034	93,797	101,244	101,333	97,557	93,747
Science	160,379	160,982	159,691	164,576	171,518	176,470	177,819	178,524
U.S. citizens and permanent residents	119,622	118,016	112,367	113,471	117,418	122,980	125,358	127,037
American Indian/Alaska Native	624	569	596	646	635	671	653	705
Asian/Pacific Islander	9,718	9,894	8,914	9,253	9,937	10,408	10,265	10,148
Black, non-Hispanic	6,378	6,576	6,348	6,449	6,897	7,285	7,529	7,283
Hispanic	5,629	5,974	5,988	6,173	6,688	7,261	7,537	7,956
White, non-Hispanic	89,802	87,611	82,325	82,401	84,106	87,560	88,638	89,155
Other or unknown	7,471	7,392	8,196	8,549	9,155	9,795	10,736	11,790
Temporary-visa holders	40,757	42,966	47,324	51,105	54,100	53,490	52,461	51,487
Agricultural sciences	7,316	7,263	6,935	6,892	7,045	7,171	7,187	6,921
U.S. citizens and permanent residents	5,508	5,580	5,371	5,316	5,444	5,613	5,583	5,359
American Indian/Alaska Native	45	46	34	35	36	38	35	31
Asian/Pacific Islander	160	143	112	115	136	151	136	139
Black, non-Hispanic	168	159	139	126	162	194	153	172
Hispanic	211	209	223	210	197	251	267	243
White, non-Hispanic	4,759	4,856	4,626	4,547	4,670	4,738	4,745	4,516
Other or unknown	165	167	237	283	243	241	247	258
Temporary-visa holders	1,808	1,683	1,564	1,576	1,601	1,558	1,604	1,562
Biological sciences	27,742	27,338	26,475	26,590	27,677	28,818	29,270	29,946
U.S. citizens and permanent residents	21,856	21,590	20,557	20,536	21,004	21,889	21,999	22,426
American Indian/Alaska Native	88	80	79	95	87	89	92	114
Asian/Pacific Islander	2,089	2,099	1,993	2,171	2,189	2,264	2,260	2,315
Black, non-Hispanic	764	761	760	792	812	858	864	922
Hispanic	924	968	963	1,009	1,120	1,218	1,252	1,319
White, non-Hispanic	16,869	16,511	15,578	15,347	15,600	16,060	16,030	16,215
Other or unknown	1,122	1,171	1,184	1,122	1,196	1,400	1,501	1,541
Temporary-visa holders	5,886	5,748	5,918	6,054	6,673	6,929	7,271	7,520
Computer sciences	27,225	29,933	33,270	36,894	39,244	38,880	36,739	35,985
U.S. citizens and permanent residents	17,028	17,911	17,682	18,499	19,997	21,369	20,912	20,741
American Indian/Alaska Native	68	50	50	58	52	68	62	67
Asian/Pacific Islander	3,299	3,826	3,323	3,440	3,810	3,794	3,458	3,241
Black, non-Hispanic	764	815	844	943	1,063	1,128	1,095	1,049
Hispanic	559	653	617	650	733	815	858	929
White, non-Hispanic	10,750	10,856	10,839	11,279	12,000	13,221	13,100	12,968
Other or unknown	1,588	1,711	2,009	2,129	2,339	2,343	2,339	2,487
Temporary-visa holders	10,197	12,022	15,588	18,395	19,247	17,511	15,827	15,244

TABLE 16. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences	8,690	8,358	8,188	7,949	7,993	8,082	8,199	7,939
U.S. citizens and permanent residents	6,954	6,695	6,392	6,148	6,237	6,349	6,487	6,269
American Indian/Alaska Native	44	32	33	37	45	30	40	30
Asian/Pacific Islander	238	208	179	171	158	163	207	197
Black, non-Hispanic	103	112	120	125	135	130	120	110
Hispanic	202	200	186	196	191	223	235	226
White, non-Hispanic	6,033	5,873	5,612	5,362	5,389	5,422	5,520	5,326
Other or unknown	334	270	262	257	319	381	365	380
Temporary-visa holders	1,736	1,663	1,796	1,801	1,756	1,733	1,712	1,670
Mathematical sciences	10,497	10,214	9,870	10,381	11,277	12,176	12,434	12,773
U.S. citizens and permanent residents	6,859	6,348	5,932	6,240	6,760	7,524	7,752	8,055
American Indian/Alaska Native	16	12	15	22	18	18	26	23
Asian/Pacific Islander	704	565	531	552	653	739	735	787
Black, non-Hispanic	339	324	299	320	340	373	365	371
Hispanic	276	270	310	322	335	381	395	418
White, non-Hispanic	5,057	4,798	4,354	4,587	4,877	5,353	5,565	5,738
Other or unknown	467	379	423	437	537	660	666	718
Temporary-visa holders	3,638	3,866	3,938	4,141	4,517	4,652	4,682	4,718
Physical sciences	21,822	21,776	21,270	21,702	22,275	23,520	24,461	24,670
U.S. citizens and permanent residents	14,004	13,697	12,898	12,976	13,073	13,690	14,424	14,633
American Indian/Alaska Native	41	40	54	54	55	54	50	48
Asian/Pacific Islander	1,150	1,046	951	916	893	970	1,052	1,002
Black, non-Hispanic	481	501	493	462	486	508	541	526
Hispanic	525	549	507	539	605	678	743	751
White, non-Hispanic	11,048	10,872	10,176	10,084	10,123	10,515	11,007	11,310
Other or unknown	759	689	717	921	911	965	1,031	996
Temporary-visa holders	7,818	8,079	8,372	8,726	9,202	9,830	10,037	10,037
Psychology	15,095	14,456	13,594	13,149	13,437	13,395	13,992	13,993
U.S. citizens and permanent residents	14,297	13,666	12,842	12,372	12,345	12,240	12,743	13,090
American Indian/Alaska Native	87	88	103	83	83	95	89	91
Asian/Pacific Islander	551	536	532	548	553	576	562	565
Black, non-Hispanic	887	905	871	868	946	934	1,244	953
Hispanic	881	957	1,039	1,048	1,128	1,131	1,132	1,178
White, non-Hispanic	10,915	10,195	9,359	9,025	8,818	8,687	8,572	8,765
Other or unknown	976	985	938	800	817	817	1,144	1,538
Temporary-visa holders	798	790	752	777	1,092	1,155	1,249	903
Social sciences	41,992	41,644	40,089	41,019	42,570	44,428	45,537	46,297
U.S. citizens and permanent residents	33,116	32,529	30,693	31,384	32,558	34,306	35,458	36,464
American Indian/Alaska Native	235	221	228	262	259	279	259	301
Asian/Pacific Islander	1,527	1,471	1,293	1,340	1,545	1,751	1,855	1,902
Black, non-Hispanic	2,872	2,999	2,822	2,813	2,953	3,160	3,147	3,180
Hispanic	2,051	2,168	2,143	2,199	2,379	2,564	2,655	2,892
White, non-Hispanic	24,371	23,650	21,781	22,170	22,629	23,564	24,099	24,317
Other or unknown	2,060	2,020	2,426	2,600	2,793	2,988	3,443	3,872
Temporary-visa holders	8,876	9,115	9,396	9,635	10,012	10,122	10,079	9,833
Engineering	81,050	81,804	83,366	87,236	94,701	99,790	96,294	93,595
U.S. citizens and permanent residents	49,868	47,807	44,656	44,544	47,557	51,947	51,198	51,335
American Indian/Alaska Native	173	175	138	162	175	219	200	254
Asian/Pacific Islander	6,178	6,152	5,490	5,936	6,728	7,654	6,814	6,748
Black, non-Hispanic	1,942	1,989	1,950	1,934	2,012	2,171	2,270	2,370
Hispanic	2,213	2,222	2,280	2,341	2,500	2,922	3,065	2,993
White, non-Hispanic	35,932	34,199	31,457	30,858	32,500	34,577	34,377	34,155
Other or unknown	3,430	3,070	3,341	3,313	3,642	4,404	4,472	4,815
Temporary-visa holders	31,182	33,997	38,710	42,692	47,144	47,843	45,096	42,260

TABLE 16. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Chemical engineering	5,366	5,150	5,181	5,084	5,419	5,416	5,346	5,094
U.S. citizens and permanent residents	3,149	2,849	2,672	2,433	2,615	2,659	2,640	2,576
American Indian/Alaska Native	13	11	9	5	13	13	14	17
Asian/Pacific Islander	321	310	336	334	362	352	285	297
Black, non-Hispanic	105	68	89	78	79	95	95	86
Hispanic	114	128	113	108	122	143	132	130
White, non-Hispanic	2,420	2,162	1,964	1,807	1,912	1,919	1,990	1,897
Other or unknown	176	170	161	101	127	137	124	149
Temporary-visa holders	2,217	2,301	2,509	2,651	2,804	2,757	2,706	2,518
Civil engineering	12,415	12,069	12,174	12,162	12,808	13,492	13,120	12,655
U.S. citizens and permanent residents	8,509	7,846	7,397	7,115	7,344	7,906	7,874	7,819
American Indian/Alaska Native	31	43	29	29	40	42	35	38
Asian/Pacific Islander	791	615	506	492	557	658	622	606
Black, non-Hispanic	277	277	270	273	271	273	291	295
Hispanic	504	498	540	508	504	564	616	603
White, non-Hispanic	6,459	5,990	5,641	5,381	5,479	5,834	5,772	5,672
Other or unknown	447	423	411	432	493	535	538	605
Temporary-visa holders	3,906	4,223	4,777	5,047	5,464	5,586	5,246	4,836
Electrical engineering	26,512	26,689	28,075	29,888	32,678	33,969	31,794	30,656
U.S. citizens and permanent residents	14,941	14,128	13,069	13,154	13,911	15,156	14,290	14,149
American Indian/Alaska Native	25	36	26	39	27	49	43	47
Asian/Pacific Islander	2,734	2,787	2,457	2,726	3,107	3,442	2,843	2,850
Black, non-Hispanic	680	686	629	620	645	629	656	654
Hispanic	692	631	618	683	766	890	913	882
White, non-Hispanic	9,495	8,798	8,001	7,865	8,093	8,673	8,476	8,237
Other or unknown	1,315	1,190	1,338	1,221	1,273	1,473	1,359	1,479
Temporary-visa holders	11,571	12,561	15,006	16,734	18,767	18,813	17,504	16,507
Industrial engineering	8,769	9,144	9,406	10,132	10,957	11,047	10,622	10,327
U.S. citizens and permanent residents	6,000	6,070	5,678	5,717	6,204	6,584	6,545	6,835
American Indian/Alaska Native	23	23	27	30	27	37	37	35
Asian/Pacific Islander	487	586	464	492	611	738	671	747
Black, non-Hispanic	257	309	310	349	352	419	441	482
Hispanic	247	291	298	302	302	383	418	392
White, non-Hispanic	4,492	4,446	4,118	4,093	4,419	4,357	4,223	4,420
Other or unknown	494	415	461	451	493	650	755	759
Temporary-visa holders	2,769	3,074	3,728	4,415	4,753	4,463	4,077	3,492
Mechanical engineering	12,934	13,168	13,403	13,908	15,056	16,039	15,396	14,977
U.S. citizens and permanent residents	7,893	7,619	7,046	7,066	7,440	8,277	8,329	8,336
American Indian/Alaska Native	20	25	18	23	23	35	18	21
Asian/Pacific Islander	835	829	674	777	743	861	818	775
Black, non-Hispanic	308	287	292	273	279	296	278	321
Hispanic	332	336	317	342	367	441	452	467
White, non-Hispanic	5,866	5,742	5,318	5,204	5,511	5,979	6,074	6,036
Other or unknown	532	400	427	447	517	665	689	716
Temporary-visa holders	5,041	5,549	6,357	6,842	7,616	7,762	7,067	6,641
Other engineering	15,054	15,584	15,127	16,062	17,783	19,827	20,016	19,886
U.S. citizens and permanent residents	9,376	9,295	8,794	9,059	10,043	11,365	11,520	11,620
American Indian/Alaska Native	61	37	29	36	45	43	53	96
Asian/Pacific Islander	1,010	1,025	1,053	1,115	1,348	1,603	1,575	1,473
Black, non-Hispanic	315	362	360	341	386	459	509	532
Hispanic	324	338	394	398	439	501	534	519
White, non-Hispanic	7,200	7,061	6,415	6,508	7,086	7,815	7,842	7,893
Other or unknown	466	472	543	661	739	944	1,007	1,107
Temporary-visa holders	5,678	6,289	6,333	7,003	7,740	8,462	8,496	8,266

TABLE 16. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Health fields	19,590	19,889	19,052	19,345	20,842	22,434	22,734	23,428
U.S. citizens and permanent residents	17,098	17,304	16,614	16,501	17,448	18,840	19,499	20,051
American Indian/Alaska Native	94	106	109	121	120	127	111	88
Asian/Pacific Islander	1,668	1,704	1,675	1,738	1,768	1,937	1,993	2,159
Black, non-Hispanic	925	963	991	1,053	1,113	1,302	1,395	1,508
Hispanic	914	982	1,084	1,134	1,136	1,275	1,380	1,362
White, non-Hispanic	12,558	12,578	11,730	11,500	12,180	12,952	13,082	13,067
Other or unknown	939	971	1,025	955	1,131	1,247	1,538	1,867
Temporary-visa holders	2,492	2,585	2,438	2,844	3,394	3,594	3,235	3,377

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 17. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	224,608	230,581	231,202	238,463	253,356	268,476	278,090	287,679
U.S. citizens and permanent residents	191,972	194,675	191,317	194,324	205,109	218,515	228,092	238,107
American Indian/Alaska Native	1,145	1,144	1,178	1,207	1,309	1,382	1,404	1,604
Asian/Pacific Islander	14,051	14,967	14,171	15,108	16,588	18,291	19,008	19,682
Black, non-Hispanic	15,016	15,672	16,639	17,639	18,697	20,484	21,425	22,547
Hispanic	10,009	11,144	11,975	12,681	13,958	15,229	16,144	17,146
White, non-Hispanic	141,158	140,937	135,600	135,621	141,248	148,187	152,769	156,133
Other or unknown	10,593	10,811	11,754	12,068	13,309	14,942	17,342	20,995
Temporary-visa holders	32,636	35,906	39,885	44,139	48,247	49,961	49,998	49,572
Science and engineering	163,427	168,396	170,479	177,430	188,628	198,434	202,082	206,663
U.S. citizens and permanent residents	133,389	135,431	133,688	136,696	144,260	152,431	156,068	161,178
American Indian/Alaska Native	810	809	868	875	924	989	1,010	1,165
Asian/Pacific Islander	10,830	11,524	10,654	11,395	12,667	13,859	13,802	13,956
Black, non-Hispanic	11,331	11,708	12,536	13,076	13,763	14,718	14,885	15,693
Hispanic	7,645	8,324	8,935	9,460	10,446	11,061	11,675	12,532
White, non-Hispanic	94,933	94,940	91,787	92,768	96,538	100,572	102,024	102,827
Other or unknown	7,840	8,126	8,908	9,122	9,922	11,232	12,672	15,005
Temporary-visa holders	30,038	32,965	36,791	40,734	44,368	46,003	46,014	45,485
Science	144,439	148,509	149,733	155,173	163,661	170,847	174,810	179,785
U.S. citizens and permanent residents	121,008	123,050	121,633	124,269	130,455	136,985	140,810	145,875
American Indian/Alaska Native	747	742	798	810	855	904	932	990
Asian/Pacific Islander	8,996	9,515	8,870	9,324	10,011	10,743	10,832	11,037
Black, non-Hispanic	10,452	10,732	11,509	12,095	12,701	13,677	13,756	14,593
Hispanic	6,958	7,622	8,197	8,618	9,485	10,004	10,576	11,435
White, non-Hispanic	86,767	87,076	84,161	85,167	88,479	91,680	93,166	94,146
Other or unknown	7,088	7,363	8,098	8,255	8,924	9,977	11,548	13,674
Temporary-visa holders	23,431	25,459	28,100	30,904	33,206	33,862	34,000	33,910
Agricultural sciences	4,852	5,049	5,088	5,343	5,653	6,026	6,258	6,202
U.S. citizens and permanent residents	4,006	4,194	4,241	4,406	4,641	4,988	5,167	5,115
American Indian/Alaska Native	26	23	22	23	40	39	47	45
Asian/Pacific Islander	155	167	138	147	150	165	193	161
Black, non-Hispanic	176	151	153	201	213	266	241	245
Hispanic	180	213	217	215	209	239	257	263
White, non-Hispanic	3,334	3,527	3,526	3,600	3,816	4,061	4,191	4,146
Other or unknown	135	113	185	220	213	218	238	255
Temporary-visa holders	846	855	847	937	1,012	1,038	1,091	1,087
Biological sciences	28,953	29,621	29,807	31,049	33,411	35,883	37,278	38,503
U.S. citizens and permanent residents	23,503	24,180	23,964	24,669	26,258	27,976	28,756	29,621
American Indian/Alaska Native	103	106	110	110	123	147	157	164
Asian/Pacific Islander	2,350	2,377	2,253	2,539	2,646	2,894	3,040	3,146
Black, non-Hispanic	1,377	1,457	1,481	1,559	1,667	1,899	2,029	2,058
Hispanic	1,129	1,217	1,220	1,329	1,465	1,612	1,746	1,827
White, non-Hispanic	17,454	17,808	17,677	17,846	18,968	19,749	20,027	20,420
Other or unknown	1,090	1,215	1,223	1,286	1,389	1,675	1,757	2,006
Temporary-visa holders	5,450	5,441	5,843	6,380	7,153	7,907	8,522	8,882
Computer sciences	10,802	12,545	14,080	15,302	16,025	14,816	13,277	12,061
U.S. citizens and permanent residents	6,577	7,412	7,406	7,643	8,206	8,051	7,374	6,814
American Indian/Alaska Native	24	24	30	29	31	36	30	33
Asian/Pacific Islander	1,920	2,318	2,009	1,987	2,143	1,973	1,660	1,430
Black, non-Hispanic	591	670	668	766	835	823	707	712
Hispanic	195	212	246	244	271	286	285	273
White, non-Hispanic	3,198	3,521	3,629	3,778	3,962	4,039	3,854	3,627
Other or unknown	649	667	824	839	964	894	838	739
Temporary-visa holders	4,225	5,133	6,674	7,659	7,819	6,765	5,903	5,247

TABLE 17. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences	5,568	5,725	5,753	5,892	6,247	6,538	6,932	6,888
U.S. citizens and permanent residents	4,805	4,868	4,857	4,911	5,235	5,496	5,857	5,797
American Indian/Alaska Native	40	31	28	33	36	33	27	31
Asian/Pacific Islander	186	192	172	170	197	200	229	218
Black, non-Hispanic	99	101	100	102	131	140	141	152
Hispanic	168	200	169	201	222	261	302	281
White, non-Hispanic	4,065	4,134	4,200	4,211	4,410	4,541	4,822	4,794
Other or unknown	247	210	188	194	239	321	336	321
Temporary-visa holders	763	857	896	981	1,012	1,042	1,075	1,091
Mathematical sciences	5,988	6,043	5,780	6,270	6,886	7,289	7,497	7,437
U.S. citizens and permanent residents	4,205	3,982	3,661	3,927	4,379	4,533	4,808	4,759
American Indian/Alaska Native	18	18	10	16	6	7	13	15
Asian/Pacific Islander	470	437	417	433	531	625	600	632
Black, non-Hispanic	274	270	273	270	286	282	331	350
Hispanic	178	177	150	160	207	223	230	215
White, non-Hispanic	3,040	2,861	2,601	2,799	3,046	3,061	3,294	3,177
Other or unknown	225	219	210	249	303	335	340	370
Temporary-visa holders	1,783	2,061	2,119	2,343	2,507	2,756	2,689	2,678
Physical sciences	8,753	8,915	9,115	9,336	10,066	10,778	11,300	11,726
U.S. citizens and permanent residents	5,833	5,862	5,832	5,859	6,178	6,523	6,782	7,147
American Indian/Alaska Native	23	29	21	27	28	25	28	34
Asian/Pacific Islander	610	636	573	542	531	649	683	704
Black, non-Hispanic	432	402	425	413	407	431	454	482
Hispanic	307	346	337	357	376	416	489	489
White, non-Hispanic	4,170	4,165	4,167	4,164	4,497	4,592	4,718	5,017
Other or unknown	291	284	309	356	339	410	410	421
Temporary-visa holders	2,920	3,053	3,283	3,477	3,888	4,255	4,518	4,579
Psychology	37,462	37,271	36,872	37,318	37,728	38,816	40,226	43,419
U.S. citizens and permanent residents	36,074	35,822	35,361	35,574	35,963	36,859	38,302	41,294
American Indian/Alaska Native	224	212	257	251	237	229	235	243
Asian/Pacific Islander	1,468	1,502	1,531	1,628	1,633	1,800	1,885	2,004
Black, non-Hispanic	2,926	2,844	3,343	3,479	3,545	3,758	3,757	4,298
Hispanic	2,347	2,610	3,106	3,261	3,527	3,549	3,668	3,941
White, non-Hispanic	26,707	26,072	24,442	24,553	24,655	24,900	25,083	25,714
Other or unknown	2,402	2,582	2,682	2,402	2,366	2,623	3,674	5,094
Temporary-visa holders	1,388	1,449	1,511	1,744	1,765	1,957	1,924	2,125
Social sciences	42,061	43,340	43,238	44,663	47,645	50,701	52,042	53,549
U.S. citizens and permanent residents	36,005	36,730	36,311	37,280	39,595	42,559	43,764	45,328
American Indian/Alaska Native	289	299	320	321	354	388	395	425
Asian/Pacific Islander	1,837	1,886	1,777	1,878	2,180	2,437	2,542	2,742
Black, non-Hispanic	4,577	4,837	5,066	5,305	5,617	6,078	6,096	6,296
Hispanic	2,454	2,647	2,752	2,851	3,208	3,418	3,599	4,146
White, non-Hispanic	24,799	24,988	23,919	24,216	25,125	26,737	27,177	27,251
Other or unknown	2,049	2,073	2,477	2,709	3,111	3,501	3,955	4,468
Temporary-visa holders	6,056	6,610	6,927	7,383	8,050	8,142	8,278	8,221
Engineering	18,988	19,887	20,746	22,257	24,967	27,587	27,272	26,878
U.S. citizens and permanent residents	12,381	12,381	12,055	12,427	13,805	15,446	15,258	15,303
American Indian/Alaska Native	63	67	70	65	69	85	78	175
Asian/Pacific Islander	1,834	2,009	1,784	2,071	2,656	3,116	2,970	2,919
Black, non-Hispanic	879	976	1,027	981	1,062	1,041	1,129	1,100
Hispanic	687	702	738	842	961	1,057	1,099	1,097
White, non-Hispanic	8,166	7,864	7,626	7,601	8,059	8,892	8,858	8,681
Other or unknown	752	763	810	867	998	1,255	1,124	1,331
Temporary-visa holders	6,607	7,506	8,691	9,830	11,162	12,141	12,014	11,575

TABLE 17. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Chemical engineering	1,727	1,733	1,875	1,829	1,995	2,100	2,106	2,079
U.S. citizens and permanent residents	1,059	1,020	1,054	985	1,086	1,094	1,128	1,114
American Indian/Alaska Native	8	5	11	8	8	6	13	7
Asian/Pacific Islander	148	176	165	160	204	205	183	211
Black, non-Hispanic	80	79	79	89	81	78	74	60
Hispanic	65	54	69	72	84	106	117	110
White, non-Hispanic	704	643	663	610	653	635	676	664
Other or unknown	54	63	67	46	56	64	65	62
Temporary-visa holders	668	713	821	844	909	1,006	978	965
Civil engineering	4,102	4,157	4,277	4,503	4,905	5,398	5,441	5,395
U.S. citizens and permanent residents	3,046	2,955	2,909	2,957	3,209	3,552	3,562	3,598
American Indian/Alaska Native	12	13	10	14	18	23	16	14
Asian/Pacific Islander	313	316	238	279	298	366	375	400
Black, non-Hispanic	133	173	178	158	182	155	162	161
Hispanic	219	203	236	239	274	282	282	293
White, non-Hispanic	2,206	2,098	2,118	2,111	2,228	2,499	2,498	2,467
Other or unknown	163	152	129	156	209	227	229	263
Temporary-visa holders	1,056	1,202	1,368	1,546	1,696	1,846	1,879	1,797
Electrical engineering	4,872	5,133	5,536	6,212	7,270	7,794	7,201	6,788
U.S. citizens and permanent residents	2,518	2,389	2,246	2,380	2,668	2,962	2,588	2,557
American Indian/Alaska Native	8	11	11	6	12	14	11	7
Asian/Pacific Islander	709	704	662	728	972	1,164	980	938
Black, non-Hispanic	194	200	201	192	201	183	194	189
Hispanic	120	138	99	142	175	204	184	208
White, non-Hispanic	1,234	1,099	981	1,011	1,028	1,036	968	907
Other or unknown	253	237	292	301	280	361	251	308
Temporary-visa holders	2,354	2,744	3,290	3,832	4,602	4,832	4,613	4,231
Industrial engineering	2,452	2,659	2,713	2,808	3,076	3,266	3,230	3,287
U.S. citizens and permanent residents	1,869	2,003	1,896	1,890	2,114	2,261	2,238	2,230
American Indian/Alaska Native	11	16	14	13	7	15	11	16
Asian/Pacific Islander	156	198	164	194	267	285	278	299
Black, non-Hispanic	208	232	247	242	264	266	273	282
Hispanic	117	135	141	167	175	179	211	187
White, non-Hispanic	1,272	1,315	1,211	1,162	1,249	1,323	1,261	1,212
Other or unknown	105	107	119	112	152	193	204	234
Temporary-visa holders	583	656	817	918	962	1,005	992	1,057
Mechanical engineering	1,762	1,788	1,832	1,944	2,083	2,354	2,456	2,410
U.S. citizens and permanent residents	1,153	1,141	1,051	1,117	1,164	1,366	1,437	1,408
American Indian/Alaska Native	5	8	9	9	9	7	6	7
Asian/Pacific Islander	138	179	130	168	169	174	197	212
Black, non-Hispanic	104	88	104	81	79	86	91	90
Hispanic	57	52	49	65	83	96	114	108
White, non-Hispanic	791	749	687	728	743	904	924	862
Other or unknown	58	65	72	66	81	99	105	129
Temporary-visa holders	609	647	781	827	919	988	1,019	1,002
Other engineering	4,073	4,417	4,513	4,961	5,638	6,675	6,838	6,919
U.S. citizens and permanent residents	2,736	2,873	2,899	3,098	3,564	4,211	4,305	4,396
American Indian/Alaska Native	19	14	15	15	15	20	21	124
Asian/Pacific Islander	370	436	425	542	746	922	957	859
Black, non-Hispanic	160	204	218	219	255	273	335	318
Hispanic	109	120	144	157	170	190	191	191
White, non-Hispanic	1,959	1,960	1,966	1,979	2,158	2,495	2,531	2,569
Other or unknown	119	139	131	186	220	311	270	335
Temporary-visa holders	1,337	1,544	1,614	1,863	2,074	2,464	2,533	2,523

TABLE 17. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Health fields	61,181	62,185	60,723	61,033	64,728	70,042	76,008	81,016
U.S. citizens and permanent residents	58,583	59,244	57,629	57,628	60,849	66,084	72,024	76,929
American Indian/Alaska Native	335	335	310	332	385	393	394	439
Asian/Pacific Islander	3,221	3,443	3,517	3,713	3,921	4,432	5,206	5,726
Black, non-Hispanic	3,685	3,964	4,103	4,563	4,934	5,766	6,540	6,854
Hispanic	2,364	2,820	3,040	3,221	3,512	4,168	4,469	4,614
White, non-Hispanic	46,225	45,997	43,813	42,853	44,710	47,615	50,745	53,306
Other or unknown	2,753	2,685	2,846	2,946	3,387	3,710	4,670	5,990
Temporary-visa holders	2,598	2,941	3,094	3,405	3,879	3,958	3,984	4,087

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 18. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	327,389	334,423	341,283	354,522	378,991	397,420	402,630	406,653
Science and engineering	278,943	283,893	291,355	304,021	325,472	339,028	340,545	341,778
Science	213,508	215,870	219,079	226,573	240,020	248,812	253,590	257,403
Agricultural sciences	9,199	9,371	9,357	9,405	9,685	10,003	10,040	9,710
Biological sciences	46,779	46,946	46,787	48,138	51,551	54,350	55,816	57,651
Anatomy	733	708	752	675	820	829	802	844
Biochemistry	4,881	4,800	4,715	4,642	4,941	5,326	5,318	5,470
Biology	10,031	9,904	9,674	9,788	10,401	11,176	11,554	11,913
Biometry/epidemiology	2,566	2,642	2,562	2,736	3,012	3,208	3,218	3,417
Biophysics	707	681	719	837	896	968	1,115	1,120
Botany	1,803	1,758	1,705	1,720	1,791	1,730	1,653	1,667
Cell biology	4,055	4,273	4,422	4,540	4,974	5,220	5,395	5,770
Ecology	1,215	1,250	1,252	1,385	1,427	1,484	1,531	1,600
Entomology/parasitology	1,000	971	979	989	1,001	1,024	1,046	943
Genetics	1,638	1,680	1,649	1,743	1,828	1,983	2,047	2,063
Microbiology/immunology/virology	4,377	4,483	4,501	4,500	4,902	4,980	5,083	5,074
Nutrition	3,208	3,187	3,136	3,269	3,361	3,414	3,385	3,424
Pathology	1,339	1,364	1,293	1,350	1,340	1,319	1,350	1,358
Pharmacology	2,562	2,579	2,627	2,746	2,823	2,926	2,974	2,905
Physiology	1,990	1,890	1,873	1,827	1,933	2,165	2,219	2,187
Zoology	1,334	1,291	1,236	1,231	1,175	1,094	1,072	1,094
Biosciences, nec	3,340	3,485	3,692	4,160	4,926	5,504	6,054	6,802
Computer sciences	19,972	22,687	26,558	30,087	32,579	30,708	29,162	28,317
Earth, atmospheric, and ocean sciences	10,444	10,484	10,558	10,504	11,116	11,497	11,685	11,370
Atmospheric sciences	856	793	844	812	920	1,019	963	1,002
Geosciences	5,212	5,238	5,258	5,222	5,437	5,574	5,712	5,537
Oceanography	2,048	2,123	2,164	2,058	2,134	2,259	2,284	2,198
Earth/atmospheric/ocean sciences, nec	2,328	2,330	2,292	2,412	2,625	2,645	2,726	2,633
Mathematical sciences	11,751	11,796	11,740	12,467	13,709	14,627	14,916	15,261
Mathematics/applied mathematics	9,722	9,675	9,510	10,024	11,001	11,622	11,915	12,051
Statistics	2,029	2,121	2,230	2,443	2,708	3,005	3,001	3,210
Physical sciences	26,391	26,635	26,492	27,179	28,619	30,441	31,675	32,386
Astronomy	787	808	823	860	946	1,023	1,078	1,129
Chemistry	15,777	15,959	15,649	16,078	16,830	17,694	18,311	18,760
Physics	9,661	9,660	9,809	10,007	10,559	11,430	12,017	12,210
Physical sciences, nec	166	208	211	234	284	294	269	287
Psychology	35,148	34,658	34,919	34,487	34,707	35,774	37,872	38,957
Clinical psychology	9,812	9,941	9,725	9,697	9,476	9,676	10,238	10,531
Psychology, general	12,173	11,546	11,613	11,280	10,769	11,515	11,776	12,091
Psychology, nec	13,163	13,171	13,581	13,510	14,462	14,583	15,858	16,335
Social sciences	53,824	53,293	52,668	54,306	58,054	61,412	62,424	63,751
Agricultural economics	1,670	1,685	1,780	1,869	1,974	2,043	1,888	1,822
Anthropology (cultural/social)	5,734	5,814	5,621	5,577	5,753	5,945	5,832	5,833
Economics (except agricultural)	8,564	8,390	8,630	9,200	9,713	10,018	10,037	9,715
Geography	2,908	2,786	2,662	2,913	2,913	3,145	3,172	3,196
History and philosophy of science	404	429	412	400	420	457	533	582
Linguistics	2,286	2,182	2,104	2,177	2,261	2,389	2,364	2,519
Political science	16,316	16,171	16,089	16,455	18,632	19,963	21,149	22,243
Sociology	6,460	6,278	6,111	6,147	6,435	6,683	6,428	6,633
Sociology/anthropology	615	518	524	578	557	559	598	601
Social sciences, nec	8,867	9,040	8,735	8,990	9,396	10,210	10,423	10,607

TABLE 18. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	65,435	68,023	72,276	77,448	85,452	90,216	86,955	84,375
Aerospace engineering	2,565	2,645	2,759	2,821	3,003	3,243	3,243	3,241
Agricultural engineering	796	797	741	790	796	900	842	855
Biomedical engineering	2,473	2,712	2,839	3,157	3,855	4,717	5,047	5,254
Chemical engineering	5,630	5,593	5,861	5,829	6,279	6,414	6,379	6,139
Civil engineering	11,154	11,237	11,754	12,102	12,981	13,710	13,588	13,118
Electrical engineering	19,608	20,521	22,962	25,240	28,240	28,929	26,732	25,843
Engineering science	1,114	1,035	1,098	1,218	1,441	1,770	1,741	1,613
Industrial engineering	4,894	5,500	6,049	6,534	7,200	7,098	6,591	6,113
Mechanical engineering	10,073	10,331	10,795	11,436	12,512	13,356	12,718	12,178
Metallurgical/materials engineering	3,736	3,563	3,601	3,977	4,242	4,386	4,359	4,507
Mining engineering	226	258	191	194	207	219	238	212
Nuclear engineering	662	641	660	651	655	752	809	840
Petroleum engineering	481	535	519	538	649	684	660	631
Engineering, nec	2,023	2,655	2,447	2,961	3,392	4,038	4,008	3,831
Health fields	48,446	50,530	49,928	50,501	53,519	58,392	62,085	64,875
Medical fields	10,944	11,554	11,029	11,822	13,334	14,742	15,012	15,213
Anesthesiology	708	674	661	786	830	1,001	1,098	1,120
Cardiology	36	62	53	50	42	30	39	33
Endocrinology	58	66	55	51	59	56	57	52
Gastroenterology	6	7	14	7	7	11	13	3
Hematology	1	3	6	6	8	25	24	9
Neurology	1,773	1,853	1,922	2,072	2,456	2,573	2,561	2,684
Obstetrics/gynecology	10	9	13	18	18	20	13	16
Oncology/cancer research	206	245	225	246	229	232	270	329
Ophthalmology	22	31	41	33	166	393	406	380
Otorhinolaryngology	0	3	8	4	8	9	6	6
Pediatrics	260	276	351	316	363	349	327	225
Preventive medicine/community health	6,611	6,968	6,271	6,535	7,154	7,721	7,764	7,630
Psychiatry	47	55	89	124	138	77	200	117
Pulmonary disease	0	6	7	8	4	10	7	27
Radiology	162	170	155	171	179	208	184	181
Surgery	109	113	128	97	65	67	59	70
Clinical medicine, nec	935	1,013	1,030	1,298	1,608	1,960	1,984	2,331
Other health	37,502	38,976	38,899	38,679	40,185	43,650	47,073	49,662
Dental sciences	1,284	1,226	1,301	1,322	1,317	1,514	1,791	1,529
Nursing	9,053	9,469	8,957	9,120	10,001	10,832	11,598	12,571
Pharmaceutical sciences	2,258	2,609	2,776	2,763	2,546	3,515	3,633	4,255
Speech pathology/audiology	10,008	10,432	10,421	10,096	10,193	10,541	10,866	11,297
Veterinary sciences	1,048	1,052	1,154	1,244	1,418	1,391	1,364	1,532
Health related, nec	13,851	14,188	14,290	14,134	14,710	15,857	17,821	18,478

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 19. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	180,993	182,940	186,261	193,465	206,152	214,041	212,852	211,757
Science and engineering	167,320	169,055	172,783	179,863	191,809	198,485	196,818	195,624
Science	114,712	114,555	115,359	118,608	124,774	128,345	129,682	130,707
Agricultural sciences	5,507	5,486	5,298	5,201	5,253	5,360	5,304	5,011
Biological sciences	23,487	23,097	22,604	22,707	23,819	24,684	24,934	25,577
Anatomy	410	385	398	358	411	408	394	433
Biochemistry	2,780	2,692	2,613	2,546	2,644	2,847	2,820	2,815
Biology	5,097	4,961	4,791	4,647	4,892	5,103	5,195	5,405
Biometry/epidemiology	1,007	986	934	982	1,074	1,164	1,190	1,229
Biophysics	509	479	500	586	599	647	706	732
Botany	909	883	826	853	856	817	766	783
Cell biology	2,126	2,153	2,200	2,264	2,429	2,509	2,568	2,734
Ecology	613	599	592	653	649	666	682	711
Entomology/parasitology	645	619	583	571	575	560	564	499
Genetics	718	736	714	751	773	826	814	804
Microbiology/immunology/virology	2,218	2,221	2,240	2,154	2,287	2,212	2,197	2,193
Nutrition	852	802	787	779	786	787	752	752
Pathology	666	669	590	611	597	544	557	540
Pharmacology	1,317	1,316	1,310	1,308	1,291	1,353	1,362	1,311
Physiology	1,182	1,087	1,055	986	1,000	1,104	1,084	1,028
Zoology	731	720	673	647	613	549	518	537
Biosciences, nec	1,707	1,789	1,798	2,011	2,343	2,588	2,765	3,071
Computer sciences	14,520	16,313	19,098	21,776	23,743	22,858	21,962	21,689
Earth, atmospheric, and ocean sciences	6,374	6,171	6,119	5,936	6,194	6,314	6,329	6,106
Atmospheric sciences	641	567	599	539	618	682	642	657
Geosciences	3,388	3,312	3,266	3,183	3,268	3,283	3,313	3,174
Oceanography	1,129	1,122	1,109	1,042	1,074	1,096	1,069	1,054
Earth/atmospheric/ocean sciences, nec	1,216	1,170	1,145	1,172	1,234	1,253	1,305	1,221
Mathematical sciences	7,797	7,662	7,669	8,085	8,807	9,488	9,728	10,081
Mathematics/applied mathematics	6,601	6,474	6,454	6,811	7,414	7,957	8,156	8,339
Statistics	1,196	1,188	1,215	1,274	1,393	1,531	1,572	1,742
Physical sciences	19,034	19,065	18,750	19,093	19,816	21,014	21,790	22,050
Astronomy	566	590	573	607	654	692	733	756
Chemistry	10,278	10,315	9,921	10,155	10,420	10,852	11,128	11,336
Physics	8,086	8,024	8,114	8,184	8,577	9,286	9,775	9,806
Physical sciences, nec	104	136	142	147	165	184	154	152
Psychology	10,509	10,073	9,841	9,303	9,303	9,414	9,989	9,875
Clinical psychology	2,812	2,795	2,557	2,452	2,344	2,313	2,357	2,449
Psychology, general	3,891	3,537	3,540	3,288	3,246	3,459	3,692	3,571
Psychology, nec	3,806	3,741	3,744	3,563	3,713	3,642	3,940	3,855
Social sciences	27,484	26,688	25,980	26,507	27,839	29,213	29,646	30,318
Agricultural economics	1,103	1,091	1,100	1,143	1,212	1,231	1,150	1,061
Anthropology (cultural/social)	2,292	2,295	2,184	2,209	2,189	2,234	2,115	2,106
Economics (except agricultural)	5,844	5,655	5,692	5,991	6,246	6,395	6,397	6,250
Geography	1,762	1,636	1,581	1,684	1,684	1,774	1,850	1,822
History and philosophy of science	257	267	239	226	232	267	309	315
Linguistics	781	782	754	769	797	830	840	920
Political science	8,833	8,512	8,290	8,176	8,921	9,532	10,086	10,700
Sociology	2,467	2,312	2,229	2,196	2,323	2,391	2,270	2,442
Sociology/anthropology	241	180	200	223	202	199	195	199
Social sciences, nec	3,904	3,958	3,711	3,890	4,033	4,360	4,434	4,503

TABLE 19. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	52,608	54,500	57,424	61,255	67,035	70,140	67,136	64,917
Aerospace engineering	2,251	2,320	2,385	2,435	2,591	2,790	2,789	2,779
Agricultural engineering	573	564	500	530	551	621	577	583
Biomedical engineering	1,720	1,822	1,897	2,070	2,477	2,959	3,135	3,229
Chemical engineering	4,233	4,197	4,315	4,289	4,613	4,604	4,562	4,363
Civil engineering	8,213	8,192	8,454	8,677	9,201	9,592	9,427	9,010
Electrical engineering	16,471	17,147	19,073	20,767	22,884	23,361	21,645	21,084
Engineering science	892	838	879	961	1,137	1,406	1,363	1,261
Industrial engineering	3,810	4,364	4,710	5,105	5,628	5,467	4,996	4,508
Mechanical engineering	8,840	9,069	9,451	9,998	10,932	11,608	10,947	10,446
Metallurgical/materials engineering	2,829	2,715	2,751	2,988	3,180	3,258	3,218	3,319
Mining engineering	181	215	156	163	177	187	208	183
Nuclear engineering	551	530	535	523	527	598	641	670
Petroleum engineering	433	462	447	460	554	568	540	527
Engineering, nec	1,611	2,065	1,871	2,289	2,583	3,121	3,088	2,955
Health fields	13,673	13,885	13,478	13,602	14,343	15,556	16,034	16,133
Medical fields	4,761	4,835	4,520	4,784	5,329	5,722	5,563	5,385
Anesthesiology	307	311	329	359	341	416	387	378
Cardiology	28	37	38	31	23	22	28	20
Endocrinology	33	35	27	24	27	29	20	24
Gastroenterology	6	2	8	1	1	1	6	1
Hematology	0	0	4	4	1	10	12	7
Neurology	1,027	1,060	1,063	1,097	1,308	1,310	1,276	1,314
Obstetrics/gynecology	6	1	7	9	6	10	4	7
Oncology/cancer research	97	111	103	112	85	90	116	141
Ophthalmology	6	9	18	19	98	135	142	126
Otorhinolaryngology	0	3	3	2	7	7	5	4
Pediatrics	49	52	85	50	55	60	57	45
Preventive medicine/community health	2,464	2,432	2,089	2,157	2,437	2,513	2,397	2,149
Psychiatry	12	16	25	43	34	24	48	33
Pulmonary disease	0	4	5	3	3	5	1	14
Radiology	118	126	105	113	112	130	112	98
Surgery	51	61	65	69	47	50	41	49
Clinical medicine, nec	557	575	546	691	744	910	911	975
Other health	8,912	9,050	8,958	8,818	9,014	9,834	10,471	10,748
Dental sciences	805	768	799	822	811	918	1,028	852
Nursing	990	1,103	1,095	1,125	1,315	1,445	1,398	1,422
Pharmaceutical sciences	1,182	1,305	1,371	1,388	1,299	1,667	1,690	1,945
Speech pathology/audiology	801	835	717	725	649	663	675	655
Veterinary sciences	484	442	508	508	542	539	540	566
Health related, nec	4,650	4,597	4,468	4,250	4,398	4,602	5,140	5,308

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 20. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	146,396	151,483	155,022	161,057	172,839	183,379	189,778	194,896
Science and engineering	111,623	114,838	118,572	124,158	133,663	140,543	143,727	146,154
Science	98,796	101,315	103,720	107,965	115,246	120,467	123,908	126,696
Agricultural sciences	3,692	3,885	4,059	4,204	4,432	4,643	4,736	4,699
Biological sciences	23,292	23,849	24,183	25,431	27,732	29,666	30,882	32,074
Anatomy	323	323	354	317	409	421	408	411
Biochemistry	2,101	2,108	2,102	2,096	2,297	2,479	2,498	2,655
Biology	4,934	4,943	4,883	5,141	5,509	6,073	6,359	6,508
Biometry/epidemiology	1,559	1,656	1,628	1,754	1,938	2,044	2,028	2,188
Biophysics	198	202	219	251	297	321	409	388
Botany	894	875	879	867	935	913	887	884
Cell biology	1,929	2,120	2,222	2,276	2,545	2,711	2,827	3,036
Ecology	602	651	660	732	778	818	849	889
Entomology/parasitology	355	352	396	418	426	464	482	444
Genetics	920	944	935	992	1,055	1,157	1,233	1,259
Microbiology/immunology/virology	2,159	2,262	2,261	2,346	2,615	2,768	2,886	2,881
Nutrition	2,356	2,385	2,349	2,490	2,575	2,627	2,633	2,672
Pathology	673	695	703	739	743	775	793	818
Pharmacology	1,245	1,263	1,317	1,438	1,532	1,573	1,612	1,594
Physiology	808	803	818	841	933	1,061	1,135	1,159
Zoology	603	571	563	584	562	545	554	557
Biosciences, nec	1,633	1,696	1,894	2,149	2,583	2,916	3,289	3,731
Computer sciences	5,452	6,374	7,460	8,311	8,836	7,850	7,200	6,628
Earth, atmospheric, and ocean sciences	4,070	4,313	4,439	4,568	4,922	5,183	5,356	5,264
Atmospheric sciences	215	226	245	273	302	337	321	345
Geosciences	1,824	1,926	1,992	2,039	2,169	2,291	2,399	2,363
Oceanography	919	1,001	1,055	1,016	1,060	1,163	1,215	1,144
Earth/atmospheric/ocean sciences, nec	1,112	1,160	1,147	1,240	1,391	1,392	1,421	1,412
Mathematical sciences	3,954	4,134	4,071	4,382	4,902	5,139	5,188	5,180
Mathematics/applied mathematics	3,121	3,201	3,056	3,213	3,587	3,665	3,759	3,712
Statistics	833	933	1,015	1,169	1,315	1,474	1,429	1,468
Physical sciences	7,357	7,570	7,742	8,086	8,803	9,427	9,885	10,336
Astronomy	221	218	250	253	292	331	345	373
Chemistry	5,499	5,644	5,728	5,923	6,410	6,842	7,183	7,424
Physics	1,575	1,636	1,695	1,823	1,982	2,144	2,242	2,404
Physical sciences, nec	62	72	69	87	119	110	115	135
Psychology	24,639	24,585	25,078	25,184	25,404	26,360	27,883	29,082
Clinical psychology	7,000	7,146	7,168	7,245	7,132	7,363	7,881	8,082
Psychology, general	8,282	8,009	8,073	7,992	7,523	8,056	8,084	8,520
Psychology, nec	9,357	9,430	9,837	9,947	10,749	10,941	11,918	12,480
Social sciences	26,340	26,605	26,688	27,799	30,215	32,199	32,778	33,433
Agricultural economics	567	594	680	726	762	812	738	761
Anthropology (cultural/social)	3,442	3,519	3,437	3,368	3,564	3,711	3,717	3,727
Economics (except agricultural)	2,720	2,735	2,938	3,209	3,467	3,623	3,640	3,465
Geography	1,146	1,150	1,081	1,229	1,229	1,371	1,322	1,374
History and philosophy of science	147	162	173	174	188	190	224	267
Linguistics	1,505	1,400	1,350	1,408	1,464	1,559	1,524	1,599
Political science	7,483	7,659	7,799	8,279	9,711	10,431	11,063	11,543
Sociology	3,993	3,966	3,882	3,951	4,112	4,292	4,158	4,191
Sociology/anthropology	374	338	324	355	355	360	403	402
Social sciences, nec	4,963	5,082	5,024	5,100	5,363	5,850	5,989	6,104

TABLE 20. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	12,827	13,523	14,852	16,193	18,417	20,076	19,819	19,458
Aerospace engineering	314	325	374	386	412	453	454	462
Agricultural engineering	223	233	241	260	245	279	265	272
Biomedical engineering	753	890	942	1,087	1,378	1,758	1,912	2,025
Chemical engineering	1,397	1,396	1,546	1,540	1,666	1,810	1,817	1,776
Civil engineering	2,941	3,045	3,300	3,425	3,780	4,118	4,161	4,108
Electrical engineering	3,137	3,374	3,889	4,473	5,356	5,568	5,087	4,759
Engineering science	222	197	219	257	304	364	378	352
Industrial engineering	1,084	1,136	1,339	1,429	1,572	1,631	1,595	1,605
Mechanical engineering	1,233	1,262	1,344	1,438	1,580	1,748	1,771	1,732
Metallurgical/materials engineering	907	848	850	989	1,062	1,128	1,141	1,188
Mining engineering	45	43	35	31	30	32	30	29
Nuclear engineering	111	111	125	128	128	154	168	170
Petroleum engineering	48	73	72	78	95	116	120	104
Engineering, nec	412	590	576	672	809	917	920	876
Health fields	34,773	36,645	36,450	36,899	39,176	42,836	46,051	48,742
Medical fields	6,183	6,719	6,509	7,038	8,005	9,020	9,449	9,828
Anesthesiology	401	363	332	427	489	585	711	742
Cardiology	8	25	15	19	19	8	11	13
Endocrinology	25	31	28	27	32	27	37	28
Gastroenterology	0	5	6	6	6	10	7	2
Hematology	1	3	2	2	7	15	12	2
Neurology	746	793	859	975	1,148	1,263	1,285	1,370
Obstetrics/gynecology	4	8	6	9	12	10	9	9
Oncology/cancer research	109	134	122	134	144	142	154	188
Ophthalmology	16	22	23	14	68	258	264	254
Otorhinolaryngology	0	0	5	2	1	2	1	2
Pediatrics	211	224	266	266	308	289	270	180
Preventive medicine/community health	4,147	4,536	4,182	4,378	4,717	5,208	5,367	5,481
Psychiatry	35	39	64	81	104	53	152	84
Pulmonary disease	0	2	2	5	1	5	6	13
Radiology	44	44	50	58	67	78	72	83
Surgery	58	52	63	28	18	17	18	21
Clinical medicine, nec	378	438	484	607	864	1,050	1,073	1,356
Other health	28,590	29,926	29,941	29,861	31,171	33,816	36,602	38,914
Dental sciences	479	458	502	500	506	596	763	677
Nursing	8,063	8,366	7,862	7,995	8,686	9,387	10,200	11,149
Pharmaceutical sciences	1,076	1,304	1,405	1,375	1,247	1,848	1,943	2,310
Speech pathology/audiology	9,207	9,597	9,704	9,371	9,544	9,878	10,191	10,642
Veterinary sciences	564	610	646	736	876	852	824	966
Health related, nec	9,201	9,591	9,822	9,884	10,312	11,255	12,681	13,170

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 21. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	91,021	98,176	110,213	120,869	131,280	132,220	128,944	126,608
Science and engineering	86,998	93,817	105,682	115,796	125,272	126,040	122,925	120,375
Science	54,949	58,135	64,534	70,212	75,146	75,138	74,929	74,938
Agricultural sciences	2,284	2,195	2,098	2,227	2,322	2,350	2,427	2,396
Biological sciences	10,395	10,207	10,820	11,470	12,839	13,789	14,610	15,249
Anatomy	149	147	172	169	184	190	170	173
Biochemistry	1,402	1,387	1,542	1,519	1,679	1,845	1,923	2,008
Biology	1,785	1,714	1,775	1,904	2,168	2,292	2,476	2,702
Biometry/epidemiology	604	654	695	762	953	1,029	1,006	1,005
Biophysics	162	151	200	257	287	310	362	369
Botany	565	549	538	546	570	558	565	632
Cell biology	833	827	965	1,077	1,207	1,329	1,533	1,614
Ecology	135	156	161	173	191	221	228	208
Entomology/parasitology	266	278	265	247	256	271	285	270
Genetics	382	370	363	418	411	503	539	544
Microbiology/immunology/virology	904	900	892	968	1,160	1,122	1,196	1,186
Nutrition	925	893	944	1,014	1,026	1,045	1,006	1,000
Pathology	278	283	287	283	290	318	300	317
Pharmacology	562	552	611	620	653	741	776	822
Physiology	417	433	424	415	435	503	478	445
Zoology	160	132	164	182	199	162	173	186
Biosciences, nec	866	781	822	916	1,170	1,350	1,594	1,768
Computer sciences	10,930	12,748	16,928	19,923	20,660	17,964	16,424	16,019
Earth, atmospheric, and ocean sciences	2,186	2,216	2,403	2,472	2,537	2,513	2,556	2,483
Atmospheric sciences	234	257	283	266	292	267	251	263
Geosciences	1,119	1,110	1,182	1,235	1,264	1,315	1,328	1,281
Oceanography	483	463	489	477	453	465	480	464
Earth/atmospheric/ocean sciences, nec	350	386	449	494	528	466	497	475
Mathematical sciences	4,690	5,208	5,395	5,811	6,319	6,704	6,656	6,682
Mathematics/applied mathematics	3,788	4,084	4,144	4,328	4,688	4,868	4,851	4,785
Statistics	902	1,124	1,251	1,483	1,631	1,836	1,805	1,897
Physical sciences	9,923	10,335	10,891	11,460	12,383	13,206	13,540	13,695
Astronomy	206	234	259	271	295	317	361	356
Chemistry	5,546	5,627	5,745	6,162	6,836	7,271	7,429	7,602
Physics	4,120	4,405	4,812	4,937	5,167	5,540	5,694	5,673
Physical sciences, nec	51	69	75	90	85	78	56	64
Psychology	1,738	1,737	1,860	2,016	2,195	2,458	2,645	2,465
Clinical psychology	303	319	326	355	407	422	340	400
Psychology, general	584	599	719	784	851	980	1,254	992
Psychology, nec	851	819	815	877	937	1,056	1,051	1,073
Social sciences	12,803	13,489	14,139	14,833	15,891	16,154	16,071	15,949
Agricultural economics	786	807	904	950	975	1,019	903	886
Anthropology (cultural/social)	637	701	695	658	722	727	746	751
Economics (except agricultural)	4,651	4,916	5,227	5,700	6,006	6,053	5,995	5,810
Geography	492	497	541	629	633	652	661	654
History and philosophy of science	61	57	67	67	65	64	64	77
Linguistics	882	858	866	880	850	878	919	844
Political science	2,943	3,271	3,452	3,519	3,944	4,123	4,120	4,140
Sociology	942	1,013	1,078	1,069	1,157	1,200	1,134	1,145
Sociology/anthropology	87	63	67	72	60	64	75	83
Social sciences, nec	1,322	1,306	1,242	1,289	1,479	1,374	1,454	1,559

TABLE 21. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	32,049	35,682	41,148	45,584	50,126	50,902	47,996	45,437
Aerospace engineering	1,297	1,367	1,401	1,537	1,569	1,563	1,548	1,478
Agricultural engineering	370	378	342	372	380	449	412	463
Biomedical engineering	647	790	868	1,048	1,420	1,754	1,857	1,869
Chemical engineering	2,571	2,767	3,069	3,199	3,405	3,479	3,365	3,203
Civil engineering	4,283	4,745	5,441	5,803	6,278	6,409	6,121	5,643
Electrical engineering	11,469	12,926	15,709	17,490	19,586	19,328	17,940	17,038
Engineering science	485	469	576	653	745	878	893	786
Industrial engineering	2,639	3,053	3,725	4,371	4,635	4,348	4,009	3,541
Mechanical engineering	4,861	5,324	6,181	6,641	7,326	7,495	6,866	6,441
Metallurgical/materials engineering	1,842	1,851	1,956	2,201	2,362	2,426	2,363	2,441
Mining engineering	56	90	97	94	94	101	103	101
Nuclear engineering	273	298	312	337	315	340	339	325
Petroleum engineering	419	449	330	340	410	590	541	528
Engineering, nec	837	1,175	1,141	1,498	1,601	1,742	1,639	1,580
Health fields	4,023	4,359	4,531	5,073	6,008	6,180	6,019	6,233
Medical fields	1,283	1,450	1,333	1,746	2,303	2,273	2,175	2,140
Anesthesiology	8	1	2	1	4	13	8	7
Cardiology	13	17	14	16	18	15	16	17
Endocrinology	17	17	13	18	18	24	19	7
Gastroenterology	0	0	1	1	1	2	0	0
Hematology	0	0	4	0	2	7	1	1
Neurology	238	261	315	357	422	486	520	559
Obstetrics/gynecology	0	1	1	0	2	5	4	6
Oncology/cancer research	31	49	40	47	40	33	45	76
Ophthalmology	15	16	16	9	42	18	23	13
Otorhinolaryngology	0	2	0	0	0	0	0	0
Pediatrics	23	23	32	37	51	41	42	56
Preventive medicine/community health	825	936	755	1,086	1,489	1,353	1,245	1,137
Psychiatry	1	3	2	1	4	9	13	14
Pulmonary disease	0	0	0	0	1	5	0	6
Radiology	29	29	27	33	50	62	57	46
Surgery	5	7	9	7	2	4	7	2
Clinical medicine, nec	78	88	102	133	157	196	175	193
Other health	2,740	2,909	3,198	3,327	3,705	3,907	3,844	4,093
Dental sciences	317	272	336	294	318	284	295	253
Nursing	306	352	337	316	398	462	410	389
Pharmaceutical sciences	1,048	1,054	1,195	1,238	1,313	1,431	1,348	1,413
Speech pathology/audiology	312	336	351	360	374	402	372	406
Veterinary sciences	259	285	307	326	337	349	341	381
Health related, nec	498	610	672	793	965	979	1,078	1,251

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 22. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	327,389	334,423	341,283	354,522	378,991	397,420	402,630	406,653
U.S. citizens and permanent residents	236,368	236,247	231,070	233,653	247,711	265,200	273,686	280,045
American Indian/Alaska Native	1,339	1,290	1,365	1,413	1,495	1,548	1,560	1,603
Asian/Pacific Islander	20,941	21,643	19,730	20,863	22,899	24,624	24,732	25,052
Black, non-Hispanic	13,782	13,963	15,014	15,307	16,346	17,678	18,583	18,820
Hispanic	11,955	12,810	13,625	14,328	15,611	17,299	18,035	18,755
White, non-Hispanic	177,215	175,601	168,649	168,061	175,950	186,056	190,586	192,725
Other or unknown	11,136	10,940	12,687	13,681	15,410	17,995	20,190	23,090
Temporary-visa holders	91,021	98,176	110,213	120,869	131,280	132,220	128,944	126,608
Science and engineering	278,943	283,893	291,355	304,021	325,472	339,028	340,545	341,778
U.S. citizens and permanent residents	191,945	190,076	185,673	188,225	200,200	212,988	217,620	221,403
American Indian/Alaska Native	1,098	1,026	1,102	1,131	1,156	1,235	1,253	1,298
Asian/Pacific Islander	17,563	18,078	16,123	17,103	19,025	20,355	20,007	20,055
Black, non-Hispanic	11,299	11,211	12,079	12,057	12,830	13,522	14,063	14,228
Hispanic	9,895	10,288	10,821	11,381	12,555	13,674	14,242	14,940
White, non-Hispanic	142,733	140,342	134,934	134,994	141,742	149,129	151,508	152,242
Other or unknown	9,357	9,131	10,614	11,559	12,892	15,073	16,547	18,640
Temporary-visa holders	86,998	93,817	105,682	115,796	125,272	126,040	122,925	120,375
Science	213,508	215,870	219,079	226,573	240,020	248,812	253,590	257,403
U.S. citizens and permanent residents	158,559	157,735	154,545	156,361	164,874	173,674	178,661	182,465
American Indian/Alaska Native	962	905	991	1,002	1,018	1,070	1,098	1,139
Asian/Pacific Islander	12,759	13,090	11,837	12,457	13,419	14,131	14,410	14,594
Black, non-Hispanic	9,721	9,605	10,365	10,401	11,025	11,687	12,103	12,259
Hispanic	8,251	8,672	9,112	9,568	10,562	11,384	11,836	12,536
White, non-Hispanic	119,278	117,928	113,493	113,332	118,220	123,261	125,404	126,467
Other or unknown	7,588	7,535	8,747	9,601	10,630	12,141	13,810	15,470
Temporary-visa holders	54,949	58,135	64,534	70,212	75,146	75,138	74,929	74,938
Agricultural sciences	9,199	9,371	9,357	9,405	9,685	10,003	10,040	9,710
U.S. citizens and permanent residents	6,915	7,176	7,259	7,178	7,363	7,653	7,613	7,314
American Indian/Alaska Native	58	51	41	41	58	54	59	50
Asian/Pacific Islander	250	249	196	211	228	259	253	230
Black, non-Hispanic	221	218	244	267	289	346	298	310
Hispanic	293	315	344	306	294	368	408	374
White, non-Hispanic	5,881	6,125	6,118	5,976	6,154	6,307	6,261	5,995
Other or unknown	212	218	316	377	340	319	334	355
Temporary-visa holders	2,284	2,195	2,098	2,227	2,322	2,350	2,427	2,396
Biological sciences	46,779	46,946	46,787	48,138	51,551	54,350	55,816	57,651
U.S. citizens and permanent residents	36,384	36,739	35,967	36,668	38,712	40,561	41,206	42,402
American Indian/Alaska Native	160	141	160	176	177	192	205	223
Asian/Pacific Islander	3,811	3,864	3,630	4,080	4,189	4,468	4,555	4,648
Black, non-Hispanic	1,638	1,687	1,718	1,817	1,941	2,097	2,245	2,317
Hispanic	1,656	1,756	1,726	1,892	2,137	2,334	2,486	2,617
White, non-Hispanic	27,592	27,543	26,922	26,820	28,263	29,022	29,252	29,899
Other or unknown	1,527	1,748	1,811	1,883	2,005	2,448	2,463	2,698
Temporary-visa holders	10,395	10,207	10,820	11,470	12,839	13,789	14,610	15,249
Computer sciences	19,972	22,687	26,558	30,087	32,579	30,708	29,162	28,317
U.S. citizens and permanent residents	9,042	9,939	9,630	10,164	11,919	12,744	12,738	12,298
American Indian/Alaska Native	47	33	39	42	45	51	49	41
Asian/Pacific Islander	2,299	2,869	2,259	2,329	2,678	2,466	2,193	2,040
Black, non-Hispanic	476	537	608	655	800	800	793	765
Hispanic	266	295	283	304	384	465	506	495
White, non-Hispanic	5,386	5,600	5,679	5,997	6,813	7,757	7,966	7,727
Other or unknown	568	605	762	837	1,199	1,205	1,231	1,230
Temporary-visa holders	10,930	12,748	16,928	19,923	20,660	17,964	16,424	16,019

TABLE 22. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences	10,444	10,484	10,558	10,504	11,116	11,497	11,685	11,370
U.S. citizens and permanent residents	8,258	8,268	8,155	8,032	8,579	8,984	9,129	8,887
American Indian/Alaska Native	57	42	46	53	64	50	51	47
Asian/Pacific Islander	304	292	272	266	278	294	356	329
Black, non-Hispanic	134	137	159	140	193	195	194	170
Hispanic	253	304	267	297	334	394	417	408
White, non-Hispanic	7,148	7,163	7,113	6,957	7,313	7,518	7,582	7,400
Other or unknown	362	330	298	319	397	533	529	533
Temporary-visa holders	2,186	2,216	2,403	2,472	2,537	2,513	2,556	2,483
Mathematical sciences	11,751	11,796	11,740	12,467	13,709	14,627	14,916	15,261
U.S. citizens and permanent residents	7,061	6,588	6,345	6,656	7,390	7,923	8,260	8,579
American Indian/Alaska Native	22	20	14	20	10	16	19	25
Asian/Pacific Islander	771	626	590	624	744	807	885	917
Black, non-Hispanic	355	342	349	359	369	382	393	415
Hispanic	260	274	273	300	334	364	365	380
White, non-Hispanic	5,286	4,991	4,722	4,931	5,416	5,788	6,015	6,154
Other or unknown	367	335	397	422	517	566	583	688
Temporary-visa holders	4,690	5,208	5,395	5,811	6,319	6,704	6,656	6,682
Physical sciences	26,391	26,635	26,492	27,179	28,619	30,441	31,675	32,386
U.S. citizens and permanent residents	16,468	16,300	15,601	15,719	16,236	17,235	18,135	18,691
American Indian/Alaska Native	57	62	65	67	71	70	68	70
Asian/Pacific Islander	1,442	1,400	1,251	1,198	1,148	1,335	1,422	1,423
Black, non-Hispanic	728	700	691	683	697	736	803	784
Hispanic	680	728	682	731	810	923	1,026	1,054
White, non-Hispanic	12,855	12,782	12,224	12,185	12,641	13,154	13,725	14,225
Other or unknown	706	628	688	855	869	1,017	1,091	1,135
Temporary-visa holders	9,923	10,335	10,891	11,460	12,383	13,206	13,540	13,695
Psychology	35,148	34,658	34,919	34,487	34,707	35,774	37,872	38,957
U.S. citizens and permanent residents	33,410	32,921	33,059	32,471	32,512	33,316	35,227	36,492
American Indian/Alaska Native	222	220	271	226	221	241	248	242
Asian/Pacific Islander	1,464	1,529	1,569	1,583	1,590	1,681	1,753	1,794
Black, non-Hispanic	2,417	2,200	2,574	2,515	2,484	2,571	2,766	2,857
Hispanic	2,305	2,454	2,941	2,988	3,233	3,271	3,356	3,505
White, non-Hispanic	25,444	24,840	23,869	23,191	23,023	23,355	23,709	23,954
Other or unknown	1,558	1,678	1,835	1,968	1,961	2,197	3,395	4,140
Temporary-visa holders	1,738	1,737	1,860	2,016	2,195	2,458	2,645	2,465
Social sciences	53,824	53,293	52,668	54,306	58,054	61,412	62,424	63,751
U.S. citizens and permanent residents	41,021	39,804	38,529	39,473	42,163	45,258	46,353	47,802
American Indian/Alaska Native	339	336	355	377	372	396	399	441
Asian/Pacific Islander	2,418	2,261	2,070	2,166	2,564	2,821	2,993	3,213
Black, non-Hispanic	3,752	3,784	4,022	3,965	4,252	4,560	4,611	4,641
Hispanic	2,538	2,546	2,596	2,750	3,036	3,265	3,272	3,703
White, non-Hispanic	29,686	28,884	26,846	27,275	28,597	30,360	30,894	31,113
Other or unknown	2,288	1,993	2,640	2,940	3,342	3,856	4,184	4,691
Temporary-visa holders	12,803	13,489	14,139	14,833	15,891	16,154	16,071	15,949
Engineering	65,435	68,023	72,276	77,448	85,452	90,216	86,955	84,375
U.S. citizens and permanent residents	33,386	32,341	31,128	31,864	35,326	39,314	38,959	38,938
American Indian/Alaska Native	136	121	111	129	138	165	155	159
Asian/Pacific Islander	4,804	4,988	4,286	4,646	5,606	6,224	5,597	5,461
Black, non-Hispanic	1,578	1,606	1,714	1,656	1,805	1,835	1,960	1,969
Hispanic	1,644	1,616	1,709	1,813	1,993	2,290	2,406	2,404
White, non-Hispanic	23,455	22,414	21,441	21,662	23,522	25,868	26,104	25,775
Other or unknown	1,769	1,596	1,867	1,958	2,262	2,932	2,737	3,170
Temporary-visa holders	32,049	35,682	41,148	45,584	50,126	50,902	47,996	45,437

TABLE 22. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Chemical engineering	5,630	5,593	5,861	5,829	6,279	6,414	6,379	6,139
U.S. citizens and permanent residents	3,059	2,826	2,792	2,630	2,874	2,935	3,014	2,936
American Indian/Alaska Native	16	13	17	9	19	18	25	23
Asian/Pacific Islander	356	384	420	409	438	423	363	390
Black, non-Hispanic	126	101	125	135	135	133	137	116
Hispanic	146	152	145	152	181	205	208	204
White, non-Hispanic	2,306	2,074	1,954	1,844	1,985	2,040	2,158	2,056
Other or unknown	109	102	131	81	116	116	123	147
Temporary-visa holders	2,571	2,767	3,069	3,199	3,405	3,479	3,365	3,203
Civil engineering	11,154	11,237	11,754	12,102	12,981	13,710	13,588	13,118
U.S. citizens and permanent residents	6,871	6,492	6,313	6,299	6,703	7,301	7,467	7,475
American Indian/Alaska Native	26	30	21	24	34	36	33	32
Asian/Pacific Islander	721	624	482	518	583	656	640	617
Black, non-Hispanic	230	247	275	261	276	251	262	273
Hispanic	464	457	516	495	474	561	562	590
White, non-Hispanic	5,136	4,839	4,739	4,695	4,937	5,359	5,524	5,441
Other or unknown	294	295	280	306	399	438	446	522
Temporary-visa holders	4,283	4,745	5,441	5,803	6,278	6,409	6,121	5,643
Electrical engineering	19,608	20,521	22,962	25,240	28,240	28,929	26,732	25,843
U.S. citizens and permanent residents	8,139	7,595	7,253	7,750	8,654	9,601	8,792	8,805
American Indian/Alaska Native	13	18	19	27	16	31	27	26
Asian/Pacific Islander	1,824	1,908	1,601	1,752	2,242	2,546	2,003	2,004
Black, non-Hispanic	466	452	427	428	458	438	477	462
Hispanic	387	327	328	376	499	555	560	578
White, non-Hispanic	4,875	4,410	4,230	4,471	4,764	5,169	5,050	4,961
Other or unknown	574	480	648	696	675	862	675	774
Temporary-visa holders	11,469	12,926	15,709	17,490	19,586	19,328	17,940	17,038
Industrial engineering	4,894	5,500	6,049	6,534	7,200	7,098	6,591	6,113
U.S. citizens and permanent residents	2,255	2,447	2,324	2,163	2,565	2,750	2,582	2,572
American Indian/Alaska Native	9	15	16	16	8	14	10	15
Asian/Pacific Islander	306	379	258	266	364	370	323	310
Black, non-Hispanic	166	175	231	200	246	258	253	255
Hispanic	125	148	155	171	174	190	233	210
White, non-Hispanic	1,523	1,617	1,497	1,365	1,601	1,616	1,515	1,500
Other or unknown	126	113	167	145	172	302	248	282
Temporary-visa holders	2,639	3,053	3,725	4,371	4,635	4,348	4,009	3,541
Mechanical engineering	10,073	10,331	10,795	11,436	12,512	13,356	12,718	12,178
U.S. citizens and permanent residents	5,212	5,007	4,614	4,795	5,186	5,861	5,852	5,737
American Indian/Alaska Native	19	18	12	18	20	22	18	20
Asian/Pacific Islander	626	663	488	609	578	661	625	582
Black, non-Hispanic	285	250	263	247	230	247	243	282
Hispanic	238	231	209	246	270	315	347	331
White, non-Hispanic	3,716	3,613	3,412	3,456	3,791	4,237	4,242	4,117
Other or unknown	328	232	230	219	297	379	377	405
Temporary-visa holders	4,861	5,324	6,181	6,641	7,326	7,495	6,866	6,441
Other engineering	14,076	14,841	14,855	16,307	18,240	20,709	20,947	20,984
U.S. citizens and permanent residents	7,850	7,974	7,832	8,227	9,344	10,866	11,252	11,413
American Indian/Alaska Native	53	27	26	35	41	44	42	43
Asian/Pacific Islander	971	1,030	1,037	1,092	1,401	1,568	1,643	1,558
Black, non-Hispanic	305	381	393	385	460	508	588	581
Hispanic	284	301	356	373	395	464	496	491
White, non-Hispanic	5,899	5,861	5,609	5,831	6,444	7,447	7,615	7,700
Other or unknown	338	374	411	511	603	835	868	1,040
Temporary-visa holders	6,226	6,867	7,023	8,080	8,896	9,843	9,695	9,571

TABLE 22. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Field, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Health fields	48,446	50,530	49,928	50,501	53,519	58,392	62,085	64,875
U.S. citizens and permanent residents	44,423	46,171	45,397	45,428	47,511	52,212	56,066	58,642
American Indian/Alaska Native	241	264	263	282	339	313	307	305
Asian/Pacific Islander	3,378	3,565	3,607	3,760	3,874	4,269	4,725	4,997
Black, non-Hispanic	2,483	2,752	2,935	3,250	3,516	4,156	4,520	4,592
Hispanic	2,060	2,522	2,804	2,947	3,056	3,625	3,793	3,815
White, non-Hispanic	34,482	35,259	33,715	33,067	34,208	36,927	39,078	40,483
Other or unknown	1,779	1,809	2,073	2,122	2,518	2,922	3,643	4,450
Temporary-visa holders	4,023	4,359	4,531	5,073	6,008	6,180	6,019	6,233

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
All sources	327,389	334,423	341,283	354,522	378,991	397,420	402,630	406,653
Federal	63,759	65,796	67,588	68,873	75,565	81,776	83,812	83,832
DOD	8,259	8,026	8,141	7,960	7,977	9,204	9,007	8,976
DOE <sup>a</sup>	NA	2,749	2,995	3,116	3,548	4,024	4,135	4,392
HHS	22,704	23,442	23,490	24,337	26,959	29,231	30,894	30,752
NIH	18,215	19,019	19,472	19,904	22,129	24,309	26,683	26,810
Other HHS	4,489	4,423	4,018	4,433	4,830	4,922	4,211	3,942
NASA	2,646	2,579	2,780	2,819	3,082	3,230	2,916	2,691
NSF	13,459	13,835	14,599	15,429	17,135	19,308	19,969	20,423
USDA	2,485	2,634	2,630	2,735	3,100	3,468	3,562	3,370
Other <sup>a</sup>	14,206	12,531	12,953	12,477	13,764	13,311	13,329	13,228
Institutional	128,995	133,182	133,401	140,719	147,816	151,659	154,441	156,017
Other nonfederal	26,411	26,029	27,862	28,294	28,956	29,255	27,298	27,384
Domestic	22,157	22,099	24,014	24,458	25,597	26,157	24,458	24,770
Foreign	4,254	3,930	3,848	3,836	3,359	3,098	2,840	2,614
Self-support	108,224	109,416	112,432	116,636	126,654	134,730	137,079	139,420
Science and engineering	278,943	283,893	291,355	304,021	325,472	339,028	340,545	341,778
Federal	55,810	57,332	59,224	60,237	66,368	72,343	74,164	74,604
DOD	7,959	7,662	7,734	7,715	7,693	8,908	8,678	8,628
DOE <sup>a</sup>	NA	2,719	2,980	3,105	3,540	4,011	4,119	4,376
HHS	16,740	17,246	17,684	18,098	20,181	22,242	23,716	23,881
NIH	15,308	15,987	16,315	16,578	18,582	20,441	22,377	22,719
Other HHS	1,432	1,259	1,369	1,520	1,599	1,801	1,339	1,162
NASA	2,620	2,564	2,762	2,797	3,066	3,217	2,891	2,671
NSF	13,339	13,712	14,475	15,300	17,007	19,160	19,800	20,215
USDA	2,426	2,573	2,568	2,685	3,026	3,390	3,478	3,283
Other <sup>a</sup>	12,726	10,856	11,021	10,537	11,855	11,415	11,482	11,550
Institutional	118,944	122,271	122,429	129,746	136,295	139,479	141,175	142,085
Other nonfederal	24,201	23,811	25,403	25,745	26,244	26,504	24,584	24,472
Domestic	20,379	20,303	21,913	22,286	23,214	23,736	21,999	22,062
Foreign	3,822	3,508	3,490	3,459	3,030	2,768	2,585	2,410
Self-support	79,988	80,479	84,299	88,293	96,565	100,702	100,622	100,617
Science	213,508	215,870	219,079	226,573	240,020	248,812	253,590	257,403
Federal	40,289	41,427	42,517	43,165	47,506	50,870	52,881	53,355
DOD	3,643	3,309	3,259	3,331	3,293	3,426	3,364	3,307
DOE <sup>a</sup>	NA	1,732	1,772	1,813	2,011	2,292	2,358	2,456
HHS	15,839	16,285	16,550	16,810	18,715	20,286	21,582	21,627
NIH	14,554	15,143	15,317	15,445	17,300	18,796	20,470	20,651
Other HHS	1,285	1,142	1,233	1,365	1,415	1,490	1,112	976
NASA	1,375	1,429	1,492	1,443	1,572	1,575	1,463	1,395
NSF	8,620	8,768	9,264	9,866	11,055	12,434	13,012	13,353
USDA	2,229	2,333	2,351	2,425	2,689	2,971	3,070	2,950
Other <sup>a</sup>	8,583	7,571	7,829	7,477	8,171	7,886	8,032	8,267
Institutional	95,543	97,017	96,358	101,913	105,889	108,256	110,180	112,379
Other nonfederal	14,439	14,277	14,818	14,709	14,965	15,359	14,744	14,677
Domestic	11,825	11,886	12,417	12,338	12,914	13,516	13,056	13,139
Foreign	2,614	2,391	2,401	2,371	2,051	1,843	1,688	1,538
Self-support	63,237	63,149	65,386	66,786	71,660	74,327	75,785	76,992
Agricultural sciences	9,199	9,371	9,357	9,405	9,685	10,003	10,040	9,710
Federal	1,722	1,943	1,938	1,974	2,156	2,505	2,516	2,343
DOD	47	28	42	47	34	33	24	24
DOE <sup>a</sup>	NA	41	45	29	55	58	49	53
HHS	32	29	57	51	87	89	90	84
NIH	16	17	37	40	64	60	67	74
Other HHS	16	12	20	11	23	29	23	10

TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
NASA	36	55	65	63	74	90	52	49
NSF	94	114	113	138	124	211	202	211
USDA	988	1,077	1,043	1,065	1,156	1,333	1,369	1,278
Other <sup>a</sup>	525	599	573	581	626	691	730	644
Institutional	3,847	3,865	3,870	4,060	4,109	3,949	4,050	3,987
Other nonfederal	1,640	1,630	1,711	1,567	1,549	1,584	1,592	1,460
Domestic	1,339	1,371	1,475	1,380	1,426	1,413	1,463	1,355
Foreign	301	259	236	187	123	171	129	105
Self-support	1,990	1,933	1,838	1,804	1,871	1,965	1,882	1,920
Biological sciences	46,779	46,946	46,787	48,138	51,551	54,350	55,816	57,651
Federal	16,176	16,462	16,670	16,733	18,611	20,178	21,718	22,165
DOD	356	338	329	369	393	363	442	360
DOE <sup>a</sup>	NA	155	171	166	180	193	224	253
HHS	11,918	12,265	12,263	12,315	13,664	14,886	16,136	16,153
NIH	11,301	11,771	11,688	11,651	12,944	14,161	15,621	15,634
Other HHS	617	494	575	664	720	725	515	519
NASA	102	101	100	77	115	98	107	94
NSF	1,539	1,495	1,600	1,619	1,816	2,137	2,260	2,358
USDA	752	803	781	817	992	1,034	1,077	1,094
Other <sup>a</sup>	1,509	1,305	1,426	1,370	1,451	1,467	1,472	1,853
Institutional	20,111	20,354	20,137	21,178	21,785	22,369	22,370	23,352
Other nonfederal	3,736	3,301	3,378	3,591	3,851	3,990	3,794	3,945
Domestic	3,212	2,843	2,954	3,225	3,544	3,702	3,550	3,687
Foreign	524	458	424	366	307	288	244	258
Self-support	6,756	6,829	6,602	6,636	7,304	7,813	7,934	8,189
Computer sciences	19,972	22,687	26,558	30,087	32,579	30,708	29,162	28,317
Federal	3,309	3,349	3,675	4,248	4,958	5,325	5,133	5,367
DOD	1,307	1,208	1,220	1,284	1,303	1,379	1,184	1,405
DOE <sup>a</sup>	NA	109	111	120	138	159	155	156
HHS	110	107	122	173	240	303	295	327
NIH	75	64	84	101	185	231	262	289
Other HHS	35	43	38	72	55	72	33	38
NASA	124	111	142	166	203	226	141	95
NSF	1,171	1,309	1,495	1,867	2,344	2,717	2,748	2,819
USDA	10	20	16	25	41	39	37	21
Other <sup>a</sup>	587	485	569	613	689	502	573	544
Institutional	6,206	7,033	7,838	8,975	9,537	9,257	9,022	9,028
Other nonfederal	1,311	1,529	1,906	1,925	1,908	1,948	1,733	1,680
Domestic	1,137	1,393	1,640	1,604	1,684	1,758	1,547	1,480
Foreign	174	136	266	321	224	190	186	200
Self-support	9,146	10,776	13,139	14,939	16,176	14,178	13,274	12,242
Earth, atmospheric, and ocean sciences	10,444	10,484	10,558	10,504	11,116	11,497	11,685	11,370
Federal	2,959	2,965	2,992	2,916	3,041	3,306	3,343	3,309
DOD	336	336	280	257	201	254	128	154
DOE <sup>a</sup>	NA	124	144	137	167	155	171	166
HHS	38	37	57	60	47	68	42	34
NIH	21	17	40	37	32	52	25	22
Other HHS	17	20	17	23	15	16	17	12
NASA	390	409	457	456	470	420	456	458
NSF	1,122	1,128	1,140	1,127	1,205	1,376	1,513	1,505
USDA	77	55	50	65	74	85	93	73
Other <sup>a</sup>	996	876	864	814	877	948	940	919
Institutional	4,441	4,748	4,620	4,670	4,897	5,083	5,221	5,026
Other nonfederal	860	847	905	904	1,099	882	912	955
Domestic	696	687	760	719	905	766	840	859
Foreign	164	160	145	185	194	116	72	96
Self-support	2,184	1,924	2,041	2,014	2,079	2,226	2,209	2,080

TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Mathematical sciences	11,751	11,796	11,740	12,467	13,709	14,627	14,916	15,261
Federal	1,044	1,103	1,368	1,388	1,619	1,680	1,720	1,756
DOD	283	227	239	212	166	232	165	187
DOE <sup>a</sup>	NA	44	40	40	42	53	64	69
HHS	100	105	92	108	165	154	174	165
NIH	68	78	76	89	133	119	154	155
Other HHS	32	27	16	19	32	35	20	10
NASA	11	15	23	23	20	23	24	24
NSF	384	441	635	763	944	975	1,031	1,028
USDA	7	7	7	20	14	9	33	35
Other <sup>a</sup>	259	264	332	222	268	234	229	248
Institutional	8,289	8,267	8,187	8,635	9,104	9,650	9,976	10,143
Other nonfederal	453	439	438	417	555	520	377	443
Domestic	314	313	309	297	441	425	298	360
Foreign	139	126	129	120	114	95	79	83
Self-support	1,965	1,987	1,747	2,027	2,431	2,777	2,843	2,919
Physical sciences	26,391	26,635	26,492	27,179	28,619	30,441	31,675	32,386
Federal	9,123	9,239	9,211	9,284	9,950	10,615	11,186	11,217
DOD	994	881	864	855	860	885	1,146	892
DOE <sup>a</sup>	NA	1,181	1,170	1,260	1,368	1,607	1,613	1,695
HHS	1,891	1,844	1,974	2,113	2,346	2,446	2,531	2,622
NIH	1,631	1,655	1,769	1,858	2,114	2,179	2,356	2,468
Other HHS	260	189	205	255	232	267	175	154
NASA	595	562	533	506	544	574	560	580
NSF	3,318	3,279	3,287	3,327	3,591	3,868	4,095	4,168
USDA	40	33	51	42	51	66	45	40
Other <sup>a</sup>	2,285	1,459	1,332	1,181	1,190	1,169	1,196	1,220
Institutional	14,101	14,118	13,850	14,503	15,037	16,099	16,709	17,138
Other nonfederal	1,852	1,926	1,915	1,977	2,034	2,104	2,131	2,188
Domestic	1,663	1,754	1,747	1,850	1,913	1,977	2,031	2,095
Foreign	189	172	168	127	121	127	100	93
Self-support	1,315	1,352	1,516	1,415	1,598	1,623	1,649	1,843
Psychology	35,148	34,658	34,919	34,487	34,707	35,774	37,872	38,957
Federal	2,927	3,229	3,278	3,248	3,600	3,583	3,635	3,702
DOD	128	117	135	140	170	150	140	150
DOE <sup>a</sup>	NA	41	25	1	9	10	27	30
HHS	1,445	1,554	1,605	1,616	1,756	1,866	1,875	1,847
NIH	1,226	1,275	1,328	1,392	1,512	1,621	1,668	1,705
Other HHS	219	279	277	224	244	245	207	142
NASA	24	41	36	27	37	27	32	12
NSF	283	310	277	283	297	330	369	394
USDA	8	13	16	13	4	17	20	18
Other <sup>a</sup>	1,039	1,153	1,184	1,168	1,327	1,183	1,172	1,251
Institutional	13,261	13,235	12,517	13,101	13,193	13,280	13,663	13,843
Other nonfederal	1,349	1,397	1,342	1,238	1,182	1,314	1,399	1,420
Domestic	1,296	1,341	1,291	1,173	1,126	1,231	1,353	1,390
Foreign	53	56	51	65	56	83	46	30
Self-support	17,611	16,797	17,782	16,900	16,732	17,597	19,175	19,992
Social sciences	53,824	53,293	52,668	54,306	58,054	61,412	62,424	63,751
Federal	3,029	3,137	3,385	3,374	3,571	3,678	3,630	3,496
DOD	192	174	150	167	166	130	135	135
DOE <sup>a</sup>	NA	37	66	60	52	57	55	34
HHS	305	344	380	374	410	474	439	395
NIH	216	266	295	277	316	373	317	304
Other HHS	89	78	85	97	94	101	122	91

TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
NASA	93	135	136	125	109	117	91	83
NSF	709	692	717	742	734	820	794	870
USDA	347	325	387	378	357	388	396	391
Other <sup>a</sup>	1,383	1,430	1,549	1,528	1,743	1,692	1,720	1,588
Institutional	25,287	25,397	25,339	26,791	28,227	28,569	29,169	29,862
Other nonfederal	3,238	3,208	3,223	3,090	2,787	3,017	2,806	2,586
Domestic	2,168	2,184	2,241	2,090	1,875	2,244	1,974	1,913
Foreign	1,070	1,024	982	1,000	912	773	832	673
Self-support	22,270	21,551	20,721	21,051	23,469	26,148	26,819	27,807
Engineering	65,435	68,023	72,276	77,448	85,452	90,216	86,955	84,375
Federal	15,521	15,905	16,707	17,072	18,862	21,473	21,283	21,249
DOD	4,316	4,353	4,475	4,384	4,400	5,482	5,314	5,321
DOE <sup>a</sup>	NA	987	1,208	1,292	1,529	1,719	1,761	1,920
HHS	901	961	1,134	1,288	1,466	1,956	2,134	2,254
NIH	754	844	998	1,133	1,282	1,645	1,907	2,068
Other HHS	147	117	136	155	184	311	227	186
NASA	1,245	1,135	1,270	1,354	1,494	1,642	1,428	1,276
NSF	4,719	4,944	5,211	5,434	5,952	6,726	6,788	6,862
USDA	197	240	217	260	337	419	408	333
Other <sup>a</sup>	4,143	3,285	3,192	3,060	3,684	3,529	3,450	3,283
Institutional	23,401	25,254	26,071	27,833	30,406	31,223	30,995	29,706
Other nonfederal	9,762	9,534	10,585	11,036	11,279	11,145	9,840	9,795
Domestic	8,554	8,417	9,496	9,948	10,300	10,220	8,943	8,923
Foreign	1,208	1,117	1,089	1,088	979	925	897	872
Self-support	16,751	17,330	18,913	21,507	24,905	26,375	24,837	23,625
Chemical engineering	5,630	5,593	5,861	5,829	6,279	6,414	6,379	6,139
Federal	1,701	1,669	1,672	1,692	1,965	2,055	2,146	2,097
DOD	160	161	113	140	181	265	218	204
DOE <sup>a</sup>	NA	220	242	257	310	327	352	365
HHS	141	149	155	179	219	245	298	274
NIH	111	127	128	136	185	210	262	236
Other HHS	30	22	27	43	34	35	36	38
NASA	98	101	102	108	119	103	95	90
NSF	756	744	770	721	823	841	873	851
USDA	39	37	35	35	45	35	46	46
Other <sup>a</sup>	507	257	255	252	268	239	264	267
Institutional	2,126	2,295	2,299	2,241	2,446	2,540	2,479	2,343
Other nonfederal	947	973	1,081	1,095	1,094	995	957	920
Domestic	834	899	977	984	1,011	932	902	870
Foreign	113	74	104	111	83	63	55	50
Self-support	856	656	809	801	774	824	797	779
Civil engineering	11,154	11,237	11,754	12,102	12,981	13,710	13,588	13,118
Federal	1,670	1,668	1,934	1,943	2,104	2,185	2,155	2,000
DOD	192	157	160	178	182	148	169	180
DOE <sup>a</sup>	NA	50	84	82	84	94	90	92
HHS	46	44	51	27	36	61	59	60
NIH	35	39	40	26	29	45	33	32
Other HHS	11	5	11	1	7	16	26	28
NASA	61	56	74	79	93	87	59	68
NSF	544	538	596	587	648	704	702	652
USDA	28	35	36	38	50	69	73	64
Other <sup>a</sup>	799	788	933	952	1,011	1,022	1,003	884
Institutional	4,588	4,865	4,941	4,977	5,386	5,553	5,703	5,323
Other nonfederal	1,136	1,119	1,357	1,479	1,370	1,483	1,240	1,169
Domestic	922	931	1,193	1,303	1,255	1,378	1,108	1,055
Foreign	214	188	164	176	115	105	132	114
Self-support	3,760	3,585	3,522	3,703	4,121	4,489	4,490	4,626

TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Electrical engineering	19,608	20,521	22,962	25,240	28,240	28,929	26,732	25,843
Federal	4,316	4,608	5,052	4,968	5,702	6,198	6,000	6,036
DOD	1,803	1,848	2,080	1,976	1,942	2,233	1,969	1,929
DOE <sup>a</sup>	NA	71	93	138	193	189	211	236
HHS	102	104	187	149	180	356	351	360
NIH	79	87	145	109	145	246	291	314
Other HHS	23	17	42	40	35	110	60	46
NASA	244	272	284	332	384	373	335	244
NSF	1,304	1,473	1,586	1,641	1,945	2,256	2,363	2,501
USDA	12	10	12	13	21	57	54	23
Other <sup>a</sup>	851	830	810	719	1,037	734	717	743
Institutional	6,602	7,197	7,390	8,038	8,672	8,933	8,564	8,334
Other nonfederal	3,124	2,840	3,278	3,433	3,550	3,310	2,794	3,058
Domestic	2,846	2,561	3,027	3,184	3,312	3,080	2,630	2,793
Foreign	278	279	251	249	238	230	164	265
Self-support	5,566	5,876	7,242	8,801	10,316	10,488	9,374	8,415
Industrial engineering	4,894	5,500	6,049	6,534	7,200	7,098	6,591	6,113
Federal	586	711	805	803	827	989	968	950
DOD	180	252	235	241	242	251	303	342
DOE <sup>a</sup>	NA	12	31	46	42	58	45	46
HHS	32	33	34	40	58	73	66	68
NIH	25	20	21	29	31	36	43	56
Other HHS	7	13	13	11	27	37	23	12
NASA	32	28	26	29	29	58	43	52
NSF	175	220	258	276	277	387	334	291
USDA	4	2	7	8	6	11	12	9
Other <sup>a</sup>	163	164	214	163	173	151	165	142
Institutional	1,732	1,929	2,129	2,429	2,618	2,364	2,341	2,147
Other nonfederal	548	577	683	746	756	695	600	574
Domestic	448	488	576	605	640	617	520	514
Foreign	100	89	107	141	116	78	80	60
Self-support	2,028	2,283	2,432	2,556	2,999	3,050	2,682	2,442
Mechanical engineering	10,073	10,331	10,795	11,436	12,512	13,356	12,718	12,178
Federal	2,607	2,591	2,656	2,776	2,976	3,417	3,162	3,114
DOD	728	713	652	689	618	876	730	703
DOE <sup>a</sup>	NA	207	239	214	312	351	360	342
HHS	104	112	112	159	159	166	180	186
NIH	71	87	105	147	144	135	154	159
Other HHS	33	25	7	12	15	31	26	27
NASA	290	242	292	280	316	350	282	258
NSF	908	882	915	1,002	1,035	1,104	1,040	1,055
USDA	5	21	7	11	10	20	22	19
Other <sup>a</sup>	572	414	439	421	526	550	548	551
Institutional	3,829	4,042	4,228	4,483	4,983	5,055	4,991	4,671
Other nonfederal	1,611	1,604	1,764	1,692	1,731	1,740	1,490	1,399
Domestic	1,467	1,434	1,565	1,545	1,608	1,610	1,338	1,268
Foreign	144	170	199	147	123	130	152	131
Self-support	2,026	2,094	2,147	2,485	2,822	3,144	3,075	2,994
Other engineering	14,076	14,841	14,855	16,307	18,240	20,709	20,947	20,984
Federal	4,641	4,658	4,588	4,890	5,288	6,629	6,852	7,052
DOD	1,253	1,222	1,235	1,160	1,235	1,709	1,925	1,963
DOE <sup>a</sup>	NA	427	519	555	588	700	703	839
HHS	476	519	595	734	814	1,055	1,180	1,306
NIH	433	484	559	686	748	973	1,124	1,271
Other HHS	43	35	36	48	66	82	56	35

TABLE 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
NASA	520	436	492	526	553	671	614	564
NSF	1,032	1,087	1,086	1,207	1,224	1,434	1,476	1,512
USDA	109	135	120	155	205	227	201	172
Other <sup>a</sup>	1,251	832	541	553	669	833	753	696
Institutional	4,524	4,926	5,084	5,665	6,301	6,778	6,917	6,888
Other nonfederal	2,396	2,421	2,422	2,591	2,778	2,922	2,759	2,675
Domestic	2,037	2,104	2,158	2,327	2,474	2,603	2,445	2,423
Foreign	359	317	264	264	304	319	314	252
Self-support	2,515	2,836	2,761	3,161	3,873	4,380	4,419	4,369
Health fields	48,446	50,530	49,928	50,501	53,519	58,392	62,085	64,875
Federal	7,949	8,464	8,364	8,636	9,197	9,433	9,648	9,228
DOD	300	364	407	245	284	296	329	348
DOE <sup>a</sup>	NA	30	15	11	8	13	16	16
HHS	5,964	6,196	5,806	6,239	6,778	6,989	7,178	6,871
NIH	2,907	3,032	3,157	3,326	3,547	3,868	4,306	4,091
Other HHS	3,057	3,164	2,649	2,913	3,231	3,121	2,872	2,780
NASA	26	15	18	22	16	13	25	20
NSF	120	123	124	129	128	148	169	208
USDA	59	61	62	50	74	78	84	87
Other <sup>a</sup>	1,480	1,675	1,932	1,940	1,909	1,896	1,847	1,678
Institutional	10,051	10,911	10,972	10,973	11,521	12,180	13,266	13,932
Other nonfederal	2,210	2,218	2,459	2,549	2,712	2,751	2,714	2,912
Domestic	1,778	1,796	2,101	2,172	2,383	2,421	2,459	2,708
Foreign	432	422	358	377	329	330	255	204
Self-support	28,236	28,937	28,133	28,343	30,089	34,028	36,457	38,803

NA = not available.

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 = U.S. Department of Agriculture.

<sup>a</sup> Data for DOE were not collected separately until 1999. Students supported by DOE before 1999 were included under other federal support.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	327,389	334,423	341,283	354,522	378,991	397,420	402,630	406,653
Fellowships	29,106	30,112	31,330	32,270	34,851	34,460	35,089	36,487
Research assistantships	88,097	91,279	94,323	99,923	108,183	114,256	114,741	114,251
Teaching assistantships	65,173	66,294	66,423	68,267	70,732	73,105	73,034	74,276
Traineeships	14,946	14,707	14,171	14,086	14,925	15,097	14,815	14,522
Other support	130,067	132,031	135,036	139,976	150,300	160,502	164,951	167,117
Self-support	108,224	109,416	112,432	116,636	126,654	134,730	137,079	139,420
Other support	21,843	22,615	22,604	23,340	23,646	25,772	27,872	27,697
Science and engineering	278,943	283,893	291,355	304,021	325,472	339,028	340,545	341,778
Fellowships	26,575	27,377	28,415	29,677	32,084	31,780	32,239	33,632
Research assistantships	83,053	85,866	88,449	93,638	101,551	107,294	107,462	106,704
Teaching assistantships	61,974	63,198	63,328	64,976	67,242	69,476	69,167	70,273
Traineeships	9,841	9,505	9,554	9,197	9,771	10,140	9,804	9,841
Other support	97,500	97,947	101,609	106,533	114,824	120,338	121,873	121,328
Self-support	79,988	80,479	84,299	88,293	96,565	100,702	100,622	100,617
Other support	17,512	17,468	17,310	18,240	18,259	19,636	21,251	20,711
Science	213,508	215,870	219,079	226,573	240,020	248,812	253,590	257,403
Fellowships	20,974	21,278	22,051	23,210	25,065	24,514	25,044	26,358
Research assistantships	55,669	57,197	57,762	61,465	66,409	69,965	71,637	71,979
Teaching assistantships	51,892	52,496	52,273	53,093	54,679	56,945	56,996	58,346
Traineeships	8,963	8,737	8,786	8,414	8,819	9,084	8,848	8,811
Other support	76,010	76,162	78,207	80,391	85,048	88,304	91,065	91,909
Self-support	63,237	63,149	65,386	66,786	71,660	74,327	75,785	76,992
Other support	12,773	13,013	12,821	13,605	13,388	13,977	15,280	14,917
Agricultural sciences	9,199	9,371	9,357	9,405	9,685	10,003	10,040	9,710
Fellowships	486	474	450	520	520	568	599	656
Research assistantships	5,091	5,219	5,279	5,432	5,612	5,823	5,870	5,534
Teaching assistantships	1,062	1,192	1,223	1,203	1,178	1,169	1,216	1,187
Traineeships	115	95	86	84	73	52	74	20
Other support	2,445	2,391	2,319	2,166	2,302	2,391	2,281	2,313
Self-support	1,990	1,933	1,838	1,804	1,871	1,965	1,882	1,920
Other support	455	458	481	362	431	426	399	393
Biological sciences	46,779	46,946	46,787	48,138	51,551	54,350	55,816	57,651
Fellowships	5,617	5,789	5,747	6,147	6,431	6,477	6,711	7,230
Research assistantships	18,171	18,308	18,564	19,410	21,181	22,706	23,891	24,582
Teaching assistantships	9,083	8,727	8,619	8,639	8,903	9,145	8,849	9,126
Traineeships	5,204	5,283	5,177	4,941	5,321	5,620	5,536	5,604
Other support	8,704	8,839	8,680	9,001	9,715	10,402	10,829	11,109
Self-support	6,756	6,829	6,602	6,636	7,304	7,813	7,934	8,189
Other support	1,948	2,010	2,078	2,365	2,411	2,589	2,895	2,920
Computer sciences	19,972	22,687	26,558	30,087	32,579	30,708	29,162	28,317
Fellowships	1,011	1,006	1,198	1,114	1,480	1,387	1,411	1,465
Research assistantships	4,300	4,895	5,302	6,407	7,153	7,500	7,197	7,186
Teaching assistantships	3,798	4,366	4,602	5,130	5,367	5,029	4,819	4,742
Traineeships	219	212	263	248	279	332	288	231
Other support	10,644	12,208	15,193	17,188	18,300	16,460	15,447	14,693
Self-support	9,146	10,776	13,139	14,939	16,176	14,178	13,274	12,242
Other support	1,498	1,432	2,054	2,249	2,124	2,282	2,173	2,451
Earth, atmospheric, and ocean sciences	10,444	10,484	10,558	10,504	11,116	11,497	11,685	11,370
Fellowships	922	930	1,046	1,065	1,118	1,175	1,227	1,356
Research assistantships	4,108	4,249	4,235	4,173	4,532	4,597	4,829	4,740
Teaching assistantships	2,559	2,612	2,528	2,562	2,685	2,810	2,691	2,664
Traineeships	114	109	98	97	98	115	123	111

TABLE 24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
Other support	2,741	2,584	2,651	2,607	2,683	2,800	2,815	2,499
Self-support	2,184	1,924	2,041	2,014	2,079	2,226	2,209	2,080
Other support	557	660	610	593	604	574	606	419
Mathematical sciences	11,751	11,796	11,740	12,467	13,709	14,627	14,916	15,261
Fellowships	1,104	1,035	1,295	1,397	1,424	1,382	1,345	1,428
Research assistantships	1,215	1,269	1,250	1,422	1,736	1,810	1,923	1,892
Teaching assistantships	6,566	6,767	6,805	6,997	7,429	7,923	8,031	8,220
Traineeships	164	112	122	105	124	123	108	95
Other support	2,702	2,613	2,268	2,546	2,996	3,389	3,509	3,626
Self-support	1,965	1,987	1,747	2,027	2,431	2,777	2,843	2,919
Other support	737	626	521	519	565	612	666	707
Physical sciences	26,391	26,635	26,492	27,179	28,619	30,441	31,675	32,386
Fellowships	2,113	2,199	2,260	2,371	2,665	2,514	2,731	2,790
Research assistantships	11,046	11,270	11,097	11,826	12,651	13,527	13,702	14,013
Teaching assistantships	10,880	10,866	10,664	10,575	10,761	11,818	12,253	12,584
Traineeships	482	383	464	437	421	364	366	422
Other support	1,870	1,917	2,007	1,970	2,121	2,218	2,623	2,577
Self-support	1,315	1,352	1,516	1,415	1,598	1,623	1,649	1,843
Other support	555	565	491	555	523	595	974	734
Psychology	35,148	34,658	34,919	34,487	34,707	35,774	37,872	38,957
Fellowships	2,337	2,478	2,375	2,307	2,295	2,299	2,396	2,512
Research assistantships	4,762	4,795	4,710	4,979	5,370	5,584	6,031	5,837
Teaching assistantships	5,976	6,032	5,796	5,645	5,818	6,081	5,934	6,240
Traineeships	1,113	1,022	1,228	1,302	1,246	1,184	900	1,081
Other support	20,960	20,331	20,810	20,254	19,978	20,626	22,611	23,287
Self-support	17,611	16,797	17,782	16,900	16,732	17,597	19,175	19,992
Other support	3,349	3,534	3,028	3,354	3,246	3,029	3,436	3,295
Social sciences	53,824	53,293	52,668	54,306	58,054	61,412	62,424	63,751
Fellowships	7,384	7,367	7,680	8,289	9,132	8,712	8,624	8,921
Research assistantships	6,976	7,192	7,325	7,816	8,174	8,418	8,194	8,195
Teaching assistantships	11,968	11,934	12,036	12,342	12,538	12,970	13,203	13,583
Traineeships	1,552	1,521	1,348	1,200	1,257	1,294	1,453	1,247
Other support	25,944	25,279	24,279	24,659	26,953	30,018	30,950	31,805
Self-support	22,270	21,551	20,721	21,051	23,469	26,148	26,819	27,807
Other support	3,674	3,728	3,558	3,608	3,484	3,870	4,131	3,998
Engineering	65,435	68,023	72,276	77,448	85,452	90,216	86,955	84,375
Fellowships	5,601	6,099	6,364	6,467	7,019	7,266	7,195	7,274
Research assistantships	27,384	28,669	30,687	32,173	35,142	37,329	35,825	34,725
Teaching assistantships	10,082	10,702	11,055	11,883	12,563	12,531	12,171	11,927
Traineeships	878	768	768	783	952	1,056	956	1,030
Other support	21,490	21,785	23,402	26,142	29,776	32,034	30,808	29,419
Self-support	16,751	17,330	18,913	21,507	24,905	26,375	24,837	23,625
Other support	4,739	4,455	4,489	4,635	4,871	5,659	5,971	5,794
Chemical engineering	5,630	5,593	5,861	5,829	6,279	6,414	6,379	6,139
Fellowships	728	836	794	760	832	837	692	658
Research assistantships	2,900	2,944	3,076	3,154	3,464	3,603	3,754	3,593
Teaching assistantships	898	964	951	850	894	851	789	757
Traineeships	97	65	85	53	71	73	102	123
Other support	1,007	784	955	1,012	1,018	1,050	1,042	1,008
Self-support	856	656	809	801	774	824	797	779
Other support	151	128	146	211	244	226	245	229
Civil engineering	11,154	11,237	11,754	12,102	12,981	13,710	13,588	13,118
Fellowships	828	869	924	1,009	1,074	1,115	1,093	1,103
Research assistantships	3,871	4,086	4,636	4,533	4,781	5,033	4,870	4,450
Teaching assistantships	1,755	1,789	1,868	1,876	1,952	2,011	2,096	1,993



TABLE 24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
Traineeships	191	197	117	156	210	196	152	160
Other support	4,509	4,296	4,209	4,528	4,964	5,355	5,377	5,412
Self-support	3,760	3,585	3,522	3,703	4,121	4,489	4,490	4,626
Other support	749	711	687	825	843	866	887	786
Electrical engineering	19,608	20,521	22,962	25,240	28,240	28,929	26,732	25,843
Fellowships	1,318	1,363	1,357	1,303	1,497	1,535	1,522	1,571
Research assistantships	7,691	8,417	9,207	9,588	10,655	10,814	10,168	10,196
Teaching assistantships	3,344	3,392	3,643	4,045	4,303	4,227	3,924	3,869
Traineeships	133	76	107	92	105	128	123	147
Other support	7,122	7,273	8,648	10,212	11,680	12,225	10,995	10,060
Self-support	5,566	5,876	7,242	8,801	10,316	10,488	9,374	8,415
Other support	1,556	1,397	1,406	1,411	1,364	1,737	1,621	1,645
Industrial engineering	4,894	5,500	6,049	6,534	7,200	7,098	6,591	6,113
Fellowships	252	257	325	427	445	442	437	434
Research assistantships	1,380	1,468	1,655	1,747	1,900	1,843	1,691	1,490
Teaching assistantships	777	893	956	1,058	1,027	964	940	924
Traineeships	24	21	18	58	56	42	46	51
Other support	2,461	2,861	3,095	3,244	3,772	3,807	3,477	3,214
Self-support	2,028	2,283	2,432	2,556	2,999	3,050	2,682	2,442
Other support	433	578	663	688	773	757	795	772
Mechanical engineering	10,073	10,331	10,795	11,436	12,512	13,356	12,718	12,178
Fellowships	902	874	1,021	955	1,013	991	917	927
Research assistantships	4,498	4,642	4,850	5,086	5,480	6,048	5,704	5,329
Teaching assistantships	1,780	1,950	1,968	2,178	2,358	2,310	2,203	2,202
Traineeships	180	142	121	126	116	117	102	109
Other support	2,713	2,723	2,835	3,091	3,545	3,890	3,792	3,611
Self-support	2,026	2,094	2,147	2,485	2,822	3,144	3,075	2,994
Other support	687	629	688	606	723	746	717	617
Other engineering	14,076	14,841	14,855	16,307	18,240	20,709	20,947	20,984
Fellowships	1,573	1,900	1,943	2,013	2,158	2,346	2,534	2,581
Research assistantships	7,044	7,112	7,263	8,065	8,862	9,988	9,638	9,667
Teaching assistantships	1,528	1,714	1,669	1,876	2,029	2,168	2,219	2,182
Traineeships	253	267	320	298	394	500	431	440
Other support	3,678	3,848	3,660	4,055	4,797	5,707	6,125	6,114
Self-support	2,515	2,836	2,761	3,161	3,873	4,380	4,419	4,369
Other support	1,163	1,012	899	894	924	1,327	1,706	1,745
Health fields	48,446	50,530	49,928	50,501	53,519	58,392	62,085	64,875
Fellowships	2,531	2,735	2,915	2,593	2,767	2,680	2,850	2,855
Research assistantships	5,044	5,413	5,874	6,285	6,632	6,962	7,279	7,547
Teaching assistantships	3,199	3,096	3,095	3,291	3,490	3,629	3,867	4,003
Traineeships	5,105	5,202	4,617	4,889	5,154	4,957	5,011	4,681
Other support	32,567	34,084	33,427	33,443	35,476	40,164	43,078	45,789
Self-support	28,236	28,937	28,133	28,343	30,089	34,028	36,457	38,803
Other support	4,331	5,147	5,294	5,100	5,387	6,136	6,621	6,986

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 25. Full-time graduate students in science and engineering fields in all institutions, by primary mechanism and primary source of support: 1998–2005

Primary mechanism and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
All sources	278,943	283,893	291,355	304,021	325,472	339,028	340,545	341,778
Federal	55,810	57,332	59,224	60,237	66,368	72,343	74,164	74,604
DOD	7,959	7,662	7,734	7,715	7,693	8,908	8,678	8,628
DOE <sup>a</sup>	NA	2,719	2,980	3,105	3,540	4,011	4,119	4,376
HHS	16,740	17,246	17,684	18,098	20,181	22,242	23,716	23,881
NIH	15,308	15,987	16,315	16,578	18,582	20,441	22,377	22,719
Other HHS	1,432	1,259	1,369	1,520	1,599	1,801	1,339	1,162
NASA	2,620	2,564	2,762	2,797	3,066	3,217	2,891	2,671
NSF	13,339	13,712	14,475	15,300	17,007	19,160	19,800	20,215
USDA	2,426	2,573	2,568	2,685	3,026	3,390	3,478	3,283
Other <sup>a</sup>	12,726	10,856	11,021	10,537	11,855	11,415	11,482	11,550
Institutional	118,944	122,271	122,429	129,746	136,295	139,479	141,175	142,085
Other nonfederal	24,201	23,811	25,403	25,745	26,244	26,504	24,584	24,472
Domestic	20,379	20,303	21,913	22,286	23,214	23,736	21,999	22,062
Foreign	3,822	3,508	3,490	3,459	3,030	2,768	2,585	2,410
Self-support	79,988	80,479	84,299	88,293	96,565	100,702	100,622	100,617
Fellowships	26,575	27,377	28,415	29,677	32,084	31,780	32,239	33,632
Federal	6,335	6,594	6,614	6,587	7,099	6,979	7,283	7,634
DOD	536	486	540	472	446	436	412	363
DOE <sup>a</sup>	NA	100	156	120	118	151	129	149
HHS	1,285	1,345	1,149	1,315	1,490	1,367	1,555	1,499
NIH	1,057	1,175	992	1,144	1,293	1,196	1,430	1,409
Other HHS	228	170	157	171	197	171	125	90
NASA	380	359	338	317	319	265	264	281
NSF	2,335	2,411	2,539	2,606	2,818	3,135	3,316	3,494
USDA	136	141	120	126	89	93	85	72
Other <sup>a</sup>	1,663	1,752	1,772	1,631	1,819	1,532	1,522	1,776
Institutional	15,234	15,991	16,982	18,317	20,214	20,055	20,568	21,859
Other nonfederal	5,006	4,792	4,819	4,773	4,771	4,746	4,388	4,139
Domestic	3,277	3,269	3,450	3,360	3,569	3,714	3,442	3,151
Foreign	1,729	1,523	1,369	1,413	1,202	1,032	946	988
Self-support	na	na	na	na	na	na	na	na
Research assistantships	83,053	85,866	88,449	93,638	101,551	107,294	107,462	106,704
Federal	39,962	40,977	42,405	43,861	49,023	54,322	55,338	55,073
DOD	5,784	5,658	5,730	5,799	6,153	6,834	6,244	6,043
DOE <sup>a</sup>	NA	2,533	2,717	2,892	3,322	3,762	3,851	4,076
HHS	10,584	10,787	11,335	11,773	13,349	15,126	16,393	16,461
NIH	9,647	10,036	10,473	10,733	12,245	13,761	15,403	15,654
Other HHS	937	751	862	1,040	1,104	1,365	990	807
NASA	2,122	2,107	2,291	2,336	2,606	2,817	2,526	2,245
NSF	10,373	10,715	11,304	12,022	13,459	15,209	15,603	15,757
USDA	2,188	2,290	2,314	2,465	2,810	3,113	3,235	3,066
Other <sup>a</sup>	8,911	6,887	6,714	6,574	7,324	7,461	7,486	7,425
Institutional	29,797	31,476	31,492	34,168	36,333	36,580	36,776	36,225
Other nonfederal	13,294	13,413	14,552	15,609	16,195	16,392	15,348	15,406
Domestic	12,666	12,816	13,922	14,967	15,473	15,752	14,752	14,849
Foreign	628	597	630	642	722	640	596	557
Self-support	na	na	na	na	na	na	na	na

TABLE 25. Full-time graduate students in science and engineering fields in all institutions, by primary mechanism and primary source of support: 1998–2005

Primary mechanism and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Teaching assistantships	61,974	63,198	63,328	64,976	67,242	69,476	69,167	70,273
Federal	971	876	1,270	955	1,096	1,338	1,316	1,494
DOD	na	na	na	na	na	na	na	na
DOE <sup>a</sup>	NA	16	34	27	41	48	58	78
HHS	232	203	277	244	250	324	268	311
NIH	221	196	261	213	203	283	245	273
Other HHS	11	7	16	31	47	41	23	38
NASA	23	9	11	34	26	34	31	51
NSF	130	121	137	187	217	286	285	381
USDA	37	60	68	46	46	80	67	59
Other <sup>a</sup>	549	467	743	417	516	566	607	614
Institutional	60,391	61,631	61,099	63,073	65,035	67,072	66,869	67,781
Other nonfederal	612	691	959	948	1,111	1,066	982	998
Domestic	612	691	959	948	1,111	1,066	982	998
Foreign	na	na	na	na	na	na	na	na
Self-support	na	na	na	na	na	na	na	na
Traineeships	9,841	9,505	9,554	9,197	9,771	10,140	9,804	9,841
Federal	5,426	5,411	5,694	5,417	5,746	5,916	5,842	5,948
DOD	64	51	59	36	46	39	45	63
DOE <sup>a</sup>	NA	22	10	2	9	5	25	35
HHS	4,234	4,361	4,415	4,224	4,516	4,794	4,824	4,919
NIH	4,056	4,161	4,141	3,992	4,314	4,654	4,691	4,774
Other HHS	178	200	274	232	202	140	133	145
NASA	57	51	46	50	52	56	48	56
NSF	408	344	324	336	318	333	406	377
USDA	14	25	18	16	13	14	16	23
Other <sup>a</sup>	649	557	822	753	792	675	478	475
Institutional	3,730	3,457	3,303	3,300	3,618	3,632	3,431	3,282
Other nonfederal	685	637	557	480	407	592	531	611
Domestic	541	537	412	348	341	504	429	549
Foreign	144	100	145	132	66	88	102	62
Self-support	na	na	na	na	na	na	na	na
Other types of support	97,500	97,947	101,609	106,533	114,824	120,338	121,873	121,328
Federal	3,116	3,474	3,241	3,417	3,404	3,788	4,385	4,455
DOD	1,575	1,467	1,405	1,408	1,048	1,599	1,977	2,159
DOE <sup>a</sup>	NA	48	63	64	50	45	56	38
HHS	405	550	508	542	576	631	676	691
NIH	327	419	448	496	527	547	608	609
Other HHS	78	131	60	46	49	84	68	82
NASA	38	38	76	60	63	45	22	38
NSF	93	121	171	149	195	197	190	206
USDA	51	57	48	32	68	90	75	63
Other <sup>a</sup>	954	1,193	970	1,162	1,404	1,181	1,389	1,260

TABLE 25. Full-time graduate students in science and engineering fields in all institutions, by primary mechanism and primary source of support: 1998–2005

Primary mechanism and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Institutional	9,792	9,716	9,553	10,888	11,095	12,140	13,531	12,938
Other nonfederal	4,604	4,278	4,516	3,935	3,760	3,708	3,335	3,318
Domestic	3,283	2,990	3,170	2,663	2,720	2,700	2,394	2,515
Foreign	1,321	1,288	1,346	1,272	1,040	1,008	941	803
Self-support	79,988	80,479	84,299	88,293	96,565	100,702	100,622	100,617

na = not applicable.

NA = not available.

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 = U.S. Department of Agriculture.

<sup>a</sup> Data for DOE were not collected separately until 1999. Students supported by DOE before 1999 were included under other federal support.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 26. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	90,828	92,214	94,340	98,112	104,184	107,715	106,580	110,401
Science and engineering	74,373	75,447	78,332	82,411	86,827	89,331	86,580	89,183
Science	55,112	54,934	56,141	59,105	62,220	64,902	64,555	66,810
Agricultural sciences	2,299	2,253	2,335	2,338	2,320	2,424	2,316	2,260
Biological sciences	11,335	10,959	10,955	11,608	12,127	12,719	12,796	12,896
Anatomy	180	161	198	159	193	178	180	213
Biochemistry	1,022	896	929	851	880	958	907	930
Biology	2,498	2,521	2,282	2,376	2,532	2,610	2,740	2,826
Biometry/epidemiology	815	825	837	953	1,001	1,022	986	1,069
Biophysics	158	118	128	162	166	223	210	174
Botany	409	363	357	315	335	307	336	316
Cell biology	903	867	977	993	1,085	1,125	1,140	1,186
Ecology	261	251	280	348	317	345	302	314
Entomology/parasitology	233	179	185	202	203	175	211	153
Genetics	397	427	380	382	362	373	441	365
Microbiology/immunology/virology	857	904	823	884	914	909	889	868
Nutrition	940	834	830	906	890	895	843	863
Pathology	279	320	276	320	294	256	277	248
Pharmacology	513	487	549	507	554	552	510	466
Physiology	654	608	570	615	633	760	731	678
Zoology	274	263	230	247	231	258	212	199
Biosciences, nec	942	935	1,124	1,388	1,537	1,773	1,881	2,028
Computer sciences	5,758	6,677	8,431	9,077	9,037	8,134	7,783	8,258
Earth, atmospheric, and ocean sciences	2,859	2,746	2,649	2,794	3,085	3,104	2,926	2,777
Atmospheric sciences	189	203	222	205	213	268	228	228
Geosciences	1,348	1,296	1,230	1,383	1,437	1,412	1,336	1,327
Oceanography	471	474	479	511	533	567	534	463
Earth/atmospheric/ocean sciences, nec	851	773	718	695	902	857	828	759
Mathematical sciences	3,334	3,271	3,419	3,686	3,918	4,185	4,252	4,196
Mathematics/applied mathematics	2,721	2,650	2,757	2,892	3,114	3,266	3,365	3,263
Statistics	613	621	662	794	804	919	887	933
Physical sciences	5,932	6,004	5,829	6,011	6,280	6,841	6,603	6,657
Astronomy	162	171	183	193	194	225	210	190
Chemistry	3,682	3,672	3,482	3,651	3,746	3,983	3,862	3,904
Physics	2,046	2,074	2,101	2,102	2,231	2,543	2,442	2,458
Physical sciences, nec	42	87	63	65	109	90	89	105
Psychology	8,590	8,305	7,545	7,691	8,420	8,858	9,478	10,377
Clinical psychology	2,001	1,992	1,829	1,731	1,898	1,986	2,251	2,318
Psychology, general	3,060	2,745	2,534	2,652	2,657	3,009	2,979	3,416
Psychology, nec	3,529	3,568	3,182	3,308	3,865	3,863	4,248	4,643
Social sciences	15,005	14,719	14,978	15,900	17,033	18,637	18,401	19,389
Agricultural economics	417	482	455	496	575	536	523	557
Anthropology (cultural/social)	1,219	1,193	1,157	1,119	1,177	1,279	1,187	1,257
Economics (except agricultural)	2,352	2,355	2,508	2,562	2,843	2,921	2,686	2,676
Geography	805	830	784	872	812	915	860	898
History and philosophy of science	89	91	78	72	97	107	107	138
Linguistics	493	422	454	495	466	588	570	633
Political science	4,953	4,837	5,142	5,562	6,241	6,950	7,348	7,810
Sociology	1,428	1,307	1,300	1,431	1,535	1,543	1,359	1,504
Sociology/anthropology	177	144	164	160	155	179	178	173
Social sciences, nec	3,072	3,058	2,936	3,131	3,132	3,619	3,583	3,743

TABLE 26. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	19,261	20,513	22,191	23,306	24,607	24,429	22,025	22,373
Aerospace engineering	717	727	775	767	712	845	834	804
Agricultural engineering	175	212	188	192	201	197	177	190
Biomedical engineering	675	724	915	884	1,125	1,327	1,274	1,267
Chemical engineering	1,503	1,491	1,595	1,541	1,616	1,600	1,392	1,293
Civil engineering	3,785	3,726	3,840	3,820	4,107	4,363	4,175	4,057
Electrical engineering	5,741	6,369	7,195	7,882	8,221	7,834	6,633	6,987
Engineering science	308	255	299	339	404	392	361	317
Industrial engineering	1,547	1,851	2,005	2,216	2,238	2,029	1,724	1,674
Mechanical engineering	2,923	3,119	3,269	3,583	3,709	3,476	3,129	3,225
Metallurgical/materials engineering	900	892	1,005	975	1,044	958	926	992
Mining engineering	44	45	48	40	41	73	64	58
Nuclear engineering	153	150	163	164	149	177	192	193
Petroleum engineering	132	149	149	153	198	166	151	161
Engineering, nec	658	803	745	750	842	992	993	1,155
Health fields	16,455	16,767	16,008	15,701	17,357	18,384	20,000	21,218
Medical fields	3,896	3,921	3,871	4,099	4,495	4,727	4,741	4,677
Anesthesiology	226	219	263	269	215	246	186	251
Cardiology	6	7	6	4	5	4	9	4
Endocrinology	6	7	2	4	12	9	4	10
Gastroenterology	0	0	2	0	0	6	4	3
Hematology	1	2	3	0	2	4	3	0
Neurology	376	345	341	366	443	452	426	425
Obstetrics/gynecology	1	0	2	2	5	0	3	4
Oncology/cancer research	50	44	38	45	46	30	52	43
Ophthalmology	4	2	4	12	1	60	76	80
Otorhinolaryngology	0	0	3	1	0	0	1	0
Pediatrics	111	114	151	132	134	131	125	100
Preventive medicine/community health	2,660	2,773	2,621	2,786	2,958	3,082	3,132	2,917
Psychiatry	20	16	28	18	25	27	41	34
Pulmonary disease	0	3	2	3	1	0	0	0
Radiology	48	41	31	61	59	55	49	54
Surgery	36	40	30	9	11	7	7	5
Clinical medicine, nec	351	308	344	387	578	614	623	747
Other health	12,559	12,846	12,137	11,602	12,862	13,657	15,259	16,541
Dental sciences	399	350	381	382	387	396	457	438
Nursing	2,808	2,955	2,700	2,442	2,799	3,083	3,352	3,948
Pharmaceutical sciences	548	597	605	521	513	537	1,024	1,246
Speech pathology/audiology	3,979	3,974	3,863	3,814	3,902	4,110	4,303	4,496
Veterinary sciences	204	169	270	359	385	374	324	343
Health related, nec	4,621	4,801	4,318	4,084	4,876	5,157	5,799	6,070

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 27. First-time, full-time U.S. citizens or permanent resident graduate students in science, engineering, and health fields in all institutions, by detailed field: 2000–05

Field	2000	2001	2002	2003	2004	2005
All surveyed fields	61,036	62,421	70,374	76,498	77,442	80,054
Science and engineering	46,316	48,232	54,653	59,669	58,966	60,469
Science	37,698	39,543	43,880	47,390	47,768	49,547
Agricultural sciences	1,916	1,845	1,856	1,971	1,870	1,828
Biological sciences	8,355	8,772	9,263	9,763	9,828	9,932
Anatomy	162	134	168	138	156	188
Biochemistry	577	530	561	627	564	601
Biology	1,837	1,883	2,052	2,139	2,263	2,256
Biometry/epidemiology	583	693	648	706	709	779
Biophysics	88	104	117	154	146	128
Botany	244	224	226	231	218	208
Cell biology	748	715	814	822	827	880
Ecology	241	303	280	291	261	282
Entomology/parasitology	146	144	163	142	163	118
Genetics	307	293	298	283	341	284
Microbiology/immunology/virology	640	660	686	718	671	681
Nutrition	603	668	673	678	616	656
Pathology	215	266	248	194	227	198
Pharmacology	382	350	417	415	385	323
Physiology	475	519	552	640	645	596
Zoology	195	216	194	221	182	161
Biosciences, nec	912	1,070	1,166	1,364	1,454	1,593
Computer sciences	2,414	2,621	3,534	3,891	3,651	3,664
Earth, atmospheric, and ocean sciences	2,082	2,210	2,550	2,573	2,469	2,288
Atmospheric sciences	147	140	159	220	186	173
Geosciences	986	1,091	1,179	1,129	1,102	1,088
Oceanography	374	426	447	485	476	376
Earth/atmospheric/ocean sciences, nec	575	553	765	739	705	651
Mathematical sciences	1,849	2,030	2,311	2,527	2,637	2,571
Mathematics/applied mathematics	1,532	1,717	1,952	2,106	2,227	2,171
Statistics	317	313	359	421	410	400
Physical sciences	3,323	3,325	3,775	4,095	4,039	4,154
Astronomy	123	135	137	150	145	144
Chemistry	2,151	2,125	2,292	2,442	2,400	2,468
Physics	1,009	1,025	1,270	1,442	1,420	1,448
Physical sciences, nec	40	40	76	61	74	94
Psychology	7,060	7,167	7,902	8,285	8,960	9,838
Clinical psychology	1,751	1,634	1,806	1,898	2,170	2,231
Psychology, general	2,342	2,455	2,466	2,794	2,777	3,221
Psychology, nec	2,967	3,078	3,630	3,593	4,013	4,386
Social sciences	10,699	11,573	12,689	14,285	14,314	15,272
Agricultural economics	231	250	353	321	319	343
Anthropology (cultural/social)	996	985	1,028	1,142	1,068	1,145
Economics (except agricultural)	976	1,025	1,206	1,373	1,270	1,236
Geography	626	703	675	741	731	759
History and philosophy of science	65	62	90	95	97	115
Linguistics	257	294	305	405	381	440
Political science	3,870	4,291	4,949	5,561	6,002	6,489
Sociology	1,062	1,163	1,302	1,340	1,204	1,320
Sociology/anthropology	143	148	138	161	153	154
Social sciences, nec	2,473	2,652	2,643	3,146	3,089	3,271

TABLE 27. First-time, full-time U.S. citizens or permanent resident graduate students in science, engineering, and health fields in all institutions, by detailed field: 2000–05

Field	2000	2001	2002	2003	2004	2005
Engineering	8,618	8,689	10,773	12,279	11,198	10,922
Aerospace engineering	374	348	396	536	537	508
Agricultural engineering	111	106	118	118	96	94
Biomedical engineering	593	554	710	879	841	821
Chemical engineering	659	616	765	856	733	629
Civil engineering	2,009	1,989	2,250	2,595	2,591	2,492
Electrical engineering	1,901	1,985	2,679	3,127	2,458	2,430
Engineering science	136	164	228	231	225	177
Industrial engineering	596	600	789	840	759	697
Mechanical engineering	1,238	1,384	1,692	1,847	1,690	1,673
Metallurgical/materials engineering	413	410	502	479	454	482
Mining engineering	28	27	27	38	37	35
Nuclear engineering	78	76	99	114	138	143
Petroleum engineering	56	52	47	25	46	26
Engineering, nec	426	378	471	594	593	715
Health fields	14,720	14,189	15,721	16,829	18,476	19,585
Medical fields	3,420	3,455	3,769	4,050	4,074	4,058
Anesthesiology	263	269	215	238	186	249
Cardiology	4	0	2	2	6	2
Endocrinology	0	2	8	5	4	10
Gastroenterology	2	0	0	6	4	3
Hematology	2	0	2	3	3	0
Neurology	267	284	364	371	358	345
Obstetrics/gynecology	2	2	5	0	2	0
Oncology/cancer research	30	38	40	26	42	34
Ophthalmology	3	7	1	59	72	78
Otorhinolaryngology	3	1	0	0	1	0
Pediatrics	140	114	113	116	109	77
Preventive medicine/community health	2,319	2,308	2,416	2,595	2,633	2,483
Psychiatry	27	18	23	27	38	34
Pulmonary disease	2	3	1	0	0	0
Radiology	23	51	43	46	42	47
Surgery	28	9	10	7	6	4
Clinical medicine, nec	305	349	526	549	568	692
Other health	11,300	10,734	11,952	12,779	14,402	15,527
Dental sciences	291	312	301	325	403	360
Nursing	2,603	2,362	2,723	3,003	3,284	3,872
Pharmaceutical sciences	324	246	257	294	781	967
Speech pathology/audiology	3,751	3,699	3,782	4,000	4,183	4,365
Veterinary sciences	213	289	313	313	260	274
Health related, nec	4,118	3,826	4,576	4,844	5,491	5,689

nec = not elsewhere classified.

NOTE: Collection of data on first-time, full-time enrollment by race/ethnicity and citizenship began in 1999; the first data released were those collected for 2000.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 28. First-time, full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2000–05

Field	2000	2001	2002	2003	2004	2005
All surveyed fields	33,304	35,691	33,810	31,217	29,138	30,347
Science and engineering	32,016	34,179	32,174	29,662	27,614	28,714
Science	18,443	19,562	18,340	17,512	16,787	17,263
Agricultural sciences	419	493	464	453	446	432
Biological sciences	2,600	2,836	2,864	2,956	2,968	2,964
Anatomy	36	25	25	40	24	25
Biochemistry	352	321	319	331	343	329
Biology	445	493	480	471	477	570
Biometry/epidemiology	254	260	353	316	277	290
Biophysics	40	58	49	69	64	46
Botany	113	91	109	76	118	108
Cell biology	229	278	271	303	313	306
Ecology	39	45	37	54	41	32
Entomology/parasitology	39	58	40	33	48	35
Genetics	73	89	64	90	100	81
Microbiology/immunology/virology	183	224	228	191	218	187
Nutrition	227	238	217	217	227	207
Pathology	61	54	46	62	50	50
Pharmacology	167	157	137	137	125	143
Physiology	95	96	81	120	86	82
Zoology	35	31	37	37	30	38
Biosciences, nec	212	318	371	409	427	435
Computer sciences	6,017	6,456	5,503	4,243	4,132	4,594
Earth, atmospheric, and ocean sciences	567	584	535	531	457	489
Atmospheric sciences	75	65	54	48	42	55
Geosciences	244	292	258	283	234	239
Oceanography	105	85	86	82	58	87
Earth/atmospheric/ocean sciences, nec	143	142	137	118	123	108
Mathematical sciences	1,570	1,656	1,607	1,658	1,615	1,625
Mathematics/applied mathematics	1,225	1,175	1,162	1,160	1,138	1,092
Statistics	345	481	445	498	477	533
Physical sciences	2,506	2,686	2,505	2,746	2,564	2,503
Astronomy	60	58	57	75	65	46
Chemistry	1,331	1,526	1,454	1,541	1,462	1,436
Physics	1,092	1,077	961	1,101	1,022	1,010
Physical sciences, nec	23	25	33	29	15	11
Psychology	485	524	518	573	518	539
Clinical psychology	78	97	92	88	81	87
Psychology, general	192	197	191	215	202	195
Psychology, nec	215	230	235	270	235	257
Social sciences	4,279	4,327	4,344	4,352	4,087	4,117
Agricultural economics	224	246	222	215	204	214
Anthropology (cultural/social)	161	134	149	137	119	112
Economics (except agricultural)	1,532	1,537	1,637	1,548	1,416	1,440
Geography	158	169	137	174	129	139
History and philosophy of science	13	10	7	12	10	23
Linguistics	197	201	161	183	189	193
Political science	1,272	1,271	1,292	1,389	1,346	1,321
Sociology	238	268	233	203	155	184
Sociology/anthropology	21	12	17	18	25	19
Social sciences, nec	463	479	489	473	494	472

TABLE 28. First-time, full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2000–05

Field	2000	2001	2002	2003	2004	2005
Engineering	13,573	14,617	13,834	12,150	10,827	11,451
Aerospace engineering	401	419	316	309	297	296
Agricultural engineering	77	86	83	79	81	96
Biomedical engineering	322	330	415	448	433	446
Chemical engineering	936	925	851	744	659	664
Civil engineering	1,831	1,831	1,857	1,768	1,584	1,565
Electrical engineering	5,294	5,897	5,542	4,707	4,175	4,557
Engineering science	163	175	176	161	136	140
Industrial engineering	1,409	1,616	1,449	1,189	965	977
Mechanical engineering	2,031	2,199	2,017	1,629	1,439	1,552
Metallurgical/materials engineering	592	565	542	479	472	510
Mining engineering	20	13	14	35	27	23
Nuclear engineering	85	88	50	63	54	50
Petroleum engineering	93	101	151	141	105	135
Engineering, nec	319	372	371	398	400	440
Health fields	1,288	1,512	1,636	1,555	1,524	1,633
Medical fields	451	644	726	677	667	619
Anesthesiology	0	0	0	8	0	2
Cardiology	2	4	3	2	3	2
Endocrinology	2	2	4	4	0	0
Gastroenterology	0	0	0	0	0	0
Hematology	1	0	0	1	0	0
Neurology	74	82	79	81	68	80
Obstetrics/gynecology	0	0	0	0	1	4
Oncology/cancer research	8	7	6	4	10	9
Ophthalmology	1	5	0	1	4	2
Otorhinolaryngology	0	0	0	0	0	0
Pediatrics	11	18	21	15	16	23
Preventive medicine/community health	302	478	542	487	499	434
Psychiatry	1	0	2	0	3	0
Pulmonary disease	0	0	0	0	0	0
Radiology	8	10	16	9	7	7
Surgery	2	0	1	0	1	1
Clinical medicine, nec	39	38	52	65	55	55
Other health	837	868	910	878	857	1,014
Dental sciences	90	70	86	71	54	78
Nursing	97	80	76	80	68	76
Pharmaceutical sciences	281	275	256	243	243	279
Speech pathology/audiology	112	115	120	110	120	131
Veterinary sciences	57	70	72	61	64	69
Health related, nec	200	258	300	313	308	381

nec = not elsewhere classified.

NOTE: Collection of data on first-time, full-time enrollment by race/ethnicity and citizenship began in 1999; the first data released were those collected for 2000.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 29. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2000–05

Field, citizenship, and race/ethnicity	2000	2001	2002	2003	2004	2005
All surveyed fields	94,340	98,112	104,184	107,715	106,580	110,401
U.S. citizens and permanent residents	61,036	62,421	70,374	76,498	77,442	80,054
American Indian/Alaska Native	328	369	362	403	430	425
Asian/Pacific Islander	5,266	5,360	6,614	7,127	7,217	7,482
Black, non-Hispanic	3,828	4,036	4,499	4,897	5,503	5,543
Hispanic	3,080	3,492	3,953	4,462	4,572	5,068
White, non-Hispanic	44,965	45,102	50,217	53,560	53,375	54,541
Other or unknown	3,569	4,062	4,729	6,049	6,345	6,995
Temporary-visa holders	33,304	35,691	33,810	31,217	29,138	30,347
Science and engineering	78,332	82,411	86,827	89,331	86,580	89,183
U.S. citizens and permanent residents	46,316	48,232	54,653	59,669	58,966	60,469
American Indian/Alaska Native	248	296	272	318	343	336
Asian/Pacific Islander	4,061	4,300	5,376	5,808	5,628	5,721
Black, non-Hispanic	2,908	3,020	3,341	3,584	3,869	3,988
Hispanic	2,331	2,626	3,020	3,313	3,425	3,816
White, non-Hispanic	33,868	34,664	38,769	41,619	40,628	41,096
Other or unknown	2,900	3,326	3,875	5,027	5,073	5,512
Temporary-visa holders	32,016	34,179	32,174	29,662	27,614	28,714
Science	56,141	59,105	62,220	64,902	64,555	66,810
U.S. citizens and permanent residents	37,698	39,543	43,880	47,390	47,768	49,547
American Indian/Alaska Native	218	258	232	267	300	297
Asian/Pacific Islander	2,906	3,042	3,596	3,855	4,018	4,163
Black, non-Hispanic	2,446	2,617	2,858	3,080	3,353	3,464
Hispanic	1,872	2,146	2,468	2,634	2,776	3,167
White, non-Hispanic	27,874	28,737	31,480	33,551	33,019	33,866
Other or unknown	2,382	2,743	3,246	4,003	4,302	4,590
Temporary-visa holders	18,443	19,562	18,340	17,512	16,787	17,263
Agricultural sciences	2,335	2,338	2,320	2,424	2,316	2,260
U.S. citizens and permanent residents	1,916	1,845	1,856	1,971	1,870	1,828
American Indian/Alaska Native	11	11	16	15	20	14
Asian/Pacific Islander	39	51	50	55	59	64
Black, non-Hispanic	51	65	64	105	74	104
Hispanic	75	65	69	78	93	86
White, non-Hispanic	1,670	1,560	1,571	1,638	1,528	1,457
Other or unknown	70	93	86	80	96	103
Temporary-visa holders	419	493	464	453	446	432
Biological sciences	10,955	11,608	12,127	12,719	12,796	12,896
U.S. citizens and permanent residents	8,355	8,772	9,263	9,763	9,828	9,932
American Indian/Alaska Native	33	42	29	56	45	44
Asian/Pacific Islander	883	927	990	1,126	1,235	1,209
Black, non-Hispanic	386	472	457	503	619	616
Hispanic	385	487	524	537	545	631
White, non-Hispanic	6,222	6,368	6,789	6,928	6,811	6,735
Other or unknown	446	476	474	613	573	697
Temporary-visa holders	2,600	2,836	2,864	2,956	2,968	2,964
Computer sciences	8,431	9,077	9,037	8,134	7,783	8,258
U.S. citizens and permanent residents	2,414	2,621	3,534	3,891	3,651	3,664
American Indian/Alaska Native	3	11	11	13	13	11
Asian/Pacific Islander	551	553	830	736	656	637
Black, non-Hispanic	130	142	191	207	226	207
Hispanic	56	70	102	121	140	150
White, non-Hispanic	1,481	1,578	2,046	2,399	2,163	2,241
Other or unknown	193	267	354	415	453	418
Temporary-visa holders	6,017	6,456	5,503	4,243	4,132	4,594

TABLE 29. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2000–05

Field, citizenship, and race/ethnicity	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences	2,649	2,794	3,085	3,104	2,926	2,777
U.S. citizens and permanent residents	2,082	2,210	2,550	2,573	2,469	2,288
American Indian/Alaska Native	13	17	17	7	19	13
Asian/Pacific Islander	58	71	79	66	85	77
Black, non-Hispanic	31	38	49	51	38	48
Hispanic	65	67	90	87	92	89
White, non-Hispanic	1,836	1,935	2,164	2,175	2,069	1,932
Other or unknown	79	82	151	187	166	129
Temporary-visa holders	567	584	535	531	457	489
Mathematical sciences	3,419	3,686	3,918	4,185	4,252	4,196
U.S. citizens and permanent residents	1,849	2,030	2,311	2,527	2,637	2,571
American Indian/Alaska Native	5	5	3	5	9	6
Asian/Pacific Islander	176	181	234	269	288	278
Black, non-Hispanic	105	87	118	130	142	134
Hispanic	73	87	88	97	96	115
White, non-Hispanic	1,384	1,569	1,722	1,848	1,912	1,865
Other or unknown	106	101	146	178	190	173
Temporary-visa holders	1,570	1,656	1,607	1,658	1,615	1,625
Physical sciences	5,829	6,011	6,280	6,841	6,603	6,657
U.S. citizens and permanent residents	3,323	3,325	3,775	4,095	4,039	4,154
American Indian/Alaska Native	12	15	20	14	16	16
Asian/Pacific Islander	275	241	237	297	318	340
Black, non-Hispanic	146	161	168	186	194	168
Hispanic	136	153	193	217	209	208
White, non-Hispanic	2,587	2,557	2,935	3,113	3,034	3,175
Other or unknown	167	198	222	268	268	247
Temporary-visa holders	2,506	2,686	2,505	2,746	2,564	2,503
Psychology	7,545	7,691	8,420	8,858	9,478	10,377
U.S. citizens and permanent residents	7,060	7,167	7,902	8,285	8,960	9,838
American Indian/Alaska Native	40	50	49	57	61	44
Asian/Pacific Islander	341	330	357	394	466	491
Black, non-Hispanic	530	530	562	581	656	756
Hispanic	403	416	556	585	637	748
White, non-Hispanic	5,274	5,251	5,793	5,971	6,088	6,515
Other or unknown	472	590	585	697	1,052	1,284
Temporary-visa holders	485	524	518	573	518	539
Social sciences	14,978	15,900	17,033	18,637	18,401	19,389
U.S. citizens and permanent residents	10,699	11,573	12,689	14,285	14,314	15,272
American Indian/Alaska Native	101	107	87	100	117	149
Asian/Pacific Islander	583	688	819	912	911	1,067
Black, non-Hispanic	1,067	1,122	1,249	1,317	1,404	1,431
Hispanic	679	801	846	912	964	1,140
White, non-Hispanic	7,420	7,919	8,460	9,479	9,414	9,946
Other or unknown	849	936	1,228	1,565	1,504	1,539
Temporary-visa holders	4,279	4,327	4,344	4,352	4,087	4,117
Engineering	22,191	23,306	24,607	24,429	22,025	22,373
U.S. citizens and permanent residents	8,618	8,689	10,773	12,279	11,198	10,922
American Indian/Alaska Native	30	38	40	51	43	39
Asian/Pacific Islander	1,155	1,258	1,780	1,953	1,610	1,558
Black, non-Hispanic	462	403	483	504	516	524
Hispanic	459	480	552	679	649	649
White, non-Hispanic	5,994	5,927	7,289	8,068	7,609	7,230
Other or unknown	518	583	629	1,024	771	922
Temporary-visa holders	13,573	14,617	13,834	12,150	10,827	11,451

TABLE 29. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2000–05

Field, citizenship, and race/ethnicity	2000	2001	2002	2003	2004	2005
Chemical engineering	1,595	1,541	1,616	1,600	1,392	1,293
U.S. citizens and permanent residents	659	616	765	856	733	629
American Indian/Alaska Native	1	4	9	2	3	3
Asian/Pacific Islander	101	94	130	131	79	87
Black, non-Hispanic	36	31	36	37	30	28
Hispanic	39	31	52	71	44	44
White, non-Hispanic	455	434	510	576	556	432
Other or unknown	27	22	28	39	21	35
Temporary-visa holders	936	925	851	744	659	664
Civil engineering	3,840	3,820	4,107	4,363	4,175	4,057
U.S. citizens and permanent residents	2,009	1,989	2,250	2,595	2,591	2,492
American Indian/Alaska Native	12	7	11	7	11	9
Asian/Pacific Islander	153	180	211	218	225	203
Black, non-Hispanic	79	72	59	47	84	74
Hispanic	139	155	139	175	148	157
White, non-Hispanic	1,542	1,470	1,701	1,970	1,962	1,863
Other or unknown	84	105	129	178	161	186
Temporary-visa holders	1,831	1,831	1,857	1,768	1,584	1,565
Electrical engineering	7,195	7,882	8,221	7,834	6,633	6,987
U.S. citizens and permanent residents	1,901	1,985	2,679	3,127	2,458	2,430
American Indian/Alaska Native	4	5	5	13	6	6
Asian/Pacific Islander	422	444	743	864	582	582
Black, non-Hispanic	108	108	130	136	121	124
Hispanic	87	93	144	157	162	157
White, non-Hispanic	1,121	1,144	1,480	1,617	1,383	1,318
Other or unknown	159	191	177	340	204	243
Temporary-visa holders	5,294	5,897	5,542	4,707	4,175	4,557
Industrial engineering	2,005	2,216	2,238	2,029	1,724	1,674
U.S. citizens and permanent residents	596	600	789	840	759	697
American Indian/Alaska Native	3	8	0	4	5	5
Asian/Pacific Islander	74	75	119	132	86	100
Black, non-Hispanic	72	50	79	76	73	70
Hispanic	52	34	41	43	73	51
White, non-Hispanic	355	392	514	512	452	404
Other or unknown	40	41	36	73	70	67
Temporary-visa holders	1,409	1,616	1,449	1,189	965	977
Mechanical engineering	3,269	3,583	3,709	3,476	3,129	3,225
U.S. citizens and permanent residents	1,238	1,384	1,692	1,847	1,690	1,673
American Indian/Alaska Native	4	6	6	8	8	4
Asian/Pacific Islander	112	177	195	208	171	171
Black, non-Hispanic	58	60	66	70	58	69
Hispanic	60	84	86	108	96	102
White, non-Hispanic	950	983	1,244	1,322	1,242	1,222
Other or unknown	54	74	95	131	115	105
Temporary-visa holders	2,031	2,199	2,017	1,629	1,439	1,552
Other engineering	4,287	4,264	4,716	5,127	4,972	5,137
U.S. citizens and permanent residents	2,215	2,115	2,598	3,014	2,967	3,001
American Indian/Alaska Native	6	8	9	17	10	12
Asian/Pacific Islander	293	288	382	400	467	415
Black, non-Hispanic	109	82	113	138	150	159
Hispanic	82	83	90	125	126	138
White, non-Hispanic	1,571	1,504	1,840	2,071	2,014	1,991
Other or unknown	154	150	164	263	200	286
Temporary-visa holders	2,072	2,149	2,118	2,113	2,005	2,136

TABLE 29. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2000–05

Field, citizenship, and race/ethnicity	2000	2001	2002	2003	2004	2005
Health fields	16,008	15,701	17,357	18,384	20,000	21,218
U.S. citizens and permanent residents	14,720	14,189	15,721	16,829	18,476	19,585
American Indian/Alaska Native	80	73	90	85	87	89
Asian/Pacific Islander	1,205	1,060	1,238	1,319	1,589	1,761
Black, non-Hispanic	920	1,016	1,158	1,313	1,634	1,555
Hispanic	749	866	933	1,149	1,147	1,252
White, non-Hispanic	11,097	10,438	11,448	11,941	12,747	13,445
Other or unknown	669	736	854	1,022	1,272	1,483
Temporary-visa holders	1,288	1,512	1,636	1,555	1,524	1,633

NOTE: Collection of data on first-time, full-time enrollment by race/ethnicity and citizenship began in 1999; the first data released were those collected for 2000.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
All surveyed fields	583,226	2,651	38,737	33,708	29,457	292,510	39,467	146,696
Science and engineering	478,782	2,124	30,852	25,346	23,481	226,137	31,610	139,232
Science	358,309	1,695	21,185	21,876	19,391	183,301	25,464	85,397
Agricultural sciences	13,123	76	300	417	506	8,662	513	2,649
Biological sciences	68,449	278	5,461	2,980	3,146	36,635	3,547	16,402
Anatomy	938	2	92	48	41	523	44	188
Biochemistry	5,814	15	458	169	243	2,582	258	2,089
Biology	15,668	68	877	791	876	9,120	942	2,994
Biometry/epidemiology	4,805	15	581	282	193	2,227	305	1,202
Biophysics	1,183	3	131	24	37	562	51	375
Botany	1,860	8	76	17	49	966	79	665
Cell biology	6,177	23	668	176	280	2,986	356	1,688
Ecology	2,165	11	53	28	71	1,593	160	249
Entomology/parasitology	1,126	9	28	14	47	713	33	282
Genetics	2,155	10	182	70	63	1,164	101	565
Microbiology/immunology/virology	5,401	16	487	255	307	2,857	259	1,220
Nutrition	4,817	15	338	270	204	2,604	243	1,143
Pathology	1,576	8	159	67	58	879	65	340
Pharmacology	3,114	20	307	184	145	1,514	91	853
Physiology	2,399	12	372	97	104	1,264	84	466
Zoology	1,264	10	35	12	36	922	38	211
Biosciences, nec	7,987	33	617	476	392	4,159	438	1,872
Computer sciences	48,046	100	4,671	1,761	1,202	16,595	3,226	20,491
Earth, atmospheric, and ocean sciences	14,827	61	415	262	507	10,120	701	2,761
Atmospheric sciences	1,146	3	58	30	36	697	39	283
Geosciences	7,212	29	136	82	206	5,010	322	1,427
Oceanography	2,760	11	65	37	150	1,896	111	490
Earth/atmospheric/ocean sciences, nec	3,709	18	156	113	115	2,517	229	561
Mathematical sciences	20,210	38	1,419	721	633	8,915	1,088	7,396
Mathematics/applied mathematics	16,106	34	1,062	617	565	7,661	917	5,250
Statistics	4,104	4	357	104	68	1,254	171	2,146
Physical sciences	36,396	82	1,706	1,008	1,240	16,327	1,417	14,616
Astronomy	1,191	5	46	10	27	677	63	363
Chemistry	21,122	53	1,135	694	821	9,463	739	8,217
Physics	13,472	20	503	272	358	5,765	588	5,966
Physical sciences, nec	611	4	22	32	34	422	27	70
Psychology	57,412	334	2,569	5,251	5,119	34,479	6,632	3,028
Clinical psychology	14,283	88	672	874	1,761	8,618	1,781	489
Psychology, general	16,786	99	869	1,682	1,186	10,707	1,092	1,151
Psychology, nec	26,343	147	1,028	2,695	2,172	15,154	3,759	1,388
Social sciences	99,846	726	4,644	9,476	7,038	51,568	8,340	18,054
Agricultural economics	2,118	23	43	65	54	912	65	956
Anthropology (cultural/social)	7,706	123	305	277	470	5,077	609	845
Economics (except agricultural)	11,805	19	593	319	336	3,713	448	6,377
Geography	4,772	34	153	160	153	3,255	236	781
History and philosophy of science	965	5	36	42	60	679	64	79
Linguistics	3,187	17	247	64	163	1,540	226	930
Political science	41,106	251	1,975	5,000	3,370	21,115	4,523	4,872
Sociology	9,037	62	401	1,086	664	5,032	493	1,299
Sociology/anthropology	848	6	9	108	54	528	51	92
Social sciences, nec	18,302	186	882	2,355	1,714	9,717	1,625	1,823

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Engineering	120,473	429	9,667	3,470	4,090	42,836	6,146	53,835
Aerospace engineering	4,170	13	251	73	116	1,844	231	1,642
Agricultural engineering	1,059	3	37	25	13	441	19	521
Biomedical engineering	6,067	13	802	192	192	2,424	305	2,139
Chemical engineering	7,173	24	508	146	240	2,561	211	3,483
Civil engineering	18,050	52	1,006	456	896	8,139	868	6,633
Electrical engineering	37,444	54	3,788	843	1,090	9,144	1,787	20,738
Engineering science	1,951	9	143	36	43	793	72	855
Industrial engineering	13,614	51	1,046	764	579	5,632	993	4,549
Mechanical engineering	17,387	28	987	411	575	6,898	845	7,643
Metallurgical/materials engineering	5,160	5	315	102	106	1,859	131	2,642
Mining engineering	279	0	6	3	9	121	22	118
Nuclear engineering	1,013	3	47	21	38	534	31	339
Petroleum engineering	808	0	21	31	17	114	9	616
Engineering, nec	6,298	174	710	367	176	2,332	622	1,917
Health fields	104,444	527	7,885	8,362	5,976	66,373	7,857	7,464
Medical fields	21,566	112	2,154	1,968	1,593	11,097	2,117	2,525
Anesthesiology	1,363	5	68	64	24	1,002	189	11
Cardiology	33	0	2	1	0	13	0	17
Endocrinology	56	0	11	2	2	30	3	8
Gastroenterology	7	0	1	0	0	6	0	0
Hematology	13	0	4	0	0	8	0	1
Neurology	2,783	12	242	102	130	1,582	146	569
Obstetrics/gynecology	21	0	2	1	2	10	0	6
Oncology/cancer research	331	1	29	13	12	196	3	77
Ophthalmology	394	1	159	6	15	163	36	14
Otorhinolaryngology	12	0	3	0	1	8	0	0
Pediatrics	278	3	18	24	7	156	13	57
Preventive medicine/community health	12,714	83	1,202	1,502	1,072	6,035	1,375	1,445
Psychiatry	250	0	8	11	70	134	12	15
Pulmonary disease	27	0	5	1	0	15	0	6
Radiology	276	3	26	15	15	160	8	49
Surgery	88	0	14	7	4	49	11	3
Clinical medicine, nec	2,920	4	360	219	239	1,530	321	247
Other health	82,878	415	5,731	6,394	4,383	55,276	5,740	4,939
Dental sciences	1,783	2	252	40	91	1,035	59	304
Nursing	31,670	203	1,680	2,892	1,518	22,627	2,144	606
Pharmaceutical sciences	6,091	14	1,062	584	242	2,263	343	1,583
Speech pathology/audiology	14,975	66	921	669	928	11,019	891	481
Veterinary sciences	1,970	7	64	60	38	1,263	93	445
Health related, nec	26,389	123	1,752	2,149	1,566	17,069	2,210	1,520

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.



TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
All surveyed fields	295,547	1,047	19,055	11,161	12,311	136,377	18,472	97,124
Science and engineering	272,119	959	16,896	9,653	10,949	123,310	16,605	93,747
Science	178,524	705	10,148	7,283	7,956	89,155	11,790	51,487
Agricultural sciences	6,921	31	139	172	243	4,516	258	1,562
Biological sciences	29,946	114	2,315	922	1,319	16,215	1,541	7,520
Anatomy	472	1	51	19	23	259	22	97
Biochemistry	2,996	10	219	68	117	1,399	129	1,054
Biology	7,037	29	358	270	371	4,227	431	1,351
Biometry/epidemiology	1,796	5	204	73	79	788	146	501
Biophysics	775	2	77	14	27	380	36	239
Botany	875	4	23	4	21	456	31	336
Cell biology	2,887	8	287	61	121	1,501	156	753
Ecology	955	3	19	8	31	688	75	131
Entomology/parasitology	606	4	13	4	22	374	15	174
Genetics	846	4	94	15	30	422	43	238
Microbiology/immunology/virology	2,319	7	215	84	118	1,250	123	522
Nutrition	1,026	2	55	52	38	451	33	395
Pathology	629	1	60	14	27	335	24	168
Pharmacology	1,401	11	145	65	67	696	41	376
Physiology	1,144	3	182	32	45	632	31	219
Zoology	628	6	14	6	20	450	19	113
Biosciences, nec	3,554	14	299	133	162	1,907	186	853
Computer sciences	35,985	67	3,241	1,049	929	12,968	2,487	15,244
Earth, atmospheric, and ocean sciences	7,939	30	197	110	226	5,326	380	1,670
Atmospheric sciences	758	3	41	17	24	481	23	169
Geosciences	4,169	16	75	39	101	2,840	185	913
Oceanography	1,279	2	27	10	68	833	56	283
Earth/atmospheric/ocean sciences, nec	1,733	9	54	44	33	1,172	116	305
Mathematical sciences	12,773	23	787	371	418	5,738	718	4,718
Mathematics/applied mathematics	10,546	21	621	317	369	4,987	615	3,616
Statistics	2,227	2	166	54	49	751	103	1,102
Physical sciences	24,670	48	1,002	526	751	11,310	996	10,037
Astronomy	797	1	29	5	12	440	39	271
Chemistry	12,699	32	586	298	428	5,910	453	4,992
Physics	10,803	13	373	205	289	4,707	489	4,727
Physical sciences, nec	371	2	14	18	22	253	15	47
Psychology	13,993	91	565	953	1,178	8,765	1,538	903
Clinical psychology	3,271	31	113	158	379	2,071	419	100
Psychology, general	4,725	22	241	348	310	3,084	302	418
Psychology, nec	5,997	38	211	447	489	3,610	817	385
Social sciences	46,297	301	1,902	3,180	2,892	24,317	3,872	9,833
Agricultural economics	1,245	8	16	27	28	562	33	571
Anthropology (cultural/social)	2,782	45	89	52	171	1,846	209	370
Economics (except agricultural)	7,551	10	336	178	225	2,531	304	3,967
Geography	2,759	20	76	77	86	1,916	132	452
History and philosophy of science	525	1	16	22	29	371	33	53
Linguistics	1,132	11	76	21	55	553	104	312
Political science	19,020	104	805	1,677	1,379	10,331	2,157	2,567
Sociology	3,237	27	127	311	274	1,793	174	531
Sociology/anthropology	303	2	3	31	18	185	29	35
Social sciences, nec	7,743	73	358	784	627	4,229	697	975

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents						Temporary- visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Engineering	93,595	254	6,748	2,370	2,993	34,155	4,815	42,260
Aerospace engineering	3,563	11	189	58	100	1,572	198	1,435
Agricultural engineering	736	2	23	13	3	305	15	375
Biomedical engineering	3,770	7	455	89	117	1,513	188	1,401
Chemical engineering	5,094	17	297	86	130	1,897	149	2,518
Civil engineering	12,655	38	606	295	603	5,672	605	4,836
Electrical engineering	30,656	47	2,850	654	882	8,237	1,479	16,507
Engineering science	1,532	5	102	26	36	641	51	671
Industrial engineering	10,327	35	747	482	392	4,420	759	3,492
Mechanical engineering	14,977	21	775	321	467	6,036	716	6,641
Metallurgical/materials engineering	3,812	5	219	53	74	1,377	102	1,982
Mining engineering	240	0	4	3	5	99	20	109
Nuclear engineering	802	3	31	8	28	438	23	271
Petroleum engineering	687	0	19	27	11	100	7	523
Engineering, nec	4,744	63	431	255	145	1,848	503	1,499
Health fields	23,428	88	2,159	1,508	1,362	13,067	1,867	3,377
Medical fields	7,354	22	735	475	462	3,716	708	1,236
Anesthesiology	463	1	15	11	9	358	65	4
Cardiology	20	0	1	0	0	5	0	14
Endocrinology	25	0	4	1	2	13	2	3
Gastroenterology	2	0	1	0	0	1	0	0
Hematology	8	0	2	0	0	5	0	1
Neurology	1,357	3	116	50	65	759	75	289
Obstetrics/gynecology	12	0	2	1	2	4	0	3
Oncology/cancer research	142	1	12	4	5	84	2	34
Ophthalmology	130	0	34	1	7	62	17	9
Otorhinolaryngology	7	0	1	0	1	5	0	0
Pediatrics	49	0	3	3	1	18	1	23
Preventive medicine/community health	3,686	15	359	333	272	1,662	354	691
Psychiatry	52	0	3	2	13	27	3	4
Pulmonary disease	14	0	4	0	0	7	0	3
Radiology	138	2	16	3	6	81	5	25
Surgery	61	0	9	4	3	36	8	1
Clinical medicine, nec	1,188	0	153	62	76	589	176	132
Other health	16,074	66	1,424	1,033	900	9,351	1,159	2,141
Dental sciences	986	1	119	18	39	609	29	171
Nursing	2,939	22	190	214	223	1,989	199	102
Pharmaceutical sciences	2,645	6	420	198	83	945	152	841
Speech pathology/audiology	970	5	119	49	61	587	76	73
Veterinary sciences	729	2	26	20	18	381	33	249
Health related, nec	7,805	30	550	534	476	4,840	670	705

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents						Temporary- visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All surveyed fields	287,679	1,604	19,682	22,547	17,146	156,133	20,995	49,572
Science and engineering	206,663	1,165	13,956	15,693	12,532	102,827	15,005	45,485
Science	179,785	990	11,037	14,593	11,435	94,146	13,674	33,910
Agricultural sciences	6,202	45	161	245	263	4,146	255	1,087
Biological sciences	38,503	164	3,146	2,058	1,827	20,420	2,006	8,882
Anatomy	466	1	41	29	18	264	22	91
Biochemistry	2,818	5	239	101	126	1,183	129	1,035
Biology	8,631	39	519	521	505	4,893	511	1,643
Biometry/epidemiology	3,009	10	377	209	114	1,439	159	701
Biophysics	408	1	54	10	10	182	15	136
Botany	985	4	53	13	28	510	48	329
Cell biology	3,290	15	381	115	159	1,485	200	935
Ecology	1,210	8	34	20	40	905	85	118
Entomology/parasitology	520	5	15	10	25	339	18	108
Genetics	1,309	6	88	55	33	742	58	327
Microbiology/immunology/virology	3,082	9	272	171	189	1,607	136	698
Nutrition	3,791	13	283	218	166	2,153	210	748
Pathology	947	7	99	53	31	544	41	172
Pharmacology	1,713	9	162	119	78	818	50	477
Physiology	1,255	9	190	65	59	632	53	247
Zoology	636	4	21	6	16	472	19	98
Biosciences, nec	4,433	19	318	343	230	2,252	252	1,019
Computer sciences	12,061	33	1,430	712	273	3,627	739	5,247
Earth, atmospheric, and ocean sciences	6,888	31	218	152	281	4,794	321	1,091
Atmospheric sciences	388	0	17	13	12	216	16	114
Geosciences	3,043	13	61	43	105	2,170	137	514
Oceanography	1,481	9	38	27	82	1,063	55	207
Earth/atmospheric/ocean sciences, nec	1,976	9	102	69	82	1,345	113	256
Mathematical sciences	7,437	15	632	350	215	3,177	370	2,678
Mathematics/applied mathematics	5,560	13	441	300	196	2,674	302	1,634
Statistics	1,877	2	191	50	19	503	68	1,044
Physical sciences	11,726	34	704	482	489	5,017	421	4,579
Astronomy	394	4	17	5	15	237	24	92
Chemistry	8,423	21	549	396	393	3,553	286	3,225
Physics	2,669	7	130	67	69	1,058	99	1,239
Physical sciences, nec	240	2	8	14	12	169	12	23
Psychology	43,419	243	2,004	4,298	3,941	25,714	5,094	2,125
Clinical psychology	11,012	57	559	716	1,382	6,547	1,362	389
Psychology, general	12,061	77	628	1,334	876	7,623	790	733
Psychology, nec	20,346	109	817	2,248	1,683	11,544	2,942	1,003
Social sciences	53,549	425	2,742	6,296	4,146	27,251	4,468	8,221
Agricultural economics	873	15	27	38	26	350	32	385
Anthropology (cultural/social)	4,924	78	216	225	299	3,231	400	475
Economics (except agricultural)	4,254	9	257	141	111	1,182	144	2,410
Geography	2,013	14	77	83	67	1,339	104	329
History and philosophy of science	440	4	20	20	31	308	31	26
Linguistics	2,055	6	171	43	108	987	122	618
Political science	22,086	147	1,170	3,323	1,991	10,784	2,366	2,305
Sociology	5,800	35	274	775	390	3,239	319	768
Sociology/anthropology	545	4	6	77	36	343	22	57
Social sciences, nec	10,559	113	524	1,571	1,087	5,488	928	848

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
Engineering	26,878	175	2,919	1,100	1,097	8,681	1,331	11,575
Aerospace engineering	607	2	62	15	16	272	33	207
Agricultural engineering	323	1	14	12	10	136	4	146
Biomedical engineering	2,297	6	347	103	75	911	117	738
Chemical engineering	2,079	7	211	60	110	664	62	965
Civil engineering	5,395	14	400	161	293	2,467	263	1,797
Electrical engineering	6,788	7	938	189	208	907	308	4,231
Engineering science	419	4	41	10	7	152	21	184
Industrial engineering	3,287	16	299	282	187	1,212	234	1,057
Mechanical engineering	2,410	7	212	90	108	862	129	1,002
Metallurgical/materials engineering	1,348	0	96	49	32	482	29	660
Mining engineering	39	0	2	0	4	22	2	9
Nuclear engineering	211	0	16	13	10	96	8	68
Petroleum engineering	121	0	2	4	6	14	2	93
Engineering, nec	1,554	111	279	112	31	484	119	418
Health fields	81,016	439	5,726	6,854	4,614	53,306	5,990	4,087
Medical fields	14,212	90	1,419	1,493	1,131	7,381	1,409	1,289
Anesthesiology	900	4	53	53	15	644	124	7
Cardiology	13	0	1	1	0	8	0	3
Endocrinology	31	0	7	1	0	17	1	5
Gastroenterology	5	0	0	0	0	5	0	0
Hematology	5	0	2	0	0	3	0	0
Neurology	1,426	9	126	52	65	823	71	280
Obstetrics/gynecology	9	0	0	0	0	6	0	3
Oncology/cancer research	189	0	17	9	7	112	1	43
Ophthalmology	264	1	125	5	8	101	19	5
Otorhinolaryngology	5	0	2	0	0	3	0	0
Pediatrics	229	3	15	21	6	138	12	34
Preventive medicine/community health	9,028	68	843	1,169	800	4,373	1,021	754
Psychiatry	198	0	5	9	57	107	9	11
Pulmonary disease	13	0	1	1	0	8	0	3
Radiology	138	1	10	12	9	79	3	24
Surgery	27	0	5	3	1	13	3	2
Clinical medicine, nec	1,732	4	207	157	163	941	145	115
Other health	66,804	349	4,307	5,361	3,483	45,925	4,581	2,798
Dental sciences	797	1	133	22	52	426	30	133
Nursing	28,731	181	1,490	2,678	1,295	20,638	1,945	504
Pharmaceutical sciences	3,446	8	642	386	159	1,318	191	742
Speech pathology/audiology	14,005	61	802	620	867	10,432	815	408
Veterinary sciences	1,241	5	38	40	20	882	60	196
Health related, nec	18,584	93	1,202	1,615	1,090	12,229	1,540	815

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
All institutions	358,309	1,695	21,185	21,876	19,391	183,301	25,464	85,397
New England	26,163	75	1,531	717	702	12,611	2,868	7,659
Connecticut	5,697	19	295	215	171	2,989	593	1,415
Central CT State U.	328	1	20	14	7	222	34	30
CT C.	5	0	0	0	0	5	0	0
Quinnipiac U.	28	0	1	1	1	20	3	2
Rensselaer Hartford	117	0	13	3	4	75	18	4
Sacred Heart U.	104	0	14	5	3	64	0	18
Southern CT State U.	359	0	17	24	20	251	41	6
St. Joseph C. (West Hartford, CT)	51	0	1	1	0	48	1	0
Trinity C. (Hartford, CT)	52	0	1	3	3	34	11	0
U. Bridgeport	224	0	8	3	7	101	2	103
U. CT all campuses	1,912	6	75	56	41	923	194	617
U. Hartford	227	0	6	10	7	139	55	10
U. New Haven	682	8	15	53	41	387	86	92
Wesleyan U.	126	0	8	2	0	70	1	45
Western CT State U.	31	0	2	3	2	24	0	0
Yale U.	1,451	4	114	37	35	626	147	488
Maine	549	5	10	3	11	418	0	102
U. ME	549	5	10	3	11	418	0	102
Massachusetts	16,539	34	1,127	435	450	7,097	2,177	5,219
American International C.	114	0	0	13	2	80	6	13
Anna Maria C.	92	0	0	4	0	38	50	0
Assumption C.	88	0	0	1	4	69	14	0
Boston C.	455	0	16	12	4	268	1	154
Boston U.	2,663	3	159	50	37	838	795	781
Brandeis U.	340	0	17	3	5	195	5	115
Bridgewater State C.	123	1	3	5	2	92	19	1
Clark U.	347	0	3	5	10	105	73	151
Fitchburg State C.	41	0	0	0	1	13	1	26
Framingham State C.	28	0	1	0	1	11	15	0
Harvard U.	3,606	15	298	140	137	1,370	477	1,169
MA C. of Pharmacy and Health Sciences <sup>a</sup>	28	0	0	0	0	0	20	8
MA Institute of Technology	3,070	10	361	64	94	1,183	310	1,048
Mt. Holyoke C.	3	0	0	1	0	2	0	0
Northeastern U.	801	1	20	15	27	312	146	280
Salem State C.	72	0	0	2	3	61	3	3
Smith C.	9	0	1	0	0	6	0	2
Tufts U. <sup>a</sup>	948	0	73	29	34	585	37	190
U. MA	2,568	4	94	69	70	1,272	156	903
U. MA Dartmouth	191	0	4	2	3	90	5	87
U. MA Lowell <sup>a</sup>	542	0	53	15	10	277	27	160
Williams C.	27	0	0	0	0	0	0	27
Woods Hole Oceanographic Institution	108	0	6	1	3	69	7	22
Worcester Polytechnic Institute	247	0	16	4	0	140	8	79
Worcester State C.	28	0	2	0	3	21	2	0
New Hampshire	1,120	6	28	10	8	713	68	287
Dartmouth C.	439	2	14	2	5	266	9	141
Rivier C.	23	0	4	0	0	10	5	4
U. NH	658	4	10	8	3	437	54	142

TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Rhode Island	1,725	8	63	48	54	1,007	30	515
Brown U.	846	5	30	20	15	350	19	407
RI C.	15	0	0	0	0	13	2	0
U. RI	864	3	33	28	39	644	9	108
Vermont	533	3	8	6	8	387	0	121
U. VT	533	3	8	6	8	387	0	121
Middle Atlantic	59,098	124	3,976	3,820	2,641	27,306	5,629	15,602
New Jersey	8,586	10	669	550	321	2,900	1,843	2,293
Fairleigh Dickinson U. all campuses	1,527	0	0	0	0	0	1,238	289
Kean U.	389	0	20	108	54	164	10	33
Monmouth U.	35	0	1	1	3	10	4	16
Montclair State U.	429	0	22	36	28	270	27	46
NJ Institute of Technology	936	0	183	45	25	185	64	434
Princeton U.	1,086	3	84	31	17	516	37	398
Rutgers, The State U. NJ all campuses	2,557	3	195	201	94	1,192	86	786
Seton Hall U.	665	3	15	55	24	225	295	48
Stevens Institute of Technology	404	1	58	17	12	129	68	119
U. of Medicine and Dentistry NJ	476	0	88	52	50	151	12	123
William Paterson U. NJ	82	0	3	4	14	58	2	1
New York	35,303	89	2,459	2,591	2,002	15,686	3,113	9,363
Adelphi U.	370	0	7	18	8	178	136	23
Albany Medical C.	73	0	10	5	1	48	0	9
Alfred U. all campuses	93	0	0	1	1	87	4	0
Clarkson U.	87	0	3	0	0	28	0	56
C. New Rochelle	145	0	0	20	5	15	104	1
C. of St. Rose	200	0	1	5	1	170	20	3
Columbia U. in the City of NY	2,520	5	245	68	75	965	152	1,010
Cornell U. all campuses	3,093	10	205	89	103	1,220	174	1,292
CUNY Baruch C.	605	3	86	120	65	289	0	42
CUNY Brooklyn C.	620	0	68	181	28	212	0	131
CUNY C. Staten Island	52	0	6	6	3	20	7	10
CUNY Graduate Ctr.	1,725	6	75	108	110	658	266	502
CUNY Herbert H. Lehman C. <sup>a</sup>	70	0	1	1	4	3	37	24
CUNY Hunter C.	600	0	38	78	49	263	102	70
CUNY John Jay C. of Criminal Justice	1,567	4	127	287	261	746	142	0
CUNY Queens C.	638	0	83	71	142	278	18	46
CUNY The City C.	621	6	87	90	112	156	0	170
Fordham U.	380	0	22	15	34	174	52	83
Hofstra U.	403	0	14	24	14	251	91	9
Iona C.	173	0	2	12	20	97	37	5
Long Island U. all campuses	1,152	6	106	386	87	494	73	0
Marist C.	288	1	17	13	9	215	7	26
Mt. Sinai School of Medicine	215	1	5	6	11	84	36	72
New School, The	1,285	2	77	90	108	514	168	326
NY Institute of Technology all campuses	258	0	17	19	9	39	20	154
NY Medical C.	213	0	29	24	16	78	12	54
NY U.	3,051	3	341	144	132	1,277	286	868
Niagara U.	42	0	0	6	1	32	0	3
Pace U. all campuses	622	3	93	62	61	250	70	83
Polytechnic U.	286	0	40	7	2	56	72	109
Rensselaer Polytechnic Institute	369	2	17	9	6	154	3	178
Rochester Institute of Technology	393	0	14	6	10	223	25	115
Rockefeller U.	148	1	20	7	4	60	1	55

TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Russell Sage C. all campuses	59	0	1	3	4	44	6	1
Sarah Lawrence C.	53	0	5	1	2	29	3	13
St. John's U. (Jamaica, NY)	622	1	44	63	58	320	84	52
SUNY Albany	2,159	12	51	130	91	1,269	185	421
SUNY Binghamton	907	4	36	36	36	393	77	325
SUNY Buffalo all campuses	2,014	10	67	57	40	918	99	823
SUNY C. Brockport	211	0	4	24	5	178	0	0
SUNY C. Buffalo	21	0	1	0	1	10	0	9
SUNY C. Geneseo	1	0	0	0	0	1	0	0
SUNY C. of Environmental Science and Forestry	339	1	2	2	2	251	0	81
SUNY C. Oneonta	5	0	0	0	1	3	1	0
SUNY C. Oswego	129	0	1	4	3	117	0	4
SUNY C. Plattsburgh	30	0	0	0	0	30	0	0
SUNY C. Potsdam	1	0	0	0	0	0	1	0
SUNY Fredonia	20	0	0	0	0	19	0	1
SUNY Health Science Ctr. Brooklyn	43	0	4	1	1	11	0	26
SUNY Institute of Technology Utica-Rome	131	0	6	3	0	85	1	36
SUNY New Paltz	130	0	5	2	7	70	11	35
SUNY Stony Brook all campuses	1,859	1	100	42	52	639	92	933
SUNY Upstate Medical U.	114	0	16	2	6	58	0	32
Syracuse U. all campuses	1,064	4	25	38	33	508	103	353
Teachers C. Columbia U.	1,301	0	154	148	91	658	145	105
U. Rochester	989	3	31	15	33	464	4	439
Wagner C.	9	0	2	3	0	4	0	0
Yeshiva U.	735	0	48	39	44	273	186	145
Pennsylvania	15,209	25	848	679	318	8,720	673	3,946
Bloomsburg U. PA	6	0	0	0	0	5	0	1
Bryn Mawr C.	87	0	2	2	1	72	0	10
Bucknell U.	18	0	0	0	8	9	0	1
California U. PA	121	0	0	15	2	95	9	0
Carnegie Mellon U.	1,884	5	143	45	30	739	96	826
Clarion U. PA all campuses	31	1	0	2	0	28	0	0
Drexel U.	1,398	0	119	98	34	845	128	174
Duquesne U.	233	0	5	4	1	181	1	41
East Stroudsburg U. PA	91	0	0	4	2	74	0	11
Edinboro U. PA	136	1	3	1	1	125	0	5
Gannon U.	45	0	0	1	0	27	0	17
Indiana U. PA all campuses	451	0	3	25	6	292	98	27
Kutztown U. PA	91	2	4	6	5	66	8	0
Lehigh U.	319	0	12	8	3	211	5	80
Marywood U.	176	1	4	3	2	149	16	1
Millersville U. PA	100	0	1	2	1	77	16	3
PA State U. all campuses	3,080	7	114	77	76	1,705	50	1,051
Philadelphia C. of Osteopathic Medicine	259	0	12	37	3	204	3	0
Shippensburg U. PA	263	1	4	8	2	229	12	7
Slippery Rock U. PA	69	0	0	0	0	61	4	4
St. Joseph's U.	358	0	7	98	13	166	15	59
Temple U.	899	1	63	52	18	500	39	226
Thomas Jefferson U.	229	0	19	17	5	159	6	23
U. PA	1,770	1	147	38	38	944	17	585
U. Pittsburgh all campuses	2,223	2	130	107	49	1,245	35	655
U. Scranton	94	0	1	5	3	75	3	7

TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
U. of the Sciences Philadelphia	120	1	8	1	0	16	73	21
Villanova U.	388	1	15	16	9	224	37	86
West Chester U. PA	268	1	32	7	6	195	2	25
Wilkes U.	2	0	0	0	0	2	0	0
<b>East North Central</b>	<b>55,716</b>	<b>194</b>	<b>2,616</b>	<b>3,244</b>	<b>1,487</b>	<b>30,320</b>	<b>2,368</b>	<b>15,487</b>
<b>Illinois</b>	<b>18,700</b>	<b>45</b>	<b>1,219</b>	<b>1,425</b>	<b>603</b>	<b>9,127</b>	<b>904</b>	<b>5,377</b>
Bradley U.	73	0	1	2	0	11	4	55
Chicago State U.	231	0	3	179	18	25	3	3
DePaul U.	2,904	4	296	264	123	1,396	447	374
Eastern IL U.	166	0	0	3	0	117	21	25
Governors State U.	424	1	8	158	10	139	18	90
IL Institute of Technology <sup>a</sup>	702	0	58	34	13	154	17	426
IL State U.	505	3	19	16	10	321	13	123
Loyola U. Chicago	494	0	43	17	11	260	43	120
Midwestern U. (Chicago, IL)	67	0	14	6	3	43	1	0
North Central C.	15	0	3	0	0	10	1	1
Northeastern IL U.	367	0	49	30	19	205	15	49
Northern IL U.	1,045	3	47	41	21	695	3	235
Northwestern U.	1,201	3	73	38	46	627	26	388
Roosevelt U.	627	0	28	159	39	274	80	47
Rosalind Franklin U. of Medicine and Science	185	0	61	4	4	92	3	21
Rush U.	73	0	5	3	2	47	0	16
Southern IL U. Carbondale	1,182	4	17	70	22	720	13	336
Southern IL U. Edwardsville	517	3	7	64	5	323	0	115
U. Chicago	1,606	7	111	69	56	757	64	542
U. IL Chicago	1,930	7	111	115	88	801	55	753
U. IL Springfield	599	1	28	47	9	314	16	184
U. IL Urbana-Champaign	3,352	7	231	74	97	1,529	42	1,372
Western IL U.	435	2	6	32	7	267	19	102
<b>Indiana</b>	<b>7,138</b>	<b>20</b>	<b>338</b>	<b>234</b>	<b>189</b>	<b>3,814</b>	<b>316</b>	<b>2,227</b>
Ball State U.	456	0	2	0	1	231	95	127
IN State U. all campuses	557	1	28	47	16	339	34	92
IN U. all campuses	3,041	11	251	98	85	1,833	43	720
Purdue U. all campuses	2,241	5	41	75	60	956	69	1,035
U. Evansville	52	0	0	1	0	49	2	0
U. of Notre Dame	670	3	16	7	23	326	44	251
U. of St. Francis (Ft. Wayne, IN)	37	0	0	1	1	30	5	0
Valparaiso U.	84	0	0	5	3	50	24	2
<b>Michigan</b>	<b>9,787</b>	<b>67</b>	<b>504</b>	<b>642</b>	<b>277</b>	<b>5,159</b>	<b>252</b>	<b>2,886</b>
Andrews U.	91	0	4	24	9	39	0	15
Central MI U.	394	1	22	20	5	267	5	74
Eastern MI U.	660	5	29	61	9	356	39	161
Grand Valley State U.	320	1	10	16	7	261	2	23
Lawrence Technological U.	28	0	5	1	1	17	1	3
MI State U.	2,212	17	64	71	63	1,081	53	863
MI Technological U.	306	0	1	4	7	132	17	145
Northern MI U. <sup>a</sup>	127	14	1	3	1	104	0	4
Oakland U.	280	2	16	15	3	182	16	46
U. Detroit Mercy	318	1	3	55	2	116	41	100
U. MI all campuses	2,728	14	257	139	130	1,439	47	702
Wayne State U.	1,351	5	84	177	19	579	25	462
Western MI U.	972	7	8	56	21	586	6	288



TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary- visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Ohio	13,686	29	351	818	281	7,897	639	3,671
Air Force Institute of Technology	348	0	0	0	0	150	0	198
Antioch U. all campuses	1,429	0	34	67	78	1,122	107	21
Bowling Green State U. all campuses	555	2	8	10	8	307	13	207
Case Western Reserve U.	1,018	6	75	45	17	479	69	327
Cleveland State U.	752	0	21	97	10	403	46	175
John Carroll U.	75	0	2	14	0	59	0	0
Kent State U. all campuses	743	0	9	23	9	398	16	288
Medical C. OH	110	0	7	3	1	46	1	52
Miami U. all campuses	596	3	10	22	9	407	9	136
OH State U. all campuses	2,920	5	70	92	47	1,458	55	1,193
OH U. all campuses	699	1	8	13	9	377	0	291
Union Institute & U. <sup>a</sup>	334	1	5	36	3	257	26	6
U. Akron all campuses	719	0	17	48	17	435	37	165
U. Cincinnati all campuses	1,836	7	47	207	51	1,041	188	295
U. Dayton	177	0	1	11	1	133	0	31
U. Toledo	458	0	7	25	5	227	33	161
Wright State U. all campuses	632	3	24	73	15	389	35	93
Xavier U.	155	0	2	18	0	135	0	0
Youngstown State U.	130	1	4	14	1	74	4	32
Wisconsin	6,405	33	204	125	137	4,323	257	1,326
Marquette U.	459	2	25	20	9	318	5	80
Medical C. WI	152	0	24	1	5	86	0	36
U. WI Eau Claire	32	0	0	0	0	31	1	0
U. WI Green Bay	47	0	3	0	0	41	1	2
U. WI La Crosse	149	1	8	0	2	131	4	3
U. WI Madison	3,557	15	107	38	83	2,200	172	942
U. WI Milwaukee	1,668	10	35	58	36	1,211	69	249
U. WI Oshkosh	145	4	0	3	0	130	2	6
U. WI Platteville	2	0	1	0	0	1	0	0
U. WI Stevens Point	69	1	1	0	0	65	0	2
U. WI Stout	89	0	0	3	2	75	3	6
U. WI Whitewater	36	0	0	2	0	34	0	0
West North Central	26,729	176	732	963	429	14,026	3,606	6,797
Iowa	3,824	12	57	80	71	1,889	81	1,634
Drake U.	231	3	3	7	7	172	24	15
IA State U.	1,711	5	20	42	21	835	51	737
Loras C.	20	0	0	0	0	19	0	1
Maharishi U. of Management	362	0	0	0	0	4	0	358
U. IA	1,328	4	29	24	42	731	5	493
U. Northern IA	172	0	5	7	1	128	1	30
Kansas	4,425	56	123	135	93	2,754	211	1,053
Emporia State U.	167	0	1	3	1	138	15	9
Ft. Hays State U.	70	0	2	1	3	64	0	0
KS State U.	1,478	3	38	41	21	865	20	490
Pittsburg State U.	93	0	0	0	0	50	1	42
U. KS all campuses	2,057	49	62	60	56	1,326	121	383
Washburn U.	30	0	0	2	0	26	0	2
Wichita State U.	530	4	20	28	12	285	54	127

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Minnesota	8,774	44	222	426	124	3,386	3,015	1,557
Bemidji State U.	16	0	0	0	0	9	4	3
Mayo Graduate School	164	1	14	8	11	68	16	46
MN State U. Mankato	309	0	6	2	2	111	25	163
MN State U. Moorhead <sup>9</sup>	47	0	1	2	0	43	0	1
St. Cloud State U.	156	0	2	0	1	66	14	73
St. Mary's U. MN	50	0	1	2	0	33	11	3
U. MN all campuses	4,031	20	162	75	58	2,372	87	1,257
Walden U.	4,001	23	36	337	52	684	2,858	11
Missouri	5,487	23	192	233	87	3,319	203	1,430
Central MO State U.	336	0	3	17	5	254	24	33
Forest Institute of Professional Psychology	205	3	8	8	6	176	2	2
Kansas City U. of Medicine and Biosciences	18	0	1	1	1	15	0	0
Kirksville C. of Osteopathic Medicine	34	0	3	1	0	28	0	2
Lincoln U. (Jefferson City, MO)	26	1	0	13	0	8	1	3
Northwest MO State U.	138	1	0	0	1	78	4	54
Southeast MO State U.	48	0	3	3	0	42	0	0
Southwest MO State U.	296	4	0	4	0	250	14	24
St. Louis U. all campuses	439	1	16	30	5	349	3	35
Truman State U.	6	0	0	0	0	6	0	0
U. MO-Columbia	1,259	5	28	38	21	671	43	453
U. MO-Kansas City	633	1	17	45	15	299	52	204
U. MO-Rolla	276	0	4	8	3	109	14	138
U. MO-St. Louis	498	2	28	39	5	274	42	108
Washington U. St. Louis	1,275	5	81	26	25	760	4	374
Nebraska	2,466	10	60	69	39	1,571	83	634
Creighton U.	144	0	9	7	3	98	1	26
U. NE Kearney	161	2	3	4	4	139	7	2
U. NE Lincoln	1,218	5	16	15	15	704	45	418
U. NE Omaha	835	3	21	40	15	582	27	147
U. NE Medical Ctr.	108	0	11	3	2	48	3	41
North Dakota	1,108	14	17	9	13	648	8	399
ND State U. all campuses	698	3	11	7	4	366	8	299
U. ND all campuses	410	11	6	2	9	282	0	100
South Dakota	645	17	61	11	2	459	5	90
SD School of Mines and Technology	73	0	2	0	0	61	2	8
SD State U.	355	13	39	6	2	236	1	58
U. SD	217	4	20	5	0	162	2	24
South Atlantic	59,291	175	2,992	5,734	2,391	32,982	2,453	12,564
Delaware	1,277	7	75	70	24	690	9	402
DE State U.	50	0	4	16	0	12	0	18
U. DE	1,227	7	71	54	24	678	9	384
District of Columbia	6,981	20	484	818	244	3,289	993	1,133
American U.	1,838	5	82	153	65	743	570	220
Catholic U. America, The	282	1	5	13	18	153	44	48
Gallaudet U.	34	0	4	3	2	22	1	2
George Washington U.	3,362	14	279	170	122	1,943	296	538
Georgetown U.	835	0	103	19	24	407	76	206
Howard U.	609	0	11	442	11	20	6	119
U. DC	21	0	0	18	2	1	0	0

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Florida	13,377	35	484	1,289	1,348	7,251	426	2,544
Barry U. <sup>a</sup>	245	1	16	75	58	58	26	11
Embry-Riddle Aeronautical U.	73	0	0	2	5	33	10	23
FL A&M U.	252	0	8	210	9	3	0	22
FL Atlantic U.	812	2	47	51	81	465	4	162
FL Institute of Technology	577	2	8	22	25	291	97	132
FL International U.	962	0	28	117	309	263	5	240
FL State U.	1,543	3	52	91	61	895	21	420
Nova Southeastern U.	2,437	10	87	394	350	1,369	134	93
U. Central FL	1,364	3	46	95	96	872	22	230
U. FL	2,869	10	86	104	148	1,645	77	799
U. Miami	821	0	43	47	114	380	21	216
U. South FL	1,196	2	57	67	81	793	8	188
U. West FL	226	2	6	14	11	184	1	8
Georgia	6,916	18	329	766	151	3,546	152	1,954
Augusta State U.	37	0	1	5	1	30	0	0
Clark Atlanta U.	180	0	2	144	0	0	0	34
Emory U.	829	1	51	66	17	475	13	206
GA C. and State U.	140	0	2	39	2	90	2	5
GA Institute of Technology all campuses	1,642	1	88	82	29	747	13	682
GA Southern U.	228	0	4	59	4	158	0	3
GA State U.	1,436	12	77	221	23	583	72	448
Medical C. GA	109	0	4	9	1	44	1	50
Mercer U. all campuses	23	0	0	0	0	0	23	0
Morehouse School of Medicine	26	0	0	26	0	0	0	0
State U. West GA	169	1	0	15	0	147	4	2
U. GA	1,889	2	94	100	36	1,109	24	524
Valdosta State U.	208	1	6	0	38	163	0	0
Maryland	8,648	23	547	943	210	4,458	393	2,074
Coppin State U.	92	0	0	90	1	0	0	1
Frostburg State U.	88	1	2	5	1	71	4	4
Hood C.	240	0	4	20	2	129	74	11
Johns Hopkins U., The	2,055	6	220	87	77	1,001	12	652
Loyola C.	581	0	20	97	11	406	17	30
Morgan State U.	88	0	1	61	1	7	5	13
Towson U.	701	1	29	102	7	415	47	100
Uniformed Services U. of the Health Sciences	91	2	10	8	3	57	8	3
U. Baltimore	386	1	6	140	9	169	29	32
U. MD Baltimore	291	0	20	24	10	160	3	74
U. MD Baltimore County	1,119	2	108	135	22	582	47	223
U. MD College Park	2,757	9	116	121	62	1,421	142	886
U. MD Eastern Shore	146	0	11	52	4	32	2	45
Washington C.	13	1	0	1	0	8	3	0
North Carolina	9,487	33	462	984	167	5,973	67	1,801
Appalachian State U.	291	0	0	12	1	275	0	3
Duke U.	1,450	1	122	74	34	844	9	366
East Carolina U.	456	0	25	34	6	327	1	63
NC Agricultural and Technical State U.	131	0	3	96	1	17	0	14
NC Central U.	401	2	8	345	5	37	2	2
NC State U.	2,426	4	125	140	37	1,509	9	602
U. NC Chapel Hill	2,222	14	118	106	44	1,491	20	429

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U. NC Charlotte	715	0	36	52	16	414	0	197
U. NC Greensboro	609	4	17	85	11	419	26	47
U. NC Wilmington	323	3	2	9	7	290	0	12
Wake Forest U.	313	1	5	26	3	220	0	58
Western Carolina U.	150	4	1	5	2	130	0	8
South Carolina	2,199	5	58	131	33	1,420	71	481
Clemson U.	919	1	10	27	12	560	53	256
C. Charleston	232	0	4	9	5	191	8	15
Furman U.	6	0	0	0	0	6	0	0
Medical U. SC	268	1	13	20	6	194	1	33
U. SC all campuses	694	2	26	62	8	412	9	175
Winthrop U.	80	1	5	13	2	57	0	2
Virginia	8,865	28	526	695	198	5,300	290	1,828
C. of William and Mary all campuses	412	1	23	21	7	298	1	61
Eastern VA Medical School	128	0	9	12	4	87	0	16
George Mason U.	2,412	4	222	138	75	1,339	143	491
Hampton U.	91	0	6	70	1	14	0	0
James Madison U.	183	0	7	11	3	151	3	8
Marymount U.	47	1	9	2	2	20	4	9
Old Dominion U.	834	5	26	92	18	433	32	228
Radford U.	157	0	4	11	3	139	0	0
U. Richmond	10	0	2	0	0	8	0	0
U. VA all campuses	1,241	4	53	33	25	769	40	317
VA Commonwealth U.	1,017	4	68	116	18	697	16	98
VA Polytechnic Institute and State U.	2,248	9	96	108	42	1,342	51	600
VA State U.	85	0	1	81	0	3	0	0
West Virginia	1,541	6	27	38	16	1,055	52	347
Marshall U.	466	2	7	11	3	366	42	35
WV U.	1,075	4	20	27	13	689	10	312
East South Central	15,384	51	415	2,138	210	8,766	323	3,481
Alabama	4,372	24	139	871	62	2,151	81	1,044
AL A&M U.	182	1	8	94	1	22	0	56
AL State U.	26	0	0	24	0	1	0	1
Auburn U. all campuses	1,149	7	19	153	26	630	12	302
Jacksonville State U.	260	5	8	59	4	167	15	2
Troy State U. main campus	500	0	5	342	5	139	9	0
Tuskegee U.	28	0	0	22	0	0	4	2
U. AL, The	600	5	12	34	13	345	2	189
U. AL Birmingham, The	957	2	73	100	9	491	1	281
U. AL Huntsville, The	406	4	11	31	2	232	5	121
U. South AL	264	0	3	12	2	124	33	90
Kentucky	3,615	10	77	185	46	2,154	176	967
Eastern KY U.	294	2	5	9	0	233	8	37
Morehead State U.	52	0	0	3	0	46	3	0
Murray State U.	215	1	8	16	4	153	0	33
Spalding U. <sup>a</sup>	152	3	6	5	0	112	21	5
U. KY all campuses	1,710	3	40	61	26	866	138	576
U. Louisville	823	0	16	80	12	544	5	166
Western KY U.	369	1	2	11	4	200	1	150

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Mississippi	2,639	6	52	480	47	1,506	4	544
Jackson State U.	393	0	13	282	4	39	0	55
MS State U.	1,128	4	15	88	22	806	0	193
U. MS all campuses	415	1	7	43	4	177	1	182
U. Southern MS	703	1	17	67	17	484	3	114
Tennessee	4,758	11	147	602	55	2,955	62	926
Austin Peay State U.	84	1	0	5	3	61	10	4
East TN State U.	274	0	1	14	0	205	6	48
Fisk U.	44	0	0	33	2	3	0	6
Meharry Medical C.	81	0	1	79	1	0	0	0
Middle TN State U.	280	2	30	27	1	218	2	0
TN State U.	416	1	12	250	1	139	0	13
TN Technological U.	120	0	0	6	0	86	0	28
U. Memphis, The	626	1	24	60	2	339	0	200
U. TN	1,581	6	26	43	18	1,161	30	297
U. TN Chattanooga	208	0	5	33	6	153	0	11
U. TN Health Science Ctr.	141	0	11	6	2	57	1	64
Vanderbilt U.	903	0	37	46	19	533	13	255
West South Central	31,576	234	1,315	2,761	2,440	15,051	547	9,228
Arkansas	1,848	12	35	146	22	1,207	29	397
AR State U. main campus	225	0	1	34	2	156	8	24
U. AR for Medical Sciences	141	0	10	8	1	60	0	62
U. AR Little Rock	232	2	10	38	3	114	1	64
U. AR main campus	979	6	11	48	15	642	10	247
U. Central AR	271	4	3	18	1	235	10	0
Louisiana	3,739	8	141	1,053	41	1,487	104	905
Grambling State U.	129	0	0	124	0	0	0	5
LA State U. Baton Rouge, Shreveport <sup>b</sup>	1,681	6	40	127	28	835	88	557
LA Tech U.	205	0	54	15	2	77	3	54
McNeese State U.	114	0	12	32	1	60	0	9
Nicholls State U.	148	0	0	29	2	116	0	1
Northwestern State U.	31	0	0	9	1	20	1	0
Southeastern LA U.	81	0	1	10	2	65	1	2
Southern U. and A&M C. all campuses	820	2	27	690	2	85	4	10
Tulane U.	NA	NA	NA	NA	NA	NA	NA	NA
U. LA Lafayette	467	0	6	9	3	177	5	267
U. LA Monroe	63	0	1	8	0	52	2	0
Oklahoma	3,116	137	82	151	89	1,768	19	870
Cameron U. <sup>a</sup>	149	7	2	37	8	94	0	1
East Central U.	20	3	1	0	0	16	0	0
Northeastern State U.	144	39	1	5	2	96	0	1
OK State U. all campuses	1,086	45	13	22	20	510	0	476
U. OK all campuses	1,515	38	61	83	56	930	1	346
U. Tulsa	202	5	4	4	3	122	18	46
Texas	22,873	77	1,057	1,411	2,288	10,589	395	7,056
Abilene Christian U.	91	0	2	5	11	69	1	3
Angelo State U.	117	0	2	7	10	96	0	2
Baylor C. of Dentistry	20	0	3	0	0	5	0	12
Baylor C. of Medicine	430	2	32	16	31	169	0	180
Baylor U.	331	1	11	6	17	192	8	96
Lamar U.	240	0	0	0	6	30	0	204
Midwestern State U.	107	1	3	7	6	67	2	21

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Prairie View A&M U.	260	0	1	205	11	31	0	12
Rice U.	709	1	48	25	46	283	12	294
Sam Houston State U.	163	0	20	3	8	109	0	23
Southern Methodist U.	335	2	20	8	8	168	0	129
St. Mary's U. (San Antonio, TX)	267	1	3	5	101	86	63	8
Stephen F. Austin State U.	365	2	7	15	10	291	0	40
Sul Ross State U.	66	0	0	5	15	44	2	0
Tarleton State U.	162	2	6	11	5	122	2	14
TX A&M U. all campuses	3,668	11	112	99	242	1,874	31	1,299
TX A&M U. Commerce	391	1	20	22	6	212	0	130
TX A&M U. Corpus Christi	300	1	10	10	77	150	0	52
TX A&M U. Kingsville	340	1	3	8	102	98	0	128
TX A&M U. System Health Science Ctr.	105	0	9	2	5	28	0	61
TX Christian U.	111	1	0	1	3	65	3	38
TX Southern U.	439	1	15	356	17	23	11	16
TX State U. San Marcos	816	3	58	38	128	513	14	62
TX Tech U.	1,005	5	23	14	61	479	63	360
TX Woman's U.	543	1	23	72	39	348	4	56
U. Houston	1,248	2	75	29	52	440	38	612
U. Houston-Clear Lake	823	1	61	85	78	391	0	207
U. Houston-Victoria	62	0	0	7	11	44	0	0
U. North TX	1,240	14	35	65	62	713	36	315
U. TX Arlington	1,227	3	68	94	69	520	0	473
U. TX Austin	2,158	6	90	21	99	1,056	21	865
U. TX Dallas	1,102	3	94	61	51	364	7	522
U. TX El Paso	433	1	5	11	187	105	4	120
U. TX Health Science Ctr. Houston	698	2	66	27	62	292	8	241
U. TX Health Science Ctr. San Antonio	212	0	21	5	32	63	1	90
U. TX Medical Branch	215	0	7	6	16	116	7	63
U. TX of the Permian Basin	55	0	1	1	11	42	0	0
U. TX San Antonio	779	3	33	32	276	332	3	100
U. TX Southwestern Medical Ctr. Dallas	484	1	43	9	33	222	33	143
U. TX Tyler	147	1	10	9	4	110	8	5
U. TX-Pan American	322	2	2	7	236	31	8	36
U. of the Incarnate Word	56	0	1	2	28	18	5	2
Wayland Baptist U.	13	0	0	0	0	13	0	0
West TX A&M U.	218	1	14	0	16	165	0	22
Mountain	22,845	232	748	289	1,119	14,698	1,614	4,145
Arizona	4,892	62	181	77	270	2,880	256	1,166
AZ State U. main campus	2,040	20	73	45	118	1,086	214	484
Northern AZ U.	527	17	7	4	41	417	13	28
U. AZ	2,325	25	101	28	111	1,377	29	654
Colorado	6,725	48	245	94	294	4,644	536	864
CO School of Mines	424	1	10	3	12	307	0	91
CO State U.	1,791	9	28	13	48	1,214	177	302
CO State U. Pueblo	18	0	1	0	2	15	0	0
U. CO all campuses	3,409	32	153	52	184	2,328	294	366
U. Denver	869	6	49	22	37	614	42	99
U. Northern CO	214	0	4	4	11	166	23	6
Idaho	1,427	7	15	6	17	1,103	55	224
Boise State U.	232	0	5	0	7	197	23	0
ID State U.	359	6	4	0	7	309	0	33
U. ID	836	1	6	6	3	597	32	191

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Montana	1,290	33	51	5	12	1,066	32	91
MT State U. Bozeman	510	4	23	0	4	409	22	48
MT Tech of the U. MT	11	0	0	0	0	11	0	0
U. MT, The	769	29	28	5	8	646	10	43
Nevada	1,539	7	61	50	71	925	148	277
U. NV, Las Vegas	692	3	32	43	39	390	84	101
U. NV, Reno	847	4	29	7	32	535	64	176
New Mexico	2,746	55	49	37	396	1,205	334	670
Eastern NM U. all campuses	67	1	0	2	1	48	0	15
NM Highlands U.	120	2	0	3	43	44	7	21
NM Institute of Mining and Technology	197	3	2	0	12	95	7	78
NM State U. all campuses	882	10	11	17	158	279	173	234
U. NM all campuses	1,480	39	36	15	182	739	147	322
Utah	3,448	16	106	18	53	2,264	231	760
Brigham Young U. all campuses	1,105	5	23	5	18	672	208	174
U. UT	1,467	2	67	7	22	959	19	391
UT State U.	876	9	16	6	13	633	4	195
Wyoming	778	4	40	2	6	611	22	93
U. WY	778	4	40	2	6	611	22	93
Pacific	58,138	434	6,806	2,209	4,799	27,525	6,054	10,311
Alaska	641	38	16	8	10	474	9	86
U. AK Anchorage all campuses	112	9	3	4	2	87	3	4
U. AK Fairbanks all campuses	513	28	13	4	8	374	6	80
U. AK Southeast	16	1	0	0	0	13	0	2
California	47,288	300	5,926	2,051	4,522	20,993	5,262	8,234
Alliant International U.	1,252	11	131	77	149	683	139	62
Azusa Pacific U.	293	4	31	18	47	161	11	21
Biola U.	38	0	7	0	3	20	1	7
CA Institute of Integral Studies	609	4	36	23	39	338	137	32
CA Institute of Technology	767	1	60	6	24	383	0	293
CA State Polytechnic U. Pomona	468	1	102	20	78	150	70	47
CA State Polytechnic U. San Luis Obispo	309	3	18	2	30	197	51	8
CA State U. Bakersfield	140	0	9	9	36	79	5	2
CA State U. Chico	382	8	10	6	26	224	50	58
CA State U. Dominguez Hills	395	3	22	175	83	53	48	11
CA State U. Fresno	695	7	46	25	169	265	98	85
CA State U. Fullerton	1,281	6	302	35	178	432	170	158
CA State U. Hayward	315	0	118	9	10	58	48	72
CA State U. Long Beach	930	5	168	53	185	300	108	111
CA State U. Los Angeles	1,094	2	254	77	387	231	142	1
CA State U. Northridge	813	8	75	42	133	360	131	64
CA State U. Sacramento	1,273	11	148	72	155	579	201	107
CA State U. San Bernardino	584	6	47	55	136	225	73	42
CA State U. Stanislaus	159	1	11	12	27	81	24	3
Chapman U.	386	5	21	34	36	238	43	9
Claremont Graduate U.	711	3	79	39	51	251	115	173
Dominican U. CA	89	1	2	2	6	63	13	2
Fielding Institute, The	629	6	20	54	43	463	38	5
Fuller Theological Seminary CA	386	1	62	20	26	211	36	30
Golden Gate U.	290	2	47	32	19	101	56	33
Humboldt State U.	326	5	8	2	17	215	76	3
John F. Kennedy U.	647	3	40	30	41	493	40	0

TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Loma Linda U.	570	5	73	88	91	255	6	52
Loyola Marymount U. <sup>a</sup>	39	0	8	1	5	13	3	9
National U.	1,746	3	126	236	308	878	158	37
Naval Postgraduate School	382	0	24	17	17	208	13	103
Occidental C.	3	0	0	0	0	3	0	0
Pacific Graduate School of Psychology	258	3	30	16	22	145	30	12
Pacific States U.	15	0	1	0	0	0	0	14
Pardee RAND Graduate School of Policy Studies	101	0	5	1	3	39	0	53
Pepperdine U.	931	6	66	76	106	437	215	25
San Diego State U.	1,475	9	158	38	159	620	174	317
San Francisco State U.	1,158	7	173	67	146	452	214	99
San Jose State U.	929	4	328	12	44	304	124	113
Santa Clara U.	381	0	66	4	30	172	40	69
Sonoma State U.	54	0	2	2	3	32	14	1
Stanford U.	2,314	10	307	33	85	998	138	743
U. CA, Berkeley	3,589	46	344	87	201	1,934	334	643
U. CA, Davis	2,738	16	265	50	101	1,300	407	599
U. CA, Irvine	1,693	6	280	23	108	641	201	434
U. CA, Los Angeles	3,609	27	637	111	303	1,568	272	691
U. CA, Riverside	1,055	5	116	7	73	351	146	357
U. CA, San Diego	2,001	10	251	26	102	1,098	141	373
U. CA, San Francisco	489	1	91	9	30	251	84	23
U. CA, Santa Barbara	1,477	4	128	18	69	806	187	265
U. CA, Santa Cruz	822	4	71	10	44	417	159	117
U. La Verne	384	2	25	67	111	125	38	16
U. San Diego	58	0	3	0	4	41	7	3
U. San Francisco	262	1	37	7	13	97	31	76
U. Southern CA	3,433	24	433	111	204	912	200	1,549
U. of the Pacific	34	0	3	1	1	25	2	2
Wright Institute all campuses <sup>a</sup>	27	0	1	4	5	17	0	0
Hawaii	1,684	9	353	11	35	622	118	536
U. HI Manoa	1,684	9	353	11	35	622	118	536
Oregon	3,474	34	196	50	95	2,239	238	622
OGI School of Science & Engineering at OR Health & Science U.	117	0	49	2	1	48	3	14
OR Health & Science U.	148	2	16	0	5	119	0	6
OR State U.	1,171	12	39	9	26	726	46	313
Portland State U.	1,224	11	61	29	47	838	102	136
Southern OR U.	70	1	8	0	3	51	3	4
U. OR	744	8	23	10	13	457	84	149
Washington	5,051	53	315	89	137	3,197	427	833
Central WA U.	146	14	5	0	4	115	7	1
Eastern WA U.	206	5	7	7	9	151	26	1
Pacific Lutheran U.	42	0	0	4	2	26	10	0
Seattle U.	194	1	23	15	8	115	29	3
U. WA	3,381	24	232	49	89	2,089	314	584
Walla Walla C.	9	0	0	1	0	8	0	0
WA State U.	855	7	40	12	21	519	20	236
Western WA U.	218	2	8	1	4	174	21	8



TABLE 33. Graduate science students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
Outlying areas	3,369	0	54	1	3,173	16	2	123
Guam	64	0	51	1	0	9	0	3
U. GU	64	0	51	1	0	9	0	3
Puerto Rico	3,305	0	3	0	3,173	7	2	120
Carlos Albizu U. (San Juan, PR)	649	0	0	0	649	0	0	0
Ponce School of Medicine	29	0	0	0	29	0	0	0
Pontifical Catholic U. PR, The	479	0	0	0	479	0	0	0
U. PR Mayaguez Campus	532	0	0	0	532	0	0	0
U. PR Medical Sciences Campus	146	0	0	0	145	1	0	0
U. PR Rio Piedras Campus	1,470	0	3	0	1,339	6	2	120

NA = not available; data were not collected from this institution in this year. Tulane University (all schools) was closed in fall 2005 due to Hurricane Katrina.

<sup>a</sup> Institution did not respond to the 2005 survey; all 2005 data are imputed.

<sup>b</sup> The two New Orleans campuses were closed in fall 2005 due to Hurricane Katrina and did not report data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	White, non- Hispanic		
All institutions	120,473	429	9,667	3,470	4,090	42,836	6,146	53,835
New England	8,242	14	531	127	182	3,092	816	3,480
Connecticut	1,276	0	49	19	38	410	89	671
Rensselaer Hartford	176	0	17	5	14	119	21	0
U. Bridgeport	266	0	1	3	0	2	1	259
U. CT all campuses	440	0	20	5	11	161	23	220
U. Hartford	96	0	4	2	5	27	14	44
U. New Haven	159	0	1	3	7	58	21	69
Yale U.	139	0	6	1	1	43	9	79
Maine	135	1	1	0	7	79	4	43
U. ME	135	1	1	0	7	79	4	43
Massachusetts	6,099	13	450	96	126	2,227	691	2,496
Anna Maria C.	3	0	0	0	0	0	3	0
Boston U.	515	0	30	8	13	119	122	223
Harvard U.	309	3	27	5	8	140	0	126
MA Institute of Technology	2,489	7	238	42	66	852	237	1,047
Northeastern U.	774	2	30	15	6	174	198	349
Tufts U. <sup>a</sup>	399	0	26	7	7	216	65	78
U. MA	419	0	17	2	10	136	26	228
U. MA Dartmouth	154	0	4	1	0	34	4	111
U. MA Lowell <sup>b</sup>	524	0	47	9	4	252	20	192
Western New England C.	46	0	1	3	0	36	6	0
Woods Hole Oceanographic Institution	31	0	1	0	2	19	0	9
Worcester Polytechnic Institute	436	1	29	4	10	249	10	133
New Hampshire	328	0	12	5	8	161	31	111
Dartmouth C.	134	0	5	4	5	58	22	40
U. NH	194	0	7	1	3	103	9	71
Rhode Island	293	0	18	5	3	136	0	131
Brown U.	123	0	6	2	1	33	0	81
U. RI	170	0	12	3	2	103	0	50
Vermont	111	0	1	2	0	79	1	28
Marlboro C.	6	0	0	0	0	6	0	0
U. VT	105	0	1	2	0	73	1	28
Middle Atlantic	15,781	27	1,176	478	408	4,891	1,103	7,698
New Jersey	3,681	6	370	147	138	1,011	380	1,629
Fairleigh Dickinson U. all campuses	168	0	0	0	0	0	11	157
Monmouth U.	77	0	12	3	2	34	17	9
NJ Institute of Technology	1,223	0	155	84	72	280	69	563
Princeton U.	452	2	28	9	8	151	12	242
Rutgers, The State U. NJ all campuses	687	0	75	15	15	194	15	373
Stevens Institute of Technology	1,058	4	100	34	41	341	256	282
U. of Medicine and Dentistry NJ	16	0	0	2	0	11	0	3
New York	7,090	9	532	205	187	1,940	521	3,696
Alfred U. all campuses	58	0	2	2	2	40	0	12
Clarkson U.	192	0	2	1	0	70	0	119
Columbia U. in the City of NY	795	1	90	12	8	136	99	449
Cooper Union	54	0	16	1	0	26	1	10
Cornell U. all campuses	902	2	96	11	28	316	34	415
CUNY Graduate Ctr.	192	0	5	7	8	10	28	134
CUNY The City C.	291	0	57	31	47	22	0	134

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	White, non- Hispanic		
Manhattan C.	183	0	25	6	13	76	50	13
NY Institute of Technology all campuses	320	0	22	24	10	48	37	179
Pace U. all campuses	16	0	2	3	2	7	0	2
Polytechnic U.	557	0	71	30	13	79	95	269
Rensselaer Polytechnic Institute	603	0	16	10	13	220	17	327
Rochester Institute of Technology	306	1	15	9	5	126	16	134
SUNY Albany	81	0	4	1	1	20	5	50
SUNY Binghamton	305	0	14	14	2	82	34	159
SUNY Buffalo all campuses	794	3	24	18	10	261	26	452
SUNY C. of Environmental Science and Forestry	90	0	2	1	0	50	0	37
SUNY Institute of Technology Utica-Rome	11	0	0	0	0	9	0	2
SUNY New Paltz	34	0	3	0	0	5	1	25
SUNY Stony Brook all campuses	415	1	34	10	14	101	26	229
Syracuse U. all campuses	589	0	15	11	9	119	26	409
Union C. (Schenectady, NY)	76	1	2	1	0	42	25	5
U. Rochester	226	0	15	2	2	75	1	131
Pennsylvania	5,010	12	274	126	83	1,940	202	2,373
Bucknell U.	16	0	0	0	2	11	0	3
Carnegie Mellon U.	828	2	46	14	9	253	21	483
Drexel U.	791	2	50	36	18	300	67	318
Gannon U.	60	1	0	1	0	10	0	48
Lehigh U.	497	0	32	10	8	209	13	225
PA State U. all campuses	1,388	2	65	24	23	523	31	720
Temple U.	113	1	10	3	1	25	9	64
U. PA	411	0	43	13	7	163	1	184
U. Pittsburgh all campuses	565	4	18	23	10	317	0	193
Villanova U.	269	0	8	2	4	114	60	81
Widener U. all campuses	44	0	2	0	1	15	0	26
Wilkes U.	28	0	0	0	0	0	0	28
East North Central	20,652	32	1,157	456	369	7,590	604	10,444
Illinois	4,643	10	363	91	92	1,543	61	2,483
Bradley U.	153	0	3	1	0	32	8	109
IL Institute of Technology <sup>a</sup>	574	2	34	1	8	152	3	374
Northern IL U.	180	1	10	8	1	49	4	107
Northwestern U.	664	3	72	17	20	266	11	275
Southern IL U. Carbondale	404	0	9	17	2	74	1	301
Southern IL U. Edwardsville	144	0	1	3	0	57	0	83
U. IL Chicago	761	0	62	19	30	263	22	365
U. IL Urbana-Champaign	1,763	4	172	25	31	650	12	869
Indiana	2,578	4	64	55	46	854	113	1,442
Ball State U.	24	0	0	0	1	1	13	9
IN U. all campuses	105	0	3	4	0	25	5	68
Purdue U. all campuses	1,936	2	43	45	36	576	73	1,161
Rose-Hulman Institute of Technology	112	0	4	1	1	85	1	20
U. of Notre Dame	401	2	14	5	8	167	21	184
Michigan	5,667	10	460	190	133	2,188	202	2,484
Andrews U.	19	0	0	3	4	10	0	2
Eastern MI U.	113	0	1	10	0	51	6	45
Grand Valley State U.	51	1	2	1	0	43	0	4
Lawrence Technological U.	314	0	14	20	9	200	24	47
MI State U.	451	0	18	19	17	130	4	263
MI Technological U.	432	0	4	4	7	172	19	226
Oakland U.	528	1	57	12	7	274	26	151

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
U. Detroit Mercy	128	1	6	7	4	44	13	53
U. MI all campuses	2,616	6	279	85	75	1,049	70	1,052
Wayne State U.	698	1	72	25	5	146	40	409
Western MI U.	317	0	7	4	5	69	0	232
Ohio	5,597	5	156	75	41	1,888	140	3,292
Air Force Institute of Technology	618	0	0	0	0	239	1	378
Case Western Reserve U.	524	0	33	8	5	239	17	222
Cleveland State U.	388	0	12	11	2	105	0	258
Miami U. all campuses	45	0	1	2	2	27	1	12
OH State U. all campuses	1,154	1	25	9	8	456	29	626
OH U. all campuses	216	0	1	0	1	67	0	147
U. Akron all campuses	353	0	28	5	4	85	17	214
U. Cincinnati all campuses	1,021	2	24	13	6	217	38	721
U. Dayton	350	0	9	7	7	176	18	133
U. Toledo	363	0	4	0	2	68	8	281
Wright State U. all campuses	521	2	19	19	4	176	8	293
Youngstown State U.	44	0	0	1	0	33	3	7
Wisconsin	2,167	3	114	45	57	1,117	88	743
Marquette U.	321	1	62	11	8	211	3	25
Milwaukee School of Engineering	223	0	2	10	8	170	29	4
U. WI Madison	1,133	1	25	13	27	444	46	577
U. WI Milwaukee	376	1	20	8	14	200	6	127
U. WI Platteville	69	0	3	2	0	57	3	4
U. WI Stout	45	0	2	1	0	35	1	6
West North Central	7,332	15	381	150	123	3,100	276	3,287
Iowa	1,196	0	31	30	21	479	28	607
IA State U.	811	0	13	13	8	321	27	429
Maharishi U. of Management	6	0	0	0	0	0	0	6
U. IA	379	0	18	17	13	158	1	172
Kansas	1,400	3	74	25	17	518	51	712
KS State U.	317	1	7	7	4	159	6	133
U. KS all campuses	504	2	21	10	9	251	27	184
Wichita State U.	579	0	46	8	4	108	18	395
Minnesota	1,911	4	143	40	39	900	93	692
Mayo Graduate School	35	0	2	0	3	13	4	13
MN State U. Mankato	39	0	0	0	0	3	0	36
St. Cloud State U.	57	0	1	0	0	5	2	49
U. MN all campuses	1,471	3	89	22	12	734	18	593
Walden U.	309	1	51	18	24	145	69	1
Missouri	1,791	5	61	46	43	806	95	735
Central MO State U.	28	2	1	2	0	13	3	7
Southwest MO State U.	16	0	0	0	1	4	0	11
St. Louis U. all campuses	15	0	0	0	0	7	0	8
U. MO-Columbia	434	0	12	6	16	132	10	258
U. MO-Kansas City	108	0	4	0	0	29	10	65
U. MO-Rolla	795	3	24	32	13	386	61	276
Washington U. St. Louis	395	0	20	6	13	235	11	110
Nebraska	345	1	5	7	2	130	2	198
U. NE Lincoln	345	1	5	7	2	130	2	198

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
North Dakota	404	1	59	1	0	152	0	191
ND State U. all campuses	331	1	49	1	0	119	0	161
U. ND all campuses	73	0	10	0	0	33	0	30
South Dakota	285	1	8	1	1	115	7	152
SD School of Mines and Technology	161	1	1	1	1	77	3	77
SD State U.	124	0	7	0	0	38	4	75
South Atlantic	22,507	45	1,454	1,223	915	9,176	766	8,928
Delaware	483	1	15	13	7	178	0	269
U. DE	483	1	15	13	7	178	0	269
District of Columbia	1,681	8	170	156	63	734	211	339
Catholic U. America, The	122	0	4	10	5	38	37	28
George Washington U.	1,497	8	164	131	56	695	173	270
Howard U.	62	0	2	15	2	1	1	41
Florida	5,813	6	394	322	554	2,057	134	2,346
Embry-Riddle Aeronautical U.	66	0	4	2	2	27	9	22
FL A&M U.	74	0	1	43	2	14	0	14
FL Atlantic U.	164	0	15	12	12	64	1	60
FL Institute of Technology	389	0	15	14	19	156	69	116
FL International U.	545	2	74	35	167	55	2	210
FL State U.	302	0	51	69	12	79	1	90
U. Central FL	1,080	2	75	47	98	455	14	389
U. FL	2,159	2	107	53	109	832	33	1,023
U. Miami	292	0	12	12	55	105	2	106
U. South FL	742	0	40	35	78	270	3	316
Georgia	3,759	5	248	172	92	1,499	109	1,634
GA Institute of Technology all campuses	3,652	5	248	172	92	1,495	30	1,610
Mercer U. all campuses	75	0	0	0	0	0	75	0
U. GA	32	0	0	0	0	4	4	24
Maryland	2,580	6	194	180	61	844	115	1,180
Johns Hopkins U., The	421	1	33	10	8	132	8	229
Loyola C.	21	0	0	1	0	20	0	0
Morgan State U.	160	0	13	84	2	35	5	21
U. MD Baltimore County	252	0	21	15	5	68	18	125
U. MD College Park	1,726	5	127	70	46	589	84	805
North Carolina	2,680	8	167	207	36	1,195	12	1,055
Duke U.	354	4	21	14	5	163	1	146
NC Agricultural and Technical State U.	191	0	25	111	0	18	2	35
NC State U.	1,721	3	96	60	30	818	8	706
U. NC Chapel Hill	60	0	7	7	0	32	1	13
U. NC Charlotte	336	1	16	15	1	153	0	150
Wake Forest U.	18	0	2	0	0	11	0	5
South Carolina	1,140	2	21	35	15	454	41	572
Clemson U.	701	2	9	20	2	281	32	355
U. SC all campuses	439	0	12	15	13	173	9	217

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Virginia	3,665	8	234	130	83	1,929	112	1,169
C. of William and Mary all campuses	35	1	0	0	1	17	0	16
George Mason U.	403	1	67	19	19	196	22	79
Old Dominion U.	705	1	35	41	22	388	55	163
U. VA all campuses	619	0	34	9	3	379	6	188
VA Commonwealth U.	125	0	9	14	2	45	2	53
VA Polytechnic Institute and State U.	1,778	5	89	47	36	904	27	670
West Virginia	706	1	11	8	4	286	32	364
Marshall U.	95	0	1	2	0	59	27	6
WV U.	599	1	10	6	4	226	4	348
WV U. Institute of Technology	12	0	0	0	0	1	1	10
East South Central	5,207	11	204	265	53	2,304	61	2,309
Alabama	1,860	4	96	130	26	800	27	777
Auburn U. all campuses	567	1	10	18	11	227	6	294
Tuskegee U.	53	0	1	39	0	1	12	0
U. AL, The	249	0	32	15	4	88	2	108
U. AL Birmingham, The	265	0	35	21	6	101	0	102
U. AL Huntsville, The	524	3	12	32	5	353	6	113
U. South AL	202	0	6	5	0	30	1	160
Kentucky	1,010	3	50	24	5	424	14	490
U. KY all campuses	484	1	26	5	2	155	13	282
U. Louisville	526	2	24	19	3	269	1	208
Mississippi	536	0	13	24	9	206	1	283
MS State U.	408	0	13	24	9	172	0	190
U. MS all campuses	128	0	0	0	0	34	1	93
Tennessee	1,801	4	45	87	13	874	19	759
East TN State U.	31	0	0	5	0	24	0	2
TN State U.	42	0	3	20	0	11	0	8
TN Technological U.	158	0	0	4	0	49	0	105
U. Memphis, The	216	1	5	7	1	68	0	134
U. TN	833	2	16	25	6	455	13	316
U. TN Chattanooga	61	0	3	9	0	40	0	9
U. TN Health Science Ctr.	25	0	0	2	0	9	0	14
Vanderbilt U.	435	1	18	15	6	218	6	171
West South Central	12,665	54	702	395	644	3,550	196	7,124
Arkansas	599	3	17	47	15	251	27	239
U. AR main campus	599	3	17	47	15	251	27	239
Louisiana	1,070	3	28	54	17	192	10	766
LA State U. Baton Rouge, Shreveport <sup>b</sup>	573	1	6	17	10	114	10	415
LA Tech U.	270	0	22	3	1	44	0	200
McNeese State U.	74	2	0	0	3	12	0	57
Southern U. and A&M C. all campuses	36	0	0	27	0	0	0	9
Tulane U.	NA	NA	NA	NA	NA	NA	NA	NA
U. LA Lafayette	117	0	0	7	3	22	0	85
Oklahoma	1,158	29	16	17	26	303	3	764
Northeastern State U.	19	8	0	0	0	11	0	0
OK State U. all campuses	432	12	3	5	3	98	0	311
U. OK all campuses	575	8	12	11	19	180	0	345
U. Tulsa	132	1	1	1	4	14	3	108

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	White, non- Hispanic		
Texas	9,838	19	641	277	586	2,804	156	5,355
Lamar U.	228	0	2	2	0	13	2	209
Prairie View A&M U.	90	0	6	55	1	9	0	19
Rice U.	332	0	31	4	11	95	29	162
Southern Methodist U.	958	12	146	69	69	493	0	169
St. Mary's U. (San Antonio, TX)	59	0	2	2	24	16	7	8
TX A&M U. all campuses	2,033	0	41	46	66	575	25	1,280
TX A&M U. Kingsville	337	0	3	2	23	15	0	294
TX Tech U.	536	1	5	6	40	225	22	237
U. Houston	699	1	61	16	32	195	19	375
U. Houston-Clear Lake	147	0	18	8	10	51	0	60
U. North TX	50	0	1	1	7	5	0	36
U. TX Arlington	1,232	0	93	32	28	198	34	847
U. TX Austin	1,858	5	122	10	71	659	9	982
U. TX Dallas	513	0	83	11	9	90	2	318
U. TX El Paso	275	0	1	2	78	20	1	173
U. TX Health Science Ctr. San Antonio	26	0	0	1	4	9	0	12
U. TX San Antonio	310	0	22	8	70	108	0	102
U. TX Southwestern Medical Ctr. Dallas	47	0	2	0	2	3	2	38
U. TX Tyler	22	0	2	1	0	13	3	3
U. TX-Pan American	71	0	0	1	38	1	1	30
West TX A&M U.	15	0	0	0	3	11	0	1
Mountain	8,120	38	381	71	315	3,689	619	3,007
Arizona	2,084	12	93	22	65	546	199	1,147
AZ State U. main campus	1,450	5	60	18	42	388	182	755
Northern AZ U.	15	3	0	0	0	7	2	3
U. AZ	619	4	33	4	23	151	15	389
Colorado	2,272	9	108	30	80	1,316	153	576
CO School of Mines	324	1	9	7	10	214	0	83
CO State U.	505	0	11	1	11	292	28	162
CO State U. Pueblo	12	0	0	0	1	3	0	8
U. CO all campuses	1,363	7	80	20	56	765	123	312
U. Denver	68	1	8	2	2	42	2	11
Idaho	586	1	33	6	12	353	51	130
Boise State U.	123	0	9	2	5	86	21	0
ID State U.	92	0	3	0	2	58	0	29
U. ID	371	1	21	4	5	209	30	101
Montana	164	0	21	0	1	117	0	25
MT State U. Bozeman	121	0	21	0	0	86	0	14
MT Tech of the U. MT	43	0	0	0	1	31	0	11
Nevada	453	0	29	5	6	159	41	213
U. NV, Las Vegas	247	0	16	4	5	87	30	105
U. NV, Reno	206	0	13	1	1	72	11	108
New Mexico	1,016	12	18	8	141	328	106	403
NM Institute of Mining and Technology	121	0	1	1	10	60	4	45
NM State U. all campuses	359	5	6	4	57	53	56	178
U. NM all campuses	536	7	11	3	74	215	46	180

TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Utah	1,436	1	58	0	10	812	69	486
Brigham Young U. all campuses	346	0	4	0	2	218	58	64
U. UT	723	1	46	0	8	380	11	277
UT State U.	367	0	8	0	0	214	0	145
Wyoming	109	3	21	0	0	58	0	27
U. WY	109	3	21	0	0	58	0	27
Pacific	19,611	193	3,681	305	725	5,444	1,705	7,558
Alaska	165	2	7	1	4	84	7	60
U. AK Anchorage all campuses	76	2	4	1	1	59	6	3
U. AK Fairbanks all campuses	89	0	3	0	3	25	1	57
California	16,806	182	3,412	278	662	4,245	1,493	6,534
CA Institute of Technology	501	1	48	12	14	163	0	263
CA State Polytechnic U. Pomona	201	0	69	3	31	48	20	30
CA State Polytechnic U. San Luis Obispo	223	2	44	0	17	112	31	17
CA State U. Chico	1	0	0	1	0	0	0	0
CA State U. Dominguez Hills	2	0	1	0	0	1	0	0
CA State U. Fresno	50	0	6	0	0	12	7	25
CA State U. Fullerton	172	0	63	5	19	33	14	38
CA State U. Long Beach	393	1	125	12	49	73	35	98
CA State U. Los Angeles	212	0	57	11	45	28	28	43
CA State U. Northridge	394	0	83	9	39	102	59	102
CA State U. Sacramento	250	1	54	10	8	49	24	104
Humboldt State U.	6	0	1	0	2	1	2	0
Loyola Marymount U. <sup>a</sup>	82	0	21	9	16	25	4	7
National U.	35	0	10	2	2	16	4	1
Naval Postgraduate School	570	0	13	27	23	248	197	62
San Diego State U.	338	1	45	4	17	81	37	153
San Francisco State U.	64	0	21	4	4	13	8	14
San Jose State U.	1,825	157	948	15	32	130	132	411
Santa Clara U.	404	0	131	5	25	88	63	92
Stanford U.	2,880	1	361	46	66	747	255	1,404
U. CA, Berkeley	1,551	9	193	30	62	560	136	561
U. CA, Davis	788	1	119	5	22	266	96	279
U. CA, Irvine	567	1	103	2	24	102	56	279
U. CA, Los Angeles	981	1	259	10	31	208	59	413
U. CA, Riverside	167	0	9	2	7	17	4	128
U. CA, San Diego	787	0	123	7	20	288	55	294
U. CA, San Francisco	73	1	18	0	5	36	4	9
U. CA, Santa Barbara	529	0	62	4	11	215	32	205
U. CA, Santa Cruz	173	1	23	3	2	47	21	76
U. Southern CA	2,587	4	402	40	69	536	110	1,426
Hawaii	208	0	65	1	7	46	7	82
U. HI Manoa	208	0	65	1	7	46	7	82
Oregon	913	1	84	6	14	358	60	390
OGI School of Science & Engineering at OR Health & Science U.	28	0	8	0	0	18	0	2
OR State U.	448	1	26	2	1	212	25	181
Portland State U.	436	0	50	4	13	128	35	206
U. Portland	1	0	0	0	0	0	0	1



TABLE 34. Graduate engineering students in all institutions, by region, state, institution, and citizenship, and by race/ethnicity of U.S. citizens and permanent residents: 2005

Region, state, and institution	Total	U.S. citizens and permanent residents					Temporary- visa holders	
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	Other or unknown		
Washington	1,519	8	113	19	38	711	138	492
Central WA U.	19	0	0	1	0	11	7	0
Seattle U.	57	0	8	2	0	21	13	13
St. Martin's C.	32	0	1	1	3	24	0	3
U. WA	1,072	6	99	13	29	495	114	316
WA State U.	339	2	5	2	6	160	4	160
Outlying areas	356	0	0	0	356	0	0	0
Puerto Rico	356	0	0	0	356	0	0	0
U. PR Mayaguez Campus	356	0	0	0	356	0	0	0

NA = not available; data were not collected from this institution in this year. Tulane University (all schools) was closed in fall 2005 due to Hurricane Katrina.

<sup>a</sup> Institution did not respond to the 2005 survey; all 2005 data are imputed.

<sup>b</sup> The two New Orleans campuses were closed in fall 2005 due to Hurricane Katrina and did not report data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 35. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	435,949	443,185	443,632	459,227	487,314	510,410	518,516	527,767
Science and engineering	367,164	372,732	374,710	389,588	412,927	430,093	432,501	436,583
Science	272,738	276,528	275,900	285,729	299,858	310,623	316,029	322,290
Agricultural sciences	11,380	11,522	11,235	11,401	11,838	12,390	12,486	12,196
Biological sciences	53,177	53,532	52,975	54,415	57,725	60,861	62,739	64,436
Anatomy	785	749	795	735	906	908	897	938
Biochemistry	5,107	5,060	4,925	4,855	5,148	5,473	5,520	5,720
Biology	11,703	11,508	11,037	11,038	11,481	12,247	12,938	13,011
Biometry/epidemiology	3,514	3,704	3,615	3,817	4,071	4,439	4,674	4,805
Biophysics	737	710	751	877	953	1,032	1,180	1,183
Botany	2,033	1,965	1,894	1,913	1,966	1,900	1,830	1,859
Cell biology	4,206	4,469	4,647	4,747	5,209	5,521	5,697	6,030
Ecology	1,535	1,576	1,609	1,746	1,787	2,057	2,022	2,019
Entomology/parasitology	1,168	1,145	1,104	1,170	1,191	1,206	1,241	1,126
Genetics	1,682	1,730	1,655	1,776	1,841	2,008	2,077	2,095
Microbiology/immunology/virology	4,751	4,795	4,799	4,785	5,188	5,232	5,357	5,377
Nutrition	4,186	4,232	4,170	4,182	4,289	4,342	4,392	4,433
Pathology	1,580	1,580	1,531	1,637	1,613	1,541	1,540	1,576
Pharmacology	2,730	2,757	2,963	3,140	3,234	3,357	3,122	3,114
Physiology	2,151	2,064	1,993	1,944	2,053	2,179	2,240	2,221
Zoology	1,580	1,519	1,443	1,409	1,347	1,300	1,234	1,261
Biosciences, nec	3,729	3,969	4,044	4,644	5,448	6,119	6,778	7,668
Computer sciences	33,314	36,675	40,567	44,963	48,457	47,343	44,592	43,266
Earth, atmospheric, and ocean sciences	13,174	13,048	12,948	12,859	13,235	13,609	14,130	13,954
Atmospheric sciences	954	906	956	918	1,027	1,138	1,077	1,139
Geosciences	6,334	6,309	6,283	6,219	6,332	6,515	6,944	6,904
Oceanography	2,426	2,498	2,545	2,471	2,518	2,584	2,705	2,659
Earth/atmospheric/ocean sciences, nec	3,460	3,335	3,164	3,251	3,358	3,372	3,404	3,252
Mathematical sciences	14,978	14,732	14,374	15,262	16,545	17,558	18,185	18,479
Mathematics/applied mathematics	12,361	12,042	11,591	12,236	13,153	13,754	14,326	14,495
Statistics	2,617	2,690	2,783	3,026	3,392	3,804	3,859	3,984
Physical sciences	29,678	29,852	29,561	30,249	31,466	33,446	34,838	35,407
Astronomy	820	832	888	916	990	1,080	1,119	1,191
Chemistry	17,827	17,817	17,504	17,825	18,492	19,496	20,198	20,461
Physics	10,647	10,695	10,674	11,061	11,482	12,342	13,075	13,268
Physical sciences, nec	384	508	495	447	502	528	446	487
Psychology	42,254	41,732	40,485	40,880	41,314	42,302	43,901	46,741
Clinical psychology	11,363	11,497	11,327	11,327	11,306	11,766	12,161	12,773
Psychology, general	13,394	12,624	12,151	12,281	11,859	11,960	11,949	12,574
Psychology, nec	17,497	17,611	17,007	17,272	18,149	18,576	19,791	21,394
Social sciences	74,783	75,435	73,755	75,700	79,278	83,114	85,158	87,811
Agricultural economics	1,992	2,011	2,076	2,153	2,181	2,315	2,192	2,100
Anthropology (cultural/social)	7,232	7,275	7,286	7,203	7,166	7,417	7,413	7,343
Economics (except agricultural)	10,221	10,058	10,209	10,885	11,366	11,523	11,623	11,130
Geography	3,861	3,822	3,647	3,923	3,951	4,255	4,295	4,231
History and philosophy of science	449	503	472	496	472	506	602	689
Linguistics	2,662	2,570	2,456	2,505	2,564	2,699	2,673	2,919
Political science	26,378	26,825	26,412	27,023	29,707	31,412	33,123	34,771
Sociology	8,074	8,012	7,797	7,894	7,984	8,036	7,891	8,117
Sociology/anthropology	835	719	728	788	710	757	811	825
Social sciences, nec	13,079	13,640	12,672	12,830	13,177	14,194	14,535	15,686

TABLE 35. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	94,426	96,204	98,810	103,859	113,069	119,470	116,472	114,293
Aerospace engineering	3,096	3,290	3,337	3,396	3,627	3,969	3,997	4,055
Agricultural engineering	975	986	943	947	952	1,058	1,041	1,059
Biomedical engineering	2,800	3,017	3,144	3,534	4,288	5,250	5,749	6,015
Chemical engineering	7,013	6,821	6,996	6,840	7,290	7,376	7,334	7,054
Civil engineering	15,653	15,472	15,815	16,012	17,032	18,156	17,881	17,391
Electrical engineering	29,117	29,631	31,360	33,760	37,208	38,326	36,132	35,242
Engineering science	1,685	1,604	1,601	1,759	1,985	2,187	2,134	1,910
Industrial engineering	10,310	10,982	11,363	12,082	13,261	13,481	12,951	12,724
Mechanical engineering	14,082	14,321	14,609	15,245	16,483	17,547	17,128	16,695
Metallurgical/materials engineering	4,587	4,404	4,309	4,660	4,933	5,075	4,998	5,115
Mining engineering	290	320	276	229	256	266	298	265
Nuclear engineering	821	830	792	801	795	885	971	1,013
Petroleum engineering	567	630	621	652	759	847	843	806
Engineering, nec	3,430	3,896	3,644	3,942	4,200	5,047	5,015	4,949
Health fields	68,785	70,453	68,922	69,639	74,387	80,317	86,015	91,184
Medical fields	15,836	16,474	15,684	16,587	18,140	19,482	19,838	20,504
Anesthesiology	650	642	623	698	696	891	1,027	1,042
Cardiology	36	63	53	50	43	36	39	33
Endocrinology	58	67	57	53	60	80	63	56
Gastroenterology	6	7	14	7	7	11	16	7
Hematology	1	5	6	6	13	25	30	13
Neurology	1,825	1,907	1,982	2,136	2,513	2,665	2,642	2,763
Obstetrics/gynecology	13	16	16	28	23	28	17	21
Oncology/cancer research	209	250	239	261	231	234	274	331
Ophthalmology	31	49	58	46	181	413	423	394
Otorhinolaryngology	0	3	9	4	8	9	12	12
Pediatrics	328	316	403	380	463	429	424	278
Preventive medicine/community health	11,209	11,600	10,528	10,779	11,463	11,886	11,921	12,212
Psychiatry	86	87	141	229	268	216	348	250
Pulmonary disease	0	6	7	8	5	14	7	27
Radiology	191	187	168	198	217	246	211	192
Surgery	122	122	147	130	86	84	75	88
Clinical medicine, nec	1,071	1,147	1,233	1,574	1,863	2,215	2,309	2,785
Other health	52,949	53,979	53,238	53,052	56,247	60,835	66,177	70,680
Dental sciences	1,518	1,467	1,430	1,494	1,446	1,654	1,978	1,783
Nursing	21,067	21,091	19,771	19,801	20,750	22,148	25,050	26,662
Pharmaceutical sciences	2,869	3,398	3,592	3,666	4,529	5,492	5,218	6,088
Speech pathology/audiology	9,976	10,211	10,423	10,053	10,328	10,681	10,989	11,858
Veterinary sciences	1,288	1,314	1,367	1,476	1,691	1,719	1,732	1,970
Health related, nec	16,231	16,498	16,655	16,562	17,503	19,141	21,210	22,319

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 36. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	302,555	307,987	311,264	321,660	344,021	362,894	362,412	365,567
Science and engineering	253,633	257,532	261,055	271,205	290,014	304,628	302,038	302,990
Science	185,916	188,362	188,557	194,700	205,145	214,580	215,623	219,476
Agricultural sciences	10,952	11,104	10,771	10,893	11,289	11,767	11,901	11,614
Biological sciences	37,842	37,859	37,497	38,287	40,625	43,204	43,539	44,990
Anatomy	584	562	591	552	655	643	611	646
Biochemistry	3,609	3,561	3,499	3,474	3,626	3,887	3,821	4,012
Biology	8,143	8,115	7,855	7,821	8,236	8,832	9,245	9,420
Biometry/epidemiology	2,143	2,200	2,192	2,356	2,635	2,856	2,724	2,782
Biophysics	417	416	449	533	613	680	732	739
Botany	1,897	1,825	1,803	1,827	1,901	1,826	1,759	1,787
Cell biology	2,678	2,816	2,980	3,080	3,387	3,607	3,640	3,903
Ecology	1,446	1,456	1,483	1,583	1,579	1,843	1,841	1,806
Entomology/parasitology	1,109	1,087	1,055	1,119	1,138	1,158	1,197	1,094
Genetics	1,097	1,115	1,052	1,121	1,112	1,253	1,231	1,285
Microbiology/immunology/virology	3,256	3,215	3,200	3,191	3,388	3,377	3,389	3,405
Nutrition	3,414	3,408	3,227	3,220	3,225	3,333	3,367	3,527
Pathology	1,074	1,053	1,015	1,033	984	995	998	958
Pharmacology	1,829	1,848	2,058	2,039	2,070	2,283	2,025	2,104
Physiology	1,341	1,305	1,175	1,111	1,179	1,248	1,274	1,272
Zoology	1,522	1,461	1,406	1,354	1,287	1,244	1,204	1,254
Biosciences, nec	2,283	2,416	2,457	2,873	3,610	4,139	4,481	4,996
Computer sciences	20,639	22,895	25,176	27,361	29,866	30,063	27,803	27,199
Earth, atmospheric, and ocean sciences	11,073	10,950	10,885	10,724	11,055	11,409	11,804	11,614
Atmospheric sciences	933	889	931	891	991	1,102	1,033	1,082
Geosciences	5,148	5,150	5,145	5,065	5,155	5,362	5,717	5,689
Oceanography	2,043	2,091	2,142	2,108	2,124	2,165	2,276	2,181
Earth/atmospheric/ocean sciences, nec	2,949	2,820	2,667	2,660	2,785	2,780	2,778	2,662
Mathematical sciences	11,238	11,096	11,067	11,846	12,820	13,680	14,075	14,331
Mathematics/applied mathematics	9,172	8,925	8,899	9,484	10,123	10,642	11,007	11,223
Statistics	2,066	2,171	2,168	2,362	2,697	3,038	3,068	3,108
Physical sciences	21,800	21,822	21,730	22,183	23,137	24,560	25,657	26,313
Astronomy	509	511	542	538	566	637	663	690
Chemistry	13,215	13,095	12,967	13,169	13,658	14,361	14,907	15,287
Physics	7,705	7,716	7,735	8,042	8,431	9,041	9,648	9,856
Physical sciences, nec	371	500	486	434	482	521	439	480
Psychology	21,635	21,028	20,548	20,556	21,302	21,791	21,606	22,231
Clinical psychology	3,006	3,023	3,038	2,959	2,996	2,996	3,045	2,972
Psychology, general	8,424	7,946	7,596	7,606	7,709	8,017	7,917	8,562
Psychology, nec	10,205	10,059	9,914	9,991	10,597	10,778	10,644	10,697
Social sciences	50,737	51,608	50,883	52,850	55,051	58,106	59,238	61,184
Agricultural economics	1,925	1,946	2,016	2,091	2,120	2,243	2,107	2,028
Anthropology (cultural/social)	5,169	5,282	5,302	5,259	5,237	5,507	5,546	5,497
Economics (except agricultural)	6,488	6,497	6,528	7,026	7,534	7,754	7,982	7,659
Geography	3,553	3,497	3,326	3,621	3,675	3,956	3,999	3,958
History and philosophy of science	222	296	272	298	273	294	384	450
Linguistics	1,876	1,834	1,761	1,805	1,886	1,995	2,027	2,061
Political science	15,479	16,103	15,853	16,667	17,949	19,122	20,004	20,588
Sociology	6,111	5,905	5,772	5,906	5,999	5,987	5,935	6,103
Sociology/anthropology	678	605	602	620	592	623	676	687
Social sciences, nec	9,236	9,643	9,451	9,557	9,786	10,625	10,578	12,153

TABLE 36. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	67,717	69,170	72,498	76,505	84,869	90,048	86,415	83,514
Aerospace engineering	2,295	2,308	2,350	2,390	2,609	2,859	2,935	2,964
Agricultural engineering	930	940	889	879	888	993	979	999
Biomedical engineering	1,792	1,939	2,002	2,156	2,732	3,498	3,688	3,793
Chemical engineering	5,064	4,859	5,060	4,898	5,359	5,431	5,352	5,072
Civil engineering	11,998	12,135	12,521	12,805	13,607	14,722	14,487	14,072
Electrical engineering	19,131	20,056	21,976	23,857	26,965	28,104	26,032	24,978
Engineering science	1,063	1,102	986	1,085	1,221	1,471	1,349	1,078
Industrial engineering	7,422	7,705	8,239	8,786	9,751	9,415	8,766	8,127
Mechanical engineering	10,890	11,004	11,374	11,864	13,220	13,898	13,168	12,536
Metallurgical/materials engineering	3,184	3,064	3,121	3,424	3,664	3,762	3,741	3,947
Mining engineering	197	214	264	224	252	261	298	265
Nuclear engineering	715	716	672	691	686	773	872	913
Petroleum engineering	459	531	525	534	631	727	706	690
Engineering, nec	2,577	2,597	2,519	2,912	3,284	4,134	4,042	4,080
Health fields	48,922	50,455	50,209	50,455	54,007	58,266	60,374	62,577
Medical fields	9,714	10,127	10,006	10,444	11,317	11,997	11,881	12,265
Anesthesiology	325	303	352	405	426	537	565	544
Cardiology	10	34	26	25	16	9	0	0
Endocrinology	58	67	57	53	58	78	62	56
Gastroenterology	6	7	14	7	7	11	16	7
Hematology	1	5	6	6	7	13	23	13
Neurology	889	999	1,073	1,173	1,430	1,540	1,419	1,477
Obstetrics/gynecology	8	13	8	20	13	13	3	10
Oncology/cancer research	139	145	143	146	123	116	137	186
Ophthalmology	31	49	58	46	178	399	404	392
Otorhinolaryngology	0	3	6	4	8	9	12	12
Pediatrics	226	243	257	287	362	361	355	211
Preventive medicine/community health	7,073	7,241	6,835	6,944	7,211	7,348	7,145	7,448
Psychiatry	64	58	78	189	215	171	302	197
Pulmonary disease	0	1	1	1	5	14	6	26
Radiology	148	135	126	153	175	181	185	169
Surgery	118	118	139	122	78	75	68	81
Clinical medicine, nec	618	706	827	863	1,005	1,122	1,179	1,436
Other health	39,208	40,328	40,203	40,011	42,690	46,269	48,493	50,312
Dental sciences	1,204	1,199	1,213	1,239	1,205	1,365	1,661	1,482
Nursing	16,797	16,859	15,989	15,952	16,829	18,076	20,051	20,289
Pharmaceutical sciences	2,202	2,672	2,949	2,972	3,707	4,517	3,964	4,302
Speech pathology/audiology	7,957	8,239	8,356	8,046	7,912	8,083	8,007	8,590
Veterinary sciences	1,235	1,267	1,322	1,430	1,638	1,667	1,674	1,858
Health related, nec	9,813	10,092	10,374	10,372	11,399	12,561	13,136	13,791

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 37. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	133,394	135,198	132,368	137,567	143,293	147,516	156,104	162,200
Science and engineering	113,531	115,200	113,655	118,383	122,913	125,465	130,463	133,593
Science	86,822	88,166	87,343	91,029	94,713	96,043	100,406	102,814
Agricultural sciences	428	418	464	508	549	623	585	582
Biological sciences	15,335	15,673	15,478	16,128	17,100	17,657	19,200	19,446
Anatomy	201	187	204	183	251	265	286	292
Biochemistry	1,498	1,499	1,426	1,381	1,522	1,586	1,699	1,708
Biology	3,560	3,393	3,182	3,217	3,245	3,415	3,693	3,591
Biometry/epidemiology	1,371	1,504	1,423	1,461	1,436	1,583	1,950	2,023
Biophysics	320	294	302	344	340	352	448	444
Botany	136	140	91	86	65	74	71	72
Cell biology	1,528	1,653	1,667	1,667	1,822	1,914	2,057	2,127
Ecology	89	120	126	163	208	214	181	213
Entomology/parasitology	59	58	49	51	53	48	44	32
Genetics	585	615	603	655	729	755	846	810
Microbiology/immunology/virology	1,495	1,580	1,599	1,594	1,800	1,855	1,968	1,972
Nutrition	772	824	943	962	1,064	1,009	1,025	906
Pathology	506	527	516	604	629	546	542	618
Pharmacology	901	909	905	1,101	1,164	1,074	1,097	1,010
Physiology	810	759	818	833	874	931	966	949
Zoology	58	58	37	55	60	56	30	7
Biosciences, nec	1,446	1,553	1,587	1,771	1,838	1,980	2,297	2,672
Computer sciences	12,675	13,780	15,391	17,602	18,591	17,280	16,789	16,067
Earth, atmospheric, and ocean sciences	2,101	2,098	2,063	2,135	2,180	2,200	2,326	2,340
Atmospheric sciences	21	17	25	27	36	36	44	57
Geosciences	1,186	1,159	1,138	1,154	1,177	1,153	1,227	1,215
Oceanography	383	407	403	363	394	419	429	478
Earth/atmospheric/ocean sciences, nec	511	515	497	591	573	592	626	590
Mathematical sciences	3,740	3,636	3,307	3,416	3,725	3,878	4,110	4,148
Mathematics/applied mathematics	3,189	3,117	2,692	2,752	3,030	3,112	3,319	3,272
Statistics	551	519	615	664	695	766	791	876
Physical sciences	7,878	8,030	7,831	8,066	8,329	8,886	9,181	9,094
Astronomy	311	321	346	378	424	443	456	501
Chemistry	4,612	4,722	4,537	4,656	4,834	5,135	5,291	5,174
Physics	2,942	2,979	2,939	3,019	3,051	3,301	3,427	3,412
Physical sciences, nec	13	8	9	13	20	7	7	7
Psychology	20,619	20,704	19,937	20,324	20,012	20,511	22,295	24,510
Clinical psychology	8,357	8,474	8,289	8,368	8,310	8,770	9,116	9,801
Psychology, general	4,970	4,678	4,555	4,675	4,150	3,943	4,032	4,012
Psychology, nec	7,292	7,552	7,093	7,281	7,552	7,798	9,147	10,697
Social sciences	24,046	23,827	22,872	22,850	24,227	25,008	25,920	26,627
Agricultural economics	67	65	60	62	61	72	85	72
Anthropology (cultural/social)	2,063	1,993	1,984	1,944	1,929	1,910	1,867	1,846
Economics (except agricultural)	3,733	3,561	3,681	3,859	3,832	3,769	3,641	3,471
Geography	308	325	321	302	276	299	296	273
History and philosophy of science	227	207	200	198	199	212	218	239
Linguistics	786	736	695	700	678	704	646	858
Political science	10,899	10,722	10,559	10,356	11,758	12,290	13,119	14,183
Sociology	1,963	2,107	2,025	1,988	1,985	2,049	1,956	2,014
Sociology/anthropology	157	114	126	168	118	134	135	138
Social sciences, nec	3,843	3,997	3,221	3,273	3,391	3,569	3,957	3,533

TABLE 37. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	26,709	27,034	26,312	27,354	28,200	29,422	30,057	30,779
Aerospace engineering	801	982	987	1,006	1,018	1,110	1,062	1,091
Agricultural engineering	45	46	54	68	64	65	62	60
Biomedical engineering	1,008	1,078	1,142	1,378	1,556	1,752	2,061	2,222
Chemical engineering	1,949	1,962	1,936	1,942	1,931	1,945	1,982	1,982
Civil engineering	3,655	3,337	3,294	3,207	3,425	3,434	3,394	3,319
Electrical engineering	9,986	9,575	9,384	9,903	10,243	10,222	10,100	10,264
Engineering science	622	502	615	674	764	716	785	832
Industrial engineering	2,888	3,277	3,124	3,296	3,510	4,066	4,185	4,597
Mechanical engineering	3,192	3,317	3,235	3,381	3,263	3,649	3,960	4,159
Metallurgical/materials engineering	1,403	1,340	1,188	1,236	1,269	1,313	1,257	1,168
Mining engineering	93	106	12	5	4	5	0	0
Nuclear engineering	106	114	120	110	109	112	99	100
Petroleum engineering	108	99	96	118	128	120	137	116
Engineering, nec	853	1,299	1,125	1,030	916	913	973	869
Health fields	19,863	19,998	18,713	19,184	20,380	22,051	25,641	28,607
Medical fields	6,122	6,347	5,678	6,143	6,823	7,485	7,957	8,239
Anesthesiology	325	339	271	293	270	354	462	498
Cardiology	26	29	27	25	27	27	39	33
Endocrinology	0	0	0	0	2	2	1	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	6	12	7	0
Neurology	936	908	909	963	1,083	1,125	1,223	1,286
Obstetrics/gynecology	5	3	8	8	10	15	14	11
Oncology/cancer research	70	105	96	115	108	118	137	145
Ophthalmology	0	0	0	0	3	14	19	2
Otorhinolaryngology	0	0	3	0	0	0	0	0
Pediatrics	102	73	146	93	101	68	69	67
Preventive medicine/community health	4,136	4,359	3,693	3,835	4,252	4,538	4,776	4,764
Psychiatry	22	29	63	40	53	45	46	53
Pulmonary disease	0	5	6	7	0	0	1	1
Radiology	43	52	42	45	42	65	26	23
Surgery	4	4	8	8	8	9	7	7
Clinical medicine, nec	453	441	406	711	858	1,093	1,130	1,349
Other health	13,741	13,651	13,035	13,041	13,557	14,566	17,684	20,368
Dental sciences	314	268	217	255	241	289	317	301
Nursing	4,270	4,232	3,782	3,849	3,921	4,072	4,999	6,373
Pharmaceutical sciences	667	726	643	694	822	975	1,254	1,786
Speech pathology/audiology	2,019	1,972	2,067	2,007	2,416	2,598	2,982	3,268
Veterinary sciences	53	47	45	46	53	52	58	112
Health related, nec	6,418	6,406	6,281	6,190	6,104	6,580	8,074	8,528

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 38. Graduate students in science and engineering fields in doctorate-granting institutions, by enrollment status, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 1998–2005

Enrollment status, citizenship, and race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005
Full-time and part-time enrollment	367,164	372,732	374,710	389,588	412,927	430,093	432,501	436,583
U.S. citizens and permanent residents	268,657	266,680	256,811	260,683	273,149	288,325	294,522	302,412
American Indian/Alaska Native	1,384	1,320	1,364	1,446	1,510	1,629	1,589	1,695
Asian/Pacific Islander	23,305	23,819	21,524	22,645	24,637	26,440	26,222	26,604
Black, non-Hispanic	16,639	17,274	17,662	17,915	19,031	20,276	20,625	21,233
Hispanic	13,414	14,264	14,539	15,178	16,488	17,865	18,740	19,821
White, non-Hispanic	198,900	195,295	185,374	185,655	192,245	200,480	203,193	205,003
Other or unknown	15,015	14,708	16,348	17,844	19,238	21,635	24,153	28,056
Temporary-visa holders	98,507	106,052	117,899	128,905	139,778	141,768	137,979	134,171
Full-time enrollment	264,325	269,012	275,279	287,571	307,752	320,263	322,356	323,315
U.S. citizens and permanent residents	179,440	177,533	172,826	175,267	186,068	197,621	202,891	205,981
American Indian/Alaska Native	994	921	985	1,026	1,054	1,127	1,131	1,162
Asian/Pacific Islander	16,224	16,601	14,760	15,676	17,139	18,258	18,420	18,496
Black, non-Hispanic	10,229	10,194	10,832	10,724	11,497	12,062	12,648	12,632
Hispanic	9,070	9,458	9,743	10,209	11,269	12,316	12,896	13,419
White, non-Hispanic	134,565	132,248	126,997	127,257	133,616	140,298	142,695	143,092
Other or unknown	8,358	8,111	9,509	10,375	11,493	13,560	15,101	17,180
Temporary-visa holders	84,885	91,479	102,453	112,304	121,684	122,642	119,465	117,334
Part-time enrollment	102,839	103,720	99,431	102,017	105,175	109,830	110,145	113,268
U.S. citizens and permanent residents	89,217	89,147	83,985	85,416	87,081	90,704	91,631	96,431
American Indian/Alaska Native	390	399	379	420	456	502	458	533
Asian/Pacific Islander	7,081	7,218	6,764	6,969	7,498	8,182	7,802	8,108
Black, non-Hispanic	6,410	7,080	6,830	7,191	7,534	8,214	7,977	8,601
Hispanic	4,344	4,806	4,796	4,969	5,219	5,549	5,844	6,402
White, non-Hispanic	64,335	63,047	58,377	58,398	58,629	60,182	60,498	61,911
Other or unknown	6,657	6,597	6,839	7,469	7,745	8,075	9,052	10,876
Temporary-visa holders	13,622	14,573	15,446	16,601	18,094	19,126	18,514	16,837

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 39. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents						Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic			
All surveyed fields	527,767	2,155	33,684	28,590	24,930	262,502	34,655	141,251	
Science and engineering	436,583	1,695	26,604	21,233	19,821	205,003	28,056	134,171	
Science	322,290	1,443	18,452	17,896	16,080	164,009	22,485	81,925	
Agricultural sciences	12,196	61	253	403	454	8,010	424	2,591	
Biological sciences	64,436	261	5,077	2,772	2,812	34,164	3,161	16,189	
Anatomy	938	2	92	48	41	523	44	188	
Biochemistry	5,720	15	434	163	226	2,549	248	2,085	
Biology	13,011	56	683	657	659	7,358	745	2,853	
Biometry/epidemiology	4,805	15	581	282	193	2,227	305	1,202	
Biophysics	1,183	3	131	24	37	562	51	375	
Botany	1,859	8	76	17	49	965	79	665	
Cell biology	6,030	22	652	166	266	2,927	335	1,662	
Ecology	2,019	10	49	23	64	1,487	140	246	
Entomology/parasitology	1,126	9	28	14	47	713	33	282	
Genetics	2,095	10	175	70	60	1,132	94	554	
Microbiology/immunology/virology	5,377	16	482	251	304	2,851	258	1,215	
Nutrition	4,433	14	245	257	162	2,438	186	1,131	
Pathology	1,576	8	159	67	58	879	65	340	
Pharmacology	3,114	20	307	184	145	1,514	91	853	
Physiology	2,221	10	356	94	87	1,152	56	466	
Zoology	1,261	10	35	12	33	922	38	211	
Biosciences, nec	7,668	33	592	443	381	3,965	393	1,861	
Computer sciences	43,266	92	3,956	1,563	1,001	15,087	2,903	18,664	
Earth, atmospheric, and ocean sciences	13,954	58	371	245	468	9,481	629	2,702	
Atmospheric sciences	1,139	3	58	30	36	694	39	279	
Geosciences	6,904	28	124	79	194	4,768	293	1,418	
Oceanography	2,659	11	62	37	147	1,820	98	484	
Earth/atmospheric/ocean sciences, nec	3,252	16	127	99	91	2,199	199	521	
Mathematical sciences	18,479	36	1,140	587	485	8,024	949	7,258	
Mathematics/applied mathematics	14,495	32	831	490	421	6,806	791	5,124	
Statistics	3,984	4	309	97	64	1,218	158	2,134	
Physical sciences	35,407	79	1,582	940	1,191	15,881	1,349	14,385	
Astronomy	1,191	5	46	10	27	677	63	363	
Chemistry	20,461	52	1,037	645	792	9,198	714	8,023	
Physics	13,268	20	480	255	343	5,683	554	5,933	
Physical sciences, nec	487	2	19	30	29	323	18	66	
Psychology	46,741	247	2,134	3,873	4,054	27,902	5,741	2,790	
Clinical psychology	12,773	74	594	794	1,627	7,547	1,679	458	
Psychology, general	12,574	68	656	1,055	703	8,321	734	1,037	
Psychology, nec	21,394	105	884	2,024	1,724	12,034	3,328	1,295	
Social sciences	87,811	609	3,939	7,513	5,615	45,460	7,329	17,346	
Agricultural economics	2,100	23	43	64	53	899	65	953	
Anthropology (cultural/social)	7,343	116	290	273	419	4,854	551	840	
Economics (except agricultural)	11,130	16	487	263	300	3,493	406	6,165	
Geography	4,231	28	139	127	130	2,890	183	734	
History and philosophy of science	689	3	30	29	23	487	38	79	
Linguistics	2,919	17	203	60	141	1,421	188	889	
Political science	34,771	191	1,625	3,794	2,524	17,995	4,025	4,617	
Sociology	8,117	54	368	897	526	4,592	418	1,262	
Sociology/anthropology	825	6	7	108	54	508	51	91	
Social sciences, nec	15,686	155	747	1,898	1,445	8,321	1,404	1,716	

TABLE 39. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
Engineering	114,293	252	8,152	3,337	3,741	40,994	5,571	52,246
Aerospace engineering	4,055	13	232	71	112	1,795	215	1,617
Agricultural engineering	1,059	3	37	25	13	441	19	521
Biomedical engineering	6,015	13	801	190	186	2,389	300	2,136
Chemical engineering	7,054	24	459	145	235	2,527	203	3,461
Civil engineering	17,391	49	869	444	848	7,902	748	6,531
Electrical engineering	35,242	52	3,111	790	969	8,714	1,614	19,992
Engineering science	1,910	9	141	35	42	766	65	852
Industrial engineering	12,724	38	957	732	519	5,151	932	4,395
Mechanical engineering	16,695	27	876	403	509	6,639	760	7,481
Metallurgical/materials engineering	5,115	5	308	102	105	1,841	125	2,629
Mining engineering	265	0	6	3	9	112	22	113
Nuclear engineering	1,013	3	47	21	38	534	31	339
Petroleum engineering	806	0	21	31	17	114	9	614
Engineering, nec	4,949	16	287	345	139	2,069	528	1,565
Health fields	91,184	460	7,080	7,357	5,109	57,499	6,599	7,080
Medical fields	20,504	104	2,065	1,897	1,541	10,536	1,953	2,408
Anesthesiology	1,042	4	61	57	21	800	88	11
Cardiology	33	0	2	1	0	13	0	17
Endocrinology	56	0	11	2	2	30	3	8
Gastroenterology	7	0	1	0	0	6	0	0
Hematology	13	0	4	0	0	8	0	1
Neurology	2,763	12	241	98	129	1,573	142	568
Obstetrics/gynecology	21	0	2	1	2	10	0	6
Oncology/cancer research	331	1	29	13	12	196	3	77
Ophthalmology	394	1	159	6	15	163	36	14
Otorhinolaryngology	12	0	3	0	1	8	0	0
Pediatrics	278	3	18	24	7	156	13	57
Preventive medicine/community health	12,212	78	1,163	1,457	1,030	5,808	1,332	1,344
Psychiatry	250	0	8	11	70	134	12	15
Pulmonary disease	27	0	5	1	0	15	0	6
Radiology	192	1	24	8	11	96	4	48
Surgery	88	0	14	7	4	49	11	3
Clinical medicine, nec	2,785	4	320	211	237	1,471	309	233
Other health	70,680	356	5,015	5,460	3,568	46,963	4,646	4,672
Dental sciences	1,783	2	252	40	91	1,035	59	304
Nursing	26,662	175	1,305	2,396	1,199	19,258	1,774	555
Pharmaceutical sciences	6,088	14	1,062	584	242	2,262	343	1,581
Speech pathology/audiology	11,858	49	824	523	683	8,687	669	423
Veterinary sciences	1,970	7	64	60	38	1,263	93	445
Health related, nec	22,319	109	1,508	1,857	1,315	14,458	1,708	1,364

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 40. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	307,094	313,910	319,816	332,603	355,393	372,213	377,781	381,172
Science and engineering	264,325	269,012	275,279	287,571	307,752	320,263	322,356	323,315
Science	200,415	202,510	204,630	211,892	224,514	232,728	237,745	241,160
Agricultural sciences	8,782	8,923	8,914	8,937	9,176	9,497	9,459	9,138
Biological sciences	45,203	45,372	45,374	46,672	50,026	52,517	54,063	55,745
Anatomy	733	708	752	675	820	829	802	844
Biochemistry	4,854	4,778	4,699	4,617	4,930	5,288	5,279	5,416
Biology	8,850	8,728	8,625	8,717	9,289	9,958	10,447	10,691
Biometry/epidemiology	2,566	2,642	2,562	2,736	3,012	3,208	3,218	3,417
Biophysics	707	681	719	837	896	968	1,115	1,120
Botany	1,799	1,757	1,700	1,716	1,789	1,730	1,653	1,666
Cell biology	4,027	4,245	4,388	4,500	4,933	5,189	5,356	5,719
Ecology	1,192	1,230	1,224	1,364	1,396	1,455	1,495	1,568
Entomology/parasitology	1,000	971	979	989	1,001	1,024	1,046	943
Genetics	1,596	1,633	1,597	1,686	1,770	1,927	1,998	2,010
Microbiology/immunology/virology	4,370	4,471	4,497	4,495	4,895	4,971	5,070	5,058
Nutrition	3,027	3,022	2,999	3,123	3,220	3,191	3,159	3,221
Pathology	1,339	1,364	1,293	1,350	1,340	1,319	1,350	1,358
Pharmacology	2,562	2,579	2,627	2,746	2,823	2,926	2,974	2,905
Physiology	1,990	1,876	1,856	1,811	1,917	2,059	2,094	2,066
Zoology	1,328	1,287	1,234	1,229	1,173	1,093	1,070	1,091
Biosciences, nec	3,263	3,400	3,623	4,081	4,822	5,382	5,937	6,652
Computer sciences	18,463	20,619	23,656	27,217	29,870	28,340	27,235	26,547
Earth, atmospheric, and ocean sciences	10,062	10,110	10,181	10,086	10,679	11,067	11,256	10,992
Atmospheric sciences	854	791	842	811	915	1,016	958	999
Geosciences	5,048	5,095	5,128	5,080	5,234	5,404	5,504	5,392
Oceanography	2,006	2,081	2,131	2,017	2,104	2,209	2,252	2,165
Earth/atmospheric/ocean sciences, nec	2,154	2,143	2,080	2,178	2,426	2,438	2,542	2,436
Mathematical sciences	11,292	11,368	11,357	12,015	13,118	13,969	14,334	14,596
Mathematics/applied mathematics	9,271	9,263	9,138	9,589	10,452	11,022	11,378	11,453
Statistics	2,021	2,105	2,219	2,426	2,666	2,947	2,956	3,143
Physical sciences	26,035	26,264	26,111	26,822	28,225	30,043	31,243	31,886
Astronomy	787	808	823	860	946	1,023	1,078	1,129
Chemistry	15,516	15,684	15,369	15,818	16,564	17,408	18,004	18,406
Physics	9,579	9,579	9,719	9,924	10,459	11,335	11,925	12,105
Physical sciences, nec	153	193	200	220	256	277	236	246
Psychology	29,996	29,587	29,506	29,184	29,335	30,357	32,121	32,971
Clinical psychology	9,045	9,192	9,126	9,050	8,790	8,954	9,358	9,699
Psychology, general	9,991	9,474	9,440	9,193	8,875	9,383	9,348	9,802
Psychology, nec	10,960	10,921	10,940	10,941	11,670	12,020	13,415	13,470
Social sciences	50,582	50,267	49,531	50,959	54,085	56,938	58,034	59,285
Agricultural economics	1,670	1,685	1,777	1,865	1,972	2,042	1,887	1,813
Anthropology (cultural/social)	5,563	5,631	5,473	5,470	5,625	5,776	5,669	5,685
Economics (except agricultural)	8,337	8,136	8,318	8,928	9,362	9,609	9,646	9,373
Geography	2,699	2,609	2,497	2,738	2,712	2,942	2,952	2,967
History and philosophy of science	385	412	373	372	364	378	426	479
Linguistics	2,196	2,107	2,037	2,088	2,134	2,257	2,259	2,403
Political science	15,102	15,060	14,904	15,114	16,968	18,220	19,304	20,178
Sociology	6,060	5,959	5,870	5,903	6,113	6,296	6,099	6,285
Sociology/anthropology	593	507	515	560	549	548	584	591
Social sciences, nec	7,977	8,161	7,767	7,921	8,286	8,870	9,208	9,511

TABLE 40. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	63,910	66,502	70,649	75,679	83,238	87,535	84,611	82,155
Aerospace engineering	2,544	2,623	2,740	2,799	2,970	3,206	3,190	3,150
Agricultural engineering	796	797	741	790	796	900	842	855
Biomedical engineering	2,435	2,678	2,806	3,124	3,831	4,691	5,015	5,232
Chemical engineering	5,595	5,572	5,837	5,790	6,226	6,373	6,346	6,110
Civil engineering	10,813	10,931	11,526	11,845	12,718	13,443	13,348	12,880
Electrical engineering	19,009	19,923	22,189	24,442	27,262	27,680	25,783	24,996
Engineering science	1,111	1,027	1,086	1,207	1,424	1,751	1,712	1,589
Industrial engineering	4,748	5,362	5,927	6,369	6,995	6,879	6,352	5,822
Mechanical engineering	9,957	10,226	10,645	11,292	12,347	13,119	12,478	11,984
Metallurgical/materials engineering	3,694	3,534	3,578	3,960	4,227	4,375	4,338	4,491
Mining engineering	217	252	182	185	198	208	229	200
Nuclear engineering	662	641	660	651	655	752	809	840
Petroleum engineering	478	523	513	535	644	682	658	629
Engineering, nec	1,851	2,413	2,219	2,690	2,945	3,476	3,511	3,377
Health fields	42,769	44,898	44,537	45,032	47,641	51,950	55,425	57,857
Medical fields	10,640	11,259	10,781	11,415	12,751	14,115	14,447	14,630
Anesthesiology	591	575	561	588	556	715	841	842
Cardiology	36	62	53	50	42	30	39	33
Endocrinology	58	66	55	51	59	56	57	52
Gastroenterology	6	7	14	7	7	11	13	3
Hematology	1	3	6	6	8	25	24	9
Neurology	1,773	1,853	1,922	2,072	2,456	2,573	2,561	2,684
Obstetrics/gynecology	10	9	13	18	18	20	13	16
Oncology/cancer research	206	245	225	246	229	232	270	329
Ophthalmology	21	31	41	33	166	393	406	380
Otorhinolaryngology	0	3	8	4	8	9	6	6
Pediatrics	260	276	351	316	363	349	327	225
Preventive medicine/community health	6,496	6,849	6,190	6,423	6,958	7,509	7,579	7,394
Psychiatry	40	50	85	123	127	67	184	117
Pulmonary disease	0	6	7	8	4	10	7	27
Radiology	160	168	151	167	178	208	171	169
Surgery	109	113	128	97	65	67	59	70
Clinical medicine, nec	873	943	971	1,206	1,507	1,841	1,890	2,274
Other health	32,129	33,639	33,756	33,617	34,890	37,835	40,978	43,227
Dental sciences	1,284	1,226	1,301	1,322	1,317	1,514	1,791	1,529
Nursing	7,600	8,261	7,802	7,852	8,695	9,295	9,912	10,783
Pharmaceutical sciences	2,253	2,598	2,774	2,760	2,546	3,515	3,633	4,254
Speech pathology/audiology	7,787	8,128	8,212	7,952	7,993	8,292	8,658	9,028
Veterinary sciences	1,048	1,052	1,154	1,244	1,418	1,391	1,364	1,532
Health related, nec	12,157	12,374	12,513	12,487	12,921	13,828	15,620	16,101

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 41. U.S. citizen or permanent resident full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	218,284	218,174	212,938	215,365	227,994	243,728	252,506	257,885
Science and engineering	179,440	177,533	172,826	175,267	186,068	197,621	202,891	205,981
Science	147,077	146,161	142,556	144,320	152,089	160,037	165,255	168,298
Agricultural sciences	6,526	6,751	6,842	6,750	6,898	7,178	7,076	6,788
Biological sciences	34,921	35,276	34,652	35,346	37,336	38,871	39,569	40,625
Anatomy	584	561	580	506	636	639	632	671
Biochemistry	3,456	3,393	3,160	3,102	3,254	3,449	3,358	3,409
Biology	7,138	7,102	6,922	6,922	7,237	7,764	8,040	8,067
Biometry/epidemiology	1,962	1,988	1,867	1,974	2,059	2,179	2,212	2,412
Biophysics	545	530	519	580	609	658	753	751
Botany	1,234	1,208	1,162	1,170	1,219	1,172	1,088	1,034
Cell biology	3,198	3,423	3,425	3,429	3,732	3,865	3,835	4,123
Ecology	1,058	1,074	1,064	1,191	1,207	1,236	1,273	1,362
Entomology/parasitology	734	693	714	742	745	753	761	673
Genetics	1,227	1,266	1,237	1,273	1,368	1,432	1,459	1,477
Microbiology/immunology/virology	3,466	3,571	3,605	3,527	3,735	3,849	3,875	3,876
Nutrition	2,117	2,140	2,071	2,128	2,205	2,164	2,173	2,231
Pathology	1,061	1,081	1,006	1,067	1,050	1,001	1,050	1,041
Pharmacology	2,000	2,027	2,016	2,126	2,170	2,185	2,198	2,083
Physiology	1,573	1,443	1,432	1,396	1,482	1,558	1,616	1,621
Zoology	1,168	1,155	1,070	1,047	974	931	897	905
Biosciences, nec	2,400	2,621	2,802	3,166	3,654	4,036	4,349	4,889
Computer sciences	8,208	8,791	8,375	9,100	10,869	11,804	11,924	11,582
Earth, atmospheric, and ocean sciences	7,908	7,926	7,805	7,648	8,178	8,589	8,730	8,535
Atmospheric sciences	622	534	559	545	623	749	710	739
Geosciences	3,939	3,994	3,950	3,859	3,980	4,097	4,183	4,112
Oceanography	1,524	1,620	1,643	1,541	1,653	1,747	1,775	1,704
Earth/atmospheric/ocean sciences, nec	1,823	1,778	1,653	1,703	1,922	1,996	2,062	1,980
Mathematical sciences	6,716	6,256	6,046	6,287	6,937	7,392	7,793	8,010
Mathematics/applied mathematics	5,595	5,275	5,075	5,335	5,885	6,256	6,626	6,760
Statistics	1,121	981	971	952	1,052	1,136	1,167	1,250
Physical sciences	16,228	16,018	15,318	15,444	15,934	16,942	17,822	18,337
Astronomy	581	574	564	589	651	706	717	773
Chemistry	10,053	10,117	9,690	9,717	9,799	10,214	10,668	10,926
Physics	5,486	5,199	4,937	5,007	5,313	5,821	6,253	6,454
Physical sciences, nec	108	128	127	131	171	201	184	184
Psychology	28,360	27,974	27,777	27,306	27,327	28,075	29,935	30,654
Clinical psychology	8,755	8,892	8,821	8,716	8,402	8,548	9,038	9,327
Psychology, general	9,436	8,907	8,763	8,461	8,131	8,505	8,472	8,872
Psychology, nec	10,169	10,175	10,193	10,129	10,794	11,022	12,425	12,455
Social sciences	38,210	37,169	35,741	36,439	38,610	41,186	42,406	43,767
Agricultural economics	884	878	874	917	999	1,024	985	930
Anthropology (cultural/social)	4,933	4,936	4,786	4,816	4,908	5,052	4,923	4,937
Economics (except agricultural)	3,800	3,360	3,243	3,350	3,492	3,703	3,807	3,704
Geography	2,213	2,121	1,963	2,131	2,102	2,307	2,310	2,340
History and philosophy of science	326	357	307	306	299	314	362	402
Linguistics	1,357	1,278	1,190	1,223	1,296	1,393	1,371	1,588
Political science	12,270	11,878	11,550	11,670	13,151	14,217	15,302	16,169
Sociology	5,138	4,970	4,810	4,844	4,977	5,123	4,983	5,164
Sociology/anthropology	506	444	448	489	489	487	511	508
Social sciences, nec	6,783	6,947	6,570	6,693	6,897	7,566	7,852	8,025

TABLE 41. U.S. citizen or permanent resident full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	32,363	31,372	30,270	30,947	33,979	37,584	37,636	37,683
Aerospace engineering	1,257	1,270	1,353	1,277	1,421	1,663	1,672	1,689
Agricultural engineering	426	419	399	418	416	451	430	392
Biomedical engineering	1,793	1,894	1,946	2,084	2,414	2,938	3,160	3,363
Chemical engineering	3,037	2,812	2,779	2,608	2,847	2,910	2,987	2,918
Civil engineering	6,590	6,259	6,171	6,142	6,545	7,110	7,303	7,298
Electrical engineering	7,794	7,264	6,913	7,418	8,090	8,860	8,339	8,377
Engineering science	626	561	513	555	683	877	822	806
Industrial engineering	2,155	2,350	2,238	2,060	2,447	2,609	2,426	2,386
Mechanical engineering	5,146	4,950	4,559	4,746	5,105	5,739	5,721	5,628
Metallurgical/materials engineering	1,860	1,684	1,624	1,759	1,866	1,950	1,983	2,057
Mining engineering	161	162	87	93	107	110	128	104
Nuclear engineering	389	343	348	314	340	412	470	515
Petroleum engineering	59	75	184	195	235	92	118	103
Engineering, nec	1,070	1,329	1,156	1,278	1,463	1,863	2,077	2,047
Health fields	38,844	40,641	40,112	40,098	41,926	46,107	49,615	51,904
Medical fields	9,374	9,819	9,459	9,695	10,526	11,923	12,333	12,582
Anesthesiology	583	574	559	587	554	702	833	835
Cardiology	23	45	39	34	24	15	23	16
Endocrinology	41	49	42	33	41	32	38	45
Gastroenterology	6	7	13	6	6	9	13	3
Hematology	1	3	2	6	6	18	23	8
Neurology	1,535	1,592	1,607	1,715	2,034	2,087	2,041	2,125
Obstetrics/gynecology	10	8	12	18	16	15	9	10
Oncology/cancer research	175	196	185	199	189	199	225	253
Ophthalmology	6	15	25	24	124	375	383	367
Otorhinolaryngology	0	1	8	4	8	9	6	6
Pediatrics	237	253	319	279	312	308	285	169
Preventive medicine/community health	5,674	5,917	5,435	5,347	5,537	6,224	6,386	6,342
Psychiatry	39	47	83	122	123	58	171	103
Pulmonary disease	0	6	7	8	3	5	7	21
Radiology	132	139	124	134	128	146	114	123
Surgery	104	106	119	90	63	63	52	68
Clinical medicine, nec	808	861	880	1,089	1,358	1,658	1,724	2,088
Other health	29,470	30,822	30,653	30,403	31,400	34,184	37,282	39,322
Dental sciences	967	954	965	1,028	999	1,230	1,496	1,276
Nursing	7,301	7,922	7,478	7,550	8,359	8,936	9,532	10,420
Pharmaceutical sciences	1,208	1,550	1,581	1,522	1,233	2,084	2,285	2,842
Speech pathology/audiology	7,509	7,830	7,905	7,620	7,661	7,959	8,328	8,661
Veterinary sciences	789	767	847	918	1,081	1,042	1,023	1,151
Health related, nec	11,696	11,799	11,877	11,765	12,067	12,933	14,618	14,972

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 42. Full-time graduate students with temporary visas in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	88,810	95,736	106,878	117,238	127,399	128,485	125,275	123,287
Science and engineering	84,885	91,479	102,453	112,304	121,684	122,642	119,465	117,334
Science	53,338	56,349	62,074	67,572	72,425	72,691	72,490	72,862
Agricultural sciences	2,256	2,172	2,072	2,187	2,278	2,319	2,383	2,350
Biological sciences	10,282	10,096	10,722	11,326	12,690	13,646	14,494	15,120
Anatomy	149	147	172	169	184	190	170	173
Biochemistry	1,398	1,385	1,539	1,515	1,676	1,839	1,921	2,007
Biology	1,712	1,626	1,703	1,795	2,052	2,194	2,407	2,624
Biometry/epidemiology	604	654	695	762	953	1,029	1,006	1,005
Biophysics	162	151	200	257	287	310	362	369
Botany	565	549	538	546	570	558	565	632
Cell biology	829	822	963	1,071	1,201	1,324	1,521	1,596
Ecology	134	156	160	173	189	219	222	206
Entomology/parasitology	266	278	265	247	256	271	285	270
Genetics	369	367	360	413	402	495	539	533
Microbiology/immunology/virology	904	900	892	968	1,160	1,122	1,195	1,182
Nutrition	910	882	928	995	1,015	1,027	986	990
Pathology	278	283	287	283	290	318	300	317
Pharmacology	562	552	611	620	653	741	776	822
Physiology	417	433	424	415	435	501	478	445
Zoology	160	132	164	182	199	162	173	186
Biosciences, nec	863	779	821	915	1,168	1,346	1,588	1,763
Computer sciences	10,255	11,828	15,281	18,117	19,001	16,536	15,311	14,965
Earth, atmospheric, and ocean sciences	2,154	2,184	2,376	2,438	2,501	2,478	2,526	2,457
Atmospheric sciences	232	257	283	266	292	267	248	260
Geosciences	1,109	1,101	1,178	1,221	1,254	1,307	1,321	1,280
Oceanography	482	461	488	476	451	462	477	461
Earth/atmospheric/ocean sciences, nec	331	365	427	475	504	442	480	456
Mathematical sciences	4,576	5,112	5,311	5,728	6,181	6,577	6,541	6,586
Mathematics/applied mathematics	3,676	3,988	4,063	4,254	4,567	4,766	4,752	4,693
Statistics	900	1,124	1,248	1,474	1,614	1,811	1,789	1,893
Physical sciences	9,807	10,246	10,793	11,378	12,291	13,101	13,421	13,549
Astronomy	206	234	259	271	295	317	361	356
Chemistry	5,463	5,567	5,679	6,101	6,765	7,194	7,336	7,480
Physics	4,093	4,380	4,782	4,917	5,146	5,514	5,672	5,651
Physical sciences, nec	45	65	73	89	85	76	52	62
Psychology	1,636	1,613	1,729	1,878	2,008	2,282	2,186	2,317
Clinical psychology	290	300	305	334	388	406	320	372
Psychology, general	555	567	677	732	744	878	876	930
Psychology, nec	791	746	747	812	876	998	990	1,015
Social sciences	12,372	13,098	13,790	14,520	15,475	15,752	15,628	15,518
Agricultural economics	786	807	903	948	973	1,018	902	883
Anthropology (cultural/social)	630	695	687	654	717	724	746	748
Economics (except agricultural)	4,537	4,776	5,075	5,578	5,870	5,906	5,839	5,669
Geography	486	488	534	607	610	635	642	627
History and philosophy of science	59	55	66	66	65	64	64	77
Linguistics	839	829	847	865	838	864	888	815
Political science	2,832	3,182	3,354	3,444	3,817	4,003	4,002	4,009
Sociology	922	989	1,060	1,059	1,136	1,173	1,116	1,121
Sociology/anthropology	87	63	67	71	60	61	73	83
Social sciences, nec	1,194	1,214	1,197	1,228	1,389	1,304	1,356	1,486

TABLE 42. Full-time graduate students with temporary visas in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	31,547	35,130	40,379	44,732	49,259	49,951	46,975	44,472
Aerospace engineering	1,287	1,353	1,387	1,522	1,549	1,543	1,518	1,461
Agricultural engineering	370	378	342	372	380	449	412	463
Biomedical engineering	642	784	860	1,040	1,417	1,753	1,855	1,869
Chemical engineering	2,558	2,760	3,058	3,182	3,379	3,463	3,359	3,192
Civil engineering	4,223	4,672	5,355	5,703	6,173	6,333	6,045	5,582
Electrical engineering	11,215	12,659	15,276	17,024	19,172	18,820	17,444	16,619
Engineering science	485	466	573	652	741	874	890	783
Industrial engineering	2,593	3,012	3,689	4,309	4,548	4,270	3,926	3,436
Mechanical engineering	4,811	5,276	6,086	6,546	7,242	7,380	6,757	6,356
Metallurgical/materials engineering	1,834	1,850	1,954	2,201	2,361	2,425	2,355	2,434
Mining engineering	56	90	95	92	91	98	101	96
Nuclear engineering	273	298	312	337	315	340	339	325
Petroleum engineering	419	448	329	340	409	590	540	526
Engineering, nec	781	1,084	1,063	1,412	1,482	1,613	1,434	1,330
Health fields	3,925	4,257	4,425	4,934	5,715	5,843	5,810	5,953
Medical fields	1,266	1,440	1,322	1,720	2,225	2,192	2,114	2,048
Anesthesiology	8	1	2	1	2	13	8	7
Cardiology	13	17	14	16	18	15	16	17
Endocrinology	17	17	13	18	18	24	19	7
Gastroenterology	0	0	1	1	1	2	0	0
Hematology	0	0	4	0	2	7	1	1
Neurology	238	261	315	357	422	486	520	559
Obstetrics/gynecology	0	1	1	0	2	5	4	6
Oncology/cancer research	31	49	40	47	40	33	45	76
Ophthalmology	15	16	16	9	42	18	23	13
Otorhinolaryngology	0	2	0	0	0	0	0	0
Pediatrics	23	23	32	37	51	41	42	56
Preventive medicine/community health	822	932	755	1,076	1,421	1,285	1,193	1,052
Psychiatry	1	3	2	1	4	9	13	14
Pulmonary disease	0	0	0	0	1	5	0	6
Radiology	28	29	27	33	50	62	57	46
Surgery	5	7	9	7	2	4	7	2
Clinical medicine, nec	65	82	91	117	149	183	166	186
Other health	2,659	2,817	3,103	3,214	3,490	3,651	3,696	3,905
Dental sciences	317	272	336	294	318	284	295	253
Nursing	299	339	324	302	336	359	380	363
Pharmaceutical sciences	1,045	1,048	1,193	1,238	1,313	1,431	1,348	1,412
Speech pathology/audiology	278	298	307	332	332	333	330	367
Veterinary sciences	259	285	307	326	337	349	341	381
Health related, nec	461	575	636	722	854	895	1,002	1,129

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
All sources	307,094	313,910	319,816	332,603	355,393	372,213	377,781	381,172
Federal	63,041	65,054	66,762	68,069	74,393	80,853	82,604	82,448
DOD	8,212	7,972	8,095	7,915	7,934	9,170	8,967	8,931
DOE <sup>a</sup>	NA	2,747	2,995	3,112	3,543	4,019	4,129	4,385
HHS	22,394	23,132	23,167	24,052	26,630	28,910	30,606	30,443
NIH	18,112	18,927	19,403	19,827	22,071	24,238	26,611	26,740
Other HHS	4,282	4,205	3,764	4,225	4,559	4,672	3,995	3,703
NASA	2,613	2,522	2,738	2,794	3,053	3,188	2,900	2,672
NSF	13,415	13,801	14,565	15,368	17,063	19,213	19,851	20,291
USDA	2,479	2,630	2,628	2,732	3,096	3,465	3,551	3,358
Other <sup>a</sup>	13,928	12,250	12,574	12,096	13,074	12,888	12,600	12,368
Institutional	124,346	128,380	128,260	135,367	142,502	146,203	148,868	150,404
Other nonfederal	26,059	25,670	27,435	27,796	28,503	28,787	26,844	26,916
Domestic	21,829	21,771	23,624	24,109	25,201	25,745	24,060	24,384
Foreign	4,230	3,899	3,811	3,687	3,302	3,042	2,784	2,532
Self-support	93,648	94,806	97,359	101,371	109,995	116,370	119,465	121,404
Science and engineering	264,325	269,012	275,279	287,571	307,752	320,263	322,356	323,315
Federal	55,428	56,933	58,830	59,789	65,674	71,826	73,429	73,774
DOD	7,920	7,621	7,695	7,671	7,652	8,878	8,639	8,584
DOE <sup>a</sup>	NA	2,717	2,980	3,101	3,535	4,006	4,113	4,369
HHS	16,659	17,167	17,621	18,036	20,121	22,170	23,644	23,811
NIH	15,249	15,931	16,272	16,524	18,532	20,372	22,313	22,649
Other HHS	1,410	1,236	1,349	1,512	1,589	1,798	1,331	1,162
NASA	2,587	2,507	2,720	2,772	3,037	3,175	2,875	2,652
NSF	13,295	13,678	14,442	15,239	16,935	19,065	19,682	20,083
USDA	2,420	2,569	2,566	2,682	3,022	3,387	3,467	3,271
Other <sup>a</sup>	12,547	10,674	10,806	10,288	11,372	11,145	11,009	11,004
Institutional	115,053	118,324	118,238	125,257	131,827	135,028	136,757	137,457
Other nonfederal	23,955	23,528	25,044	25,331	25,869	26,122	24,206	24,133
Domestic	20,155	20,050	21,589	22,017	22,883	23,404	21,666	21,792
Foreign	3,800	3,478	3,455	3,314	2,986	2,718	2,540	2,341
Self-support	69,889	70,227	73,167	77,194	84,382	87,287	87,964	87,951
Science	200,415	202,510	204,630	211,892	224,514	232,728	237,745	241,160
Federal	39,938	41,075	42,139	42,752	46,882	50,459	52,240	52,592
DOD	3,610	3,284	3,224	3,291	3,258	3,396	3,340	3,275
DOE <sup>a</sup>	NA	1,730	1,772	1,813	2,011	2,291	2,357	2,455
HHS	15,759	16,206	16,487	16,749	18,657	20,223	21,511	21,557
NIH	14,495	15,087	15,274	15,391	17,251	18,736	20,406	20,581
Other HHS	1,264	1,119	1,213	1,358	1,406	1,487	1,105	976
NASA	1,348	1,380	1,451	1,423	1,551	1,552	1,451	1,382
NSF	8,588	8,740	9,234	9,814	11,007	12,383	12,935	13,245
USDA	2,223	2,329	2,349	2,423	2,686	2,968	3,059	2,938
Other <sup>a</sup>	8,410	7,406	7,622	7,239	7,712	7,646	7,587	7,740
Institutional	91,964	93,387	92,466	97,800	101,843	104,250	106,209	108,186
Other nonfederal	14,251	14,079	14,574	14,388	14,666	15,020	14,426	14,423
Domestic	11,652	11,707	12,192	12,138	12,646	13,221	12,770	12,926
Foreign	2,599	2,372	2,382	2,250	2,020	1,799	1,656	1,497
Self-support	54,262	53,969	55,451	56,952	61,123	62,999	64,870	65,959
Agricultural sciences	8,782	8,923	8,914	8,937	9,176	9,497	9,459	9,138
Federal	1,716	1,936	1,937	1,968	2,147	2,490	2,496	2,319
DOD	47	28	42	47	34	33	24	24
DOE <sup>a</sup>	NA	41	45	29	55	58	49	53
HHS	32	29	57	51	87	89	90	84
NIH	16	17	37	40	64	60	67	74
Other HHS	16	12	20	11	23	29	23	10

TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
NASA	36	55	65	63	74	90	52	49
NSF	94	114	113	138	124	211	202	211
USDA	987	1,077	1,043	1,064	1,155	1,333	1,369	1,277
Other <sup>a</sup>	520	592	572	576	618	676	710	621
Institutional	3,718	3,726	3,737	3,917	3,970	3,832	3,893	3,861
Other nonfederal	1,627	1,619	1,695	1,559	1,526	1,560	1,568	1,450
Domestic	1,329	1,362	1,463	1,374	1,404	1,390	1,440	1,346
Foreign	298	257	232	185	122	170	128	104
Self-support	1,721	1,642	1,545	1,493	1,533	1,615	1,502	1,508
Biological sciences	45,203	45,372	45,374	46,672	50,026	52,517	54,063	55,745
Federal	16,068	16,366	16,585	16,612	18,504	20,083	21,605	22,000
DOD	343	328	317	355	380	349	430	346
DOE <sup>a</sup>	NA	155	171	166	180	193	224	252
HHS	11,874	12,224	12,240	12,280	13,630	14,855	16,094	16,097
NIH	11,258	11,731	11,665	11,617	12,910	14,130	15,579	15,578
Other HHS	616	493	575	663	720	725	515	519
NASA	102	100	97	76	114	98	105	94
NSF	1,532	1,491	1,594	1,601	1,806	2,127	2,248	2,327
USDA	750	801	780	816	990	1,032	1,071	1,087
Other <sup>a</sup>	1,467	1,267	1,386	1,318	1,404	1,429	1,433	1,797
Institutional	19,374	19,631	19,464	20,474	21,088	21,629	21,675	22,603
Other nonfederal	3,707	3,270	3,356	3,573	3,814	3,956	3,763	3,927
Domestic	3,184	2,812	2,933	3,208	3,507	3,669	3,519	3,669
Foreign	523	458	423	365	307	287	244	258
Self-support	6,054	6,105	5,969	6,013	6,620	6,849	7,020	7,215
Computer sciences	18,463	20,619	23,656	27,217	29,870	28,340	27,235	26,547
Federal	3,272	3,321	3,611	4,183	4,908	5,278	5,100	5,324
DOD	1,299	1,201	1,203	1,277	1,300	1,378	1,182	1,403
DOE <sup>a</sup>	NA	109	111	120	138	159	155	156
HHS	110	107	120	172	239	300	294	327
NIH	75	64	82	101	185	228	261	289
Other HHS	35	43	38	71	54	72	33	38
NASA	124	111	142	165	196	217	141	95
NSF	1,164	1,302	1,492	1,855	2,332	2,706	2,739	2,810
USDA	10	20	16	25	41	39	37	21
Other <sup>a</sup>	565	471	527	569	662	479	552	512
Institutional	5,859	6,609	7,226	8,377	8,991	8,725	8,571	8,524
Other nonfederal	1,293	1,514	1,858	1,817	1,890	1,917	1,698	1,632
Domestic	1,128	1,380	1,593	1,582	1,668	1,727	1,519	1,453
Foreign	165	134	265	235	222	190	179	179
Self-support	8,039	9,175	10,961	12,840	14,081	12,420	11,866	11,067
Earth, atmospheric, and ocean sciences	10,062	10,110	10,181	10,086	10,679	11,067	11,256	10,992
Federal	2,933	2,940	2,955	2,890	3,004	3,275	3,309	3,277
DOD	336	335	279	257	200	254	128	153
DOE <sup>a</sup>	NA	123	144	137	167	154	170	166
HHS	38	37	57	60	47	68	42	29
NIH	21	17	40	37	32	52	25	17
Other HHS	17	20	17	23	15	16	17	12
NASA	388	406	453	456	470	419	456	457
NSF	1,115	1,123	1,130	1,120	1,191	1,363	1,497	1,493
USDA	74	53	49	65	74	85	92	73
Other <sup>a</sup>	982	863	843	795	855	932	924	906

TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Institutional	4,244	4,552	4,432	4,475	4,692	4,901	5,041	4,838
Other nonfederal	850	840	902	902	1,082	871	864	941
Domestic	686	680	757	717	888	755	792	845
Foreign	164	160	145	185	194	116	72	96
Self-support	2,035	1,778	1,892	1,819	1,901	2,020	2,042	1,936
Mathematical sciences	11,292	11,368	11,357	12,015	13,118	13,969	14,334	14,596
Federal	1,039	1,100	1,354	1,374	1,599	1,666	1,689	1,717
DOD	283	227	239	211	164	228	163	184
DOE <sup>a</sup>	NA	44	40	40	42	53	64	69
HHS	100	105	92	108	164	154	174	165
NIH	68	78	76	89	133	119	154	155
Other HHS	32	27	16	19	31	35	20	10
NASA	11	14	23	23	20	22	24	24
NSF	384	441	633	758	942	969	1,017	1,010
USDA	7	7	7	20	14	9	33	35
Other <sup>a</sup>	254	262	320	214	253	231	214	230
Institutional	8,063	8,058	7,993	8,428	8,898	9,430	9,707	9,831
Other nonfederal	441	424	430	410	521	472	371	437
Domestic	302	298	301	290	407	377	295	354
Foreign	139	126	129	120	114	95	76	83
Self-support	1,749	1,786	1,580	1,803	2,100	2,401	2,567	2,611
Physical sciences	26,035	26,264	26,111	26,822	28,225	30,043	31,243	31,886
Federal	9,091	9,187	9,167	9,264	9,919	10,599	11,144	11,149
DOD	994	880	864	855	860	885	1,146	892
DOE <sup>a</sup>	NA	1,180	1,170	1,260	1,368	1,607	1,613	1,695
HHS	1,878	1,827	1,961	2,113	2,346	2,446	2,531	2,615
NIH	1,629	1,652	1,769	1,858	2,114	2,179	2,356	2,461
Other HHS	249	175	192	255	232	267	175	154
NASA	582	544	518	495	537	569	556	574
NSF	3,315	3,276	3,282	3,322	3,583	3,860	4,072	4,131
USDA	40	33	51	42	51	65	41	39
Other <sup>a</sup>	2,282	1,447	1,321	1,177	1,174	1,167	1,185	1,203
Institutional	13,881	13,933	13,617	14,287	14,800	15,865	16,462	16,903
Other nonfederal	1,848	1,914	1,908	1,955	2,025	2,083	2,117	2,174
Domestic	1,659	1,742	1,740	1,828	1,904	1,956	2,019	2,081
Foreign	189	172	168	127	121	127	98	93
Self-support	1,215	1,230	1,419	1,316	1,481	1,496	1,520	1,660
Psychology	29,996	29,587	29,506	29,184	29,335	30,357	32,121	32,971
Federal	2,852	3,157	3,198	3,168	3,368	3,471	3,426	3,484
DOD	121	116	133	135	165	145	135	143
DOE <sup>a</sup>	NA	41	25	1	9	10	27	30
HHS	1,423	1,535	1,580	1,593	1,735	1,839	1,849	1,845
NIH	1,212	1,264	1,310	1,372	1,497	1,596	1,647	1,703
Other HHS	211	271	270	221	238	243	202	142
NASA	14	15	17	21	31	21	27	7
NSF	275	301	274	281	297	327	366	393
USDA	8	13	16	13	4	17	20	18
Other <sup>a</sup>	1,011	1,136	1,153	1,124	1,127	1,112	1,002	1,048
Institutional	12,163	12,114	11,378	11,762	11,947	12,082	12,375	12,485
Other nonfederal	1,315	1,368	1,313	1,191	1,112	1,243	1,331	1,359
Domestic	1,263	1,313	1,263	1,138	1,069	1,173	1,286	1,329
Foreign	52	55	50	53	43	70	45	30
Self-support	13,666	12,948	13,617	13,063	12,908	13,561	14,989	15,643

TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Social sciences	50,582	50,267	49,531	50,959	54,085	56,938	58,034	59,285
Federal	2,967	3,068	3,332	3,293	3,433	3,597	3,471	3,322
DOD	187	169	147	154	155	124	132	130
DOE <sup>a</sup>	NA	37	66	60	52	57	55	34
HHS	304	342	380	372	409	472	437	395
NIH	216	264	295	277	316	372	317	304
Other HHS	88	78	85	95	93	100	120	91
NASA	91	135	136	124	109	116	90	82
NSF	709	692	716	739	732	820	794	870
USDA	347	325	387	378	357	388	396	388
Other <sup>a</sup>	1,329	1,368	1,500	1,466	1,619	1,620	1,567	1,423
Institutional	24,662	24,764	24,619	26,080	27,457	27,786	28,485	29,141
Other nonfederal	3,170	3,130	3,112	2,981	2,696	2,918	2,714	2,503
Domestic	2,101	2,120	2,142	2,001	1,799	2,174	1,900	1,849
Foreign	1,069	1,010	970	980	897	744	814	654
Self-support	19,783	19,305	18,468	18,605	20,499	22,637	23,364	24,319
Engineering	63,910	66,502	70,649	75,679	83,238	87,535	84,611	82,155
Federal	15,490	15,858	16,691	17,037	18,792	21,367	21,189	21,182
DOD	4,310	4,337	4,471	4,380	4,394	5,482	5,299	5,309
DOE <sup>a</sup>	NA	987	1,208	1,288	1,524	1,715	1,756	1,914
HHS	900	961	1,134	1,287	1,464	1,947	2,133	2,254
NIH	754	844	998	1,133	1,281	1,636	1,907	2,068
Other HHS	146	117	136	154	183	311	226	186
NASA	1,239	1,127	1,269	1,349	1,486	1,623	1,424	1,270
NSF	4,707	4,938	5,208	5,425	5,928	6,682	6,747	6,838
USDA	197	240	217	259	336	419	408	333
Other <sup>a</sup>	4,137	3,268	3,184	3,049	3,660	3,499	3,422	3,264
Institutional	23,089	24,937	25,772	27,457	29,984	30,778	30,548	29,271
Other nonfederal	9,704	9,449	10,470	10,943	11,203	11,102	9,780	9,710
Domestic	8,503	8,343	9,397	9,879	10,237	10,183	8,896	8,866
Foreign	1,201	1,106	1,073	1,064	966	919	884	844
Self-support	15,627	16,258	17,716	20,242	23,259	24,288	23,094	21,992
Chemical engineering	5,595	5,572	5,837	5,790	6,226	6,373	6,346	6,110
Federal	1,700	1,666	1,670	1,690	1,957	2,055	2,146	2,097
DOD	160	161	113	140	181	265	218	204
DOE <sup>a</sup>	NA	220	242	257	310	327	352	365
HHS	141	149	155	179	219	245	298	274
NIH	111	127	128	136	185	210	262	236
Other HHS	30	22	27	43	34	35	36	38
NASA	97	101	102	108	119	103	95	90
NSF	756	742	768	720	816	841	873	851
USDA	39	37	35	34	44	35	46	46
Other <sup>a</sup>	507	256	255	252	268	239	264	267
Institutional	2,105	2,282	2,284	2,219	2,424	2,530	2,463	2,338
Other nonfederal	946	970	1,080	1,094	1,093	994	957	906
Domestic	834	896	976	983	1,010	931	902	864
Foreign	112	74	104	111	83	63	55	42
Self-support	844	654	803	787	752	794	780	769
Civil engineering	10,813	10,931	11,526	11,845	12,718	13,443	13,348	12,880
Federal	1,661	1,655	1,926	1,932	2,085	2,168	2,150	1,997
DOD	187	150	157	175	179	148	169	180
DOE <sup>a</sup>	NA	50	84	82	84	94	90	92
HHS	46	44	51	27	36	57	59	60
NIH	35	39	40	26	29	41	33	32
Other HHS	11	5	11	1	7	16	26	28

TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
NASA	60	56	74	78	89	87	59	68
NSF	544	538	596	586	645	700	702	652
USDA	28	35	36	38	50	69	73	64
Other <sup>a</sup>	796	782	928	946	1,002	1,013	998	881
Institutional	4,549	4,827	4,908	4,944	5,350	5,520	5,672	5,285
Other nonfederal	1,124	1,112	1,353	1,474	1,353	1,479	1,239	1,165
Domestic	910	924	1,189	1,298	1,238	1,376	1,107	1,054
Foreign	214	188	164	176	115	103	132	111
Self-support	3,479	3,337	3,339	3,495	3,930	4,276	4,287	4,433
Electrical engineering	19,009	19,923	22,189	24,442	27,262	27,680	25,783	24,996
Federal	4,307	4,599	5,048	4,959	5,690	6,159	5,964	6,021
DOD	1,803	1,847	2,079	1,976	1,942	2,233	1,966	1,929
DOE <sup>a</sup>	NA	71	93	138	193	189	211	236
HHS	102	104	187	148	179	356	351	360
NIH	79	87	145	109	145	246	291	314
Other HHS	23	17	42	39	34	110	60	46
NASA	243	269	283	328	380	368	333	242
NSF	1,298	1,472	1,586	1,640	1,939	2,233	2,336	2,488
USDA	12	10	12	13	21	57	54	23
Other <sup>a</sup>	849	826	808	716	1,036	723	713	743
Institutional	6,486	7,081	7,303	7,916	8,538	8,790	8,438	8,221
Other nonfederal	3,117	2,814	3,222	3,403	3,536	3,296	2,776	3,038
Domestic	2,842	2,542	2,983	3,155	3,302	3,066	2,612	2,784
Foreign	275	272	239	248	234	230	164	254
Self-support	5,099	5,429	6,616	8,164	9,498	9,435	8,605	7,716
Industrial engineering	4,748	5,362	5,927	6,369	6,995	6,879	6,352	5,822
Federal	584	706	805	797	818	976	957	934
DOD	179	250	235	240	239	251	299	336
DOE <sup>a</sup>	NA	12	31	46	42	58	45	46
HHS	31	33	34	40	58	73	66	68
NIH	25	20	21	29	31	36	43	56
Other HHS	6	13	13	11	27	37	23	12
NASA	32	27	26	29	29	54	42	48
NSF	175	218	258	272	273	378	328	285
USDA	4	2	7	8	6	11	12	9
Other <sup>a</sup>	163	164	214	162	171	151	165	142
Institutional	1,708	1,913	2,107	2,393	2,553	2,312	2,284	2,084
Other nonfederal	546	574	680	725	747	693	592	553
Domestic	448	485	573	605	638	615	512	495
Foreign	98	89	107	120	109	78	80	58
Self-support	1,910	2,169	2,335	2,454	2,877	2,898	2,519	2,251
Mechanical engineering	9,957	10,226	10,645	11,292	12,347	13,119	12,478	11,984
Federal	2,606	2,589	2,655	2,775	2,974	3,401	3,157	3,109
DOD	728	711	652	689	618	876	730	700
DOE <sup>a</sup>	NA	207	239	214	312	351	360	342
HHS	104	112	112	159	158	161	179	186
NIH	71	87	105	147	143	130	154	159
Other HHS	33	25	7	12	15	31	25	27
NASA	289	242	292	280	316	342	282	258
NSF	908	882	914	1,001	1,034	1,101	1,036	1,053
USDA	5	21	7	11	10	20	22	19
Other <sup>a</sup>	572	414	439	421	526	550	548	551

TABLE 43. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 1998–2005

Field and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
Institutional	3,792	4,006	4,189	4,440	4,928	4,983	4,918	4,614
Other nonfederal	1,604	1,593	1,737	1,674	1,720	1,725	1,474	1,383
Domestic	1,461	1,427	1,542	1,528	1,598	1,595	1,322	1,255
Foreign	143	166	195	146	122	130	152	128
Self-support	1,955	2,038	2,064	2,403	2,725	3,010	2,929	2,878
Other engineering	13,788	14,488	14,525	15,941	17,690	20,041	20,304	20,363
Federal	4,632	4,643	4,587	4,884	5,268	6,608	6,815	7,024
DOD	1,253	1,218	1,235	1,160	1,235	1,709	1,917	1,960
DOE <sup>a</sup>	NA	427	519	551	583	696	698	833
HHS	476	519	595	734	814	1,055	1,180	1,306
NIH	433	484	559	686	748	973	1,124	1,271
Other HHS	43	35	36	48	66	82	56	35
NASA	518	432	492	526	553	669	613	564
NSF	1,026	1,086	1,086	1,206	1,221	1,429	1,472	1,509
USDA	109	135	120	155	205	227	201	172
Other <sup>a</sup>	1,250	826	540	552	657	823	734	680
Institutional	4,449	4,828	4,981	5,545	6,191	6,643	6,773	6,729
Other nonfederal	2,367	2,386	2,398	2,573	2,754	2,915	2,742	2,665
Domestic	2,008	2,069	2,134	2,310	2,451	2,600	2,441	2,414
Foreign	359	317	264	263	303	315	301	251
Self-support	2,340	2,631	2,559	2,939	3,477	3,875	3,974	3,945
Health fields	42,769	44,898	44,537	45,032	47,641	51,950	55,425	57,857
Federal	7,613	8,121	7,932	8,280	8,719	9,027	9,175	8,674
DOD	292	351	400	244	282	292	328	347
DOE <sup>a</sup>	NA	30	15	11	8	13	16	16
HHS	5,735	5,965	5,546	6,016	6,509	6,740	6,962	6,632
NIH	2,863	2,996	3,131	3,303	3,539	3,866	4,298	4,091
Other HHS	2,872	2,969	2,415	2,713	2,970	2,874	2,664	2,541
NASA	26	15	18	22	16	13	25	20
NSF	120	123	123	129	128	148	169	208
USDA	59	61	62	50	74	78	84	87
Other <sup>a</sup>	1,381	1,576	1,768	1,808	1,702	1,743	1,591	1,364
Institutional	9,293	10,056	10,022	10,110	10,675	11,175	12,111	12,947
Other nonfederal	2,104	2,142	2,391	2,465	2,634	2,665	2,638	2,783
Domestic	1,674	1,721	2,035	2,092	2,318	2,341	2,394	2,592
Foreign	430	421	356	373	316	324	244	191
Self-support	23,759	24,579	24,192	24,177	25,613	29,083	31,501	33,453

NA = not available.

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 = U.S. Department of Agriculture.

<sup>a</sup> Data for DOE were not collected separately until 1999. Students supported by DOE before 1999 were included under other federal support.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 44. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by sex, primary source of support, and field: 2005

Sex and primary source of support	All surveyed fields	Science									Engineering								Health fields	
		Total	Agricultural sciences	Biological sciences	Computer sciences	Earth/atmospheric/ocean sciences	Mathematical sciences	Physical sciences	Psychology	Social sciences	Total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical/materials engineering		Other
Female, all sources	178,373	116,668	4,389	30,875	6,129	5,067	4,885	10,117	24,378	30,828	18,797	445	1,768	4,007	4,519	1,513	1,699	1,180	3,666	42,908
Federal	33,764	23,416	1,024	11,883	1,023	1,458	573	3,385	2,379	1,691	4,614	145	606	634	1,031	199	434	417	1,148	5,734
DOD	1,636	746	9	182	183	60	33	178	66	35	749	37	40	37	273	55	92	76	139	141
DOE	1,076	696	19	130	33	69	28	390	21	6	368	4	95	33	34	9	35	77	81	12
HHS	16,617	11,539	45	8,741	75	20	80	1,045	1,275	258	711	3	90	21	75	15	33	12	462	4,367
NIH	14,054	11,002	39	8,463	66	13	72	977	1,171	201	664	3	80	14	65	13	26	11	452	2,388
Other HHS	2,563	537	6	278	9	7	8	68	104	57	47	0	10	7	10	2	7	1	10	1,979
NASA	783	506	13	42	18	203	9	183	3	35	260	58	23	26	50	11	35	21	36	17
NSF	6,629	4,834	109	1,237	599	662	322	1,235	230	440	1,690	35	262	229	478	76	177	187	246	105
USDA	1,556	1,409	547	612	3	31	16	13	14	173	100	0	18	17	3	2	1	3	56	47
Other	5,467	3,686	282	939	112	413	85	341	770	744	736	8	78	271	118	31	61	41	128	1,045
Institutional	67,782	51,551	1,980	12,647	1,967	2,277	3,229	5,533	8,924	14,994	7,067	151	708	1,701	1,541	596	678	434	1,258	9,164
Other nonfederal	10,160	6,181	644	1,962	323	395	149	664	960	1,084	2,045	49	249	284	488	143	185	200	447	1,934
Domestic	9,412	5,725	608	1,849	283	361	128	647	948	901	1,879	43	238	256	443	133	174	180	412	1,808
Foreign	748	456	36	113	40	34	21	17	12	183	166	6	11	28	45	10	11	20	35	126
Self-support	66,667	35,520	741	4,383	2,816	937	934	535	12,115	13,059	5,071	100	205	1,388	1,459	575	402	129	813	26,076

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 = U.S. Department of Agriculture.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.



TABLE 45. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	307,094	313,910	319,816	332,603	355,393	372,213	377,781	381,172
Fellowships	28,674	29,722	30,913	31,787	34,303	33,902	34,688	36,099
Research assistantships	86,301	89,343	92,540	98,209	106,314	112,313	112,699	112,260
Teaching assistantships	63,617	64,622	64,687	66,652	69,019	71,148	71,185	72,371
Traineeships	14,518	14,250	13,660	13,518	14,451	14,722	14,314	14,151
Other support	113,984	115,973	118,016	122,437	131,306	140,128	144,895	146,291
Science and engineering	264,325	269,012	275,279	287,571	307,752	320,263	322,356	323,315
Fellowships	26,235	27,065	28,072	29,283	31,622	31,329	31,895	33,306
Research assistantships	81,452	84,199	86,947	92,182	99,959	105,628	105,682	105,047
Teaching assistantships	60,569	61,647	61,708	63,466	65,644	67,676	67,476	68,513
Traineeships	9,757	9,431	9,438	9,011	9,673	10,043	9,732	9,768
Other support	86,312	86,670	89,114	93,629	100,854	105,587	107,571	106,681
Science	200,415	202,510	204,630	211,892	224,514	232,728	237,745	241,160
Fellowships	20,704	21,002	21,738	22,869	24,633	24,106	24,726	26,073
Research assistantships	54,178	55,639	56,330	60,112	64,949	68,442	69,986	70,429
Teaching assistantships	50,555	51,061	50,820	51,693	53,237	55,341	55,479	56,752
Traineeships	8,881	8,664	8,706	8,293	8,729	9,006	8,791	8,751
Other support	66,097	66,144	67,036	68,925	72,966	75,833	78,763	79,155
Agricultural sciences	8,782	8,923	8,914	8,937	9,176	9,497	9,459	9,138
Fellowships	481	469	443	511	503	554	599	656
Research assistantships	5,019	5,139	5,210	5,358	5,529	5,741	5,746	5,449
Teaching assistantships	1,040	1,159	1,196	1,158	1,134	1,131	1,151	1,142
Traineeships	98	75	69	70	70	50	68	20
Other support	2,144	2,081	1,996	1,840	1,940	2,021	1,895	1,871
Biological sciences	45,203	45,372	45,374	46,672	50,026	52,517	54,063	55,745
Fellowships	5,588	5,778	5,726	6,101	6,390	6,437	6,662	7,135
Research assistantships	17,872	18,051	18,345	19,137	20,893	22,470	23,642	24,319
Teaching assistantships	8,638	8,259	8,201	8,246	8,512	8,670	8,430	8,682
Traineeships	5,202	5,281	5,171	4,935	5,319	5,620	5,523	5,604
Other support	7,903	8,003	7,931	8,253	8,912	9,320	9,806	10,005
Computer sciences	18,463	20,619	23,656	27,217	29,870	28,340	27,235	26,547
Fellowships	983	976	1,133	1,050	1,387	1,326	1,378	1,449
Research assistantships	4,198	4,754	5,121	6,248	6,997	7,332	7,068	7,051
Teaching assistantships	3,695	4,217	4,363	4,923	5,157	4,800	4,612	4,500
Traineeships	219	207	251	240	279	315	285	230
Other support	9,368	10,465	12,788	14,756	16,050	14,567	13,892	13,317
Earth, atmospheric, and ocean sciences	10,062	10,110	10,181	10,086	10,679	11,067	11,256	10,992
Fellowships	921	925	1,045	1,065	1,118	1,164	1,222	1,355
Research assistantships	4,004	4,157	4,167	4,095	4,445	4,532	4,713	4,655
Teaching assistantships	2,461	2,501	2,416	2,456	2,571	2,690	2,588	2,556
Traineeships	113	107	98	90	89	111	119	111
Other support	2,563	2,420	2,455	2,380	2,456	2,570	2,614	2,315
Mathematical sciences	11,292	11,368	11,357	12,015	13,118	13,969	14,334	14,596
Fellowships	1,093	1,022	1,283	1,387	1,420	1,374	1,333	1,414
Research assistantships	1,157	1,230	1,213	1,399	1,706	1,761	1,869	1,847
Teaching assistantships	6,417	6,616	6,660	6,843	7,268	7,730	7,865	8,001
Traineeships	154	109	118	105	121	123	105	95
Other support	2,471	2,391	2,083	2,281	2,603	2,981	3,162	3,239

TABLE 45. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
Physical sciences	26,035	26,264	26,111	26,822	28,225	30,043	31,243	31,886
Fellowships	2,094	2,187	2,238	2,358	2,645	2,505	2,707	2,760
Research assistantships	10,975	11,189	11,011	11,765	12,594	13,449	13,609	13,916
Teaching assistantships	10,754	10,730	10,532	10,434	10,597	11,654	12,096	12,436
Traineeships	482	383	464	436	421	364	366	420
Other support	1,730	1,775	1,866	1,829	1,968	2,071	2,465	2,354
Psychology	29,996	29,587	29,506	29,184	29,335	30,357	32,121	32,971
Fellowships	2,264	2,374	2,299	2,210	2,211	2,199	2,311	2,444
Research assistantships	4,307	4,306	4,302	4,594	4,956	5,168	5,523	5,349
Teaching assistantships	5,701	5,762	5,546	5,402	5,561	5,794	5,633	5,965
Traineeships	1,072	987	1,196	1,248	1,188	1,140	876	1,036
Other support	16,652	16,158	16,163	15,730	15,419	16,056	17,778	18,177
Social sciences	50,582	50,267	49,531	50,959	54,085	56,938	58,034	59,285
Fellowships	7,280	7,271	7,571	8,187	8,959	8,547	8,514	8,860
Research assistantships	6,646	6,813	6,961	7,516	7,829	7,989	7,816	7,843
Teaching assistantships	11,849	11,817	11,906	12,231	12,437	12,872	13,104	13,470
Traineeships	1,541	1,515	1,339	1,169	1,242	1,283	1,449	1,235
Other support	23,266	22,851	21,754	21,856	23,618	26,247	27,151	27,877
Engineering	63,910	66,502	70,649	75,679	83,238	87,535	84,611	82,155
Fellowships	5,531	6,063	6,334	6,414	6,989	7,223	7,169	7,233
Research assistantships	27,274	28,560	30,617	32,070	35,010	37,186	35,696	34,618
Teaching assistantships	10,014	10,586	10,888	11,773	12,407	12,335	11,997	11,761
Traineeships	876	767	732	718	944	1,037	941	1,017
Other support	20,215	20,526	22,078	24,704	27,888	29,754	28,808	27,526
Chemical engineering	5,595	5,572	5,837	5,790	6,226	6,373	6,346	6,110
Fellowships	716	836	794	758	832	834	689	648
Research assistantships	2,900	2,944	3,076	3,143	3,460	3,600	3,749	3,593
Teaching assistantships	892	954	936	846	883	850	786	757
Traineeships	97	65	85	53	71	73	102	123
Other support	990	773	946	990	980	1,016	1,020	989
Civil engineering	10,813	10,931	11,526	11,845	12,718	13,443	13,348	12,880
Fellowships	819	865	924	1,006	1,074	1,105	1,092	1,094
Research assistantships	3,844	4,073	4,623	4,512	4,752	5,022	4,858	4,440
Teaching assistantships	1,747	1,768	1,846	1,866	1,939	1,992	2,082	1,984
Traineeships	189	196	117	156	210	196	152	159
Other support	4,214	4,029	4,016	4,305	4,743	5,128	5,164	5,203
Electrical engineering	19,009	19,923	22,189	24,442	27,262	27,680	25,783	24,996
Fellowships	1,313	1,361	1,349	1,292	1,485	1,520	1,504	1,558
Research assistantships	7,664	8,365	9,182	9,557	10,617	10,760	10,136	10,176
Teaching assistantships	3,320	3,356	3,602	4,017	4,275	4,193	3,881	3,822
Traineeships	133	76	89	61	105	115	112	140
Other support	6,579	6,765	7,967	9,515	10,780	11,092	10,150	9,300
Industrial engineering	4,748	5,362	5,927	6,369	6,995	6,879	6,352	5,822
Fellowships	251	257	325	421	441	437	436	432
Research assistantships	1,367	1,458	1,646	1,738	1,882	1,820	1,661	1,466
Teaching assistantships	772	891	946	1,044	1,002	945	923	899
Traineeships	24	21	18	35	48	39	46	51
Other support	2,334	2,735	2,992	3,131	3,622	3,638	3,286	2,974

TABLE 45. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 1998–2005

Field and primary mechanism of support	1998	1999	2000	2001	2002	2003	2004	2005
Mechanical engineering	9,957	10,226	10,645	11,292	12,347	13,119	12,478	11,984
Fellowships	894	873	1,019	948	1,008	988	914	921
Research assistantships	4,481	4,629	4,844	5,074	5,459	6,015	5,686	5,308
Teaching assistantships	1,769	1,935	1,940	2,163	2,336	2,273	2,178	2,188
Traineeships	180	142	103	115	116	114	98	104
Other support	2,633	2,647	2,739	2,992	3,428	3,729	3,602	3,463
Other engineering	13,788	14,488	14,525	15,941	17,690	20,041	20,304	20,363
Fellowships	1,538	1,871	1,923	1,989	2,149	2,339	2,534	2,580
Research assistantships	7,018	7,091	7,246	8,046	8,840	9,969	9,606	9,635
Teaching assistantships	1,514	1,682	1,618	1,837	1,972	2,082	2,147	2,111
Traineeships	253	267	320	298	394	500	431	440
Other support	3,465	3,577	3,418	3,771	4,335	5,151	5,586	5,597
Health fields	42,769	44,898	44,537	45,032	47,641	51,950	55,425	57,857
Fellowships	2,439	2,657	2,841	2,504	2,681	2,573	2,793	2,793
Research assistantships	4,849	5,144	5,593	6,027	6,355	6,685	7,017	7,213
Teaching assistantships	3,048	2,975	2,979	3,186	3,375	3,472	3,709	3,858
Traineeships	4,761	4,819	4,222	4,507	4,778	4,679	4,582	4,383
Other support	27,672	29,303	28,902	28,808	30,452	34,541	37,324	39,610

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 46. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and primary mechanism of support: 2005

Field	Total	Fellowships	Research assistantships	Teaching assistantships	Traineeships	Other types of support
All surveyed fields	381,172	36,099	112,260	72,371	14,151	146,291
Science and engineering	323,315	33,306	105,047	68,513	9,768	106,681
Science	241,160	26,073	70,429	56,752	8,751	79,155
Agricultural sciences	9,138	656	5,449	1,142	20	1,871
Biological sciences	55,745	7,135	24,319	8,682	5,604	10,005
Anatomy	844	120	340	84	70	230
Biochemistry	5,416	718	3,020	555	538	585
Biology	10,691	1,335	3,342	3,800	426	1,788
Biometry/epidemiology	3,417	421	912	142	549	1,393
Biophysics	1,120	183	508	77	202	150
Botany	1,666	125	968	414	18	141
Cell biology	5,719	751	2,891	539	987	551
Ecology	1,568	337	485	475	39	232
Entomology/parasitology	943	64	579	168	12	120
Genetics	2,010	316	1,084	104	224	282
Microbiology/immunology/virology	5,058	653	2,524	451	778	652
Nutrition	3,221	162	1,312	429	90	1,228
Pathology	1,358	176	661	33	144	344
Pharmacology	2,905	446	1,428	150	501	380
Physiology	2,066	251	735	135	249	696
Zoology	1,091	137	374	516	11	53
Biosciences, nec	6,652	940	3,156	610	766	1,180
Computer sciences	26,547	1,449	7,051	4,500	230	13,317
Earth, atmospheric, and ocean sciences	10,992	1,355	4,655	2,556	111	2,315
Atmospheric sciences	999	50	666	138	14	131
Geosciences	5,392	702	2,004	1,817	21	848
Oceanography	2,165	264	1,231	268	21	381
Earth/atmospheric/ocean sciences, nec	2,436	339	754	333	55	955
Mathematical sciences	14,596	1,414	1,847	8,001	95	3,239
Mathematics/applied mathematics	11,453	1,165	1,193	6,656	68	2,371
Statistics	3,143	249	654	1,345	27	868
Physical sciences	31,886	2,760	13,916	12,436	420	2,354
Astronomy	1,129	222	613	226	7	61
Chemistry	18,406	1,487	7,764	7,697	319	1,139
Physics	12,105	1,021	5,501	4,494	92	997
Physical sciences, nec	246	30	38	19	2	157
Psychology	32,971	2,444	5,349	5,965	1,036	18,177
Clinical psychology	9,699	616	1,157	877	245	6,804
Psychology, general	9,802	1,040	2,064	2,975	405	3,318
Psychology, nec	13,470	788	2,128	2,113	386	8,055
Social sciences	59,285	8,860	7,843	13,470	1,235	27,877
Agricultural economics	1,813	110	1,004	171	3	525
Anthropology (cultural/social)	5,685	1,400	537	1,642	59	2,047
Economics (except agricultural)	9,373	1,459	1,103	3,241	143	3,427
Geography	2,967	267	647	1,036	16	1,001
History and philosophy of science	479	171	27	158	0	123
Linguistics	2,403	421	207	773	6	996
Political science	20,178	3,202	1,797	2,935	699	11,545
Sociology	6,285	948	964	2,263	212	1,898
Sociology/anthropology	591	40	82	230	0	239
Social sciences, nec	9,511	842	1,475	1,021	97	6,076

TABLE 46. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and primary mechanism of support: 2005

Field	Total	Fellowships	Research assistantships	Teaching assistantships	Traineeships	Other types of support
Engineering	82,155	7,233	34,618	11,761	1,017	27,526
Aerospace engineering	3,150	260	1,366	441	35	1,048
Agricultural engineering	855	59	578	69	2	147
Biomedical engineering	5,232	778	2,231	458	336	1,429
Chemical engineering	6,110	648	3,593	757	123	989
Civil engineering	12,880	1,094	4,440	1,984	159	5,203
Electrical engineering	24,996	1,558	10,176	3,822	140	9,300
Engineering science	1,589	306	808	173	20	282
Industrial engineering	5,822	432	1,466	899	51	2,974
Mechanical engineering	11,984	921	5,308	2,188	104	3,463
Metallurgical/materials engineering	4,491	652	2,764	408	23	644
Mining engineering	200	13	94	19	0	74
Nuclear engineering	840	122	447	62	7	202
Petroleum engineering	629	81	302	63	3	180
Engineering, nec	3,377	309	1,045	418	14	1,591
Health fields	57,857	2,793	7,213	3,858	4,383	39,610
Medical fields	14,630	1,202	2,805	513	1,674	8,436
Anesthesiology	842	5	0	0	225	612
Cardiology	33	0	27	0	6	0
Endocrinology	52	4	23	1	4	20
Gastroenterology	3	0	1	0	2	0
Hematology	9	6	3	0	0	0
Neurology	2,684	551	1,153	173	558	249
Obstetrics/gynecology	16	6	4	4	1	1
Oncology/cancer research	329	48	167	4	59	51
Ophthalmology	380	10	10	38	118	204
Otorhinolaryngology	6	0	0	0	0	6
Pediatrics	225	36	75	1	16	97
Preventive medicine/community health	7,394	324	983	264	388	5,435
Psychiatry	117	18	21	0	26	52
Pulmonary disease	27	13	3	0	10	1
Radiology	169	13	79	12	7	58
Surgery	70	20	10	0	18	22
Clinical medicine, nec	2,274	148	246	16	236	1,628
Other health	43,227	1,591	4,408	3,345	2,709	31,174
Dental sciences	1,529	50	90	227	29	1,133
Nursing	10,783	415	484	503	1,766	7,615
Pharmaceutical sciences	4,254	223	1,257	846	68	1,860
Speech pathology/audiology	9,028	256	757	766	397	6,852
Veterinary sciences	1,532	81	672	93	22	664
Health related, nec	16,101	566	1,148	910	427	13,050

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 47. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by primary mechanism and primary source of support: 1998–2005

Primary mechanism and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
All sources	264,325	269,012	275,279	287,571	307,752	320,263	322,356	323,315
Federal	55,428	56,933	58,830	59,789	65,674	71,826	73,429	73,774
DOD	7,920	7,621	7,695	7,671	7,652	8,878	8,639	8,584
DOE <sup>a</sup>	NA	2,717	2,980	3,101	3,535	4,006	4,113	4,369
HHS	16,659	17,167	17,621	18,036	20,121	22,170	23,644	23,811
NIH	15,249	15,931	16,272	16,524	18,532	20,372	22,313	22,649
Other HHS	1,410	1,236	1,349	1,512	1,589	1,798	1,331	1,162
NASA	2,587	2,507	2,720	2,772	3,037	3,175	2,875	2,652
NSF	13,295	13,678	14,442	15,239	16,935	19,065	19,682	20,083
USDA	2,420	2,569	2,566	2,682	3,022	3,387	3,467	3,271
Other <sup>a</sup>	12,547	10,674	10,806	10,288	11,372	11,145	11,009	11,004
Institutional	115,053	118,324	118,238	125,257	131,827	135,028	136,757	137,457
Other nonfederal	23,955	23,528	25,044	25,331	25,869	26,122	24,206	24,133
Domestic	20,155	20,050	21,589	22,017	22,883	23,404	21,666	21,792
Foreign	3,800	3,478	3,455	3,314	2,986	2,718	2,540	2,341
Self-support	69,889	70,227	73,167	77,194	84,382	87,287	87,964	87,951
Fellowships	26,235	27,065	28,072	29,283	31,622	31,329	31,895	33,306
Federal	6,307	6,552	6,586	6,549	7,069	6,912	7,217	7,544
DOD	536	485	540	472	446	436	412	363
DOE <sup>a</sup>	NA	99	156	120	118	151	129	149
HHS	1,281	1,342	1,146	1,312	1,489	1,361	1,542	1,459
NIH	1,053	1,172	989	1,141	1,292	1,190	1,417	1,369
Other HHS	228	170	157	171	197	171	125	90
NASA	380	358	336	316	317	264	260	278
NSF	2,335	2,410	2,538	2,591	2,816	3,118	3,282	3,453
USDA	136	141	120	126	87	91	81	72
Other <sup>a</sup>	1,639	1,717	1,750	1,612	1,796	1,491	1,511	1,770
Institutional	14,967	15,771	16,723	17,996	19,815	19,709	20,326	21,654
Other nonfederal	4,961	4,742	4,763	4,738	4,738	4,708	4,352	4,108
Domestic	3,232	3,230	3,404	3,336	3,549	3,699	3,408	3,131
Foreign	1,729	1,512	1,359	1,402	1,189	1,009	944	977
Self-support	na	na	na	na	na	na	na	na
Research assistantships	81,452	84,199	86,947	92,182	99,959	105,628	105,682	105,047
Federal	39,753	40,758	42,269	43,679	48,848	54,092	55,123	54,858
DOD	5,766	5,637	5,719	5,782	6,130	6,815	6,217	6,019
DOE <sup>a</sup>	NA	2,532	2,717	2,888	3,317	3,757	3,846	4,069
HHS	10,542	10,746	11,305	11,730	13,305	15,070	16,344	16,431
NIH	9,608	9,999	10,447	10,692	12,201	13,705	15,356	15,624
Other HHS	934	747	858	1,038	1,104	1,365	988	807
NASA	2,092	2,053	2,276	2,324	2,594	2,778	2,515	2,233
NSF	10,343	10,689	11,287	11,996	13,422	15,153	15,543	15,696
USDA	2,183	2,286	2,312	2,462	2,808	3,112	3,232	3,054
Other <sup>a</sup>	8,827	6,815	6,653	6,497	7,272	7,407	7,426	7,356
Institutional	28,491	30,105	30,198	32,959	35,029	35,298	35,373	34,878
Other nonfederal	13,208	13,336	14,480	15,544	16,082	16,238	15,186	15,311
Domestic	12,580	12,741	13,850	14,915	15,364	15,602	14,602	14,754
Foreign	628	595	630	629	718	636	584	557
Self-support	na	na	na	na	na	na	na	na
Teaching assistantships	60,569	61,647	61,708	63,466	65,644	67,676	67,476	68,513
Federal	951	850	1,242	947	1,076	1,325	1,303	1,465
DOD	na	na	na	na	na	na	na	na
DOE <sup>a</sup>	NA	16	34	27	41	48	58	78

TABLE 47. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by primary mechanism and primary source of support: 1998–2005

Primary mechanism and primary source of support	1998	1999	2000	2001	2002	2003	2004	2005
HHS	232	203	277	244	250	324	268	311
NIH	221	196	261	213	203	283	245	273
Other HHS	11	7	16	31	47	41	23	38
NASA	23	9	11	34	26	33	30	50
NSF	130	121	133	186	207	283	282	373
USDA	36	60	68	46	46	80	63	59
Other <sup>a</sup>	530	441	719	410	506	557	602	594
Institutional	59,031	60,132	59,526	61,594	63,494	65,345	65,212	66,068
Other nonfederal	587	665	940	925	1,074	1,006	961	980
Domestic	587	665	940	925	1,074	1,006	961	980
Foreign	na	na	na	na	na	na	na	na
Self-support	na	na	na	na	na	na	na	na
Traineeships	9,757	9,431	9,438	9,011	9,673	10,043	9,732	9,768
Federal	5,409	5,404	5,683	5,413	5,735	5,901	5,829	5,944
DOD	64	51	57	36	46	39	45	63
DOE <sup>a</sup>	NA	22	10	2	9	5	25	35
HHS	4,225	4,360	4,410	4,220	4,513	4,794	4,820	4,919
NIH	4,047	4,160	4,136	3,988	4,311	4,654	4,687	4,774
Other HHS	178	200	274	232	202	140	133	145
NASA	57	51	46	50	52	56	48	56
NSF	408	344	324	336	318	328	398	373
USDA	14	25	18	16	13	14	16	23
Other <sup>a</sup>	641	551	818	753	784	665	477	475
Institutional	3,672	3,400	3,248	3,183	3,545	3,589	3,397	3,234
Other nonfederal	676	627	507	415	393	553	506	590
Domestic	532	527	362	304	334	465	404	528
Foreign	144	100	145	111	59	88	102	62
Self-support	na	na	na	na	na	na	na	na
Other types of support	86,312	86,670	89,114	93,629	100,854	105,587	107,571	106,681
Federal	3,008	3,369	3,050	3,201	2,946	3,596	3,957	3,963
DOD	1,554	1,448	1,379	1,381	1,030	1,588	1,965	2,139
DOE <sup>a</sup>	NA	48	63	64	50	45	55	38
HHS	379	516	483	530	564	621	670	691
NIH	320	404	439	490	525	540	608	609
Other HHS	59	112	44	40	39	81	62	82
NASA	35	36	51	48	48	44	22	35
NSF	79	114	160	130	172	183	177	188
USDA	51	57	48	32	68	90	75	63
Other <sup>a</sup>	910	1,150	866	1,016	1,014	1,025	993	809
Institutional	8,892	8,916	8,543	9,525	9,944	11,087	12,449	11,623
Other nonfederal	4,523	4,158	4,354	3,709	3,582	3,617	3,201	3,144
Domestic	3,224	2,887	3,033	2,537	2,562	2,632	2,291	2,399
Foreign	1,299	1,271	1,321	1,172	1,020	985	910	745
Self-support	69,889	70,227	73,167	77,194	84,382	87,287	87,964	87,951

na = not applicable.

NA = not available.

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 = U.S. Department of Agriculture.

<sup>a</sup> Data for DOE were not collected separately until 1999. Students supported by DOE before 1999 were included under other federal support.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
-	All institutions	435,949	443,185	443,632	459,227	487,314	510,410	518,516	527,767
1	U. FL	4,186	4,788	5,082	5,319	5,991	6,653	6,740	6,918
2	U. Southern CA	5,116	5,351	5,315	5,252	6,009	6,385	6,542	6,870
3	U. MN all campuses	5,281	5,413	5,327	6,057	6,533	6,911	7,343	6,817
4	George Washington U.	4,220	4,377	4,271	4,618	4,790	5,133	6,157	6,265
5	Walden U.	695	812	873	941	1,069	959	2,498	6,211
6	U. MI all campuses	5,295	5,500	5,579	5,701	6,226	6,468	6,396	6,109
7	MA Institute of Technology	4,419	4,595	4,679	4,791	5,901	5,963	5,988	5,918
8	U. CA, Berkeley	4,824	4,866	4,885	5,010	5,243	5,727	5,785	5,781
9	TX A&M U. all campuses	4,588	4,498	4,942	5,060	5,327	5,835	5,650	5,728
10	U. WA	4,510	4,611	4,782	4,883	5,113	5,598	5,442	5,593
11	U. CA, Los Angeles	4,534	4,738	4,699	4,830	5,661	5,808	5,130	5,427
12	Stanford U.	4,603	4,842	4,735	4,928	4,856	4,898	5,356	5,392
13	U. CO all campuses	4,970	4,943	5,233	5,394	5,620	6,183	6,157	5,371
14	U. IL Urbana-Champaign	4,518	4,589	4,510	4,725	5,061	5,317	5,516	5,352
15	GA Institute of Technology all campuses	3,572	3,695	4,059	4,531	5,022	5,384	5,295	5,294
16	U. WI Madison	4,832	4,961	4,928	5,013	5,191	5,432	5,377	5,259
17	OH State U. all campuses	4,587	4,563	4,661	4,650	4,752	5,071	5,058	5,112
18	U. MD College Park	3,955	3,914	4,189	4,131	4,639	4,780	4,850	4,870
19	Boston U.	3,598	3,549	3,601	3,545	3,773	4,108	4,517	4,841
20	Harvard U.	3,605	3,691	3,856	4,301	4,157	4,343	4,570	4,738
21	PA State U. all campuses	4,068	4,077	4,024	4,329	4,725	4,814	4,816	4,664
22	Purdue U. all campuses	3,824	3,868	3,859	4,019	4,241	4,337	4,395	4,661
23	U. IL Chicago	3,211	3,407	3,585	3,709	3,992	3,846	4,774	4,402
24	U. TX Austin	4,121	4,011	4,063	4,169	4,292	4,410	4,308	4,340
25	NC State U.	3,484	3,541	3,624	3,827	3,929	3,961	4,130	4,202
26	VA Polytechnic Institute and State U.	3,275	3,250	3,619	3,868	4,032	4,184	4,150	4,100
27	Cornell U. all campuses	3,434	3,528	3,495	3,750	3,869	4,057	4,040	4,096
28	Columbia U. in the City of NY	2,419	2,333	2,278	2,062	2,197	2,429	3,634	3,995
29	IN U. all campuses	3,292	3,274	3,135	3,187	3,315	3,460	3,595	3,948
30	U. Pittsburgh all campuses	3,449	3,469	3,397	3,400	3,624	3,941	3,820	3,877
31	Johns Hopkins U., The	2,615	2,610	2,645	2,639	2,990	3,250	3,518	3,771
32	AZ State U. main campus	3,375	3,346	3,427	3,649	3,786	3,685	3,629	3,735
33	U. Cincinnati all campuses	2,616	2,592	2,460	2,472	2,569	2,645	2,659	3,622
34	U. CA, Davis	2,545	2,622	2,768	2,923	3,169	3,451	3,519	3,572
35	U. NC Chapel Hill	3,236	3,213	3,214	3,121	3,337	3,435	3,378	3,551
36	Rutgers, The State U. NJ all campuses	3,958	4,174	4,096	3,887	3,886	3,780	3,696	3,529
37	U. MA	3,352	3,357	2,947	2,948	3,386	3,416	3,448	3,513
38	Nova Southeastern U.	2,563	2,608	2,552	2,428	2,558	2,745	3,246	3,335
39	SUNY Buffalo all campuses	2,940	3,095	3,026	2,963	3,225	3,521	3,454	3,326
40	U. AZ	3,202	3,251	3,042	3,115	3,350	3,366	3,310	3,289
41	U. KS all campuses	3,114	3,144	3,166	3,195	3,277	3,391	3,263	3,268
42	U. South FL	2,848	2,960	2,991	3,084	3,103	3,207	2,895	3,240
43	Drexel U.	2,550	2,373	2,331	2,166	2,423	2,651	2,883	3,233
44	George Mason U.	3,145	3,107	3,169	3,171	3,395	3,456	3,120	3,166
45	NY U.	2,983	3,010	2,825	2,988	2,911	3,058	3,084	3,139
46	DePaul U.	2,080	2,249	2,862	3,075	3,338	2,996	3,227	3,058
47	U. Central FL	1,933	2,157	2,196	2,334	2,595	2,944	3,023	3,035
48	SUNY Stony Brook all campuses	2,548	2,592	2,565	2,680	2,961	3,201	3,124	3,021
49	U. TN	2,612	2,489	2,244	2,452	2,637	2,809	2,963	3,021
50	MI State U.	3,107	3,045	2,916	2,929	3,116	3,073	2,990	2,987



TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
51	U. KY all campuses	2,016	2,246	1,972	2,319	2,751	2,697	2,515	2,973
52	U. UT	2,077	2,110	2,265	2,410	2,473	2,633	2,973	2,968
53	U. CT all campuses	2,361	2,463	2,255	2,381	2,462	2,735	2,949	2,932
54	U. CA, San Diego	1,895	1,928	2,003	2,340	2,628	2,829	2,829	2,822
55	U. TX Arlington	1,648	1,834	2,133	2,322	2,962	3,219	3,159	2,782
56	Carnegie Mellon U.	1,922	2,000	2,100	2,329	2,364	2,496	2,739	2,712
57	Long Island U. all campuses	1,835	2,174	2,157	2,156	2,192	2,252	2,275	2,656
58	Wayne State U.	2,800	2,992	3,362	3,201	3,291	3,037	2,536	2,640
59	CO State U.	1,930	1,965	2,023	2,428	2,649	2,818	2,640	2,639
60	U. OK all campuses	2,108	2,114	1,972	2,398	2,625	2,644	2,591	2,604
61	IA State U.	2,501	2,557	2,655	2,662	2,835	2,936	2,911	2,574
62	Temple U.	1,500	1,490	2,123	2,013	3,199	3,227	2,602	2,546
63	San Diego State U.	1,880	2,144	2,082	2,151	2,321	2,451	2,243	2,468
64	U. NM all campuses	1,808	2,272	2,435	2,483	2,280	2,417	2,440	2,462
65	SUNY Albany	2,228	2,241	2,173	2,107	2,147	2,502	2,371	2,431
66	U. AL Birmingham, The	2,068	2,014	2,140	2,159	2,254	2,335	2,405	2,413
67	U. WI Milwaukee	1,491	1,387	1,968	1,893	2,047	2,192	2,328	2,382
68	LA State U. Baton Rouge, Shreveport <sup>a</sup>	2,966	3,055	2,806	2,945	3,068	3,286	3,283	2,371
69	U. IA	2,133	2,090	1,998	2,085	2,091	2,227	2,317	2,337
70	U. PA	2,023	2,095	1,999	2,093	2,163	2,227	2,238	2,310
71	U. CA, Irvine	1,349	1,387	1,431	1,590	1,951	2,193	2,241	2,289
72	TX Woman's U.	1,773	1,658	1,573	1,557	1,601	1,780	1,897	2,253
73	NJ Institute of Technology	1,917	1,943	2,387	2,275	2,279	2,314	2,287	2,229
74	Northwestern U.	1,710	1,728	1,614	1,638	1,797	1,905	2,093	2,177
75	WV U.	1,945	1,987	1,861	1,838	1,984	2,177	2,108	2,116
76	U. Houston	1,953	2,051	2,032	1,915	2,077	2,059	2,044	2,101
77	FL International U.	1,441	1,537	1,586	1,780	2,066	2,081	2,035	2,097
78	U. HI Manoa	1,857	1,753	1,587	1,655	1,869	1,949	2,108	2,092
79	U. MO-Columbia	1,614	1,713	1,744	1,745	1,870	1,930	1,991	2,056
80	U. VA all campuses	1,674	1,738	1,822	1,856	1,951	2,039	2,082	2,051
81	U. GA	1,925	1,925	1,959	1,935	2,039	2,028	2,070	2,035
82	FL State U.	1,420	1,466	1,598	1,654	1,702	1,868	1,960	2,017
83	U. CA, Santa Barbara	1,538	1,570	1,625	1,741	1,893	2,049	1,972	2,006
84	CUNY Graduate Ctr.	2,090	1,810	1,624	1,682	1,746	1,920	2,035	1,972
85	Northeastern U.	2,005	1,984	1,942	1,781	1,855	1,772	1,854	1,972
86	TX Tech U.	1,609	1,504	1,444	1,589	1,887	2,053	1,985	1,950
87	U. TX Dallas	1,363	1,452	1,863	1,870	2,067	2,082	1,984	1,948
88	VA Commonwealth U.	1,981	2,235	1,863	2,024	1,946	2,020	2,074	1,944
89	OR State U.	1,496	1,630	1,655	1,688	1,783	1,846	1,860	1,942
90	Old Dominion U.	1,705	1,581	1,636	1,798	1,878	1,910	1,913	1,939
91	Yale U.	1,604	1,608	1,678	1,748	1,728	1,930	1,938	1,919
92	U. DE	1,615	1,588	1,556	1,578	1,678	1,796	1,835	1,904
93	KS State U.	1,763	1,834	1,863	1,771	1,867	1,949	1,931	1,863
94	American U.	1,857	1,857	1,822	1,793	1,982	1,912	1,869	1,838
95	Portland State U.	1,119	1,356	1,224	1,251	1,472	1,644	1,547	1,824
96	Duke U.	1,403	1,498	1,508	1,503	1,644	1,693	1,792	1,820
97	Auburn U. all campuses	1,603	1,530	1,628	1,667	1,740	1,792	1,832	1,817
98	Fairleigh Dickinson U. all campuses	871	929	1,142	1,369	1,406	1,432	1,603	1,784
99	Southern IL U. Carbondale	1,511	1,620	1,760	1,690	1,849	1,892	1,723	1,774
100	Washington U. St. Louis	1,537	1,546	1,447	1,501	1,577	1,737	1,832	1,773

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
101	Case Western Reserve U.	1,522	1,489	1,431	1,417	1,439	1,752	1,811	1,710
102	Syracuse U. all campuses	1,704	1,693	1,765	1,765	1,756	1,861	1,763	1,706
103	Clemson U.	1,592	1,627	1,577	1,616	1,677	1,718	1,763	1,698
104	GA State U.	1,206	1,278	1,237	1,313	1,401	1,583	1,581	1,652
105	U. NE Lincoln	1,690	1,658	1,600	1,486	1,620	1,696	1,686	1,639
106	CA State U. Long Beach	1,702	1,647	1,551	1,405	1,542	1,585	1,686	1,620
107	U. Chicago	1,937	2,000	1,795	1,953	1,953	1,818	1,388	1,614
108	U. PR Río Piedras Campus	1,216	1,280	1,239	1,268	1,398	1,330	1,306	1,588
109	MS State U.	1,482	1,181	1,258	1,258	1,407	1,301	1,582	1,586
110	U. Louisville	1,048	1,224	1,386	1,521	1,473	1,605	1,633	1,583
111	Brigham Young U. all campuses	1,122	1,092	1,004	1,077	1,170	1,463	1,095	1,578
112	U. AR main campus	1,195	1,227	1,282	1,443	1,236	1,414	1,571	1,578
113	CUNY John Jay C. of Criminal Justice	971	1,107	997	978	1,161	1,361	1,541	1,567
114	Northern IL U.	1,233	1,246	1,284	1,409	1,482	1,478	1,504	1,560
115	OK State U. all campuses	1,857	1,684	1,501	1,591	1,737	1,713	1,644	1,550
116	Princeton U.	1,309	1,323	1,427	1,485	1,514	1,559	1,594	1,538
117	Tufts U. <sup>b</sup>	1,148	1,133	1,237	1,251	1,365	1,375	1,493	1,525
118	Teachers C. Columbia U.	2,356	2,467	1,422	1,556	1,388	1,508	1,481	1,504
119	WA State U.	1,325	1,247	1,428	1,425	1,503	1,594	1,550	1,501
120	U. SC all campuses	1,899	1,746	1,713	1,682	1,679	1,647	1,558	1,486
121	U. Rochester	1,115	1,277	1,166	1,223	1,288	1,341	1,414	1,479
122	Stevens Institute of Technology	1,163	1,219	911	958	1,071	1,240	1,438	1,462
123	Vanderbilt U.	1,189	1,190	1,175	1,118	1,231	1,354	1,392	1,450
124	Antioch U. all campuses	1,083	1,099	1,136	1,178	1,217	1,287	1,368	1,429
125	U. MD Baltimore County	949	897	928	1,079	1,246	1,265	1,250	1,425
126	Wichita State U.	1,393	1,221	1,299	1,567	1,630	1,572	1,514	1,409
127	Wright State U. all campuses	1,079	1,046	1,080	1,146	1,302	1,369	1,375	1,384
128	Cleveland State U.	817	827	1,013	1,090	1,213	1,489	1,425	1,381
129	U. Akron all campuses	1,463	1,429	1,222	1,380	1,495	1,445	1,367	1,376
130	Western MI U.	1,655	1,551	1,352	1,678	1,691	1,701	1,583	1,367
131	U. TX Health Science Ctr. Houston	1,271	1,318	1,518	1,429	1,497	1,374	1,337	1,363
132	St. John's U. (Jamaica, NY)	749	830	764	778	753	763	826	1,362
133	U. North TX	1,400	1,947	1,771	1,677	1,676	1,545	1,349	1,358
134	NM State U. all campuses	1,048	993	1,009	1,101	1,087	1,297	1,350	1,346
135	U. Miami	1,292	1,062	1,250	1,212	1,212	1,295	1,285	1,323
136	FL Atlantic U.	916	1,028	1,032	1,109	1,242	1,311	1,284	1,315
137	U. RI	1,043	1,155	1,167	1,075	1,146	1,227	1,220	1,312
138	UT State U.	1,197	1,275	1,269	1,259	1,329	1,359	1,258	1,307
139	Southern Methodist U.	1,167	1,137	1,038	1,040	1,001	961	1,170	1,293
140	U. NC Charlotte	774	843	956	1,067	1,182	1,251	1,249	1,293
141	Kirkville C. of Osteopathic Medicine	351	352	521	371	645	788	1,094	1,290
142	New School, The	1,000	999	957	995	1,070	1,120	1,247	1,285
143	IL Institute of Technology <sup>b</sup>	1,983	2,110	2,154	2,725	2,057	1,459	1,403	1,276
144	SUNY Binghamton	1,164	1,209	1,209	1,240	1,352	1,413	1,318	1,275
145	Loma Linda U.	1,279	1,281	1,207	1,127	1,142	1,157	1,181	1,272
146	U. South AL	703	696	831	905	906	1,080	1,220	1,269
147	CA Institute of Technology	982	982	1,042	1,139	1,184	1,273	1,288	1,268
148	Alliant International U.	na	na	na	na	1,282	1,250	1,211	1,252
149	Emory U.	1,788	1,799	1,021	964	1,220	1,142	1,178	1,243
150	U. CA, Riverside	739	775	887	951	1,012	1,143	1,194	1,239

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
151	U. CA, San Francisco	964	890	632	966	1,029	1,252	1,215	1,223
152	U. ID	1,208	1,200	1,042	1,084	1,195	1,311	1,254	1,211
153	U. NV, Reno	1,072	982	1,005	1,101	1,140	1,192	1,197	1,200
154	U. MA Lowell <sup>b</sup>	1,889	1,833	1,604	1,444	1,238	1,341	1,211	1,194
155	Marquette U.	922	869	1,038	1,217	1,106	1,187	1,239	1,173
156	U. NV, Las Vegas	568	529	611	671	801	1,009	1,107	1,167
157	Oakland U.	1,070	915	963	966	1,132	1,126	1,138	1,149
158	Georgetown U.	823	812	703	755	831	896	1,099	1,146
159	U. NH	897	906	914	908	992	1,070	1,121	1,131
160	St. Louis U. all campuses	1,005	972	875	922	908	898	959	1,128
161	East Carolina U.	761	613	589	629	650	706	933	1,109
162	U. TX San Antonio	444	395	366	425	512	604	588	1,089
163	ND State U. all campuses	534	605	584	650	663	1,113	1,076	1,073
164	U. MO-Rolla	848	857	1,016	1,159	1,358	1,291	1,071	1,071
165	U. of Notre Dame	826	834	835	922	984	1,037	1,028	1,071
166	U. MO-Kansas City	744	710	789	857	964	1,036	981	1,069
167	CUNY Hunter C.	596	620	361	397	737	994	918	1,061
168	Towson U.	767	812	960	865	689	959	997	1,057
169	U. AL Huntsville, The	888	946	944	944	1,084	1,207	1,135	1,046
170	OH U. all campuses	951	958	1,023	982	1,033	1,046	965	1,042
171	Rice U.	746	730	763	848	941	962	1,009	1,041
172	U. NC Greensboro	668	749	782	727	776	799	979	1,033
173	U. WY	895	873	862	899	943	1,002	994	1,025
174	Eastern MI U.	670	645	690	718	763	891	970	1,021
175	Seton Hall U.	843	812	758	703	767	841	879	1,015
176	Brown U.	722	739	772	795	834	894	1,027	1,004
177	U. CA, Santa Cruz	734	735	750	797	879	983	983	995
178	U. TX El Paso	714	769	760	404	858	931	1,130	975
179	U. Southern MS	754	609	730	777	754	762	909	974
180	Rensselaer Polytechnic Institute	1,557	1,646	1,728	1,751	1,417	1,215	1,074	972
181	Air Force Institute of Technology	426	392	423	345	363	323	897	966
182	FL Institute of Technology	740	721	775	973	932	965	1,043	966
183	U. PR Medical Sciences Campus	516	747	976	1,006	984	1,047	911	963
184	Naval Postgraduate School	890	795	795	766	379	985	944	952
185	TX Southern U.	364	635	648	489	506	948	669	943
186	TX State U. San Marcos	775	877	780	824	877	965	974	938
187	U. Denver	866	857	893	666	919	927	901	937
188	Kent State U. all campuses	1,034	981	970	998	1,119	951	966	936
189	U. Memphis, The	907	868	913	1,184	1,156	1,291	946	932
190	Pepperdine U.	713	682	646	678	718	813	833	931
191	U. MD Baltimore	1,041	1,000	934	996	916	960	1,080	925
192	Southern U. and A&M C. all campuses	436	626	792	758	707	889	908	916
193	CUNY The City C.	802	897	812	841	862	894	900	912
194	U. AL, The	1,030	1,003	991	960	1,011	1,047	1,017	909
195	U. Toledo	987	1,046	953	972	962	908	908	898
196	U. PR Mayaguez Campus	712	687	733	757	814	885	906	888
197	U. TX Medical Branch	265	309	264	315	380	736	714	873
198	Pace U. all campuses	762	832	1,048	1,390	1,426	1,259	1,030	872
199	U. NE Omaha	483	580	677	788	838	836	830	858
200	U. MS all campuses	812	772	793	772	755	763	806	854

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
201	Polytechnic U.	1,200	1,200	778	820	798	746	737	843
202	Ball State U.	652	753	779	841	821	838	728	834
203	Villanova U.	739	638	716	755	803	849	882	830
204	Lehigh U.	987	901	682	687	742	763	803	816
205	U. ND all campuses	637	633	647	624	627	724	695	809
206	Barry U. <sup>b</sup>	ne	ne	ne	720	700	726	760	792
207	U. MT, The	593	586	597	653	667	741	765	789
208	Santa Clara U.	871	846	697	633	734	804	765	785
209	Loyola U. Chicago	992	998	1,049	822	937	860	732	781
210	Yeshiva U.	675	707	666	651	652	657	659	776
211	Marshall U.	908	830	686	696	814	739	748	775
212	CO School of Mines	762	700	668	668	749	729	735	748
213	U. VT	613	603	631	612	623	717	718	746
214	U. ME	650	623	647	660	690	734	736	744
215	U. OR	682	648	666	678	701	752	738	744
216	Adelphi U.	545	551	458	500	547	580	682	738
217	MI Technological U.	546	589	600	597	638	705	746	738
218	Howard U.	778	743	707	765	766	799	827	732
219	NY Institute of Technology all campuses	819	789	742	763	805	703	656	719
220	TX A&M U. Kingsville	381	419	422	444	506	616	703	712
221	Claremont Graduate U.	655	625	604	607	607	645	693	711
222	Rochester Institute of Technology	556	513	499	594	698	707	733	708
223	Dartmouth C.	381	492	525	530	620	649	671	702
224	IN State U. all campuses	352	361	308	641	515	368	593	693
225	Miami U. all campuses	483	562	543	584	591	601	644	693
226	U. TX Southwestern Medical Ctr. Dallas	415	424	403	450	498	551	626	693
227	Worcester Polytechnic Institute	816	811	603	651	696	678	638	683
228	Central MI U.	820	711	815	801	789	674	689	682
229	ID State U.	446	449	475	458	511	582	582	682
230	Loyola C.	743	714	419	371	692	634	633	681
231	MT State U. Bozeman	612	624	590	606	648	704	673	675
232	Northern AZ U.	747	749	743	756	773	843	704	668
233	CUNY Queens C.	633	698	667	584	544	491	211	666
234	Baylor C. of Medicine	405	421	429	454	506	517	533	662
235	U. MO-St. Louis	643	663	719	718	697	683	707	659
236	Bowling Green State U. all campuses	561	558	592	571	617	656	673	656
237	SD State U.	526	467	510	575	610	638	655	654
238	U. Northern CO	367	392	379	406	412	431	585	653
239	U. LA Lafayette	465	501	573	578	616	575	566	650
240	Carlos Albizu U. (San Juan, PR)	502	566	594	616	659	644	656	649
241	U. IL Springfield	850	988	818	893	899	826	548	644
242	IL State U.	628	642	647	648	663	660	624	640
243	Thomas Jefferson U.	429	475	432	364	489	527	527	638
244	Boston C.	614	590	568	557	587	623	657	631
245	Fielding Institute, The	937	964	895	874	896	1,084	1,057	629
246	Roosevelt U.	600	555	536	649	696	613	644	627
247	Ferris State U.	ne	ne	ne	154	260	661	702	619
248	U. Bridgeport	357	492	700	872	801	699	631	616
249	CA Institute of Integral Studies	360	343	354	243	468	458	542	609
250	East TN State U.	484	514	424	452	520	606	534	609

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
251	U. AK Fairbanks all campuses	503	502	441	453	558	572	625	602
252	U. Detroit Mercy	493	460	464	456	470	643	594	598
253	U. Central AR	515	491	496	413	452	449	477	589
254	TN State U.	494	468	401	434	467	528	521	579
255	Indiana U. PA all campuses	407	453	434	455	512	607	614	552
256	Montclair State U.	603	560	501	462	572	507	501	551
257	LA Tech U.	309	303	348	346	545	537	664	542
258	U. of Medicine and Dentistry NJ	246	275	389	366	354	386	479	533
259	Southwest MO State U.	355	345	404	418	375	395	480	527
260	U. Dayton	482	541	508	493	521	554	534	527
261	U. AR for Medical Sciences	419	410	351	323	424	498	494	523
262	Pontifical Catholic U. PR, The	79	82	365	440	468	479	486	517
263	U. Hartford	439	365	465	459	475	517	507	516
264	Chapman U.	460	459	424	369	359	406	446	507
265	Hofstra U.	469	477	478	454	445	417	522	502
266	Hampton U.	246	244	242	398	373	437	468	493
267	Catholic U. America, The	603	560	500	487	472	459	502	486
268	Quinnipiac U.	191	200	420	457	428	446	526	484
269	Lamar U.	382	416	422	485	621	689	774	483
270	U. NE Medical Ctr.	310	327	401	411	450	459	464	474
271	U. TN Chattanooga	370	344	333	418	416	413	420	465
272	FL A&M U.	290	319	407	352	408	413	458	460
273	Rush U.	510	512	522	500	478	413	445	458
274	AR State U. main campus	419	267	269	271	317	359	450	449
275	Duquesne U.	534	527	487	468	448	448	447	449
276	C. of William and Mary all campuses	401	423	408	385	454	440	454	447
277	Azusa Pacific U.	472	415	418	374	343	355	419	446
278	Prairie View A&M U.	158	201	171	196	258	402	311	434
279	U. North TX Health Science Ctr. Ft. Worth	198	208	219	278	383	436	424	432
280	SUNY C. of Environmental Science and Forestry	426	434	435	462	462	402	398	429
281	U. La Verne	272	395	278	242	281	347	398	423
282	Boise State U.	ne	ne	ne	239	239	369	395	422
283	Baylor U.	367	341	349	355	371	400	416	414
284	U. MA Dartmouth	339	328	326	362	393	387	377	414
285	U. TX Health Science Ctr. San Antonio	469	582	573	406	419	390	556	412
286	Wake Forest U.	283	319	329	355	375	393	395	412
287	Stephen F. Austin State U.	283	303	272	277	298	382	450	398
288	Jackson State U.	313	287	283	258	331	322	324	393
289	TX A&M U. Commerce	310	339	375	427	381	344	306	391
290	Xavier U.	227	231	259	262	274	313	339	390
291	Fuller Theological Seminary CA	369	334	304	327	340	346	348	386
292	U. Baltimore	314	380	358	334	345	354	405	386
293	Brandeis U.	583	492	528	560	589	413	399	384
294	Fordham U.	458	424	417	453	439	419	411	380
295	NY Medical C.	367	353	342	332	323	310	378	378
296	Maharishi U. of Management	78	82	167	215	219	223	277	368
297	U. SD	389	384	338	296	291	292	371	368
298	Philadelphia C. of Osteopathic Medicine	206	241	422	414	428	456	473	364
299	Marywood U.	205	241	201	196	182	232	608	363
300	U. Tulsa	358	346	345	388	419	433	392	356

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
301	Clark U.	277	281	283	326	341	380	379	347
302	Lawrence Technological U.	ne	ne	ne	ne	ne	233	306	342
303	U. NC Wilmington	185	189	217	211	214	233	323	337
304	Union Institute & U. <sup>b</sup>	410	419	374	374	374	319	319	334
305	Morgan State U.	80	103	111	269	312	299	346	331
306	NC Agricultural and Technical State U.	412	406	415	455	448	442	343	322
307	NM Institute of Mining and Technology	232	251	270	269	301	311	316	318
308	OR Health & Science U.	258	291	287	305	304	286	296	307
309	Medical U. SC	238	251	224	224	226	259	303	303
310	James Madison U.	320	342	315	311	327	313	278	299
311	Clarkson U.	180	204	218	214	218	255	269	290
312	Golden Gate U.	389	318	373	235	186	433	307	290
313	U. TN Health Science Ctr.	245	262	254	244	277	316	305	285
314	Middle TN State U.	287	271	276	271	268	251	268	280
315	TN Technological U.	315	342	270	257	247	272	293	278
316	U. of the Sciences Philadelphia	66	63	61	115	265	217	266	262
317	Russell Sage C. all campuses	391	385	287	251	317	309	270	260
318	Pacific Graduate School of Psychology	285	296	288	288	295	276	267	258
319	U. San Diego	206	257	199	180	199	223	241	257
320	Medical C. GA	213	247	205	180	161	218	215	249
321	U. AR Little Rock	228	232	279	279	286	310	308	244
322	Sacred Heart U.	ne	ne	ne	334	358	265	270	242
323	SD School of Mines and Technology	205	205	276	321	343	289	272	234
324	Andrews U.	343	316	258	235	195	241	217	232
325	Creighton U.	181	197	189	181	197	231	236	229
326	Mayo Graduate School	178	173	184	180	210	207	232	224
327	Mt. Sinai School of Medicine	192	190	197	210	209	213	204	215
328	Slippery Rock U. PA	350	345	248	134	194	206	233	209
329	Forest Institute of Professional Psychology	224	246	251	251	235	209	214	205
330	U. of the Pacific	208	196	182	171	197	204	208	201
331	Rockefeller U.	139	140	151	169	174	167	193	200
332	U. MD Eastern Shore	206	171	177	158	209	225	193	199
333	Rosalind Franklin U. of Medicine and Science	286	264	234	231	225	235	215	197
334	Spalding U. <sup>b</sup>	192	199	211	188	235	238	191	196
335	Eastern VA Medical School	156	167	183	185	193	213	211	192
336	AL A&M U.	134	69	147	131	164	229	198	182
337	Medical C. WI	452	430	329	418	426	151	159	181
338	Albany Medical C.	99	97	107	108	116	108	153	180
339	Clark Atlanta U.	299	256	200	184	199	155	173	180
340	Mercer U. all campuses	172	232	230	193	181	178	155	178
341	Bloomsburg U. PA	48	51	53	58	68	52	166	173
342	Uniformed Services U. of the Health Sciences	115	133	134	150	166	165	166	168
343	SUNY Upstate Medical U.	86	96	97	96	100	113	155	152
344	Alfred U. all campuses	130	134	147	148	144	162	161	151
345	Marymount U.	ne	ne	ne	298	154	157	161	148
346	OGI School of Science & Engineering at OR Health & Science U.	279	235	369	443	473	341	197	145
347	Woods Hole Oceanographic Institution	134	125	114	114	123	128	139	139
348	TX Christian U.	147	134	122	114	121	117	125	132
349	Medical C. OH	388	461	364	306	361	371	112	131
350	U. WI Stevens Point	129	115	122	117	108	106	121	128

TABLE 48. Graduate students in science, engineering, and health fields in doctorate-granting institutions, institutions ranked by 2005 graduate student total: 1998–2005

Rank	Institution	1998	1999	2000	2001	2002	2003	2004	2005
351	Wesleyan U.	117	112	114	119	117	135	134	126
352	U. LA Monroe	285	237	232	257	140	132	134	111
353	Tuskegee U.	137	140	125	132	141	131	131	109
354	TX A&M U. System Health Science Ctr.	na	56	72	87	99	97	108	105
355	Pardee RAND Graduate School of Policy Studies	54	57	64	69	74	83	91	101
356	Gallaudet U.	39	36	35	62	62	57	95	94
357	MA C. of Pharmacy and Health Sciences <sup>b</sup>	43	80	68	93	114	127	90	88
358	Bryn Mawr C.	97	95	96	91	88	99	84	87
359	SUNY Health Science Ctr. Brooklyn	88	96	84	91	86	91	86	82
360	Meharry Medical C.	125	125	145	137	109	132	101	81
361	Baylor C. of Dentistry	73	71	62	80	66	75	70	72
362	CUNY Herbert H. Lehman C. <sup>b</sup>	57	56	67	91	113	115	69	70
363	DE State U.	30	28	18	18	11	11	7	50
364	Biola U.	48	46	40	39	38	40	36	38
365	Ponce School of Medicine	17	17	21	23	26	24	25	29
366	Wright Institute all campuses <sup>b</sup>	293	292	282	318	29	25	26	27
367	Morehouse School of Medicine	16	15	15	18	19	21	32	26
368	SUNY C. of Optometry	22	27	24	25	24	30	28	22
369	Kansas City U. of Medicine and Biosciences	0	0	0	0	0	0	0	18
-	U.S. International U.	300	304	235	na	na	na	na	na
-	CA School of Professional Psychology Alameda	262	246	223	197	na	na	na	na
-	CA School of Professional Psychology Fresno	308	374	357	312	na	na	na	na
-	CA School of Professional Psychology Los Angeles	686	665	370	583	na	na	na	na
-	CA School of Professional Psychology San Diego	620	573	681	849	na	na	na	na
-	Chicago School of Professional Psychology	199	205	ne	ne	ne	ne	ne	ne
-	Institute of Paper Science and Technology	74	75	69	68	68	na	na	na
-	Tulane U. <sup>a</sup>	1,554	1,570	1,650	1,692	2,073	2,187	2,169	NA
-	U. New England	77	81	ne	ne	ne	ne	ne	ne
-	Xavier U. LA	97	103	104	48	ne	ne	ne	ne

na = not applicable; school did not exist under this name.

NA = not available; data were not collected from this institution in this year; Tulane University (all schools) was closed in fall 2005 due to Hurricane Katrina and did not report data.

ne = not eligible; institution did not meet the criteria for inclusion.

<sup>a</sup> The two New Orleans campuses were closed in fall 2005 due to Hurricane Katrina and did not report data.

<sup>b</sup> Institution did not respond to the 2005 survey; all 2005 data are imputed.

NOTE: Tied institutions are ranked alphabetically.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 49. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	40,036	40,763	43,088	43,284	44,969	46,582	47,047 r	48,601
Science and engineering	27,826	28,943	30,197	30,163	31,871	33,516	33,898 r	34,535
Science	24,973	25,747	26,884	26,997	28,303	29,696	29,935 r	30,374
Agricultural sciences	695	749	822	835	945	1,052	941	988
Biological sciences	15,755	16,091	16,729	17,022	17,640	18,605	18,675 r	18,995
Anatomy	454	497	428	413	423	471	477	417
Biochemistry	2,532	2,485	2,469	2,558	2,752	2,621	2,510 r	2,548
Biology	1,807	1,887	1,933	1,956	2,039	2,070	1,943	2,006
Biometry/epidemiology	175	181	125	152	231	244	238	280
Biophysics	239	266	164	187	233	195	218	191
Botany	555	559	518	553	561	547	560	576
Cell biology	2,204	2,237	2,241	2,139	2,292	2,340	2,327	2,454
Ecology	115	123	152	161	186	189	170	187
Entomology/parasitology	181	178	197	223	234	258	292	284
Genetics	732	796	795	883	926	1,037	941	1,031
Microbiology/immunology/virology	2,089	2,158	2,253	2,187	2,438	2,340	2,145 r	2,269
Nutrition	234	238	224	245	225	243	274	299
Pathology	1,332	1,321	1,757	1,803	1,837	1,944	1,815 r	1,606
Pharmacology	1,470	1,511	1,460	1,391	1,386	1,520	1,552	1,536
Physiology	1,138	1,132	1,140	1,193	1,165	1,249	1,279 r	1,296
Zoology	135	138	104	88	92	82	111	142
Biosciences, nec	363	384	769	890	620	1,255	1,823	1,873
Computer sciences	371	332	341	335	359	358	384	406
Earth, atmospheric, and ocean sciences	898	923	1,155	1,036	1,113	1,166	1,253	1,364
Atmospheric sciences	85	107	94	87	79	94	119	129
Geosciences	464	477	514	471	443	463	507	517
Oceanography	249	235	246	218	270	249	299	345
Earth/atmospheric/ocean sciences, nec	100	104	301	260	321	360	328	373
Mathematical sciences	279	351	385	353	391	447	466	496
Mathematics/applied mathematics	255	321	357	329	363	407	420	439
Statistics	24	30	28	24	28	40	46	57
Physical sciences	5,973	6,136	6,252	6,198	6,587	6,707	6,945	6,865
Astronomy	360	375	315	311	330	319	367	374
Chemistry	3,729	3,824	3,865	3,851	3,965	4,030	4,227	4,089
Physics	1,844	1,853	1,942	1,900	2,148	2,197	2,135	2,203
Physical sciences, nec	40	84	130	136	144	161	216	199
Psychology	611	711	729	809	814	959	906	889
Clinical psychology	51	70	73	81	68	72	67	64
Psychology, general	387	407	410	498	531	633	602	584
Psychology, nec	173	234	246	230	215	254	237	241
Social sciences	391	454	471	409	454	402	365 r	371
Agricultural economics	38	43	41	35	21	25	34	40
Anthropology (cultural/social)	62	87	73	56	66	57	54 r	65
Economics (except agricultural)	29	31	32	23	29	36	20	13
Geography	18	30	34	36	30	29	31	42
History and philosophy of science	23	10	14	9	13	14	6	9
Linguistics	18	15	19	17	22	29	29	24
Political science	64	70	50	52	61	51	44	42
Sociology	79	104	102	88	80	74	64 r	53
Sociology/anthropology	0	0	0	4	29	2	13	10
Social sciences, nec	60	64	106	89	103	85	70	73



TABLE 49. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	2,853	3,196	3,313	3,166	3,568	3,820	3,963	4,161
Aerospace engineering	133	128	111	128	140	141	141	153
Agricultural engineering	56	62	56	60	66	88	79	89
Biomedical engineering	180	242	220	262	284	388	425	477
Chemical engineering	613	671	703	575	743	672	688	686
Civil engineering	225	299	295	280	358	319	332	400
Electrical engineering	488	548	525	435	612	646	653	687
Engineering science	110	122	163	162	169	180	180	168
Industrial engineering	30	27	48	20	42	45	50	51
Mechanical engineering	434	476	480	501	441	543	514	562
Metallurgical/materials engineering	404	421	507	479	507	539	567	578
Mining engineering	10	6	8	14	10	12	9	8
Nuclear engineering	19	30	40	78	28	52	67	41
Petroleum engineering	14	19	20	17	15	17	14	13
Engineering, nec	137	145	137	155	153	178	244	248
Health fields	12,210	11,820	12,891	13,121	13,098	13,066	13,149 r	14,066
Medical fields	10,957	10,623	11,555	11,663	11,581	11,445	11,453 r	12,296
Anesthesiology	253	230	255	254	270	268	274	301
Cardiology	603	607	566	471	446	422	364	403
Endocrinology	251	255	263	213	262	254	262	279
Gastroenterology	272	294	310	265	270	246	235	216
Hematology	316	372	302	367	314	262	278	235
Neurology	1,167	1,164	1,194	1,322	1,307	1,311	1,445 r	1,500
Obstetrics/gynecology	232	223	386	354	354	395	358	340
Oncology/cancer research	555	556	487	612	731	813	876 r	980
Ophthalmology	374	367	381	385	382	352	384 r	373
Otorhinolaryngology	101	112	112	120	119	124	146	156
Pediatrics	875	887	925	961	1,024	950	905	934
Preventive medicine/community health	316	347	425	303	328	299	290	287
Psychiatry	665	601	683	766	834	867	811	858
Pulmonary disease	209	240	266	247	215	209	170	154
Radiology	434	461	450	500	614	578	609 r	629
Surgery	1,002	1,097	1,089	1,156	1,129	1,173	1,142 r	1,197
Clinical medicine, nec	3,332	2,810	3,461	3,367	2,982	2,922	2,904	3,454
Other health	1,253	1,197	1,336	1,458	1,517	1,621	1,696 r	1,770
Dental sciences	176	212	230	194	176	173	143 r	169
Nursing	43	49	64	54	50	68	78 r	55
Pharmaceutical sciences	511	435	434	542	586	638	723 r	741
Speech pathology/audiology	58	58	59	36	56	50	37	40
Veterinary sciences	223	250	284	334	342	384	382	430
Health related, nec	242	193	265	298	307	308	333	335

nec = not elsewhere classified.

r = data significantly revised; replaces previously published data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 50. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field, primary source of support, and citizenship: 2005

Field	Postdoctoral appointees	Primary support federal				Primary support nonfederal	Citizenship	
		Total	Fellowships	Research grants	Traineeships		U.S. citizens and permanent residents	Temporary-visa holders
All surveyed fields	48,601	34,125	3,834	27,492	2,799	14,476	21,652	26,949
Science and engineering	34,535	24,845	2,071	21,350	1,424	9,690	14,152	20,383
Science	30,374	22,035	1,924	18,731	1,380	8,339	12,733	17,641
Agricultural sciences	988	629	27	598	4	359	422	566
Biological sciences	18,995	13,831	1,322	11,365	1,144	5,164	7,846	11,149
Anatomy	417	354	26	293	35	63	190	227
Biochemistry	2,548	1,929	199	1,640	90	619	1,023	1,525
Biology	2,006	1,513	157	1,317	39	493	923	1,083
Biometry/epidemiology	280	193	27	85	81	87	181	99
Biophysics	191	115	13	85	17	76	91	100
Botany	576	409	9	397	3	167	208	368
Cell biology	2,454	1,703	258	1,342	103	751	1,057	1,397
Ecology	187	124	12	111	1	63	130	57
Entomology/parasitology	284	194	7	172	15	90	120	164
Genetics	1,031	687	68	565	54	344	420	611
Microbiology/immunology/virology	2,269	1,786	180	1,394	212	483	1,011	1,258
Nutrition	299	205	12	170	23	94	142	157
Pathology	1,606	1,039	75	805	159	567	591	1,015
Pharmacology	1,536	1,110	60	922	128	426	590	946
Physiology	1,296	1,043	67	879	97	253	435	861
Zoology	142	78	5	71	2	64	102	40
Biosciences, nec	1,873	1,349	147	1,117	85	524	632	1,241
Computer sciences	406	270	7	263	0	136	164	242
Earth, atmospheric, and ocean sciences	1,364	1,031	45	979	7	333	746	618
Atmospheric sciences	129	112	6	106	0	17	54	75
Geosciences	517	353	18	333	2	164	230	287
Oceanography	345	269	19	250	0	76	187	158
Earth/atmospheric/ocean sciences, nec	373	297	2	290	5	76	275	98
Mathematical sciences	496	330	60	237	33	166	259	237
Mathematics/applied mathematics	439	282	54	201	27	157	228	211
Statistics	57	48	6	36	6	9	31	26
Physical sciences	6,865	5,088	327	4,681	80	1,777	2,448	4,417
Astronomy	374	283	30	253	0	91	225	149
Chemistry	4,089	2,894	227	2,604	63	1,195	1,346	2,743
Physics	2,203	1,739	70	1,652	17	464	764	1,439
Physical sciences, nec	199	172	0	172	0	27	113	86
Psychology	889	691	109	484	98	198	590	299
Clinical psychology	64	56	12	29	15	8	55	9
Psychology, general	584	451	60	330	61	133	383	201
Psychology, nec	241	184	37	125	22	57	152	89
Social sciences	371	165	27	124	14	206	258	113
Agricultural economics	40	32	1	31	0	8	16	24
Anthropology (cultural/social)	65	16	5	11	0	49	57	8
Economics (except agricultural)	13	2	0	2	0	11	7	6
Geography	42	31	2	29	0	11	28	14
History and philosophy of science	9	1	0	1	0	8	4	5
Linguistics	24	17	2	14	1	7	19	5
Political science	42	17	4	8	5	25	34	8
Sociology	53	30	10	13	7	23	39	14
Sociology/anthropology	10	0	0	0	0	10	7	3
Social sciences, nec	73	19	3	15	1	54	47	26

TABLE 50. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field, primary source of support, and citizenship: 2005

Field	Postdoctoral appointees	Primary support federal			Primary support nonfederal	Citizenship		
		Total	Fellowships	Research grants		Traineeships	U.S. citizens and permanent residents	Temporary-visa holders
Engineering	4,161	2,810	147	2,619	44	1,351	1,419	2,742
Aerospace engineering	153	110	2	107	1	43	56	97
Agricultural engineering	89	60	3	57	0	29	22	67
Biomedical engineering	477	379	51	304	24	98	227	250
Chemical engineering	686	443	29	409	5	243	240	446
Civil engineering	400	223	4	218	1	177	152	248
Electrical engineering	687	466	28	428	10	221	247	440
Engineering science	168	134	6	128	0	34	53	115
Industrial engineering	51	25	2	23	0	26	16	35
Mechanical engineering	562	388	15	370	3	174	150	412
Metallurgical/materials engineering	578	353	5	348	0	225	160	418
Mining engineering	8	5	1	4	0	3	3	5
Nuclear engineering	41	30	0	30	0	11	13	28
Petroleum engineering	13	8	0	8	0	5	3	10
Engineering, nec	248	186	1	185	0	62	77	171
Health fields	14,066	9,280	1,763	6,142	1,375	4,786	7,500	6,566
Medical fields	12,296	8,077	1,613	5,194	1,270	4,219	6,674	5,622
Anesthesiology	301	205	22	160	23	96	115	186
Cardiology	403	209	25	139	45	194	154	249
Endocrinology	279	198	17	150	31	81	138	141
Gastroenterology	216	119	15	77	27	97	94	122
Hematology	235	134	15	103	16	101	72	163
Neurology	1,500	960	107	783	70	540	658	842
Obstetrics/gynecology	340	126	13	98	15	214	224	116
Oncology/cancer research	980	691	43	528	120	289	391	589
Ophthalmology	373	176	11	151	14	197	93	280
Otorhinolaryngology	156	75	8	46	21	81	76	80
Pediatrics	934	677	168	418	91	257	526	408
Preventive medicine/community health	287	203	42	130	31	84	172	115
Psychiatry	858	616	118	290	208	242	659	199
Pulmonary disease	154	108	22	53	33	46	103	51
Radiology	629	378	31	309	38	251	268	361
Surgery	1,197	650	73	478	99	547	539	658
Clinical medicine, nec	3,454	2,552	883	1,281	388	902	2,392	1,062
Other health	1,770	1,203	150	948	105	567	826	944
Dental sciences	169	128	27	74	27	41	78	91
Nursing	55	43	27	7	9	12	49	6
Pharmaceutical sciences	741	524	28	482	14	217	250	491
Speech pathology/audiology	40	33	6	26	1	7	23	17
Veterinary sciences	430	243	7	219	17	187	222	208
Health related, nec	335	232	55	140	37	103	204	131

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
-	All institutions	48,601	34,535	30,374	4,161	14,066
1	Harvard U.	4,384	1,812	1,733	79	2,572
2	Johns Hopkins U., The	1,442	552	494	58	890
3	Stanford U.	1,259	778	682	96	481
4	U. CA, Los Angeles	1,094	711	630	81	383
5	Yale U.	1,012	666	656	10	346
6	U. CA, San Francisco	1,003	649	649	0	354
7	U. WA	963	631	531	100	332
8	U. CO all campuses	903	767	713	54	136
9	U. CA, San Diego	886	627	550	77	259
10	MA Institute of Technology	851	825	534	291	26
11	U. PA	815	424	357	67	391
12	Columbia U. in the City of NY	793	531	495	36	262
13	U. CA, Berkeley	774	703	616	87	71
14	Duke U.	755	504	434	70	251
15	U. Pittsburgh all campuses	722	413	336	77	309
16	Cornell U. all campuses	687	533	454	79	154
17	U. MN all campuses	676	450	376	74	226
18	U. CA, Davis	659	510	435	75	149
19	U. NC Chapel Hill	627	390	390	0	237
20	Emory U.	606	326	316	10	280
21	U. MI all campuses	603	434	347	87	169
22	U. FL	602	386	336	50	216
23	U. WI Madison	595	436	385	51	159
24	U. TX M. D. Anderson Cancer Ctr.	542	239	239	0	303
25	CA Institute of Technology	519	519	422	97	0
26	Vanderbilt U.	462	347	328	19	115
27	U. MA	461	336	313	23	125
28	Baylor C. of Medicine	435	313	313	0	122
29	NC State U.	416	340	253	87	76
30	U. IL Urbana-Champaign	416	408	303	105	8
31	Washington U. St. Louis	415	243	233	10	172
32	MI State U.	404	371	341	30	33
33	U. VA all campuses	404	342	299	43	62
34	PA State U. all campuses	403	395	327	68	8
35	Mt. Sinai School of Medicine	400	400	400	0	0
36	OH State U. all campuses	400	307	285	22	93
37	Mayo Graduate School	398	113	113	0	285
38	U. TX Southwestern Medical Ctr. Dallas	398	265	265	0	133
39	U. Southern CA	395	202	179	23	193
40	Yeshiva U.	370	260	260	0	110
41	U. IA	369	181	176	5	188
42	Rockefeller U.	367	298	298	0	69
43	IN U. all campuses	352	281	281	0	71
44	Princeton U.	349	349	264	85	0
45	Tufts U. <sup>a</sup>	347	135	114	21	212
46	U. UT	346	316	281	35	30
47	U. AZ	343	312	283	29	31
48	U. Miami	337	121	117	4	216
49	U. CA, Irvine	323	287	255	32	36
50	Purdue U. all campuses	322	258	193	65	64

TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
51	U. Rochester	308	185	177	8	123
52	Northwestern U.	301	293	219	74	8
53	NY U.	297	245	245	0	52
54	U. Chicago	290	236	236	0	54
55	SUNY Buffalo all campuses	289	274	254	20	15
56	U. TX Medical Branch	280	166	162	4	114
57	U. Cincinnati all campuses	276	93	74	19	183
58	U. MD College Park	273	269	191	78	4
59	TX A&M U. all campuses	268	259	211	48	9
60	CO State U.	255	202	195	7	53
61	FL State U.	251	247	223	24	4
62	U. KY all campuses	251	190	166	24	61
63	LA State U. Baton Rouge, Shreveport <sup>b</sup>	248	229	218	11	19
64	U. CA, Riverside	242	234	218	16	8
65	Case Western Reserve U.	241	200	163	37	41
66	U. GA	240	205	205	0	35
67	IA State U.	235	223	139	84	12
68	U. IL Chicago	235	130	126	4	105
69	U. AL Birmingham, The	232	134	129	5	98
70	Dartmouth C.	224	180	127	53	44
71	VA Commonwealth U.	223	145	126	19	78
72	U. KS all campuses	221	182	166	16	39
73	U. CT all campuses	212	152	134	18	60
74	Brown U.	207	182	155	27	25
75	U. TX Austin	205	185	148	37	20
76	GA Institute of Technology all campuses	197	197	78	119	0
77	Medical U. SC	195	100	100	0	95
78	U. MD Baltimore	195	138	138	0	57
79	Wayne State U.	185	116	110	6	69
80	Rutgers, The State U. NJ all campuses	183	157	145	12	26
81	U. South FL	179	87	69	18	92
82	Rice U.	173	173	129	44	0
83	Thomas Jefferson U.	172	92	92	0	80
84	WA State U.	171	142	119	23	29
85	U. CA, Santa Barbara	169	169	112	57	0
86	U. TN	165	144	114	30	21
87	Boston U.	159	157	157	0	2
88	Carnegie Mellon U.	159	159	119	40	0
89	VA Polytechnic Institute and State U.	158	151	104	47	7
90	U. MO-Columbia	144	130	109	21	14
91	U. of Notre Dame	140	140	104	36	0
92	U. Louisville	136	47	40	7	89
93	U. NE Lincoln	136	127	111	16	9
94	U. TX Health Science Ctr. San Antonio	134	94	94	0	40
95	Medical C. GA	133	111	111	0	22
96	U. CA, Santa Cruz	131	131	118	13	0
97	SUNY Stony Brook all campuses	125	117	108	9	8
98	SUNY Albany	124	111	100	11	13
99	U. TX Health Science Ctr. Houston	122	0	0	0	122
100	U. of Medicine and Dentistry NJ	121	114	114	0	7

TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
101	U. SC all campuses	119	110	73	37	9
102	Wake Forest U.	114	75	75	0	39
103	Medical C. WI	113	61	61	0	52
104	U. OK all campuses	112	79	68	11	33
105	U. VT	112	79	73	6	33
106	U. DE	111	104	68	36	7
107	AZ State U. main campus	108	103	64	39	5
108	OR Health & Science U.	108	91	91	0	17
109	Loyola U. Chicago	107	90	90	0	17
110	Brandeis U.	104	82	82	0	22
111	U. NM all campuses	99	93	83	10	6
112	U. AR main campus	93	93	80	13	0
113	U. HI Manoa	93	79	73	6	14
114	U. NV, Reno	89	89	81	8	0
115	MT State U. Bozeman	88	66	61	5	22
116	U. TN Health Science Ctr.	85	77	77	0	8
117	KS State U.	83	82	78	4	1
118	TX Tech U.	82	71	64	7	11
119	U. OR	77	77	77	0	0
120	U. NE Medical Ctr.	76	44	44	0	32
121	Temple U.	75	38	35	3	37
122	U. MS all campuses	72	45	45	0	27
123	Rensselaer Polytechnic Institute	68	68	34	34	0
124	U. MT, The	67	39	39	0	28
125	TX A&M U. System Health Science Ctr.	65	65	65	0	0
126	U. Akron all campuses	63	63	43	20	0
127	U. WY	63	63	51	12	0
128	Woods Hole Oceanographic Institution	61	61	55	6	0
129	OK State U. all campuses	60	49	40	9	11
130	OR State U.	60	60	41	19	0
131	MS State U.	55	48	34	14	7
132	GA State U.	53	53	53	0	0
133	Northeastern U.	53	44	29	15	9
134	Lehigh U.	51	51	36	15	0
135	Boston C.	50	50	50	0	0
136	CUNY Graduate Ctr.	50	50	50	0	0
137	Albany Medical C.	47	47	47	0	0
138	U. TX Dallas	46	40	34	6	6
139	Georgetown U.	44	44	44	0	0
140	St. Louis U. all campuses	44	26	26	0	18
141	Stevens Institute of Technology	43	43	17	26	0
142	Syracuse U. all campuses	43	43	35	8	0
143	U. RI	42	34	28	6	8
144	Clarkson U.	41	41	15	26	0
145	U. AR for Medical Sciences	40	39	39	0	1
146	WV U.	40	38	27	11	2
147	CUNY The City C.	39	39	34	5	0
148	Rush U.	39	27	27	0	12
149	CUNY Hunter C.	38	38	38	0	0
150	C. of William and Mary all campuses	38	38	33	5	0

TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
151	ND State U. all campuses	38	36	35	1	2
152	U. TX Arlington	38	38	30	8	0
153	U. MO-Kansas City	36	27	27	0	9
154	Rosalind Franklin U. of Medicine and Science	35	31	31	0	4
155	U. MD Baltimore County	35	35	22	13	0
156	Southern IL U. Carbondale	34	34	32	2	0
157	SUNY Upstate Medical U.	33	33	33	0	0
158	U. ID	33	33	29	4	0
159	Clemson U.	31	31	21	10	0
160	Wright State U. all campuses	31	31	22	9	0
161	Polytechnic U.	30	30	13	17	0
162	Miami U. all campuses	29	29	29	0	0
163	U. AL, The	29	29	24	5	0
164	U. Houston	29	29	25	4	0
165	U. South AL	29	29	21	8	0
166	Jackson State U.	28	28	28	0	0
167	Auburn U. all campuses	27	24	21	3	3
168	Loma Linda U.	27	8	8	0	19
169	Old Dominion U.	27	27	18	9	0
170	OH U. all campuses	26	25	25	0	1
171	FL International U.	25	25	25	0	0
172	U. Memphis, The	25	25	22	3	0
173	U. NH	25	25	24	1	0
174	U. North TX Health Science Ctr. Ft. Worth	25	0	0	0	25
175	Worcester Polytechnic Institute	24	24	16	8	0
176	Northern AZ U.	23	23	23	0	0
177	Kent State U. all campuses	22	21	21	0	1
178	U. AL Huntsville, The	22	22	15	7	0
179	CO School of Mines	21	21	16	5	0
180	Northern IL U.	21	21	21	0	0
181	Uniformed Services U. of the Health Sciences	21	15	15	0	6
182	UT State U.	21	21	15	6	0
183	Creighton U.	20	19	19	0	1
184	East Carolina U.	20	20	20	0	0
185	OGI School of Science & Engineering at OR Health & Science U.	18	18	15	3	0
186	U. North TX	18	18	18	0	0
187	CUNY Queens C.	17	17	17	0	0
188	Meharry Medical C.	15	15	15	0	0
189	U. ME	15	15	13	2	0
190	U. Southern MS	15	15	15	0	0
191	U. TX San Antonio	15	15	15	0	0
192	Wesleyan U.	15	15	15	0	0
193	Eastern VA Medical School	14	10	10	0	4
194	Southern Methodist U.	14	14	14	0	0
195	East TN State U.	13	13	13	0	0
196	MI Technological U.	13	13	9	4	0
197	U. NC Charlotte	13	13	13	0	0
198	Wichita State U.	13	13	8	5	0
199	Howard U.	12	10	5	5	2
200	Marquette U.	12	10	8	2	2

TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
201	U. ND all campuses	12	12	12	0	0
202	U. SD	12	12	12	0	0
203	U. Tulsa	12	12	6	6	0
204	Clark Atlanta U.	11	11	11	0	0
205	Tuskegee U.	11	3	0	3	8
206	U. Denver	11	11	11	0	0
207	Baylor U.	10	10	10	0	0
208	Bowling Green State U. all campuses	10	10	10	0	0
209	NM Institute of Mining and Technology	10	10	7	3	0
210	San Diego State U.	10	10	10	0	0
211	U. PR Rio Piedras Campus	10	10	10	0	0
212	Duquesne U.	9	8	8	0	1
213	SUNY C. of Environmental Science and Forestry	9	9	7	2	0
214	SD State U.	9	9	8	1	0
215	U. Dayton	9	9	2	7	0
216	Clark U.	8	8	8	0	0
217	Cleveland State U.	8	8	7	1	0
218	George Washington U.	8	8	8	0	0
219	NC Agricultural and Technical State U.	8	8	3	5	0
220	Oakland U.	8	8	7	1	0
221	U. LA Lafayette	8	8	5	3	0
222	FL Atlantic U.	7	7	7	0	0
223	U. MO-St. Louis	7	7	7	0	0
224	FL Institute of Technology	6	6	5	1	0
225	Marshall U.	6	6	6	0	0
226	IL State U.	5	5	5	0	0
227	IN State U. all campuses	5	5	5	0	0
228	Mercer U. all campuses	5	3	3	0	2
229	Ponce School of Medicine	5	5	5	0	0
230	SUNY C. of Optometry	5	0	0	0	5
231	U. NV, Las Vegas	5	5	5	0	0
232	Alfred U. all campuses	3	3	0	3	0
233	Central MI U.	3	3	3	0	0
234	Lamar U.	3	3	0	3	0
235	Nova Southeastern U.	3	3	3	0	0
236	Southern U. and A&M C. all campuses	3	3	3	0	0
237	TX A&M U. Commerce	3	3	3	0	0
238	AL A&M U.	2	2	2	0	0
239	Baylor C. of Dentistry	2	2	2	0	0
240	DE State U.	2	2	2	0	0
241	Rochester Institute of Technology	2	2	1	1	0
242	U. LA Monroe	2	0	0	0	2
243	Fordham U.	1	1	1	0	0
244	NY Institute of Technology all campuses	1	0	0	0	1
245	Prairie View A&M U.	1	1	1	0	0



TABLE 51. Postdoctoral appointees in doctorate-granting institutions, by area of study, institutions ranked by number of appointees: 2005

Rank	Institution	All appointees	Science and engineering			Health fields
			Total	Science	Engineering	
246	Southwest MO State U.	1	1	0	1	0
247	TN State U.	1	1	1	0	0
-	Loyola U. New Orleans	NA	NA	NA	NA	NA
-	Tulane U.	NA	NA	NA	NA	NA

NA = not available; data were not collected from this institution in this year. Loyola U. New Orleans and Tulane University (all schools) were closed in fall 2005 due to Hurricane Katrina and did not report data.

<sup>a</sup> Institution did not respond to the 2005 survey; all 2005 data are imputed.

<sup>b</sup> The two New Orleans campuses were closed in fall 2005 due to Hurricane Katrina and did not report data.

NOTE: Tied institutions are ranked alphabetically.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 52. Nonfaculty research scientist, engineer, and health professional staff with doctorates in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
All surveyed fields	7,093	7,569	7,874	7,379	7,706	8,237	8,815	9,086
Science and engineering	5,300	5,697	5,822	5,363	5,731	6,219	6,692	6,713
Science	4,490	4,757	4,926	4,579	4,857	5,296	5,678	5,795
Agricultural sciences	159	167	219	201	245	218	267	253
Biological sciences	2,238	2,331	2,244	2,276	2,565	2,851	2,968	2,928
Anatomy	33	81	89	94	107	82	70	76
Biochemistry	330	364	351	383	410	459	460	463
Biology	390	237	248	246	310	358	351	332
Biometry/epidemiology	32	40	55	68	94	117	129	131
Biophysics	41	37	17	34	32	51	26	33
Botany	73	79	51	57	53	75	69	60
Cell biology	246	251	175	233	278	318	323	283
Ecology	13	19	11	13	19	24	22	15
Entomology/parasitology	53	60	45	29	56	62	65	61
Genetics	78	86	84	92	109	110	118	138
Microbiology/immunology/virology	214	265	255	239	291	343	308	288
Nutrition	43	59	45	52	37	24	73	56
Pathology	135	149	199	219	246	215	219	265
Pharmacology	288	329	307	238	218	255	305	354
Physiology	167	182	179	189	181	180	256	194
Zoology	18	25	21	14	23	20	14	22
Biosciences, nec	84	68	112	76	101	158	160	157
Computer sciences	124	133	153	148	122	127	170	152
Earth, atmospheric, and ocean sciences	411	436	486	453	501	491	479	462
Atmospheric sciences	48	41	36	29	53	64	74	88
Geosciences	154	175	217	186	210	213	204	189
Oceanography	172	169	204	207	199	159	143	138
Earth/atmospheric/ocean sciences, nec	37	51	29	31	39	55	58	47
Mathematical sciences	88	122	80	52	34	45	66	62
Mathematics/applied mathematics	83	112	70	46	23	35	63	57
Statistics	5	10	10	6	11	10	3	5
Physical sciences	1,081	1,155	1,269	1,058	1,060	1,216	1,345	1,548
Astronomy	122	142	167	163	126	144	213	161
Chemistry	482	495	555	458	496	552	576	757
Physics	473	499	519	407	414	479	531	601
Physical sciences, nec	4	19	28	30	24	41	25	29
Psychology	252	249	324	254	210	240	241	246
Clinical psychology	26	26	35	25	39	42	39	9
Psychology, general	133	130	171	129	76	88	87	114
Psychology, nec	93	93	118	100	95	110	115	123
Social sciences	137	164	151	137	120	108	142	144
Agricultural economics	31	34	23	17	13	12	9	12
Anthropology (cultural/social)	11	18	24	24	13	21	5	7
Economics (except agricultural)	3	7	3	5	2	4	4	2
Geography	14	16	13	14	9	7	13	16
History and philosophy of science	4	1	6	3	10	2	16	5
Linguistics	5	7	6	6	4	3	2	7
Political science	3	9	16	11	21	14	19	10
Sociology	27	29	25	15	12	15	18	21
Sociology/anthropology	4	4	3	1	1	0	0	3
Social sciences, nec	35	39	32	41	35	30	56	61

TABLE 52. Nonfaculty research scientist, engineer, and health professional staff with doctorates in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Engineering	810	940	896	784	874	923	1,014	918
Aerospace engineering	68	87	39	15	17	30	60	53
Agricultural engineering	28	28	24	26	29	24	26	20
Biomedical engineering	34	58	42	36	43	49	67	58
Chemical engineering	149	141	110	90	81	90	88	61
Civil engineering	61	81	131	95	110	91	104	108
Electrical engineering	152	169	145	116	127	169	169	173
Engineering science	49	60	60	62	74	74	66	56
Industrial engineering	5	5	7	12	21	9	23	23
Mechanical engineering	109	127	176	131	120	124	174	164
Metallurgical/materials engineering	120	115	109	103	107	146	174	127
Mining engineering	1	2	0	4	2	3	5	1
Nuclear engineering	4	11	13	3	46	15	11	3
Petroleum engineering	6	10	10	2	10	0	6	20
Engineering, nec	24	46	30	89	87	99	41	51
Health fields	1,793	1,872	2,052	2,016	1,975	2,018	2,123	2,373
Medical fields	1,504	1,604	1,756	1,700	1,664	1,674	1,814	2,006
Anesthesiology	28	38	47	44	37	23	45	54
Cardiology	26	33	40	37	29	43	57	66
Endocrinology	31	15	36	24	35	21	20	19
Gastroenterology	11	14	29	21	46	55	56	53
Hematology	30	26	18	33	45	44	44	66
Neurology	162	207	168	191	164	146	133	171
Obstetrics/gynecology	20	38	22	17	11	22	19	46
Oncology/cancer research	62	73	94	101	103	106	209	247
Ophthalmology	54	32	53	39	54	44	39	69
Otorhinolaryngology	2	3	4	6	11	8	17	17
Pediatrics	78	114	101	116	115	139	153	190
Preventive medicine/community health	102	115	149	112	120	148	144	119
Psychiatry	57	62	75	70	86	128	135	120
Pulmonary disease	29	33	39	34	31	19	23	24
Radiology	48	55	98	88	99	98	115	139
Surgery	219	185	183	233	203	210	201	229
Clinical medicine, nec	545	561	600	534	475	420	404	377
Other health	289	268	296	316	311	344	309	367
Dental sciences	45	37	28	10	11	10	14	54
Nursing	12	2	13	12	21	20	32	28
Pharmaceutical sciences	98	114	129	142	154	147	115	119
Speech pathology/audiology	26	13	4	12	9	14	15	13
Veterinary sciences	70	72	81	100	80	96	57	75
Health related, nec	38	30	41	40	36	57	76	78

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 53. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents						Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All surveyed fields	7,418	9	325	5,337	140	879	67	661
Science and engineering	5,724	8	183	4,217	81	586	55	594
Science	5,016	8	132	3,823	74	497	35	447
Agricultural sciences	300	1	6	185	6	51	4	47
Biological sciences	683	0	22	539	8	31	10	73
Anatomy	13	0	0	10	3	0	0	0
Biochemistry	26	0	0	22	0	0	0	4
Biology	318	0	11	255	2	10	7	33
Biometry/epidemiology	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	0	0	0	0	0	0	0	0
Cell biology	0	0	0	0	0	0	0	0
Ecology	0	0	0	0	0	0	0	0
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	28	0	1	22	0	3	0	2
Microbiology/immunology/virology	45	0	0	42	0	0	0	3
Nutrition	115	0	5	80	1	13	1	15
Pathology	0	0	0	0	0	0	0	0
Pharmacology	50	0	3	37	1	3	0	6
Physiology	27	0	1	20	1	1	0	4
Zoology	0	0	0	0	0	0	0	0
Biosciences, nec	61	0	1	51	0	1	2	6
Computer sciences	382	0	44	193	3	27	6	109
Earth, atmospheric, and ocean sciences	94	0	7	57	8	13	0	9
Atmospheric sciences	23	0	0	14	6	0	0	3
Geosciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Earth/atmospheric/ocean sciences, nec	71	0	7	43	2	13	0	6
Mathematical sciences	176	0	10	125	3	24	0	14
Mathematics/applied mathematics	176	0	10	125	3	24	0	14
Statistics	0	0	0	0	0	0	0	0
Physical sciences	339	1	19	226	7	26	0	60
Astronomy	0	0	0	0	0	0	0	0
Chemistry	179	1	10	123	2	8	0	35
Physics	160	0	9	103	5	18	0	25
Physical sciences, nec	0	0	0	0	0	0	0	0
Psychology	1,126	3	15	912	22	158	9	7
Clinical psychology	0	0	0	0	0	0	0	0
Psychology, general	563	1	9	434	9	105	1	4
Psychology, nec	563	2	6	478	13	53	8	3
Social sciences	1,916	3	9	1,586	17	167	6	128
Agricultural economics	15	0	0	14	0	1	0	0
Anthropology (cultural/social)	0	0	0	0	0	0	0	0
Economics (except agricultural)	55	0	0	15	0	0	0	40
Geography	0	0	0	0	0	0	0	0
History and philosophy of science	5	0	0	1	0	4	0	0
Linguistics	0	0	0	0	0	0	0	0
Political science	978	2	7	846	4	78	1	40
Sociology	187	0	0	178	1	5	2	1
Sociology/anthropology	77	0	1	57	0	1	0	18
Social sciences, nec	599	1	1	475	12	78	3	29

TABLE 53. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2005

Field	Total	U.S. citizens and permanent residents					Other or unknown	Temporary-visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic		
Engineering	708	0	51	394	7	89	20	147
Aerospace engineering	0	0	0	0	0	0	0	0
Agricultural engineering	0	0	0	0	0	0	0	0
Biomedical engineering	0	0	0	0	0	0	0	0
Chemical engineering	23	0	11	5	0	1	0	6
Civil engineering	143	0	8	57	2	47	6	23
Electrical engineering	126	0	9	59	1	9	4	44
Engineering science	0	0	0	0	0	0	0	0
Industrial engineering	71	0	3	53	1	5	0	9
Mechanical engineering	70	0	6	45	1	2	7	9
Metallurgical/materials engineering	11	0	0	9	0	0	2	0
Mining engineering	0	0	0	0	0	0	0	0
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	0	0	0	0	0	0	0	0
Engineering, nec	264	0	14	166	2	25	1	56
Health fields	1,694	1	142	1,120	59	293	12	67
Medical fields	108	0	1	99	0	6	0	2
Anesthesiology	0	0	0	0	0	0	0	0
Cardiology	0	0	0	0	0	0	0	0
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	0
Obstetrics/gynecology	0	0	0	0	0	0	0	0
Oncology/cancer research	3	0	0	2	0	1	0	0
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	72	0	1	64	0	5	0	2
Psychiatry	0	0	0	0	0	0	0	0
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	0	0	0	0	0	0	0	0
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, nec	33	0	0	33	0	0	0	0
Other health	1,586	1	141	1,021	59	287	12	65
Dental sciences	0	0	0	0	0	0	0	0
Nursing	320	0	2	217	7	90	0	4
Pharmaceutical sciences	574	0	125	326	42	28	1	52
Speech pathology/audiology	240	0	2	121	4	112	1	0
Veterinary sciences	28	0	2	17	0	1	8	0
Health related, nec	424	1	10	340	6	56	2	9

nec = not elsewhere classified.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE 54. Black, non-Hispanic U.S. citizen or permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Black students in all institutions	24,261	25,200	25,928	27,075	28,719	31,242	32,619	33,708
Science and engineering	19,651	20,273	20,834	21,459	22,672	24,174	24,684	25,346
Science	16,830	17,308	17,857	18,544	19,598	20,962	21,285	21,876
Agricultural sciences	344	310	292	327	375	460	394	417
Biological sciences	2,141	2,218	2,241	2,351	2,479	2,757	2,893	2,980
Computer sciences	1,355	1,485	1,512	1,709	1,898	1,951	1,802	1,761
Earth, atmospheric, and ocean sciences	202	213	220	227	266	270	261	262
Mathematical sciences	613	594	572	590	626	655	696	721
Physical sciences	913	903	918	875	893	939	995	1,008
Psychology	3,813	3,749	4,214	4,347	4,491	4,692	5,001	5,251
Social sciences	7,449	7,836	7,888	8,118	8,570	9,238	9,243	9,476
Engineering	2,821	2,965	2,977	2,915	3,074	3,212	3,399	3,470
Health fields	4,610	4,927	5,094	5,616	6,047	7,068	7,935	8,362
Black students in HBCUs	3,528	3,746	4,134	4,303	4,429	5,129	5,071	5,337
Science and engineering	3,082	3,233	3,563	3,519	3,623	4,000	4,076	4,217
Science	2,799	2,939	3,219	3,217	3,285	3,672	3,688	3,823
Agricultural sciences	164	181	135	172	178	260	170	185
Biological sciences	536	546	518	540	525	573	568	539
Computer sciences	199	216	161	202	286	283	208	193
Earth, atmospheric, and ocean sciences	40	36	57	60	63	51	57	57
Mathematical sciences	107	129	120	121	120	105	100	125
Physical sciences	229	179	186	170	173	167	205	226
Psychology	399	451	705	747	761	891	882	912
Social sciences	1,125	1,201	1,337	1,205	1,179	1,342	1,498	1,586
Engineering	283	294	344	302	338	328	388	394
Health fields	446	513	571	784	806	1,129	995	1,120
Percentage of black students in HBCUs	14.5	14.9	15.9	15.9	15.4	16.4	15.5	15.8
Science and engineering	15.7	15.9	17.1	16.4	16.0	16.5	16.5	16.6
Science	16.6	17.0	18.0	17.3	16.8	17.5	17.3	17.5
Agricultural sciences	47.7	58.4	46.2	52.6	47.5	56.5	43.1	44.4
Biological sciences	25.0	24.6	23.1	23.0	21.2	20.8	19.6	18.1
Computer sciences	14.7	14.5	10.6	11.8	15.1	14.5	11.5	11.0
Earth, atmospheric, and ocean sciences	19.8	16.9	25.9	26.4	23.7	18.9	21.8	21.8
Mathematical sciences	17.5	21.7	21.0	20.5	19.2	16.0	14.4	17.3
Physical sciences	25.1	19.8	20.3	19.4	19.4	17.8	20.6	22.4
Psychology	10.5	12.0	16.7	17.2	16.9	19.0	17.6	17.4
Social sciences	15.1	15.3	16.9	14.8	13.8	14.5	16.2	16.7
Engineering	10.0	9.9	11.6	10.4	11.0	10.2	11.4	11.4
Health fields	9.7	10.4	11.2	14.0	13.3	16.0	12.5	13.4

HBCUs = historically black colleges and universities.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 55. Black, non-Hispanic U.S. citizen or permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2000–05

Field	Male						Female					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Black students in all institutions	9,289	9,436	10,022	10,758	11,194	11,161	16,639	17,639	18,697	20,484	21,425	22,547
Science and engineering	8,298	8,383	8,909	9,456	9,799	9,653	12,536	13,076	13,763	14,718	14,885	15,693
Science	6,348	6,449	6,897	7,285	7,529	7,283	11,509	12,095	12,701	13,677	13,756	14,593
Agricultural sciences	139	126	162	194	153	172	153	201	213	266	241	245
Biological sciences	760	792	812	858	864	922	1,481	1,559	1,667	1,899	2,029	2,058
Computer sciences	844	943	1,063	1,128	1,095	1,049	668	766	835	823	707	712
Earth, atmospheric, and ocean sciences	120	125	135	130	120	110	100	102	131	140	141	152
Mathematical sciences	299	320	340	373	365	371	273	270	286	282	331	350
Physical sciences	493	462	486	508	541	526	425	413	407	431	454	482
Psychology	871	868	946	934	1,244	953	3,343	3,479	3,545	3,758	3,757	4,298
Social sciences	2,822	2,813	2,953	3,160	3,147	3,180	5,066	5,305	5,617	6,078	6,096	6,296
Engineering	1,950	1,934	2,012	2,171	2,270	2,370	1,027	981	1,062	1,041	1,129	1,100
Health fields	991	1,053	1,113	1,302	1,395	1,508	4,103	4,563	4,934	5,766	6,540	6,854
Black students in HBCUs	1,435	1,424	1,498	1,692	1,637	1,777	2,699	2,879	2,931	3,437	3,434	3,560
Science and engineering	1,323	1,234	1,309	1,412	1,430	1,504	2,240	2,285	2,314	2,588	2,646	2,713
Science	1,131	1,050	1,112	1,202	1,194	1,230	2,088	2,167	2,173	2,470	2,494	2,593
Agricultural sciences	68	58	71	115	68	76	67	114	107	145	102	109
Biological sciences	150	150	146	166	170	173	368	390	379	407	398	366
Computer sciences	89	99	152	144	126	111	72	103	134	139	82	82
Earth, atmospheric, and ocean sciences	31	35	32	27	30	27	26	25	31	24	27	30
Mathematical sciences	58	63	56	62	55	60	62	58	64	43	45	65
Physical sciences	104	91	89	92	107	116	82	79	84	75	98	110
Psychology	118	137	158	146	142	142	587	610	603	745	740	770
Social sciences	513	417	408	450	496	525	824	788	771	892	1,002	1,061
Engineering	192	184	197	210	236	274	152	118	141	118	152	120
Health fields	112	190	189	280	207	273	459	594	617	849	788	847
Percentage of black students in HBCUs	15.4	15.1	14.9	15.7	14.6	15.9	16.2	16.3	15.7	16.8	16.0	15.8
Science and engineering	15.9	14.7	14.7	14.9	14.6	15.6	17.9	17.5	16.8	17.6	17.8	17.3
Science	17.8	16.3	16.1	16.5	15.9	16.9	18.1	17.9	17.1	18.1	18.1	17.8
Agricultural sciences	48.9	46.0	43.8	59.3	44.4	44.2	43.8	56.7	50.2	54.5	42.3	44.5
Biological sciences	19.7	18.9	18.0	19.3	19.7	18.8	24.8	25.0	22.7	21.4	19.6	17.8
Computer sciences	10.5	10.5	14.3	12.8	11.5	10.6	10.8	13.4	16.0	16.9	11.6	11.5
Earth, atmospheric, and ocean sciences	25.8	28.0	23.7	20.8	25.0	24.5	26.0	24.5	23.7	17.1	19.1	19.7
Mathematical sciences	19.4	19.7	16.5	16.6	15.1	16.2	22.7	21.5	22.4	15.2	13.6	18.6
Physical sciences	21.1	19.7	18.3	18.1	19.8	22.1	19.3	19.1	20.6	17.4	21.6	22.8
Psychology	13.5	15.8	16.7	15.6	11.4	14.9	17.6	17.5	17.0	19.8	19.7	17.9
Social sciences	18.2	14.8	13.8	14.2	15.8	16.5	16.3	14.9	13.7	14.7	16.4	16.9
Engineering	9.8	9.5	9.8	9.7	10.4	11.6	14.8	12.0	13.3	11.3	13.5	10.9
Health fields	11.3	18.0	17.0	21.5	14.8	18.1	11.2	13.0	12.5	14.7	12.0	12.4

HBCUs = historically black colleges and universities.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 56. Black, non-Hispanic U.S. citizen or permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005
Black students in all institutions	13,782	13,963	15,014	15,307	16,346	17,678	18,583	18,820
Science and engineering	11,299	11,211	12,079	12,057	12,830	13,522	14,063	14,228
Science	9,721	9,605	10,365	10,401	11,025	11,687	12,103	12,259
Agricultural sciences	221	218	244	267	289	346	298	310
Biological sciences	1,638	1,687	1,718	1,817	1,941	2,097	2,245	2,317
Computer sciences	476	537	608	655	800	800	793	765
Earth, atmospheric, and ocean sciences	134	137	159	140	193	195	194	170
Mathematical sciences	355	342	349	359	369	382	393	415
Physical sciences	728	700	691	683	697	736	803	784
Psychology	2,417	2,200	2,574	2,515	2,484	2,571	2,766	2,857
Social sciences	3,752	3,784	4,022	3,965	4,252	4,560	4,611	4,641
Engineering	1,578	1,606	1,714	1,656	1,805	1,835	1,960	1,969
Health fields	2,483	2,752	2,935	3,250	3,516	4,156	4,520	4,592
Black students in HBCUs	2,184	2,288	2,682	2,634	2,779	3,152	3,263	3,287
Science and engineering	1,871	1,917	2,270	2,067	2,167	2,268	2,493	2,502
Science	1,665	1,697	1,990	1,854	1,888	2,015	2,215	2,223
Agricultural sciences	107	120	114	133	141	194	139	143
Biological sciences	400	420	416	414	387	427	431	390
Computer sciences	80	109	110	125	165	152	114	124
Earth, atmospheric, and ocean sciences	17	13	36	25	36	34	38	34
Mathematical sciences	67	80	75	78	70	63	61	72
Physical sciences	185	145	139	129	130	116	174	172
Psychology	254	194	282	300	293	308	376	401
Social sciences	555	616	818	650	666	721	882	887
Engineering	206	220	280	213	279	253	278	279
Health fields	313	371	412	567	612	884	770	785
Percentage of black students in HBCUs	15.8	16.4	17.9	17.2	17.0	17.8	17.6	17.5
Science and engineering	16.6	17.1	18.8	17.1	16.9	16.8	17.7	17.6
Science	17.1	17.7	19.2	17.8	17.1	17.2	18.3	18.1
Agricultural sciences	48.4	55.0	46.7	49.8	48.8	56.1	46.6	46.1
Biological sciences	24.4	24.9	24.2	22.8	19.9	20.4	19.2	16.8
Computer sciences	16.8	20.3	18.1	19.1	20.6	19.0	14.4	16.2
Earth, atmospheric, and ocean sciences	12.7	9.5	22.6	17.9	18.7	17.4	19.6	20.0
Mathematical sciences	18.9	23.4	21.5	21.7	19.0	16.5	15.5	17.3
Physical sciences	25.4	20.7	20.1	18.9	18.7	15.8	21.7	21.9
Psychology	10.5	8.8	11.0	11.9	11.8	12.0	13.6	14.0
Social sciences	14.8	16.3	20.3	16.4	15.7	15.8	19.1	19.1
Engineering	13.1	13.7	16.3	12.9	15.5	13.8	14.2	14.2
Health fields	12.6	13.5	14.0	17.4	17.4	21.3	17.0	17.1

HBCUs = historically black colleges and universities.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE 57. Black, non-Hispanic U.S. citizen or permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2000–05

Field	Male						Female					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Black students in all institutions	5,419	5,356	5,785	6,132	6,376	6,420	9,595	9,951	10,561	11,546	12,207	12,400
Science and engineering	4,809	4,679	5,093	5,314	5,473	5,513	7,270	7,378	7,737	8,208	8,590	8,715
Science	3,752	3,631	3,955	4,118	4,204	4,206	6,613	6,770	7,070	7,569	7,899	8,053
Agricultural sciences	113	101	124	147	115	127	131	166	165	199	183	183
Biological sciences	603	613	656	669	682	710	1,115	1,204	1,285	1,428	1,563	1,607
Computer sciences	344	376	457	477	515	469	264	279	343	323	278	296
Earth, atmospheric, and ocean sciences	83	76	93	89	90	70	76	64	100	106	104	100
Mathematical sciences	181	198	205	209	203	225	168	161	164	173	190	190
Physical sciences	377	364	392	399	442	414	314	319	305	337	361	370
Psychology	544	525	525	528	558	550	2,030	1,990	1,959	2,043	2,208	2,307
Social sciences	1,507	1,378	1,503	1,600	1,599	1,641	2,515	2,587	2,749	2,960	3,012	3,000
Engineering	1,057	1,048	1,138	1,196	1,269	1,307	657	608	667	639	691	662
Health fields	610	677	692	818	903	907	2,325	2,573	2,824	3,338	3,617	3,685
Black students in HBCUs	993	909	979	1,097	1,081	1,123	1,689	1,725	1,800	2,055	2,182	2,164
Science and engineering	905	760	836	883	933	953	1,365	1,307	1,331	1,385	1,560	1,549
Science	752	629	670	719	763	764	1,238	1,225	1,218	1,296	1,452	1,459
Agricultural sciences	57	45	56	86	54	58	57	88	85	108	85	85
Biological sciences	123	119	112	132	136	122	293	295	275	295	295	268
Computer sciences	59	61	88	86	76	72	51	64	77	66	38	52
Earth, atmospheric, and ocean sciences	21	17	18	18	22	18	15	8	18	16	16	16
Mathematical sciences	36	40	35	41	31	37	39	38	35	22	30	35
Physical sciences	83	70	71	64	87	94	56	59	59	52	87	78
Psychology	47	61	57	43	54	71	235	239	236	265	322	330
Social sciences	326	216	233	249	303	292	492	434	433	472	579	595
Engineering	153	131	166	164	170	189	127	82	113	89	108	90
Health fields	88	149	143	214	148	170	324	418	469	670	622	615
Percentage of black students in HBCUs	18.3	17.0	16.9	17.9	17.0	17.5	17.6	17.3	17.0	17.8	17.9	17.5
Science and engineering	18.8	16.2	16.4	16.6	17.0	17.3	18.8	17.7	17.2	16.9	18.2	17.8
Science	20.0	17.3	16.9	17.5	18.1	18.2	18.7	18.1	17.2	17.1	18.4	18.1
Agricultural sciences	50.4	44.6	45.2	58.5	47.0	45.7	43.5	53.0	51.5	54.3	46.4	46.4
Biological sciences	20.4	19.4	17.1	19.7	19.9	17.2	26.3	24.5	21.4	20.7	18.9	16.7
Computer sciences	17.2	16.2	19.3	18.0	14.8	15.4	19.3	22.9	22.4	20.4	13.7	17.6
Earth, atmospheric, and ocean sciences	25.3	22.4	19.4	20.2	24.4	25.7	19.7	12.5	18.0	15.1	15.4	16.0
Mathematical sciences	19.9	20.2	17.1	19.6	15.3	16.4	23.2	23.6	21.3	12.7	15.8	18.4
Physical sciences	22.0	19.2	18.1	16.0	19.7	22.7	17.8	18.5	19.3	15.4	24.1	21.1
Psychology	8.6	11.6	10.9	8.1	9.7	12.9	11.6	12.0	12.0	13.0	14.6	14.3
Social sciences	21.6	15.7	15.5	15.6	18.9	17.8	19.6	16.8	15.8	15.9	19.2	19.8
Engineering	14.5	12.5	14.6	13.7	13.4	14.5	19.3	13.5	16.9	13.9	15.6	13.6
Health fields	14.4	22.0	20.7	26.2	16.4	18.7	13.9	16.2	16.6	20.1	17.2	16.7

HBCUs = historically black colleges and universities.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

## Appendix A. Technical Notes

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### Survey Universe

The data collected in the 2005 Survey of Graduate Students and Postdoctorates in Science and Engineering represent national estimates of graduate enrollment and postdoctoral employment as of fall 2005 in all U.S. academic institutions that granted doctorates or master's degrees in any science, engineering, or selected health-related fields.[1] The survey collects data for all branch campuses, affiliated research centers, and separately organized components, such as graduate or medical schools. The survey universe consisted of 708 reporting units at 588 graduate institutions: 493 reporting units at 373 doctorate-granting institutions and 215 reporting units at 215 master's-granting institutions.[2]

Data on graduate science and engineering (S&E) enrollment and postdoctoral appointees have been collected since 1966. However, data from 1966 to 1974 are not directly comparable with data from 1975 to 2005 due to changes in both the S&E fields and the types of institutions covered in the survey. From fall 1966 through fall 1971, the National Science Foundation (NSF) Graduate Traineeship Program collected data from a limited number of doctorate-granting institutions and requested data only on S&E fields supported by NSF. The NSF Universities and Nonprofit Institutions Studies Group began collecting these data with the fall 1972 survey. Between 1972 and 1974, eligibility definitions were changed to include health-related fields and to increase the number of S&E fields surveyed; the survey was also broadened to include all institutions known to have programs leading to a doctorate or master's degree in science and engineering.

Table A-1 shows the number of institutions, reporting units, and departments by degree level covered by the survey, as well as the estimated total enrollment for each year between 1966 and 2005.

- Data for 1966–71 reflect totals for the NSF Graduate Traineeship program only and are not comparable with data from 1972 through 2005.
- Data for 1972–74 reflect changes in eligibility definitions, which affected both S&E fields and types of institutions surveyed. These data are not comparable to data collected before 1972 or after 1974.
- Data for 1984–87 from master's-granting institutions were collected on a sample basis. Enrollment data for this period have been adjusted to account for the sampling and reflect estimated universe totals.
- Data for 1975–2005 are intended to represent consistent coverage of science, engineering, and selected health-related fields. In 1989, NSF revised the coverage of S&E fields in the survey. This resulted in the exclusion of some fields, and the data for 1975–88 subsequently were revised to reflect this change. Since 1988 the survey has attempted to cover all institutions with S&E and selected health-related doctoral or master's programs and has excluded institutions that do not have any S&E graduate programs.

Tables A-2 and A-3 present data on departmental coverage by S&E and health-related fields for doctorate- and master's-granting institutions for the years 1998–2005.

### Survey Instrument

There were no significant changes in the 2005 survey instrument from previous

survey years. The survey instrument consists of NSF Form 811 and NSF Form 812. Form 811 is a list of departments or programs specific to each institution surveyed. The list is based on the departments known to have existed in the previous survey cycle, and each school coordinator is asked to update it. Form 812 is a series of questions completed by the school coordinator or departmental respondent that obtains counts of students and data on key characteristics of interest, such as race/ethnicity, sex, citizenship, and source of funding. In addition to the questionnaires, which include instructions, the survey package contains the following:

- An enclosure detailing mailing package contents
- A flyer explaining NSF's academic S&E surveys
- A cover letter to survey coordinators at graduate or medical schools
- A crosswalk showing representative National Center for Education Statistics instructional program codes corresponding to each S&E and health-related field as defined by NSF
- A postcard for respondent use, acknowledging receipt of the survey and indicating any changes in coordinator name, address, telephone number, or e-mail address
- A flyer informing coordinators of their IDs and passwords to use in responding to the survey through the Web-based data collection system

School coordinators and departmental respondents have had the option of providing data using the Web-based data collection system since the 1998 survey. In 2005, 642 of the 708 reporting units used the online option.

### **Survey Methodology**

In addition to the verification of the information cited above, the acknowledgment postcard also requested that school coordinators indicate how the data were collected, whether the data were maintained centrally or collected from individual departments, and whether they were derived from a computerized database or were hand tabulated. The majority of reporting units indicate a combination of sources for their data. Over the years, the use of computerized systems has shown a small but gradual increase.

School coordinators were requested to review the departmental listing provided in the survey packet on NSF Form 811 and indicate any changes in their school structure, such as departments newly formed, phased out, split, or merged, and to check off any departments that had neither graduate students nor postdoctorates (for which survey forms would therefore not be submitted). School coordinators returned revised Form 811s to the survey contractor for use as a checklist in tracking departmental responses.

Schools completed a survey questionnaire for each department either centrally or at the department level and returned the questionnaire to the survey contractor for data entry, editing, and tabulation. The survey contractor referred arithmetic errors, inconsistencies between items, and sharp year-to-year fluctuations to the school coordinators for correction or clarification.

### **Response Rates**

The 2004 and 2005 response rates are not directly comparable with response rates reported for prior years. Response rates from 1975 through 2003 were calculated for reporting units (schools) and departments but not for institutions. For schools, the

response rate was calculated as the total number of responding schools divided by the total number of eligible schools. A school was considered responding if one or more of its eligible departments responded. The departmental response rate was calculated as the number of departments not requiring full imputation divided by the total number of eligible departments. A department was considered responding if it reported at least one data item.

For 2004 and 2005, the response-rate calculations were changed for schools and departments/programs, and a response-rate calculation was developed for institutions. The new response rate calculations adhere to the American Association for Public Opinion Research's (AAPOR) standards for computing response rates (see Response Rate 3 calculation in AAPOR 2004:29).[3]

Criteria for distinguishing categories of response (complete, partial, nonresponse) for 2004 forward are as follows:

- A department is considered a complete respondent if it reports complete row and column totals in Items 5, 6, 7, and 8 of the survey. A department is considered a partial respondent if it reports only grand totals for Items 5, 6, 7, and 8. Any other response from a department is considered a nonresponse.
- A reporting unit is considered a complete respondent if 90% or more of its departments provide data (are not nonrespondents). Response is considered partial if more than 50% but less than 90% of its departments provide data. A reporting unit is considered a nonrespondent if less than 50% of its departments provide data. The same criteria are used to categorize institutional response.

Of the 708 reporting units surveyed in 2005, 684 (96.6%) provided complete or partial responses to the survey; 672 (94.9%) provided complete responses, 12 (1.7%) provided partial responses, and 24 (3.4%) were nonrespondents. Five of the nonrespondent reporting units, three at Tulane and two at Louisiana State University, were closed due to Hurricane Katrina and were not available for the 2005 data collection.[4]

Of the 588 institutions surveyed in 2005, 561 (95.4%) were complete respondents, 8 (1.7%) were partial respondents, and 19 (3.2%) were nonrespondents. One partially respondent institution (Louisiana State University) reported limited data and one nonrespondent institution (Tulane) reported no data as a result of Hurricane Katrina.[5]

In 2005, using the new response rate calculations, 10,783 (87%) of the total 12,396 eligible departments were considered complete respondents. An additional 1,270 (10.3%) were considered partial respondents, reporting only grand totals to items 5, 6, 7 and 8. A total of 343 departments (2.8%) were considered nonrespondents, including 88 departments from schools closed due to Hurricane Katrina.[6]

Table A-4 shows departmental response rates for 1975–2005. For comparison purposes, two sets of response rates are shown for 2004 and 2005. The first set follows the response-rate calculation used from 1975–2003. The second set follows the response-rate calculation introduced in 2004, which adheres to AAPOR standards. For example, in 2005, 343 departments were considered nonrespondents under the new response rate calculations, whereas only 241 would have been considered nonrespondents under the older method.

Imputation techniques were used to fill in missing data for departments in 2005.

Departments that could not report data due to Hurricane Katrina were not imputed. Tables A-5 and A-6 show the total number of departments in doctorate- and master's-granting institutions, the imputed number of full- and part-time graduate students enrolled, the imputed number of postdoctoral appointees, and imputation rates for 2003, 2004, and 2005. Tables A-7 through A-12 provide imputation rates and imputed data by specific data items for 2005.

## Changes in Data Items

Over time, changes have been made to the content of the survey to keep it relevant to the needs of data users. Such changes prevent precise maintenance of trend data. Therefore, some data items are not available for all institutions in all years. Major changes in the data collected (with the year changes became effective) include the following:

- Data Collection

- 1975 Graduate institutions that granted only master's degrees were asked to provide estimates for the number of full- and part-time students and the number of postdoctorates and/or research associates.
- 1976–77 Data for master's-granting institutions were collected on an abbreviated form of the survey (short form), which did not collect data on citizenship of graduate students.
- 1978 Doctorate-granting institutions received a short form of the survey collecting selected data items; master's-granting institutions were not surveyed. The 1978 figures shown in the tables for total enrollment and full-time enrollment for master's-granting institutions represent estimates based on 1977 and 1979 data.
- 1979 All graduate institutions were surveyed using the same form; the full-scale survey was resumed.
- 1984–87 The survey design was changed to a stratified random sample with a certainty stratum that included all doctorate-granting institutions, all master's-granting historically black colleges and universities, and all land-grant institutions. The remaining master's-granting institutions were divided into two sample strata based on enrollment size. Enrollment data for 1984–87 have been adjusted to reflect universe totals.
- 2005 Due to Hurricane Katrina, data for Tulane University and Loyola University were not included, and Louisiana State University data are for the Graduate School (Baton Rouge) and Health Sciences Center (Shreveport) only; the two New Orleans campuses were closed. Data from these schools were not available and were not imputed.

- Sex

- 1976–77 Master's-granting institutions were requested to provide data on all graduate students by sex.
- 1978 Doctorate-granting institutions received a short form of the survey collecting selected data items, which did not request any information

on sex; 1978 figures in the tables represent estimates based on 1977 and 1979 data. Master's-granting institutions were not surveyed.

1979 Data on sex were requested for all graduate students at all institutions.

1993 The survey began collecting race/ethnicity data by sex.

- Race/Ethnicity

1979 The survey began collecting race/ethnicity data as an optional data item; collection of this information became an official part of the survey in 1980.

1993 The survey began collecting race/ethnicity data by sex.

1999 The survey presented respondents with new race/ethnicity categories. The Asian/Pacific Islander category used in previous years' surveys became two categories: Asian and Native Hawaiian/Pacific Islander. In addition, the survey included two new categories: More Than One Race Hispanic/Latino and More Than One Race Non-Hispanic/Latino. The 1999 survey excluded the Other category included in previous years' surveys. These changes are not reflected in the 2005 published tables.

In each of the 7 years of collecting these data, only about 8% of the departments have reported data in any of the new categories. For this year's table production, as in the previous 6 years, the data reported in the new categories are combined into previous survey categories. The data are combined for the tables as follows: the Asian and Native Hawaiian/Pacific Islander categories form the Asian/Pacific Islander category; the One Race Only Hispanic/Latino and More Than One Race Hispanic/Latino categories form the Hispanic category; and the More Than One Race Non-Hispanic/Latino and Unknown or Did Not State categories form the Other or Unknown category.

- Citizenship

1972–77 The survey collected citizenship data for graduate students enrolled full time in doctorate-granting institutions.

1975–77 Citizenship data were not collected from master's-degree-only institutions for either full- or part-time students.

1978 Doctorate-granting institutions received a short form of the survey, which did not collect any citizenship data; 1978 figures in the tables represent estimates based on 1977 and 1979 data. Master's-granting institutions were not surveyed.

1979 The survey began collecting citizenship data for all full-time graduate students.

1983 The survey began collecting citizenship data for graduate students enrolled part time.

- Full-Time Enrollment
  - 1999 The survey began collecting data on first-time enrollment by race/ethnicity, but data collected by the 2000 survey were the first of these data released.
  
- Graduate Student Support
  - 1978 The survey did not collect data on mechanisms of support, but did collect sources of support for full-time students. Because actual mechanisms of support were unknown, data were reported only as "other." Master's-granting institutions were not surveyed.
  - 1979 The survey began collecting separate data on mechanisms of support for fellowships and traineeships (prior years combined these mechanisms). It also started to collect information on "other nonfaculty research staff with doctorates" along with the information collected on postdoctoral appointees.
  - 1985 The survey began collecting separate data on students receiving their primary support from the U.S. Department of Agriculture.
  - 1996 The survey began collecting separate data on students receiving their primary support from the National Aeronautics and Space Administration.
  - 1999 The survey began collecting separate data on students receiving their primary support from the U.S. Department of Energy.

## Data Revisions

During the fall 1988 survey cycle, a review of the survey universe and of the S&E definition resulted in the exclusion of departments that were not primarily oriented toward granting research degrees. A number of departments—mostly those in the field of "Social sciences, not elsewhere classified"—were found to be primarily engaged in training teachers, practitioners, administrators, or managers rather than researchers; thus, they were no longer eligible for the survey. During the 1989–2005 survey cycles, this process continued, and all ineligible departments identified were removed to ensure trend consistency for the entire 1975–2005 period. These changes resulted in a reduction in total enrollments and social science enrollments for all years. Table A-13 shows the net effect on enrollment data of these adjustments over the years.

Each survey cycle since fall 1992, an institution's previous year's data for the highest S&E degree granted have been changed to reflect the institution's highest S&E degree in the current survey cycle. Over the years, a number of master's-granting institutions have become doctorate-granting institutions. This change has resulted in a smaller decrease in enrollment at doctorate-granting institutions than at master's-granting institutions, because it partially offsets the reductions in enrollment that occur when ineligible departments are removed from the survey as a result of the survey universe review process.

Since the 1992 survey cycle, the definition of medical schools has included only those institutional components with membership in the Association of American Medical Colleges. Data collected before 1992 are not comparable with data collected for the fall 1992 and subsequent surveys.

## Technical Tables

- A-1 The NSF data collection series: 1966–2005
- A-2 Science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1998–2005
- A-3 Science, engineering, and health departments in master's-granting institutions, by detailed field: 1998–2005
- A-4 Departmental response rates: 1975–2005
- A-5 Imputation for nonresponse in doctorate-granting institutions, by field and graduate enrollment or postdoctoral status: 2003–05
- A-6 Imputation for nonresponse in master's-granting institutions, by field and graduate enrollment or postdoctoral status: 2003–05
- A-7 Imputation rates of full-time graduate students, by source and mechanism of support, by female students: 2005
- A-8 Imputed full-time graduate students, by source and mechanism of support, and by female students: 2005
- A-9 Imputation rates of graduate students, by citizenship, race/ethnicity, enrollment status, and sex: 2005
- A-10 Imputed graduate students, by citizenship, race/ethnicity, enrollment status, and sex: 2005
- A-11 Imputation rates of science and engineering Postdoctorates, by source of support, and nonfaculty research staff with doctorates: 2005
- A-12 Imputed science and engineering Postdoctorates, by source of support, and nonfaculty research staff with doctorates: 2005
- A-13 Graduate enrollment data as originally published and as modified through the fall 2005 graduate student survey cycle: 1975–2005



TABLE A-1. The NSF data collection series: 1966–2005

Year	Institutions surveyed	Reporting units surveyed	Departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full time	Part time
Graduate Traineeship Program								
1966	204	204	2,866	441	2,425	169,303	124,255	45,048
1967	209	209	3,014	434	2,580	179,622	133,972	45,650
1968	219	219	3,190	454	2,736	184,759	140,714	44,045
1969	224	224	3,354	460	2,894	196,341	147,515	48,826
1970	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 <sup>a</sup>	224	224	3,397	407	2,990	214,680	164,764	49,916
Doctorate institutions								
1972	252	321	4,568	764	3,804	207,859	159,392	48,467
1973	255	333	6,523	851	5,672	214,348	161,525	52,823
1974	275	366	7,460	1,380	6,080	259,760	190,438	69,322
1975	344	442	8,002	1,829	6,173	301,263	208,752	92,511
1976	354	453	8,103	1,888	6,215	305,619	212,759	92,860
1977	356	459	8,336	2,025	6,311	314,213	215,389	98,824
1978	343	452	8,350	1,968	6,382	307,800	211,187	96,613
1979	370	486	8,586	2,104	6,482	324,006	219,583	104,423
1980	369	485	8,690	2,150	6,540	333,567	225,791	107,776
1981	369	483	8,620	2,149	6,471	340,078	229,500	110,578
1982	368	483	8,482	2,140	6,342	346,808	232,657	114,151
1983	369	484	8,361	2,108	6,253	353,976	238,868	115,108
1984	346	465	8,316	2,029	6,287	354,634	239,344	115,290
1985	346	460	8,429	2,069	6,360	363,499	242,688	120,811
1986	346	462	8,504	2,078	6,426	374,285	251,534	122,751
1987	350	468	8,621	2,082	6,539	379,768	256,005	123,763
1988	375	494	8,930	2,231	6,699	387,215	262,234	124,981
1989	377	496	9,058	2,250	6,808	395,100	269,421	125,679
1990	376	495	9,208	2,306	6,902	409,747	278,360	131,387
1991	376	495	9,409	2,336	7,073	426,084	291,156	134,928
1992	376	495	9,652	2,391	7,261	445,994	305,732	140,262
1993	376	495	9,851	2,410	7,441	455,122	312,412	142,710
1994	375	494	10,070	2,476	7,594	455,563	313,875	141,688
1995	374	493	10,249	2,531	7,718	449,867	310,521	139,346
1996	375	494	10,268	2,586	7,682	444,553	309,304	135,249
1997	374	497	10,250	2,666	7,584	438,565	307,632	130,933
1998	374	496	10,341	2,687	7,654	435,949	307,094	128,855
1999	375	497	10,454	2,655	7,799	443,185	313,910	129,275
2000	374	496	10,499	2,699	7,800	443,632	319,816	123,816
2001	378	499	10,549	2,700	7,849	459,227	332,603	126,624
2002	373	494	10,698	2,749	7,949	487,314	355,393	131,921
2003	373	494	10,820	2,760	8,060	510,410	372,213	138,197
2004	373	494	10,829	2,750	8,079	518,516	377,781	140,735
2005	373	493	10,978	2,729	8,249	527,767	381,172	146,595
Master's institutions								
1975 <sup>b</sup>	240	240	1,001	1,001	na	27,247	10,896	16,351
1976	240	240	1,007	1,007	na	28,097	10,653	17,444
1977	245	245	1,056	1,056	na	31,161	11,349	19,812
1978 <sup>c</sup>	256	256	1,159	1,159	na	32,112	11,843	20,269
1979	259	259	1,100	1,100	na	33,572	12,177	21,395

TABLE A-1. The NSF data collection series: 1966–2005

Year	Institutions surveyed	Reporting units surveyed	Departments surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full time	Part time
1980	257	257	1,108	1,108	na	33,511	12,625	20,886
1981	253	253	1,108	1,108	na	35,052	12,549	22,503
1982	241	241	1,102	1,102	na	35,483	12,100	23,383
1983	239	239	1,106	1,106	na	36,456	13,149	23,307
1984	65	65	475	475	na	40,036	14,578	25,458
1985	65	65	482	482	na	40,522	14,599	25,923
1986	65	65	481	481	na	41,235	14,634	26,601
1987	65	65	483	483	na	41,729	15,051	26,678
1988	229	229	1,085	1,085	na	37,308	12,893	24,415
1989	230	230	1,129	1,129	na	39,378	13,227	26,151
1990	232	232	1,150	1,150	na	42,366	14,422	27,944
1991	231	231	1,189	1,189	na	45,128	15,854	29,274
1992	230	230	1,220	1,220	na	47,528	16,823	30,705
1993	228	228	1,252	1,252	na	49,182	17,232	31,950
1994	228	228	1,295	1,295	na	48,836	18,213	30,623
1995	227	227	1,317	1,317	na	49,773	18,762	31,011
1996	226	226	1,311	1,311	na	49,526	19,232	30,294
1997	225	225	1,339	1,339	na	48,643	19,657	28,986
1998	225	225	1,344	1,344	na	49,678	20,295	29,383
1999	222	222	1,373	1,373	na	50,071	20,513	29,558
2000	220	220	1,395	1,395	na	49,679	21,467	28,212
2001	221	221	1,413	1,413	na	50,393	21,919	28,474
2002	221	221	1,428	1,428	na	53,103	23,598	29,505
2003	218	218	1,441	1,441	na	56,760	25,207	31,553
2004	216	216	1,440	1,440	na	56,421	24,849	31,572
2005	215	215	1,418	1,418	na	55,459	25,481	29,978

na = not applicable.

<sup>a</sup> The 1972 survey also collected selected data for 1971.

<sup>b</sup> The 1976 survey also collected 1975 data from master's-granting institutions.

<sup>c</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

NOTES: Data from 1966 to 1974 are not directly comparable with data from 1975 forward due to changes both in the science and engineering fields and in the types of institutions covered in the survey.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-2. Science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005 <sup>a</sup>
All surveyed fields	10,341	10,454	10,499	10,549	10,698	10,820	10,815	10,978
Science and engineering	7,452	7,521	7,567	7,597	7,672	7,801	7,837	7,966
Science	5,981	6,030	6,051	6,085	6,157	6,243	6,276	6,379
Agricultural sciences	345	339	343	350	357	362	375	387
Biological sciences	1,980	1,998	1,986	1,993	2,050	2,071	2,042	2,087
Anatomy	84	82	80	80	83	80	75	74
Biochemistry	192	193	186	183	188	185	180	184
Biology	261	262	261	259	260	265	264	265
Biometry/epidemiology	73	75	76	79	88	91	93	95
Biophysics	31	31	30	31	33	33	34	35
Botany	84	78	76	77	76	76	71	72
Cell biology	147	148	155	155	160	161	159	166
Ecology	31	36	37	39	42	43	45	45
Entomology/parasitology	49	47	46	46	44	44	42	40
Genetics	83	85	87	91	93	99	97	102
Microbiology/immunology/virology	254	261	260	255	261	259	247	246
Nutrition	129	130	129	127	127	129	128	132
Pathology	136	135	133	134	133	131	124	123
Pharmacology	159	162	160	161	166	165	156	155
Physiology	133	133	130	125	128	124	122	123
Zoology	38	38	34	33	31	32	29	29
Biosciences, nec	96	102	106	118	137	154	176	201
Computer sciences	310	319	330	342	354	367	382	391
Earth, atmospheric, and ocean sciences	369	368	371	370	368	373	372	375
Atmospheric sciences	33	32	33	33	34	34	35	36
Geosciences	211	208	207	208	205	206	207	208
Oceanography	55	58	57	55	55	57	57	56
Earth/atmospheric/ocean sciences, nec	70	70	74	74	74	76	73	75
Mathematical sciences	408	407	404	407	407	407	407	414
Mathematics/applied mathematics	325	324	319	321	320	320	318	323
Statistics	83	83	85	86	87	87	89	91
Physical sciences	601	602	600	602	591	592	590	599
Astronomy	36	36	38	38	38	38	39	41
Chemistry	283	287	284	287	279	278	278	282
Physics	260	254	250	247	244	248	248	249
Physical sciences, nec	22	25	28	30	30	28	25	27
Psychology	598	616	621	624	620	633	643	643
Clinical psychology	131	133	133	135	135	140	142	141
Psychology, general	186	188	192	190	190	190	190	192
Psychology, nec	281	295	296	299	295	303	311	310
Social sciences	1,370	1,381	1,396	1,397	1,410	1,438	1,465	1,483
Agricultural economics	55	55	55	55	57	57	56	56
Anthropology (cultural/social)	136	136	134	132	133	135	138	141
Economics (except agricultural)	203	203	202	202	197	197	198	194
Geography	103	102	102	102	106	106	107	105
History and philosophy of science	23	24	26	26	25	25	26	30
Linguistics	70	71	72	72	71	72	74	73
Political science	350	354	358	356	361	370	378	379
Sociology	185	184	183	183	183	182	181	182
Sociology/anthropology	23	23	23	23	22	24	24	24
Social sciences, nec	222	229	241	246	255	270	283	299

TABLE A-2. Science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005 <sup>a</sup>
Engineering	1,471	1,491	1,516	1,512	1,515	1,558	1,561	1,587
Aerospace engineering	54	56	57	55	54	55	54	55
Agricultural engineering	39	40	41	39	39	38	38	36
Biomedical engineering	71	76	80	80	83	95	97	101
Chemical engineering	145	148	149	148	145	145	146	148
Civil engineering	238	245	250	255	254	260	267	272
Electrical engineering	245	246	250	251	251	258	259	266
Engineering science	38	40	39	38	37	41	38	38
Industrial engineering	168	166	172	174	171	175	172	172
Mechanical engineering	192	192	191	192	192	192	190	191
Metallurgical/materials engineering	115	114	111	110	108	113	113	113
Mining engineering	24	24	25	24	23	22	22	22
Nuclear engineering	24	24	24	23	23	23	23	23
Petroleum engineering	17	16	18	17	18	18	18	18
Engineering, nec	101	104	109	106	117	123	124	132
Health	2,889	2,933	2,932	2,952	3,026	3,019	2,978	3,012
Medical fields	2,058	2,079	2,040	2,038	2,079	2,051	1,994	2,001
Anesthesiology	89	87	87	89	89	89	88	88
Cardiology	71	72	71	70	68	69	62	60
Endocrinology	71	72	70	68	67	66	60	58
Gastroenterology	68	68	68	67	65	64	60	56
Hematology	69	72	71	70	67	66	60	57
Neurology	157	164	162	164	171	174	171	175
Obstetrics/gynecology	91	91	88	88	89	86	84	84
Oncology/cancer research	63	71	70	74	89	89	89	94
Ophthalmology	78	78	76	76	77	75	72	72
Otorhinolaryngology	64	64	62	63	62	60	56	55
Pediatrics	112	110	110	109	110	109	105	103
Preventive medicine/community health	193	197	195	192	194	191	199	206
Psychiatry	101	100	98	98	104	103	101	101
Pulmonary disease	67	66	64	64	63	61	56	54
Radiology	129	131	128	127	128	123	115	118
Surgery	244	246	240	239	234	231	224	222
Clinical medicine, nec	391	390	380	380	402	395	392	398
Other health fields	831	854	892	914	947	968	984	1,011
Dental sciences	78	79	82	83	85	82	75	79
Nursing	164	167	169	172	173	184	188	195
Pharmaceutical sciences	93	92	87	87	87	90	93	93
Speech pathology/audiology	150	152	161	160	163	163	167	167
Veterinary sciences	52	55	62	62	68	71	72	79
Health related, nec	294	309	331	350	371	378	389	398

nec = not elsewhere classified.

<sup>a</sup> Includes departments at schools closed because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-3. Science, engineering, and health departments in master's-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005 <sup>a</sup>
All surveyed fields	1,344	1,373	1,395	1,413	1,428	1,441	1,440	1,418
Science and engineering	1,142	1,154	1,164	1,177	1,185	1,185	1,180	1,157
Science	975	983	993	1,001	1,005	1,003	995	983
Agricultural sciences	30	30	27	26	32	33	35	37
Biological sciences	149	152	156	157	157	161	160	160
Anatomy	0	0	0	0	0	0	0	0
Biochemistry	3	3	3	3	3	4	4	4
Biology	115	115	113	113	112	112	110	109
Biometry/epidemiology	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	2	2	2	2	2	2	2	2
Cell biology	2	2	3	3	3	3	3	4
Ecology	4	4	5	5	6	6	6	6
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	1	2	2	2	2	2	2	2
Microbiology/immunology/virology	2	2	3	3	3	3	4	5
Nutrition	9	9	9	8	8	8	9	9
Pathology	0	0	0	0	0	0	0	0
Pharmacology	0	1	1	1	0	0	0	0
Physiology	0	1	2	2	2	4	4	4
Zoology	2	2	2	2	1	1	1	1
Biosciences, nec	9	9	11	13	15	16	15	14
Computer sciences	74	77	86	89	90	96	98	99
Earth, atmospheric, and ocean sciences	54	54	56	56	57	59	57	57
Atmospheric sciences	2	1	1	1	1	1	1	1
Geosciences	25	26	28	28	29	29	27	27
Oceanography	6	6	6	5	5	5	5	5
Earth/atmospheric/ocean sciences, nec	21	21	21	22	22	24	24	24
Mathematical sciences	88	89	87	84	83	83	82	81
Mathematics/applied mathematics	85	85	83	80	79	79	78	77
Statistics	3	4	4	4	4	4	4	4
Physical sciences	95	92	87	83	83	80	76	78
Astronomy	0	0	0	0	0	0	0	0
Chemistry	57	56	55	53	52	51	50	52
Physics	26	24	22	21	22	21	19	19
Physical sciences, nec	12	12	10	9	9	8	7	7
Psychology	215	218	219	216	218	210	206	204
Clinical psychology	35	37	37	36	36	34	33	33
Psychology, general	75	76	77	77	75	72	73	70
Psychology, nec	105	105	105	103	107	104	100	101
Social sciences	270	271	275	290	285	281	281	267
Agricultural economics	3	3	2	1	1	1	1	2
Anthropology (cultural/social)	11	12	12	12	12	12	13	12
Economics (except agricultural)	29	29	29	29	27	25	24	22
Geography	21	23	22	23	24	23	23	22
History and philosophy of science	2	2	3	6	6	8	9	8
Linguistics	7	7	7	7	7	6	6	6
Political science	95	95	99	99	98	96	96	94
Sociology	35	37	36	38	38	35	36	35
Sociology/anthropology	2	2	2	2	1	1	2	2
Social sciences, nec	65	61	63	73	71	74	71	64

TABLE A-3. Science, engineering, and health departments in master's-granting institutions, by detailed field: 1998–2005

Field	1998	1999	2000	2001	2002	2003	2004	2005 <sup>a</sup>
Engineering	167	171	171	176	180	182	185	174
Aerospace engineering	3	3	3	3	3	3	3	3
Agricultural engineering	0	0	0	0	0	0	0	0
Biomedical engineering	4	4	4	4	4	3	3	3
Chemical engineering	7	6	6	6	6	7	6	6
Civil engineering	30	29	28	27	27	27	28	27
Electrical engineering	41	44	45	45	46	46	46	42
Engineering science	2	2	2	3	4	4	4	3
Industrial engineering	30	31	29	31	30	32	33	32
Mechanical engineering	21	22	23	24	22	25	25	23
Metallurgical/materials engineering	4	4	3	3	4	3	2	2
Mining engineering	2	2	2	2	2	2	2	2
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	1	1	1	1	1	1	1	1
Engineering, nec	22	23	25	27	31	29	32	30
Health	202	219	231	236	243	256	260	261
Medical fields	21	22	19	20	24	23	26	26
Anesthesiology	3	3	3	3	4	4	4	4
Cardiology	0	0	0	0	0	0	0	0
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	1
Obstetrics/gynecology	0	0	0	0	0	0	0	0
Oncology/cancer research	0	0	0	0	0	0	0	0
Ophthalmology	1	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	8	9	8	8	10	10	12	13
Psychiatry	1	1	1	1	2	1	1	0
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	1	1	1	1	1	1	2	2
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, nec	7	8	6	7	7	7	7	6
Other health fields	181	197	212	216	219	233	234	235
Dental sciences	0	0	0	0	0	0	0	0
Nursing	64	71	75	78	77	81	82	85
Pharmaceutical sciences	1	1	1	1	1	1	1	1
Speech pathology/audiology	56	59	59	59	59	58	58	56
Veterinary sciences	0	0	0	0	0	0	0	0
Health related, nec	60	66	77	78	82	93	93	93

nec = not elsewhere classified.

<sup>a</sup> Includes departments at schools closed because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-4. Departmental response rates: 1975–2005

Year	Total	Complete response		Partial response		Nonresponse	
		Number	Percent	Number	Percent	Number	Percent
1975 <sup>a</sup>	9,162	8,998	98.2	NA	NA	NA	NA
1976	9,275	9,148	98.6	NA	NA	NA	NA
1977	9,513	9,432	99.1	NA	NA	NA	NA
1978 <sup>b</sup>	8,242	8,077	98.0	NA	NA	NA	NA
1979	9,796	9,446	96.4	NA	NA	NA	NA
1980	9,930	9,593	96.6	NA	NA	NA	NA
1981	9,917	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,070	83.5	816	8.4	777	8.0
1984	8,748	7,490	85.6	643	7.4	615	7.0
1985	9,025	7,818	86.6	672	7.4	535	5.9
1986	9,097	7,817	85.9	779	8.6	501	5.5
1987	9,254	8,030	86.8	715	7.7	509	5.5
1988	10,295	8,812	85.6	970	9.4	513	5.0
1989	10,318	8,908	86.3	891	8.6	519	5.0
1990	10,483	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	9,514	82.0	1,730	14.9	354	3.1
1996	11,592	9,851	85.0	1,522	13.1	219	1.9
1997	11,597	9,720	83.8	1,665	14.4	212	1.8
1998	11,718	9,822	83.8	1,706	14.6	190	1.6
1999	11,833	9,396	79.4	2,289	19.3	148	1.3
2000	11,899	9,818	82.5	1,965	16.5	116	1.0
2001	11,967	10,121	84.6	1,731	14.5	115	1.0
2002	12,126	10,434	86.0	1,567	12.9	125	1.0
2003	12,261	10,343	84.4	1,709	13.9	209	1.7
2004 <sup>c</sup>	12,240	10,426	85.2	1,609	13.1	205	1.7
2004 <sup>d</sup>	12,240	10,524	86.0	1,474	12.0	242	2.0
2005 <sup>c</sup>	12,396	10,709	86.4	1,446	11.7	241	1.9
2005 <sup>d</sup>	12,396	10,783	87.0	1,270	10.2	343	2.8

NA = not available.

<sup>a</sup> The 1976 survey also collected 1975 data from master's-granting institutions.

<sup>b</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>c</sup> Calculated using the response-rate formula used through 2003. Schools closed in 2005 because of Hurricane Katrina were counted as nonrespondents.

<sup>d</sup> Calculated using the response-rate formula implemented in 2004. Schools closed in 2005 because of Hurricane Katrina were counted as nonrespondents.

NOTES: Includes medical schools. Departments providing partial responses are included in the complete response column prior to 1981 and reported separately beginning in 1981. Response rates for 2005 are as of 1 October 2006.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-5. Imputation for nonresponse in doctorate-granting institutions, by field and graduate enrollment or postdoctoral status: 2003–05

Year and field	Graduate departments in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Fall 2005, all fields <sup>a</sup>	10,978	381,172	146,595	48,601	3,788	1,731	279	1.0	1.2	0.6
Agricultural sciences	387	9,138	3,058	988	11	8	0	0.1	0.3	0.0
Biological sciences	2,087	55,745	8,691	18,995	601	99	73	1.1	1.1	0.4
Computer sciences	391	26,547	16,719	406	185	89	0	0.7	0.5	0.0
Earth, atmospheric, and ocean sciences	375	10,992	2,962	1,364	72	15	0	0.7	0.5	0.0
Mathematical sciences	414	14,596	3,883	496	75	57	0	0.5	1.5	0.0
Physical sciences	599	31,886	3,521	6,865	122	40	0	0.4	1.1	0.0
Psychology	643	32,971	13,770	889	801	328	0	2.4	2.4	0.0
Social sciences	1,483	59,285	28,526	371	349	266	0	0.6	0.9	0.0
Engineering	1,587	82,155	32,138	4,161	820	525	8	1.0	1.6	0.2
Health fields	3,012	57,857	33,327	14,066	752	304	198	1.3	0.9	1.4
Fall 2004, all fields	10,815	377,781	140,735	46,091	5,490	1,828	412	1.5	1.3	0.9
Agricultural sciences	375	9,459	3,027	941	66	0	2	0.7	0.0	0.2
Biological sciences	2,042	54,063	8,676	18,033	840	145	130	1.6	1.7	0.7
Computer sciences	382	27,235	17,357	384	583	372	0	2.1	2.1	0.0
Earth, atmospheric, and ocean sciences	372	11,256	2,874	1,253	52	4	0	0.5	0.1	0.0
Mathematical sciences	407	14,334	3,851	466	162	48	0	1.1	1.2	0.0
Physical sciences	590	31,243	3,595	6,945	489	85	46	1.6	2.4	0.7
Psychology	643	32,121	11,780	906	872	333	1	2.7	2.8	0.1
Social sciences	1,465	58,034	27,124	360	764	254	0	1.3	0.9	0.0
Engineering	1,561	84,611	31,861	3,963	647	260	1	0.8	0.8	*
Health fields	2,978	55,425	30,590	12,840	1,015	327	232	1.8	1.1	1.8
Fall 2003, all fields	10,820	372,213	138,197	46,582	5,976	3,767	1,753	1.6	2.7	3.8
Agricultural sciences	362	9,497	2,893	1,052	0	0	0	0.0	0.0	0.0
Biological sciences	2,071	52,517	8,344	18,605	1,020	389	690	1.9	4.7	3.7
Computer sciences	367	28,340	19,003	358	330	557	0	1.2	2.9	0.0
Earth, atmospheric, and ocean sciences	373	11,067	2,542	1,166	69	27	2	0.6	1.1	0.2
Mathematical sciences	407	13,969	3,589	447	147	119	3	1.1	3.3	0.7
Physical sciences	592	30,043	3,403	6,707	84	24	2	0.3	0.7	*
Psychology	633	30,357	11,945	959	935	581	0	3.1	4.9	0.0
Social sciences	1,438	56,938	26,176	402	709	675	1	1.2	2.6	0.2
Engineering	1,558	87,535	31,935	3,820	604	123	0	0.7	0.4	0.0
Health fields	3,019	51,950	28,367	13,066	2,078	1,272	1,055	4.0	4.5	8.1

\* = imputation rate less than 0.05%.

<sup>a</sup> No imputation was done for schools closed because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.



TABLE A-6. Imputation for nonresponse in master's-granting institutions, by field and graduate enrollment or postdoctoral status: 2003–05

Year and field	Graduate departments in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Fall 2005, all fields <sup>a</sup>	1,418	25,481	29,978	52	375	328	0	1.5	1.1	0.0
Agricultural sciences	37	572	355	1	0	0	0	0.0	0.0	0.0
Biological sciences	160	1,906	2,107	8	41	4	0	2.2	0.2	0.0
Computer sciences	99	1,770	3,010	0	18	10	0	1.0	0.3	0.0
Earth, atmospheric, and ocean sciences	57	378	495	0	7	4	0	1.9	0.8	0.0
Mathematical sciences	81	665	1,066	4	0	0	0	0.0	0.0	0.0
Physical sciences	78	500	489	31	6	4	0	1.2	0.8	0.0
Psychology	204	5,986	4,685	3	61	175	0	1.0	3.7	0.0
Social sciences	267	4,466	7,569	0	85	86	0	1.9	1.1	0.0
Engineering	174	2,220	3,960	2	113	43	0	5.1	1.1	0.0
Health fields	261	7,018	6,242	3	44	2	0	0.6	*	0.0
Fall 2004, all fields	1,440	24,849	31,572	40	186	301	1	0.7	1.0	2.5
Agricultural sciences	35	581	378	1	0	0	0	0.0	0.0	0.0
Biological sciences	160	1,753	2,056	21	4	9	0	0.2	0.4	0.0
Computer sciences	98	1,927	3,497	0	0	0	0	0.0	0.0	0.0
Earth, atmospheric, and ocean sciences	57	429	572	0	4	8	0	0.9	1.4	0.0
Mathematical sciences	82	582	1,164	0	0	0	0	0.0	0.0	0.0
Physical sciences	76	432	491	11	0	0	0	0.0	0.0	0.0
Psychology	206	5,751	4,566	4	41	4	0	0.7	*	0.0
Social sciences	281	4,390	8,031	0	71	215	0	1.6	2.7	0.0
Engineering	185	2,344	4,750	2	6	43	0	0.3	0.9	0.0
Health fields	260	6,660	6,067	1	60	22	1	0.9	0.4	100.0
Fall 2003, all fields	1,441	25,207	31,553	31	829	612	0	3.3	1.9	0.0
Agricultural sciences	33	506	301	0	0	0	0	0.0	0.0	0.0
Biological sciences	161	1,833	2,007	10	4	8	0	0.2	0.4	0.0
Computer sciences	96	2,368	3,985	2	83	143	0	3.5	3.6	0.0
Earth, atmospheric, and ocean sciences	59	430	581	0	4	8	0	0.9	1.4	0.0
Mathematical sciences	83	658	1,249	0	0	0	0	0.0	0.0	0.0
Physical sciences	80	398	454	17	0	0	0	0.0	0.0	0.0
Psychology	210	5,417	4,492	1	286	208	0	5.3	4.6	0.0
Social sciences	281	4,474	7,541	0	355	202	0	7.9	2.7	0.0
Engineering	182	2,681	5,226	0	46	39	0	1.7	0.7	0.0
Health fields	256	6,442	5,717	1	51	4	0	0.8	*	0.0

\* = imputation rate less than 0.05%.

<sup>a</sup> No imputation was done for schools closed because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-7. Imputation rates of full-time graduate students, by source and mechanism of support, and by female students: 2005  
(Percent)

Source of support	All sources	Fellowship	Research assistantship	Teaching assistantship	Traineeship	Other support	Female students
All sources	1.0	6.2	8.8	8.3	8.7	15.0	1.6
Federal sources							
Department of Defense	11.0	15.8	13.7	na	10.1	3.2	13.3
Department of Energy	5.0	3.9	5.1	6.4	0.0	20.5	5.4
Department of Health and Human Services							
National Institutes of Health	6.5	6.0	7.0	0.3	5.4	4.8	8.0
Other	13.9	8.4	8.3	0.0	17.5	10.5	15.5
National Aeronautics and Space Administration	11.4	9.5	12.0	0.0	14.5	0.0	8.2
National Science Foundation	8.3	5.3	8.7	7.1	19.8	6.5	6.3
U.S. Department of Agriculture	9.4	0.0	9.8	6.5	26.1	0.0	9.0
Other	10.7	4.6	12.5	24.5	5.6	7.6	9.7
Nonfederal sources							
Domestic	11.1	9.9	11.2	17.0	10.1	9.7	10.8
Foreign	9.7	7.0	4.5	na	42.6	14.2	8.6
Institutional	9.4	6.5	10.5	9.2	7.2	12.1	10.5
Self support	16.4	na	na	na	na	16.5	17.4

na = not applicable; question was not asked.

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE A-8. Imputed full-time graduate students, by source and mechanism of support, and by female students: 2005

Source of support	All sources	Fellowship	Research assistantship	Teaching assistantship	Traineeship	Other support	Female students
All sources	4,163	2,266	10,038	6,182	1,257	25,130	3,133
Federal sources							
Department of Defense	985	61	840	na	7	77	221
Department of Energy	220	6	207	5	0	8	58
Department of Health and Human Services							
National Institutes of Health	1,739	107	1,255	1	318	43	1,121
Other	548	16	91	0	388	41	429
National Aeronautics and Space Administration	307	27	271	0	9	0	65
National Science Foundation	1,701	190	1,380	27	81	14	419
U.S. Department of Agriculture	317	0	307	4	6	0	140
Other	1,421	88	964	169	56	145	589
Nonfederal sources							
Domestic	2,744	352	1,747	191	72	368	1,042
Foreign	254	72	27	na	29	131	66
Institutional	14,645	1,529	4,174	6,592	291	2,053	7,439
Self support	22,930	na	na	na	na	23,021	13,654

na = not applicable; question was not asked.

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE A-9. Imputation rates of graduate students, by citizenship, race/ethnicity, enrollment status, and sex: 2005  
(Percent)

Citizenship and race/ethnicity	Part time			Full time			First time	
	Total	Male	Female	Total	Male	Female	Total	Female
All graduate students	1.5	2.9	2.2	1.0	2.3	1.6	1.9	1.9
U.S. citizens and permanent residents								
One race only, non-Hispanic/Latino								
American Indian/Alaska Native	17.5	14.1	19.8	2.0	2.4	2.6	1.2	1.2
Asian	9.4	9.4	9.4	4.4	4.7	4.9	5.7	5.3
Black	4.0	4.0	4.0	4.6	4.9	4.6	3.9	4.3
Native Hawaiian/Pacific Islander	7.8	11.0	6.7	4.9	4.4	5.2	5.4	6.5
White	3.5	3.8	3.3	3.3	3.8	3.3	3.4	3.6
One race only, Hispanic/Latino	3.0	3.3	2.8	2.6	3.1	2.7	3.1	2.7
More than one race								
Hispanic/Latino	0.2	0.5	0.0	0.2	0.4	0.1	1.2	0.7
Non-Hispanic/Latino	8.2	15.6	1.4	1.0	2.3	0.0	1.1	0.0
Unknown	4.0	3.7	4.2	4.6	5.7	4.4	3.5	3.2
Temporary-visa holders	5.8	5.9	5.6	3.6	4.2	3.1	3.2	3.4

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE A-10. Imputed graduate students, by citizenship, race/ethnicity, enrollment status, and sex: 2005

Citizenship and race/ethnicity	Part time			Full time			First time	
	Total	Male	Female	Total	Male	Female	Total	Female
All graduate students	2,657	2,448	2,070	4,163	4,961	3,133	2,057	1,067
U.S. citizens and permanent residents								
One race only, non-Hispanic/Latino								
American Indian/Alaska Native	183	60	123	32	15	26	5	3
Asian	1,202	646	556	1,068	544	620	412	205
Black	593	188	405	869	315	570	218	160
Native Hawaiian/Pacific Islander	73	28	45	45	18	27	12	8
White	3,511	1,727	1,784	6,410	3,414	3,332	1,857	1,095
One race only, Hispanic/Latino	305	144	161	447	219	266	148	77
More than one race								
Hispanic/Latino	1	1	0	3	2	1	3	1
Non-Hispanic/Latino	11	10	1	5	5	0	2	0
Unknown	647	291	356	1,046	591	530	238	122
Temporary-visa holders	1,159	788	371	4,594	3,491	1,334	968	352

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE A-11. Imputation rates of science and engineering postdoctorates, by source of support, and nonfaculty research staff with doctorates: 2005

(Percent)

Status	Total	Women	With M.D., D.O., D.D.S., or D.V.M. degrees
Postdoctorates, all sources of support	0.7	0.6	8.1
Federal			
Fellowship	25.6	22.7	8.4
Research grant	8.2	8.9	7.2
Traineeship	9.7	7.6	1.7
Nonfederal	14.7	14.8	15.0
Foreign	5.3	5.8	7.9
Nonfaculty research staff with doctorates	4.2	5.4	4.2

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.

TABLE A-12. Imputed science and engineering postdoctorates, by source of support, and nonfaculty research staff with doctorates: 2005

Status	Total	Women	With M.D., D.O., D.D.S., or D.V.M. degrees
Postdoctorates, all sources of support	320	108	445
Federal			
Fellowship	982	353	38
Research grant	2,269	821	154
Traineeship	271	95	11
Nonfederal	2,129	752	343
Foreign	1,419	487	221
Nonfaculty research staff with doctorates	382	165	36

NOTE: No imputation was done for schools closed in 2005 because of Hurricane Katrina.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2005.





TABLE A-13. Graduate enrollment data as originally published and as modified through the fall 2005 graduate student survey cycle: 1975–2005

Year	All institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original	Revised	% change	Original	Revised	% change	Original	Revised	% change
1995	330,235	329,283	-0.3	305,652	310,521	1.6	24,583	18,762	-23.7
1996	328,368	328,536	0.1	303,586	309,304	1.9	24,782	19,232	-22.4
1997	326,842	327,289	0.1	301,573	307,632	2.0	25,269	19,657	-22.2
1998	327,609	327,389	-0.1	301,544	307,094	1.8	26,065	20,295	-22.1
1999	334,405	334,423	*	309,466	313,910	1.4	24,939	20,513	-17.7
2000	342,121	341,283	-0.2	316,531	319,816	1.0	25,590	21,467	-16.1
2001	355,115	354,522	-0.2	330,043	332,603	0.8	25,072	21,919	-12.6
2002	378,822	378,991	*	352,764	355,393	0.7	26,058	23,598	-9.4
2003	398,010	397,420	-0.1	371,784	372,213	0.1	26,226	25,207	-3.9
2004	402,161	402,630	0.1	376,664	377,781	0.3	25,497	24,849	-2.5
2005	406,653	NA	NA	381,172	NA	NA	25,481	NA	NA
Part-time enrollment									
1975 <sup>a</sup>	108,527	108,862	0.3	80,021	92,511	15.6	28,506	16,351	-42.6
1976	112,231	110,304	-1.7	81,925	92,860	13.3	30,306	17,444	-42.4
1977	124,776	118,636	-4.9	88,484	98,824	11.7	36,292	19,812	-45.4
1978 <sup>b</sup>	NA	116,882	NA	94,394	96,613	2.4	NA	20,269	NA
1979	131,936	125,818	-4.6	97,713	104,423	6.9	34,223	21,395	-37.5
1980	134,099	128,662	-4.1	103,057	107,776	4.6	31,042	20,886	-32.7
1981	138,606	133,081	-4.0	105,674	110,578	4.6	32,932	22,503	-31.7
1982	143,723	137,534	-4.3	109,738	114,151	4.0	33,985	23,383	-31.2
1983	149,764	138,415	-7.6	114,630	115,108	0.4	35,134	23,307	-33.7
1984	150,918	140,748	-6.7	116,622	115,290	-1.1	34,296	25,458	-25.8
1985	165,517	146,734	-11.3	121,386	120,811	-0.5	44,131	25,923	-41.3
1986	166,867	149,352	-10.5	124,223	122,751	-1.2	42,644	26,601	-37.6
1987	164,385	150,441	-8.5	123,819	123,763	*	40,566	26,678	-34.2
1988	156,976	149,396	-4.8	123,298	124,981	1.4	33,678	24,415	-27.5
1989	154,364	151,830	-1.6	117,471	125,679	7.0	36,893	26,151	-29.1
1990	163,107	159,331	-2.3	123,143	131,387	6.7	39,964	27,944	-30.1
1991	167,022	164,202	-1.7	124,540	134,928	8.3	42,482	29,274	-31.1
1992	171,998	170,967	-0.6	128,039	140,262	9.5	43,959	30,705	-30.2
1993	176,429	174,660	-1.0	133,694	142,710	6.7	42,735	31,950	-25.2
1994	174,657	172,311	-1.3	133,516	141,688	6.1	41,141	30,623	-25.6
1995	171,275	170,357	-0.5	130,676	139,346	6.6	40,599	31,011	-23.6
1996	166,158	165,543	-0.4	127,045	135,249	6.5	39,113	30,294	-22.5
1997	160,262	159,919	-0.2	123,077	130,933	6.4	37,185	28,986	-22.0
1998	158,145	158,238	0.1	121,290	128,855	6.2	36,855	29,383	-20.3
1999	159,020	158,833	-0.1	123,191	129,275	4.9	35,829	29,558	-17.5
2000	152,473	152,028	-0.3	119,081	123,816	4.0	33,392	28,212	-15.5
2001	155,041	155,098	*	122,368	126,624	3.5	32,673	28,474	-12.9
2002	161,898	161,426	-0.3	129,447	131,921	1.9	32,451	29,505	-9.1
2003	168,825	169,750	0.5	135,463	138,197	2.0	33,362	31,553	-5.4
2004	172,173	172,307	0.1	139,952	140,735	0.6	32,221	31,572	-2.0
2005	176,573	NA	NA	146,595	NA	NA	29,978	NA	NA

\* = less than 0.05%.

NA = not available.

<sup>a</sup> The 1976 survey also collected 1975 data from master's-granting institutions.<sup>b</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

NOTES: The % change column measures retroactive changes in survey definitions. Three survey changes in the late 1980s and early 1990s had a retroactive effect on figures reported for earlier years. (1) Before 1992, doctorate or master's degree-granting status was determined by an institution's status each year. Beginning in 1992, degree-granting status was determined by the status reported in the latest survey year. This change shifted numerous institutions (and students) from master's-granting to doctorate-granting categories for years before 1992. (2) In 1988, guidelines to determine science and engineering departments were tightened; thus, departments in fields such as educational psychology, social work, and cultural studies were retroactively dropped from the survey population. (3) Improved estimates were generated for 1984–87, in which enrollments at master's-granting institutions were sampled.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

## Footnotes

[1] See <http://www.nsf.gov/statistics/srvygradpostdoc/> for additional survey information and for available data related to graduate student enrollment and postdoctoral appointees in science and engineering.

[2] For purposes of this report, the term "reporting unit" is essentially equivalent to a school (such as a graduate school, medical or dental school, nursing school, or school of public health), an affiliated research center, a branch campus, or any other organizational component within an academic institution that grants an S&E or health-related degree.

[3] American Association for Public Opinion Research (AAPOR). 2004. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. 3rd Edition. Lenexa, Kansas: AAPOR.

[4] If the five reporting units closed by Hurricane Katrina were considered ineligible rather than nonrespondent for the fall 2005 data collection, the number of reporting units would be reduced to 703. The response distribution would be 95.6% complete response, 1.7% partial response, and 2.7% nonresponse.

[5] If Tulane were excluded from the list of institutions surveyed in fall 2005, the response distribution for the remaining 587 institutions would be 95.6% complete response, 1.4% partial response, and 3.1% nonresponse.

[6] Excluding the 88 departments in schools closed in 2005 by Hurricane Katrina, the response distribution for the remaining 12,308 departments would be 87.6% complete response, 10.3% partial response, and 2.1% nonresponse.

## Appendix B. Survey Materials

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- 2005 Graduate Student Survey
- 2005 Crosswalk

NATIONAL SCIENCE FOUNDATION  
ARLINGTON, VA 22230

Dear Departmental Respondent:

The National Science Foundation (NSF) and the National Institutes of Health (NIH) request your participation in their annual Survey of Graduate Students and Postdoctorates in Science and Engineering. Your timely response will ensure that your department is accurately represented in data used by Federal and State decisionmakers. In addition, we hope you will find the data useful for comparisons with other institutions in your State or region. Also, since industrial firms use these data in preparing for employment recruiting visits, your participation in the survey provides valuable benefits to your graduates.

**Your survey data should be returned to NSF on or before January 31, 2006.** This year the survey will continue to be offered online. **The Web-based data collection system (<http://www.gss2005.org>) offers many advantages over the paper survey form.** We encourage you to take advantage of the Web system. Departmental IDs and passwords to access the system are available from your school coordinator or from Mr. Jason Bauer or Ms. Allison Hesse of ORC Macro. **If you do not use the Web system, please return your completed data sheet to your survey coordinator before this date so that it can be transmitted to NSF in time to meet the survey deadline.** If you are returning your survey individually, please mail it to:

NSF-NIH Graduate Student Survey  
c/o ORC Macro  
7315 Wisconsin Avenue, Suite 400W  
Bethesda, MD 20814-3202

The data requested for the fall 2005 survey are exactly the same as those for the fall 2004 survey. When you return the survey Form 812 to your institution's survey coordinator, please keep a copy for your files. The instructions on the survey form and "How to Avoid Common Survey Errors" on page 7 should assist you in completing the survey. Because survey data with arithmetic errors or large trend inconsistencies will be returned for correction, verification, or explanation, please adhere to the guidelines. If you have any questions about the survey forms, please contact Mr. Bauer by telephone at (301) 657-3077, ext. 322 or Ms. Hesse at (301) 657-3077, ext. 120. You may also contact them toll-free at (866) 695-6275 or by e-mail at [gss@orc.com](mailto:gss@orc.com).

Please provide separate data sheets for (1) clinical psychology and (2) all other psychology departments or degree programs, due to special interest in the clinical area. Similarly, please submit separate data for degree programs in engineering, such as electrical engineering or mechanical engineering, and likewise, separate data for degree programs in computer science and in mathematics.

As a result of damages caused by hurricanes in 2005, several educational institutions had to close for the fall 2005 term. Other schools have generously allowed students displaced by the hurricanes to enroll at their universities. Do NOT include in the counts of students enrolled for the fall semester those displaced from other institutions by the fall hurricanes. However, please **DO** enter the total number of displaced students enrolled in the fall 2005 term in the comment section on page 5. Likewise, do **NOT** include in the counts of postdoctorate researchers and non-faculty research staff those displaced from other institutions by the fall hurricanes. However, please **DO** enter the total number of displaced postdoctorate researchers and non-faculty research staff at your school in the fall 2005 term in the comment section on page 6.

Survey results are made available in a variety of modes. A two-page *InfoBrief* and selected summary tables are published. All tables and reports are made available in various electronic formats on the Internet (<http://www.nsf.gov/statistics/>). These results are also entered in the Web-Based Computer-Aided Science Policy Analysis and Research (WebCASPAR) database system. The URL for WebCASPAR is <http://caspar.nsf.gov/webcaspar>.

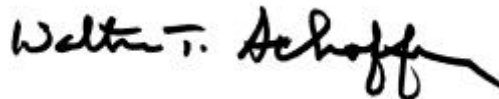
Thank you for your efforts in providing timely and meaningful statistics to NSF and NIH.

Sincerely,



Lynda T. Carlson, Ph.D.  
Division Director  
Division of Science Resources Statistics  
National Science Foundation

Sincerely,



Walter T. Schaffer, Ph.D.  
NIH Research Training Officer  
Research Training Office  
Office of the Director  
National Institutes of Health

Enclosures: D

# INSTRUCTIONS

## FOR THE NSF-NIH SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 2005

### PURPOSE OF THE SURVEY

The survey provides a comprehensive picture of the training of future scientists and engineers in the Nation's graduate schools. Data are used by Congress and the executive branch during budget preparation, and by State government agencies and other analysts to assess the future supply of science and engineering (S&E) personnel.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be used for statistical purposes only. Response is entirely voluntary and failure to provide some or all of the information will in no way adversely affect your institution.

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Suzanne Plimpton at (703) 292-7556.

### Students Included in This Survey

Count as graduate students persons enrolled **for credit** in any S&E master's or Ph.D. degree program in fall 2005. Report M.D., D.D.S., D.O., or D.V.M. candidates, interns, and residents in items 5 through 7 **only** if they are concurrently working for an S&E master's or Ph.D. degree or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (items 5 through 7), not postdoctorates (item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government- and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program.

Use only **whole** numbers. When reporting data for items 5, 6, 7, and 8, use headcounts, **not** full-time equivalents (FTEs).

### Students Excluded From This Survey

Exclude students enrolled in a foreign country (at a branch or extension center), and non-matriculated students.

Do **NOT** report students displaced by the fall hurricanes who are temporarily enrolled for classes at your school with your headcount.

**DO** enter the total number of displaced students enrolled in the fall 2005 term in the comments section on page 5.

### Students Enrolled in Multiple Departments/Institutions

A student should be reported in only **one** department. Students enrolled in interdisciplinary/interinstitutional programs should be counted only once, by their "home" department and institution.

### INCOMPLETE DATA

Please write "unavailable" or "unknown" in data cells as applicable. On this form, "N/A" means "not applicable." Data cells left blank are presumed to be zeroes.

### ITEM 4: HIGHEST GRADUATE DEGREE AVAILABLE

For the purposes of this survey, departments of programs that do not offer graduate degrees (Ph.D. or master's) are considered as "No Ph.D. or master's degree offered" programs, regardless of first professional or other degrees granted. "No Ph.D. or master's degree offered" programs should not report students, postdoctoral appointees, or anyone else in items 5, 6, and 7. Count individuals in a "No Ph.D. or master's degree offered" program only in item 8, and only if they qualify as postdoctoral appointees or other non-faculty staff by this survey's definitions.

### ITEM 5: FULL-TIME MECHANISMS OF SUPPORT

In item 5, count only graduate students pursuing an S&E degree according to a full-time schedule; this may include any combination of study, teaching, and research, depending on your institution's policy and definition of full-time status. For example, many institutions base full-time status on the number of credit hours taken; others calculate full-time according to the amount of fees paid by the student.

Report the total number of full-time degree-seeking students in line (6), column (M). Then, in lines (1) through (6), count each full-time student **only once** by **largest** source of support so that all columns and rows in item 5 sum to the full-time total in line (6), column (M). The full-time total in item 5, line (6), column (M) must equal the full-time total reported in item 7, line (6), column (K).

Do not forget full-time, self-supported students, who should be reported in column (L). Self-supported students are supported primarily through loans, personal savings, and/or family contributions.

### Mechanisms of Support—Lines (1) Through (5)

A **fellowship**, line (1), is any competitive award (often from a national competition) made to a student that requires no work of the recipient. A **traineeship**, line (2), is an educational award given to a student selected by the institution. An **assistantship** should be classified as **research**, line (3), or **teaching**, line (4), depending on assigned duties; e.g., a student devoting most of his or her time to teaching should be reported on line (4). All other full-time students, including members of the Armed Forces whose tuition is paid by the Department of Defense, and self-supported students, should be reported on line (5).

### Federal Sources of Support—Columns (A) Through (H)

**Department of Defense (DoD)—Column (A):** Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students

receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (H), "Other Federal sources."

**Department of Health and Human Services (HHS)—Columns (B) and (C):** Report students with support from the institutes or divisions of the National Institutes of Health (NIH) under column (B); report support from all other components of HHS in column (C). Refer to the organizational roster under "Survey Definitions" on page 3.

**National Science Foundation (NSF)—Column (D):** Report students receiving NSF graduate fellowships, as well as those supported under NSF research grants.

**U.S. Department of Agriculture (USDA)—Column (E):** Include research assistants working on projects financed out of Hatch, McIntyre-Stennis, or Smith-Lever formula funds, competitive research grants, and institution fellowship/training grants.

**National Aeronautics and Space Administration (NASA)—Column (F):** Report students with support from this agency.

**Department of Energy (DOE)—Column (G):** Report students receiving support under DOE research grants, including those supported by grants at national laboratories.

**Other Federal Sources—Column (H):** Report students receiving support from Federal agencies other than those listed in columns (A) through (G), such as the Fulbright program, the G.I. Bill, and Department of Education programs. Students primarily supported by Federal loans should be reported in column (L), "Self-supported students."

### Non-Federal Sources of Support—Cols. (I) Through (L)

**Institutional support—Column (I):** Report students supported from YOUR institution, including those receiving tuition waivers. State and local government support should also be reported in this column. Students primarily supported with funds from the Federal Government, such as training grants, however, should be reported under the appropriate Federal agency.

**Foreign sources—Column (J):** Report students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.

**Other U.S. sources—Column (K):** Report students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (I) or (J).

**Self-supported students—Column (L):** Report both foreign and U.S. citizen students whose largest source of support comes from ANY loans (including Federal loans) or from personal or family financial contributions. **These students must be included in the full-time total, line (6), column (M).**

**Full-Time Women—Line (7)**

Report all full-time female students by the source of their primary support. The total number of full-time women should be reported in line (7), column (M). In each column, data on line (7) should not exceed the total on line (6).

The total number of full-time women in item 5, line (7), column (M) must match the total number of full-time women in item 7, line (5), column (K).

**ITEMS 6 & 7: CITIZENSHIP AND RACIAL/ETHNIC BACKGROUND OF U.S. CITIZENS AND PERMANENT RESIDENTS**

Report all U.S. citizens and permanent residents in columns (A) through (I), and count each student only once according to his or her racial/ethnic category as defined by the Office of Management and Budget, listed under “Survey Definitions (3)” on this page.

Count foreign students, i.e., students who are in this country on temporary visas, only **once** in column (J), regardless of race/ethnicity. *Students who are native residents of a U.S. possession or are permanent residents holding green cards should be included under U.S. citizens and permanent residents.*

Please record, under the One Race Only: Non-Hispanic header, columns (A) through (E), those U.S. citizen or permanent resident students who have reported themselves in only one of the following categories: non-Hispanic Black/African American, non-Hispanic American Indian or Alaska Native, non-Hispanic Asian, non-Hispanic Native Hawaiian/Pacific Islander, or non-Hispanic White. Under the header One Race Only: Hispanic, column (F), please record those U.S. citizens and permanent residents who have reported themselves as Hispanic and either no race or only one race (Black/African American, American Indian or Alaska Native, Asian, Native Hawaiian/Pacific Islander, or White). If you allow students to report multiple races and they are U.S. citizens or permanent residents, please record them in columns (G) and (H). If students have reported themselves as Hispanic and two or more of the racial categories, please record them in column (G), More Than One Race Reported, Hispanic. Students who are non-Hispanic but are two or more races should be recorded in column (H), More Than One Race Reported, non-Hispanic. Record students who are U.S. citizens or permanent residents but have an unknown race or ethnicity in column (I). Finally, record all of those students who are on temporary visas in column (J) regardless of their race or ethnicity.

**ITEM 6: PART-TIME STUDENTS****Part-Time Men, Women, and Total—Lines (1) Through (3)**

For item 6, report ALL part-time students, regardless of their source of support. Part-time students are pursuing an S&E graduate degree but NOT on a full-time schedule. Consider students part time according to your own institution’s definition of part-time status.

**ITEM 7: FULL-TIME STUDENTS****Full-Time Total—Line (6)**

Total full-time enrollment reported in item 7, line (6), should match that reported in item 5, line (6).

**First-Time Full-Time Students—Line (7)**

A first-time student has enrolled in the program in which he or she is pursuing a degree as of the beginning of the fall term in 2005. All other students should be considered to be beyond their first time of enrollment. The total number of first-time, full-time students in item 7, line (7), column (K), should not be greater than the full-time total reported in item 7, line (6), column (K).

**First-Time Full-Time Women—Line (8)**

The total number of first-time, full-time women reported in item 7, line (8) should not be greater than the full-time women total reported in item 7, line (5), column (K).

**SURVEY DEFINITIONS****(1) NATIONAL INSTITUTES OF HEALTH ORGANIZATIONAL ROSTER**

—Item 5, column (B)

Fogarty International Center  
National Cancer Institute  
National Center for Human Genome Research  
National Center for Nursing Research  
National Center for Research Resources  
National Eye Institute  
National Heart, Lung, and Blood Institute  
National Institute of Arthritis and Musculoskeletal and Skin Diseases  
National Institute of Child Health and Human Development  
National Institute of Dental Research  
National Institute of Diabetes and Digestive and Kidney Diseases  
National Institute of Environmental Health Sciences  
National Institute of General Medical Sciences  
National Institute of Mental Health  
National Institute of Neurological Disorders and Stroke  
National Institute on Aging

National Institute on Alcohol Abuse and Alcoholism  
National Institute of Allergy and Infectious Diseases  
National Institute on Deafness and Other Communication Disorders  
National Institute on Drug Abuse  
National Library of Medicine

**(2) OTHER HHS ADMINISTRATIVE UNITS**

—Item 5, column (C)

Substance Abuse and Mental Health Services Administration  
(Please note that the former Alcohol, Drug Abuse, and Mental Health Administration institutes are now part of the National Institutes of Health.)  
Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health  
Food and Drug Administration  
Health Resources and Services Administration

**(3) RACIAL/ETHNIC CATEGORIES FOR U.S. CITIZENS AND PERMANENT RESIDENTS DEFINED BY THE OFFICE OF MANAGEMENT AND BUDGET**

—Items 6 & 7

**Black or African American:** A person having origins in any of the black racial groups of Africa.

**American Indian or Alaska Native:** A person 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 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, Samoa, Thailand, and Vietnam.

**Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, or other Pacific islands.

**White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**Hispanic or Latino:** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

**More Than One Race Reported:** Students reporting two or more of the race/ethnicity categories above.

**FOR FURTHER INFORMATION . . .**

If you have any questions about this survey, please contact Mr. Jason Bauer of ORC Macro by telephone at (301) 657-3077, ext. 322, or Ms. Allison Hesse of ORC Macro at (301) 657-3077, ext. 120.

You may also contact them toll-free at (866) 695-6275 or by e-mail at [gss@qrc.com](mailto:gss@qrc.com).

**UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 2006.**

NATIONAL SCIENCE FOUNDATION and NATIONAL INSTITUTES OF HEALTH  
**Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 2005**  
**DEPARTMENT OR PROGRAM DATA SHEET**

Due date: January 31, 2006

**IDENTIFYING INFORMATION**

1. Institution name: \_\_\_\_\_  
 2. Name of S&E department or program:  
 \_\_\_\_\_

3. Person in department or program preparing this form:  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Phone: ( \_\_\_\_\_ ) \_\_\_\_\_  
 E-mail Address: \_\_\_\_\_

4. Highest **graduate** degree<sup>1</sup> available in this department or program (CHECK ONE):  
 (1) Ph.D.<sup>2</sup>  (2) Master's  (3) No Ph.D.<sup>2</sup> or master's degree offered   
 If no Ph.D. or master's offered, do not report data in items 5, 6, and 7.

**Institution and  
 department code  
 (LEAVE BLANK)**

If changed since last year, please indicate previous name and whether this represents a merger, split, or expanded program:  
 \_\_\_\_\_

**Report all data on a headcount basis (use whole numbers, *not* fractions, decimals, FTEs, etc.). If your department does not enroll graduate students, please go to item 8.**

**ITEM 5. NUMBER OF FULL-TIME GRADUATE STUDENTS** enrolled for advanced degrees (master's and doctoral) in fall 2005. Report each student **only once** according to the source and mechanism of the **largest amount of support** received in fall 2005.

Students receiving equal support from multiple sources or through multiple mechanisms should be reported only once. When determining the largest source of support, consider **all** graduate school academic expenses including tuition, tuition remission, and stipends.

MECHANISMS OF SUPPORT	Line	FULL-TIME GRADUATE STUDENTS RECEIVING FINANCIAL ASSISTANCE											SELF-SUPPORTED STUDENTS (including loans and family sources) (L)	TOTAL FULL-TIME GRADUATE ENROLLMENT (Sum of (A) through (L)) (M)	
		FEDERAL SOURCES (excluding loans)									NON-FEDERAL SOURCES				
		Department of Defense (A)	HHS		National Science Foundation (D)	Department of Agriculture (E)	NASA (F)	Department of Energy (G)	Other Federal sources (H)	Institutional support (including State & local government) (I)	Foreign sources (J)	Other U.S. Sources (K)			
			National Institutes of Health (B)	Other HHS (C)											
Graduate Fellowships	(1)														
Graduate Traineeships	(2)														
Graduate Research Assistantships	(3)														
Graduate Teaching Assistantships	(4)														
Other Types of Support	(5)														
<b>FULL-TIME TOTAL<sup>3</sup></b>	(6)														
<b>Of the students in line (6), how many in each data cell are WOMEN?<sup>4</sup></b>	(7)														

<sup>1</sup> Report the highest degree offered even if there are no graduate students currently enrolled. Check "No Ph.D. or master's degree offered" only if your department or program does not offer graduate degrees.

<sup>2</sup> Or Ph.D. equivalent such as Sc.D. and D.Eng., but not Ed.D., M.D., or other professional degree

<sup>3</sup> The total from line (6) should be inserted in item 7, line (6), column (K).

<sup>4</sup> The total from line (7) should be inserted in item 7, line (5), column (K).

ITEM 6. RACE/ ETHNICITY of PART- TIME graduate students in fall 2005, by sex.	How many students belong to the following RACIAL/ETHNIC categories? In each line, count each student only once.	U.S. CITIZENS AND PERMANENT RESIDENTS									FOREIGN	TOTAL
		ONE RACE ONLY: Non-Hispanic/Latino					ONE RACE ONLY	MORE THAN ONE RACE		Unknown or did not state	Temporary visa holders	(Sum of (A) through (J))
		Black/ African American  (A)	Amer. Indian or Alaska Native  (B)	Asian  (C)	Native Hawaiian/ Pacific Islander  (D)	White  (E)	Hispanic/ Latino  (F)	Hispanic/ Latino  (G)	Non- Hispanic/ Latino  (H)			
MEN ENROLLED PART TIME	(1)											
WOMEN ENROLLED PART TIME	(2)											
PART TIME, TOTAL	(3)											

ITEM 7. RACE/ ETHNICITY of FULL- TIME (Item 5) graduate students in fall 2005, by sex.	MEN ENROLLED FULL TIME	(4)										
	WOMEN ENROLLED FULL TIME (column (K) should equal Item 5, line (7), column (M))	(5)										
	FULL TIME, TOTAL (column (K) should equal Item 5, line (6), column (M))	(6)										
	Of the full-time students on line (6), how many are FIRST TIME?	(7)										
	Of the first-time students on line (7), how many are WOMEN?	(8)										

List other Federal sources (agencies), from item 5, column (H), and number of full-time students supported by each:

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Did your department accept students displaced by the fall hurricanes? \_\_\_\_\_ (Yes/ No)  
If so, how many:

Please explain variances from the previous year's data or include other comments.

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If you prefer to enter your data on the Web, go to <http://www.gss2005.org>.



## INSTRUCTIONS FOR ITEM 8:

### POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES

**POSTDOCTORATES—Columns (A) through (F):** Include all postdoctorates receiving research training through the department or program. Use the following criteria to determine postdoctorate status:

- The appointee holds a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D., D.D.S., D.O., D.V.M., or foreign degrees equivalent to U.S. doctorates).
- The doctorate was awarded recently, generally within the last 5 years.
- The appointment is for a limited term, the limit generally being 5–7 years.
- The appointment is primarily for the purpose of training in research or scholarship.
- The appointee works under the supervision of a senior scholar in a department or research unit affiliated with the university.

These postdoctorates may have different titles—do not include clinical fellows and those with appointments in residency training programs in medical and health professions, unless research training under the supervision of a senior mentor is the primary purpose of the appointment.

Report postdoctorates by source of support in columns (A) through (D), with the total number of postdoctorates reported in column (E). Of this total, report the number who are foreign in column (F).

**Foreign postdoctorates—Column (F):** Include all postdoctorates who are in this country on temporary visas. Postdoctorates who are native residents of a U.S. possession or are permanent residents holding green cards should be included under U.S. citizens and permanent residents.

If you included postdoctorates who are part of your department or program but work in interdisciplinary research centers or other organized research units outside of the department or program, please provide a list of the names of those research centers or units:

**OTHER NON-FACULTY RESEARCH STAFF WITH DOCTORATES—Column (G):** Include all doctoral scientists and engineers who are involved principally in research activities but are not considered either postdoctoral appointees or members of the regular faculty. On line (2), report the number of women in each category. On line (3), report those postdoctorates and non-faculty research staff who hold first professional degrees in medical and related fields (M.D., D.D.S., D.O., or D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

**POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF DISPLACED BY FALL HURRICANES—Columns (A) through (G):** Do **NOT** report postdoctorates or non-faculty research staff temporarily displaced by the fall hurricanes. **DO** enter the total number of displaced postdoctorate researchers and other non-faculty research staff displaced by the fall hurricanes in the comments section on this page.

<b>ITEM 8.</b> NUMBER OF POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES in fall 2005.		POSTDOCTORATES						OTHER NON- FACULTY RESEARCH STAFF WITH DOCTORATES			
		SOURCE OF SUPPORT				TOTAL for all sources (A) through (D)	Of the total in (E), how many are <b>FOREIGN?</b>		(G)		
		FEDERAL			NON-FEDERAL					(E)	(F)
		Fellowships (A)	Traineeships (B)	Research grants (C)							
<b>TOTAL</b>	<b>(1)</b>										
Of the total in each cell of line (1), how many are WOMEN?	<b>(2)</b>										
Of the total in each cell of line (1), how many hold an M.D., D.O., D.D.S., or D.V.M. degree?	<b>(3)</b>										

Approximately how many person hours were required to complete this form?

Did your department accept postdoctorates or non-faculty research staff displaced by the fall hurricanes: \_\_\_\_\_ (Yes/ No)

If so, how many:

\_\_\_\_\_  
Please explain variances from the previous year's data or include other comments.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## HOW TO AVOID COMMON SURVEY ERRORS

Survey forms requiring mathematical corrections and/or verification for possible data inconsistencies are returned to departments before they can be considered final. To avoid common mistakes found on the survey forms, please follow these guidelines:

- |   |   |   |
|---|---|---|
| <p>(1) Use only <b>whole numbers</b>, not decimals or fractions. When reporting graduate students in items 5, 6, and 7, and postdoctoral appointees in item 8, use headcounts rather than full-time-equivalents (FTEs).</p> <p>(2) In item 5, count only full-time, degree-seeking graduate students, and count each only <b>once</b>, by the <b>largest</b> source of support, so that all columns and rows sum to the full-time total in line (6), column (M).</p> <p>(3) Don't forget full-time, self-supported students, who should be reported in item 5, column (L). Self-supported students are supported primarily through loans, personal savings, and/or family contributions.</p> <p>(4) Don't forget to report sources of support for all full-time women in item 5, line (7).</p> <p>(5) For the purposes of this survey, fellowships are competitive awards that require no work from the recipient. Do not report students in the fellowship row of item 5 if their largest source of support does not fit this definition.</p> <p>(6) Report only full-time, first-time students in item 7, lines (7) and (8). The total number of full-time, first-time students reported in item 7, line (7) should not be greater than the full-time total reported in item 7, line (6), column (K). Likewise, the total number of full-time, first-time women reported in item 7, line (8) should not be greater than the full-time women total reported in item 7, line (5), column (K).</p> | <p>(7) Do not report any part-time students in item 5. Count all part-time students in item 6 only.</p> <p>(8) The full-time total reported in item 5, line (6), column (M) must equal the full-time total reported in item 7, line (6), column (K). Similarly, the total number of full-time women in item 5, line (7), column (M) must match the total number of full-time women in item 7, line (5), column (K).</p> <p>(9) In items 6 and 7, count only U.S. citizens and permanent residents in columns (A) through (I). Count all foreign students on temporary visas in column (J) only, regardless of race/ethnicity.</p> <p>(10) In items 6 and 7, column (C), count only U.S. citizens and permanent residents. Do not count Asian foreign nationals.</p> <p>(11) For the purposes of this survey, departments or programs that do not offer graduate degrees (Ph.D. or master's) are considered as "no Ph.D. or master's degree" programs, regardless of first professional or other degrees granted. "No Ph.D. or master's degree" programs should not report students, postdoctoral appointees, or anyone else in items 5, 6, and 7. Count individuals in a "no Ph.D. or master's degree" program only in item 8, and <b>only if they qualify as postdoctoral appointees</b> or other non-faculty research staff by this survey's definitions.</p> | <p>(12) Report the total number of postdoctorates in item 8, line (1), column (E). Don't forget the total women postdoctorates in item 8, line (2), column (E), and total postdoctorates holding M.D., D.O., D.D.S., and D.V.M. degrees in item 8, line (3), column (E). Of each of these, foreign postdoctorates should be reported in item 8, column (F).</p> <p>(13) If the data for 2005 vary significantly from those provided last year, please note the reasons for the change in the "Comments" section of the survey Form 812.</p> <p>(14) As a result of damages caused by hurricanes in 2005, several educational institutions had to close for the fall 2005 term. Other schools have generously allowed students displaced by the hurricanes to enroll at their universities. Do <b>NOT</b> include in the counts of students enrolled for the fall semester those displaced from other institutions by the fall hurricanes. However, please <b>DO</b> enter the total number of displaced students enrolled in the fall 2005 term in the comment section on page 5. Likewise, do <b>NOT</b> include in the counts of postdoctorate researchers and non-faculty research staff those displaced from other institutions by the fall hurricanes. However, please <b>DO</b> enter the total number of displaced postdoctorate researchers and non-faculty research staff at your school in the fall 2005 term in the comment section on page 6.</p> |
|---|---|---|

**If you have any questions, please contact Mr. Jason Bauer of ORC Macro by telephone at (301) 657-3077, ext. 322, or Ms. Allison Hesse of ORC Macro by telephone at (301) 657-3077, ext. 120. You may also contact them toll-free at (866) 695-6275 or by e-mail at [gss@qrc.com](mailto:gss@qrc.com).**

## WHY DOES NSF COLLECT THESE DATA FROM YOUR DEPARTMENT?

The data that your department reports to NSF on the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey) are used in several ways, both at an institutional and national level.

At the institutional level, your data are combined with other science and engineering (S&E) data to create institutional profiles. Many institutional research officers use these data in peer analyses to help determine future directions at their own institutions. Based on full-time student enrollment, the profiles rank your graduate school among all U.S. graduate schools,<sup>1</sup> and present six aggregations specific to your school:

- Characteristics of full-time graduate S&E students
- Characteristics of part-time graduate S&E students
- Full-time graduate S&E students receiving primary support from Federal sources, by field

- Full-time graduate S&E students, by type and primary source of support
- Characteristics of S&E postdoctorates
- Characteristics of federally-supported S&E postdoctorates

Institutional profiles are online at <http://www.nsf.gov/statistics/profiles/>.

At the national level, Congress, the Executive Branch, educational associations, and Federal agencies use summary tables comprised of graduate student survey data to analyze enrollment trends, identify up-and-coming science and engineering fields, and project enrollment deficits in fields vital to national interest. These trends help Federal agencies and other policy makers determine where to allocate future monies. For example, Federal agencies use these data to consider changes in levels and mechanisms of support for graduate students. Federal agencies also use these data, in conjunction with other information, for

program development and evaluation and in determining institutional eligibility for programs targeted to special populations or instructional programs. Summary tables are also used by many nonacademic employers to locate potential sources of future employees.

Summary tables are online at <http://www.nsf.gov/statistics/>.

Finally, the data you provide are added to WebCASPAR, a rapidly expanding database of statistics on S&E programs at U.S. academic institutions. WebCASPAR is available to the public for free, providing easy access to a large body of statistical data. Over 3,000 registered researchers and policy makers use these data for studies on the current state of graduate education in S&E. Users can run customized queries to analyze data trends by field, enrollment, funding patterns, or more.

WebCASPAR is online at <http://caspar.nsf.gov/webcaspar>.

<sup>1</sup> All U.S. graduate schools with active departments in S&E fields.

## SUBMITTING YOUR DATA THROUGH THE WEB

This year, the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering will continue to offer online reporting for departments. The online system allows you to enter your data directly onto your computer screen, computes totals for you, reports errors instantly, and gives you access to your previous year's data.

To access the Web survey, go to <http://www.gss2005.org>. Enter your departmental ID and password information (available from your

school coordinator). At the First Time User Information screen, you will be prompted to enter your name, phone number, and e-mail address. You will also be asked to change your assigned password to one that you choose. After providing this information, click on Continue to move to the Department Menu screen.

At the Department Menu screen you will notice that the questionnaire items have been divided into four sections: Department Information, Race/Ethnicity

and Gender (items 6 and 7 on the paper survey), Mechanisms of Support (item 5 on the paper survey), and Postdoctorates (item 8 on the paper survey). To begin entering data, click on a submission icon. For additional instructions on accessing the Web survey, please consult the online help documentation at <http://www.gss2005.org/gssweb/help/>. For additional help, send an e-mail to NSF's contractor, ORC Macro, at [gss@orc.com](mailto:gss@orc.com), or call Mr. Jason Bauer at (301) 657-3077, ext. 322, or Ms. Allison Hesse at (301) 657-3077, ext. 120. You may also contact them toll-free at (866) 695-6275.



This questionnaire has been printed on recycled paper.

**Survey of Graduate Students and Postdoctorates in Science and Engineering**  
**2005 CROSSWALK BETWEEN NSF DISCIPLINE CODES AND**  
**THE 1990 NCES CLASSIFICATION OF INSTRUCTIONAL PROGRAMS**

The following set of discipline codes categorizes the science and engineering departments or programs in the Survey of Graduate Students and Postdoctorates in Science and Engineering. Representative department names are shown under each of the discipline codes.

**ENGINEERING**

- 101 AEROSPACE ENGINEERING**  
14.02 AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGR.
- 102 AGRICULTURAL ENGINEERING**  
14.03 AGRICULTURAL ENGINEERING
- 103 BIOMEDICAL ENGINEERING**  
14.05 BIOENGINEERING AND BIOMEDICAL ENGINEERING
- 104 CHEMICAL ENGINEERING**  
03.0509 WOOD SCIENCE  
14.07 CHEMICAL ENGINEERING  
14.32 POLYMER/PLASTICS ENGINEERING
- 105 CIVIL ENGINEERING**  
04.02 ARCHITECTURE  
14.04 ARCHITECTURAL ENGINEERING  
14.08 CIVIL ENGINEERING  
14.0803 STRUCTURAL ENGINEERING  
14.0805 WATER RESOURCES ENGINEERING  
14.14 ENVIRONMENTAL/ENVIRONMENTAL HEALTH ENGINEERING
- 106 ELECTRICAL ENGINEERING**  
14.09 COMPUTER ENGINEERING  
14.10 ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGR.
- 107 ENGINEERING SCIENCE AND ENGINEERING PHYSICS**  
14.12 ENGINEERING PHYSICS  
14.13 ENGINEERING SCIENCE
- 108 INDUSTRIAL/MANUFACTURING ENGINEERING**  
14.17 INDUSTRIAL/MANUFACTURING ENGINEERING  
14.27 SYSTEMS ENGINEERING  
14.30 ENGINEERING/INDUSTRIAL MANAGEMENT  
30.06 SYSTEMS SCIENCE
- 109 MECHANICAL ENGINEERING**  
14.11 ENGINEERING MECHANICS  
14.19 MECHANICAL ENGINEERING
- 110 METALLURGICAL AND MATERIALS ENGINEERING**  
14.06 CERAMIC SCIENCES AND ENGINEERING  
14.18 MATERIALS ENGINEERING  
14.20 METALLURGICAL ENGINEERING  
14.28 TEXTILE SCIENCES AND ENGINEERING  
14.31 MATERIALS SCIENCE  
40.0701 METALLURGY
- 111 MINING ENGINEERING**  
14.15 GEOLOGICAL ENGINEERING  
14.16 GEOPHYSICAL ENGINEERING  
14.21 MINING AND MINERAL ENGINEERING
- 112 NUCLEAR ENGINEERING**  
14.23 NUCLEAR ENGINEERING
- 113 PETROLEUM ENGINEERING**  
14.25 PETROLEUM ENGINEERING
- 114 ENGINEERING, N.E.C.**  
14.01 ENGINEERING, GENERAL  
14.22 NAVAL ARCHITECTURE AND MARINE ENGINEERING  
14.24 OCEAN ENGINEERING  
14.29 ENGINEERING DESIGN  
14.99 ENGINEERING, OTHER

**PHYSICAL SCIENCES**

- 201 ASTRONOMY**  
40.02 ASTRONOMY  
40.03 ASTROPHYSICS
- 202 CHEMISTRY**  
40.05 CHEMISTRY (SEE ALSO 602)  
40.0507 POLYMER CHEMISTRY
- 203 PHYSICS**  
40.08 PHYSICS (SEE ALSO 605)  
40.0807 OPTICS  
40.0809 ACOUSTICS
- 204 PHYSICAL SCIENCES, N.E.C.**  
40.01 PHYSICAL SCIENCES, GENERAL  
40.0799 MISCELLANEOUS PHYSICAL SCIENCES, OTHER  
40.99 PHYSICAL SCIENCES, OTHER

**EARTH, ATMOSPHERIC, AND OCEAN SCIENCES**

- 301 ATMOSPHERIC SCIENCES**  
40.04 ATMOSPHERIC SCIENCES AND METEOROLOGY
- 302 GEOSCIENCES**  
40.06 GEOLOGICAL AND RELATED SCIENCES  
40.0703 EARTH AND PLANETARY SCIENCES
- 303 OCEAN SCIENCES**  
26.0607 MARINE/AQUATIC BIOLOGY  
40.0702 OCEANOGRAPHY
- 304 EARTH, ATMOSPHERIC, AND OCEAN SCIENCES, N.E.C.**

**MATHEMATICAL SCIENCES**

- 402 MATHEMATICS AND APPLIED MATHEMATICS**  
27.01 MATHEMATICS  
27.03 APPLIED MATHEMATICS  
27.0302 OPERATIONS RESEARCH  
27.99 MATHEMATICS, OTHER  
30.08 MATHEMATICS AND COMPUTER SCIENCE
- 403 STATISTICS**  
27.05 MATHEMATICAL STATISTICS  
52.0802 ACTUARIAL SCIENCE

**COMPUTER SCIENCE**

- 401 COMPUTER SCIENCE**  
11.01 COMPUTER AND INFORMATION SCIENCES, GENERAL  
11.04 INFORMATION SCIENCES AND SYSTEMS  
11.07 COMPUTER SCIENCE  
52.1201 MANAGEMENT INFORMATION SYSTEMS  
52.1301 MANAGEMENT SCIENCE

**AGRICULTURAL SCIENCES**

- 501 AGRICULTURAL SCIENCES (SEE ALSO 102 AND 901)**  
02.01 AGRICULTURE/AGRICULTURAL SCIENCES  
02.02 ANIMAL SCIENCES  
02.03 FOOD SCIENCES  
02.04 PLANT SCIENCES  
02.05 SOIL SCIENCES  
02.99 AGRICULTURAL SCIENCES, OTHER  
03.01 NATURAL RESOURCES CONSERVATION  
03.02 CONSERVATION AND REGULATION  
03.03 FISHING AND FISHERIES SCIENCES AND MANAGEMENT  
03.05 FORESTRY AND RELATED SCIENCES  
03.06 WILDLIFE AND WILDLANDS MANAGEMENT  
03.99 CONSERVATION AND RENEWABLE NATURAL RESOURCES, OTHER

**BIOLOGICAL SCIENCES**

- 601 ANATOMY**  
26.0601 ANATOMY  
51.1301 MEDICAL ANATOMY
- 602 BIOCHEMISTRY**  
26.0202 BIOCHEMISTRY  
51.1302 MEDICAL BIOCHEMISTRY
- 603 BIOLOGY**  
26.01 BIOLOGY, GENERAL
- 604 BIOMETRY AND EPIDEMIOLOGY**  
26.0614 BIOMETRICS  
26.0615 BIOSTATISTICS  
51.1303 MEDICAL BIOMATHEMATICS AND BIOMETRICS  
51.2203 EPIDEMIOLOGY
- 605 BIOPHYSICS**  
26.0203 BIOPHYSICS  
51.1304 MEDICAL BIOPHYSICS/PHYSICS
- 606 BOTANY**  
26.03 BOTANY  
(EXCLUDING 26.05 MICROBIOLOGY/BACTERIOLOGY—SEE 611)  
26.0305 PLANT PATHOLOGY  
26.0307 PLANT PHYSIOLOGY
- 607 CELL AND MOLECULAR BIOLOGY**  
26.0204 MOLECULAR BIOLOGY  
26.04 CELL AND MOLECULAR BIOLOGY  
26.0401 CELL BIOLOGY  
51.1305 MEDICAL CELL BIOLOGY  
51.1309 MEDICAL MOLECULAR BIOLOGY

- 608 ECOLOGY**  
26.0603 ECOLOGY
- 609 ENTOMOLOGY AND PARASITOLOGY**  
26.0610 PARASITOLOGY  
26.0702 ENTOMOLOGY
- 610 GENETICS**  
26.0613 GENETICS, PLANT AND ANIMAL  
26.0617 EVOLUTIONARY BIOLOGY  
51.1306 MEDICAL GENETICS
- 611 MICROBIOLOGY, IMMUNOLOGY, AND VIROLOGY**  
26.05 MICROBIOLOGY/BACTERIOLOGY  
26.0618 BIOLOGICAL IMMUNOLOGY  
26.0619 VIROLOGY  
51.1308 MEDICAL MICROBIOLOGY
- 612 NUTRITION**  
19.05 FOODS AND NUTRITION STUDIES  
26.0609 NUTRITIONAL SCIENCES  
51.1311 MEDICAL NUTRITION
- 613 PATHOLOGY**  
26.0704 PATHOLOGY, HUMAN AND ANIMAL  
51.1312 MEDICAL PATHOLOGY
- 614 PHARMACOLOGY**  
26.0612 TOXICOLOGY  
26.0705 PHARMACOLOGY, HUMAN AND ANIMAL  
51.1314 MEDICAL TOXICOLOGY
- 615 PHYSIOLOGY**  
26.0706 PHYSIOLOGY, HUMAN AND ANIMAL  
51.1313 MEDICAL PHYSIOLOGY
- 616 ZOOLOGY**  
26.07 ZOOLOGY (EXCEPT 26.0702, ENTOMOLOGY—SEE 609, AND 26.0705, PHARMACOLOGY, HUMAN AND ANIMAL—SEE 614)
- 617 BIOSCIENCES, N.E.C.**  
26.0616 BIOTECHNOLOGY RESEARCH  
26.0699 MISCELLANEOUS BIOLOGICAL SPECIALIZATIONS, OTHER  
26.99 BIOLOGICAL SCIENCES/LIFE SCIENCES, OTHER  
30.01 BIOLOGICAL AND PHYSICAL SCIENCES  
30.10 BIOPSYCHOLOGY

#### PSYCHOLOGY

- 801 PSYCHOLOGY, COMBINED**  
42.01 PSYCHOLOGY, GENERAL
- 802 PSYCHOLOGY, EXCEPT CLINICAL**  
42.03 COGNITIVE PSYCHOLOGY AND PSYCHOLINGUISTICS  
42.04 COMMUNITY PSYCHOLOGY  
42.07 DEVELOPMENTAL AND CHILD PSYCHOLOGY  
42.08 EXPERIMENTAL PSYCHOLOGY  
42.09 INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY  
42.11 PHYSIOLOGICAL PSYCHOLOGY/PSYCHOBIOLOGY  
42.16 SOCIAL PSYCHOLOGY  
42.17 SCHOOL PSYCHOLOGY  
42.99 PSYCHOLOGY, OTHER  
51.2301 ART THERAPY  
51.2303 HYPNOTHERAPY  
51.2705 PSYCHOANALYSIS
- 803 CLINICAL PSYCHOLOGY**  
42.02 CLINICAL PSYCHOLOGY

#### SOCIAL SCIENCES

- 901 AGRICULTURAL ECONOMICS**  
01.0101 AGRICULTURAL BUSINESS AND MANAGEMENT, GENERAL  
01.0102 AGRICULTURAL BUSINESS/AGRIBUSINESS OPERATIONS  
01.0103 AGRICULTURAL ECONOMICS
- 902 ANTHROPOLOGY (CULTURAL AND SOCIAL)**  
45.02 ANTHROPOLOGY  
45.03 ARCHAEOLOGY
- 903 ECONOMICS**  
45.06 ECONOMICS  
52.06 BUSINESS/MANAGERIAL ECONOMICS
- 904 GEOGRAPHY**  
45.0701 GEOGRAPHY  
45.0702 CARTOGRAPHY
- 905 HISTORY AND PHILOSOPHY OF SCIENCE**  
45.0804 HISTORY AND PHILOSOPHY OF SCIENCE
- 906 LINGUISTICS**  
16.0102 LINGUISTICS
- 907 POLITICAL SCIENCE/PUBLIC ADMINISTRATION**  
44.04 PUBLIC ADMINISTRATION  
44.05 PUBLIC POLICY ANALYSIS  
44.99 PUBLIC ADMINISTRATION AND SERVICES, OTHER  
45.09 INTERNATIONAL RELATIONS AND AFFAIRS  
45.10 POLITICAL SCIENCE AND GOVERNMENT

- 908 SOCIOLOGY**  
45.05 DEMOGRAPHY AND POPULATION STUDIES  
45.11 SOCIOLOGY

#### 909 SOCIOLOGY/ANTHROPOLOGY

- 910 SOCIAL SCIENCES, N.E.C.**  
04.03 CITY/URBAN, COMMUNITY, AND REGIONAL PLANNING  
04.07 ARCHITECTURAL URBAN DESIGN AND PLANNING  
05 AREA, ETHNIC, AND CULTURAL STUDIES  
30.11 GERONTOLOGY  
43.01 CRIMINAL JUSTICE AND CORRECTIONS  
44.02 COMMUNITY ORGANIZATION, RESOURCES, AND SERVICES  
45.01 SOCIAL SCIENCES, GENERAL  
45.04 CRIMINOLOGY  
45.12 URBAN AFFAIRS/STUDIES  
45.99 SOCIAL SCIENCES, OTHER

#### HEALTH FIELDS (SEE ALSO 103)

- 701 ANESTHESIOLOGY**  
51.1604 NURSING ANESTHETIST (POST-R.N.)
- 702 CARDIOLOGY**
- 703 ONCOLOGY/CANCER RESEARCH**
- 704 ENDOCRINOLOGY**
- 705 GASTROENTEROLOGY**
- 706 HEMATOLOGY**
- 707 NEUROLOGY**  
26.0608 NEUROSCIENCE
- 708 OBSTETRICS AND GYNECOLOGY**
- 709 OPHTHALMOLOGY**  
51.1701 OPTOMETRY (O.D.)
- 710 OTORHINOLARYNGOLOGY**
- 711 PEDIATRICS**
- 712 PREVENTIVE MEDICINE AND COMMUNITY HEALTH**  
51.22 PUBLIC HEALTH  
51.2202 ENVIRONMENTAL HEALTH
- 713 PSYCHIATRY**  
51.1610 NURSING, PSYCHIATRY/MENTAL HEALTH (POST-R.N.)
- 714 PULMONARY DISEASE**
- 715 RADIOLOGY**  
26.0611 RADIATION BIOLOGY/RADIOBIOLOGY
- 716 SURGERY**
- 717 CLINICAL MEDICINE, N.E.C.**  
51.1399 MEDICAL BASIC SCIENCES, OTHER  
51.1201 MEDICINE (M.D.)  
51.14 MEDICAL CLINICAL SCIENCES (M.S., Ph.D.)  
51.19 OSTEOPATHIC MEDICINE (D.O.)  
51.21 PODIATRY (D.P.M., D.P., Pod.D.)
- 718 DENTAL SCIENCES**  
51.04 DENTISTRY (D.D.S., D.M.D.)  
51.05 DENTAL CLINICAL SCIENCES/GRAD. DENTISTRY (M.S., Ph.D.)
- 719 NURSING**  
51.16 NURSING  
(EXCLUDING 51.1610, NURSING, PSYCHIATRY/MENTAL HEALTH—SEE 713, AND 51.1604 NURSING ANESTHETIST—SEE 701)
- 720 PHARMACEUTICAL SCIENCES**  
51.20 PHARMACY
- 721 VETERINARY SCIENCES**  
51.24 VETERINARY MEDICINE (D.V.M.)  
51.25 VETERINARY CLINICAL SCIENCES (M.S., Ph.D.)
- 722 HEALTH-RELATED, N.E.C.**  
31.0505 EXERCISE SCIENCE/PHYSIOLOGY AND MOVEMENT STUDIES  
51.2306 OCCUPATIONAL THERAPY  
51.2308 PHYSICAL THERAPY  
51.2399 REHABILITATION/THERAPEUTIC SERVICES, OTHER  
51.2704 NATUROPATHIC MEDICINE  
51.99 HEALTH PROFESSIONS AND RELATED SCIENCES, OTHER
- 723 COMMUNICATION DISORDERS SCIENCES**  
51.02 COMMUNICATION DISORDERS SCIENCES AND SERVICES  
51.0201 COMMUNICATION DISORDERS, GENERAL  
51.0202 AUDIOLOGY/HEARING SCIENCES  
51.0203 SPEECH-LANGUAGE PATHOLOGY  
51.0204 SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

***N.E.C. = not elsewhere classified***

REV. 9-00

## Suggested Citation, Acknowledgments

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National Science Foundation, Division of Science Resources Statistics. 2007.  
*Graduate Students and Postdoctorates in Science and Engineering: Fall 2005*. NSF  
07-321. Julia D. Oliver, project officer. Arlington, VA.

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Macro International Inc. prepared the tables, general and technical notes, and report copy under NSF contract number SRS-02-44449. Macro staff members who worked on this project were Susan Akin, Joe Andorful, Jason Bauer, Jim Biancolo, Darren Edmon, David Greene, Gail Henry, Cheryl Lloyd, Mark Morgan, Rick Piet, Susan Wimmer, Emily Wuerker, and Cindy Young-Turner.

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