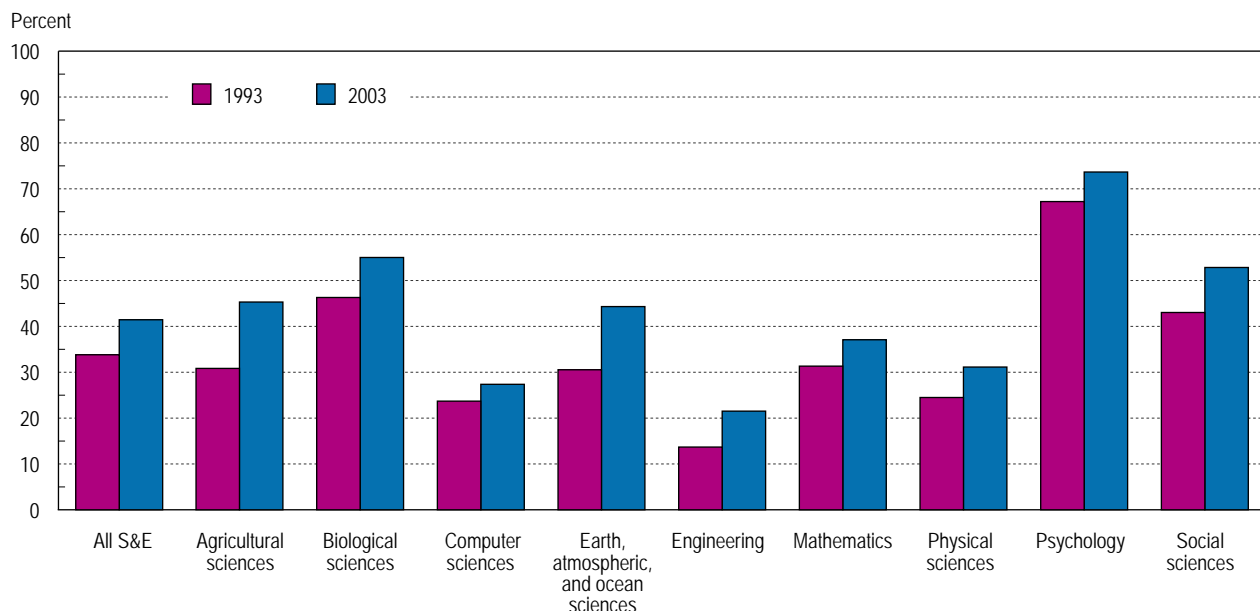


FIGURE D-1. Female share of S&E graduate students, by field: 1993 and 2003

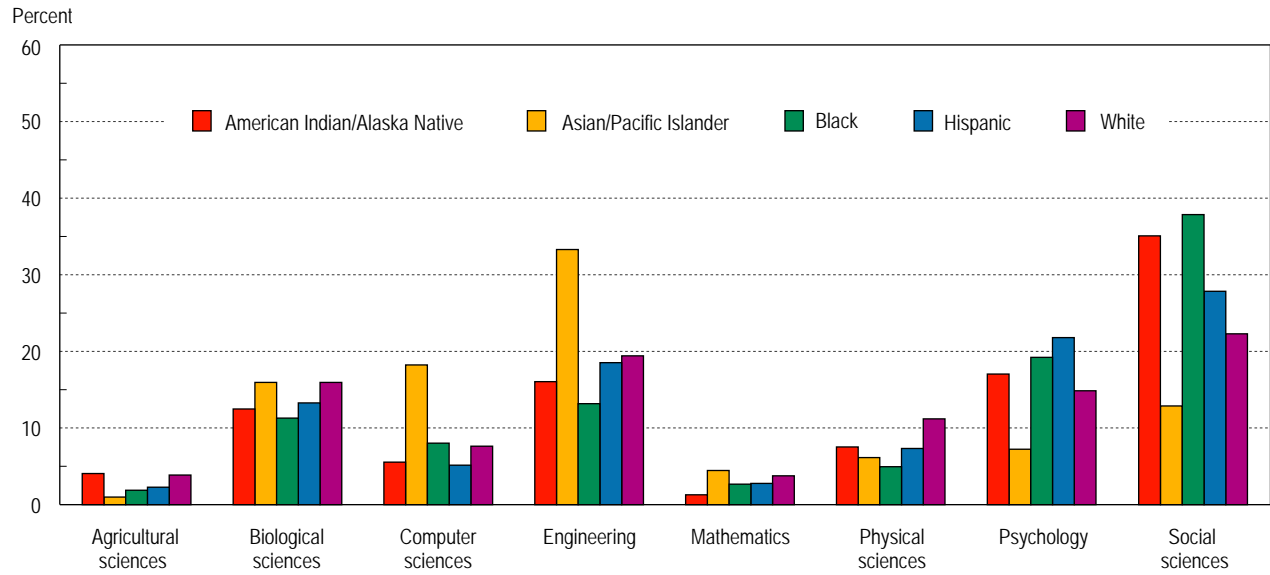


SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 1993 and 2003.

Females constituted a greater percentage of graduate students in S&E in 2003 (42 percent) than in 1993 (34 percent).

- Females accounted for more than half of all graduate students in some science fields: in 2003, for example, females made up 74 percent of the graduate students in psychology, 56 percent in biological sciences, and 53 percent in social sciences.
- Roughly 30–40 percent of the graduate students in most other science fields were female.
- Females accounted for 22 percent of graduate students in engineering and 28 percent of graduate students in computer sciences in 2003.

FIGURE D-2. Field distribution of S&E graduate students, by race/ethnicity: 2003



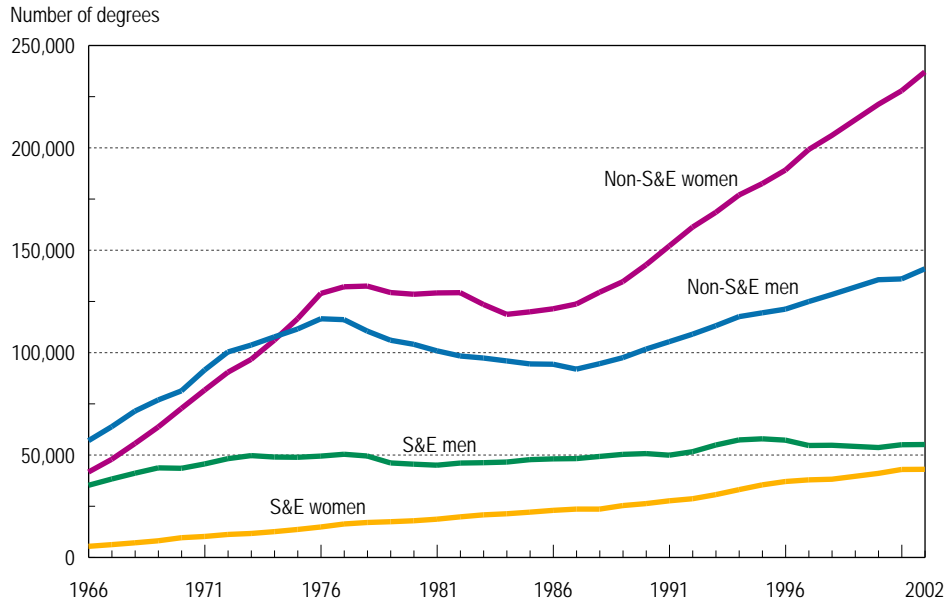
NOTES: Data are for U.S. citizens and permanent residents only. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2003.

Asian/Pacific Islander S&E graduate students are distributed among S&E fields differently from graduate students of other racial/ethnic groups.

- In 2003, 50 percent or more of black, Hispanic, and American Indian/Alaska Native graduate students and 38 percent of white students were in psychology or social sciences, compared with 20 percent of Asian/Pacific Islander students.
- Larger percentages of Asian/Pacific Islander graduate students than of other groups were in computer sciences and engineering.

FIGURE E-1. Master's degrees awarded in S&E and non-S&E fields, by sex: 1966–2002



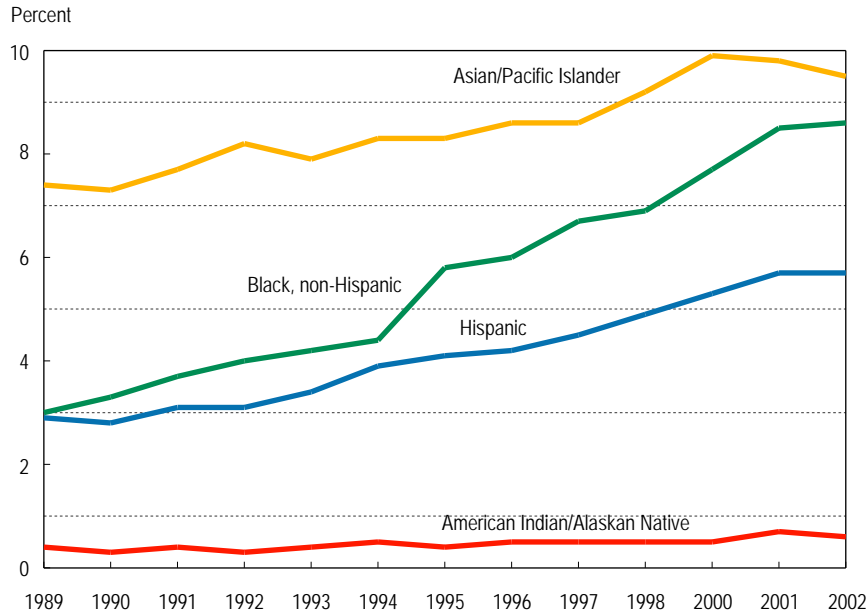
NOTE: National data not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1966–2002.

The number of master's degrees earned by women rose more rapidly than for men since 1990.

- By 2002, women earned 44 percent of S&E and 63 percent of non-S&E master's degrees, up from 34 and 58 percent, respectively, in 1990.
- For men and women, the proportion of master's degrees earned in S&E fields has declined since 1990.

FIGURE E-2. Minority share of S&E master's degrees awarded to U.S. citizens and permanent residents, by race/ethnicity: 1989–2002



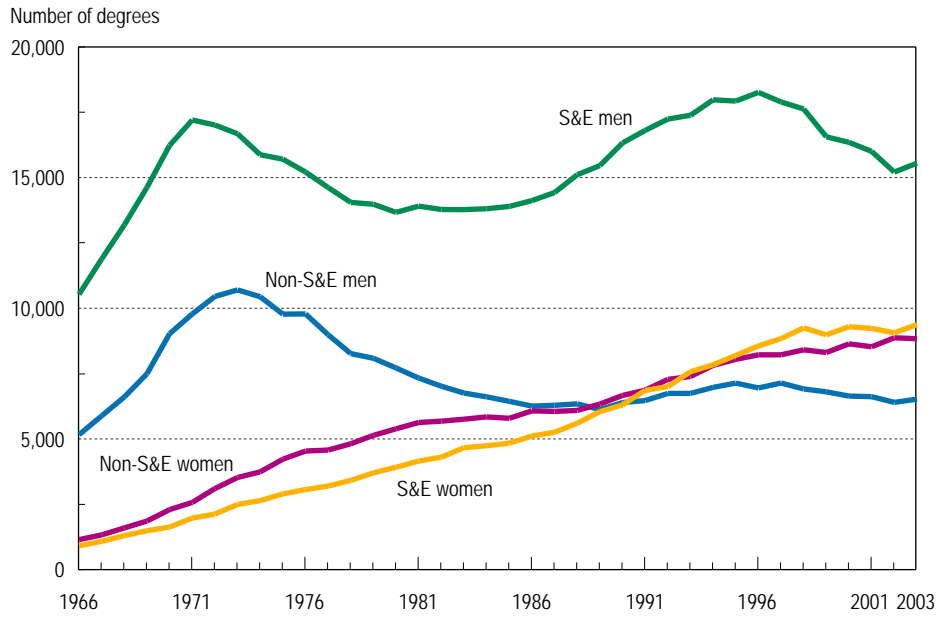
NOTE: National data not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1966–2002.

The percentages of S&E master's degrees earned by Asians/Pacific Islanders, blacks, Hispanics, and American Indians/Alaskan Natives increased since 1990.

- The number of S&E master's degrees awarded increased for all minority groups and for white women since 1990.
- The number of S&E master's degrees earned by white men decreased during the period.
- The proportion of S&E master's degrees awarded to underrepresented minorities more than doubled between 1990 and 2002 from 6 to 15 percent.

FIGURE F-1. Doctoral degrees awarded in S&E and non-S&E fields, by sex: 1966–2003

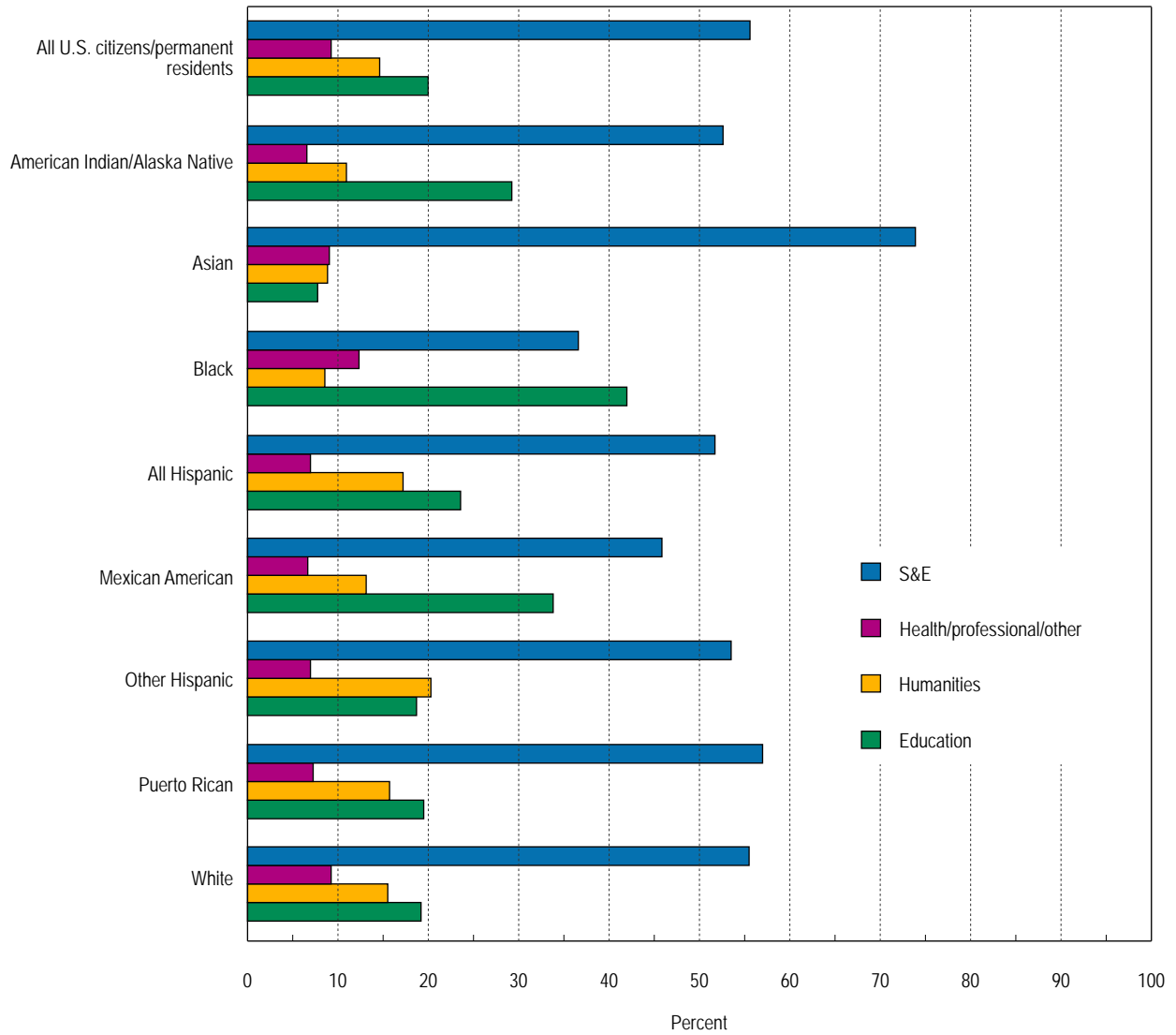


SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1966–2003.

Both the number of women earning doctoral degrees and their percentage of total awards in S&E and non-S&E fields rose between 1966 and 2003.

- By 2003, women earned 38 percent of S&E and 58 percent of non-S&E doctoral degrees, up from 8 and 18 percent, respectively, in 1966.
- The number of men earning S&E doctoral degrees dropped every year between 1996 and 2002, but increased slightly in 2003.

FIGURE F-2. Field distribution of S&E and non-S&E doctoral degrees awarded to U.S. citizens and permanent residents, by race/ethnicity: 2003



NOTE: All Hispanic includes Puerto Rican, Mexican American, and other Hispanic.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 2003.

The proportion of all doctorates earned in S&E fields varies considerably across racial/ethnic groups.

- More than half of all doctorates awarded to U.S. citizens and permanent residents were earned in S&E fields in 2003.
- However, among blacks, more than half of the doctorates earned in 2003 were in non-S&E fields, primarily education.
- In contrast, 75 percent of doctorates earned by Asians were in S&E fields, 7 percent were in education in 2003.

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
All S&E graduate students	415,181	407,630	404,856	411,182	413,536	429,242	454,892	474,203
Science	311,957	306,482	304,818	309,491	309,424	319,749	335,224	346,828
Agricultural sciences	12,301	12,203	12,168	12,312	12,023	12,235	12,698	13,197
Biological sciences	57,749	56,705	56,695	56,959	56,282	57,639	61,133	64,684
Anatomy	878	856	785	749	795	735	951	908
Biochemistry	5,275	5,102	5,148	5,101	4,966	4,917	5,190	5,552
Biology	14,611	14,646	14,277	13,989	13,407	13,352	13,822	14,720
Biometry and epidemiology	3,005	2,896	3,514	3,704	3,615	3,817	4,071	4,439
Biophysics	833	748	737	710	751	877	953	1,032
Botany	2,213	2,082	2,042	1,974	1,904	1,921	1,973	1,901
Cell and molecular biology	4,207	4,300	4,379	4,637	4,820	4,911	5,375	5,722
Ecology	1,632	1,640	1,670	1,704	1,762	1,888	1,967	2,230
Entomology and parasitology	1,234	1,161	1,168	1,145	1,104	1,170	1,191	1,206
Genetics	1,741	1,776	1,727	1,783	1,712	1,841	1,909	2,073
Microbiology, immunology, and virology	4,912	4,805	4,773	4,815	4,814	4,798	5,208	5,256
Nutrition	4,918	4,604	4,486	4,508	4,413	4,429	4,539	4,695
Pathology	1,656	1,674	1,580	1,580	1,531	1,637	1,613	1,541
Pharmacology	2,663	2,597	2,730	2,757	2,963	3,140	3,234	3,357
Physiology	2,377	2,298	2,151	2,083	2,015	1,967	2,076	2,328
Zoology	1,808	1,627	1,586	1,523	1,445	1,411	1,349	1,301
Other	3,786	3,893	3,942	4,197	4,265	4,828	5,712	6,423
Computer sciences	34,626	35,991	38,027	42,478	47,350	52,196	55,269	53,678
Earth, atmospheric, and ocean sciences	15,183	14,548	14,258	14,083	13,941	13,841	14,240	14,655
Atmospheric	1,086	1,092	965	913	963	924	1,036	1,150
Earth	7,304	6,959	6,687	6,637	6,596	6,544	6,712	6,889
Ocean	2,615	2,479	2,562	2,624	2,668	2,585	2,618	2,695
Other	4,178	4,018	4,044	3,909	3,714	3,788	3,874	3,921
Mathematics and statistics	18,008	16,719	16,485	16,257	15,650	16,651	18,163	19,465
Mathematics/applied mathematics	14,948	14,027	13,827	13,521	12,823	13,569	14,702	15,569
Statistics	3,060	2,692	2,658	2,736	2,827	3,082	3,461	3,896
Physical sciences	32,333	31,105	30,575	30,691	30,385	31,038	32,341	34,298
Astronomy	874	778	820	832	888	916	990	1,080
Chemistry	19,334	18,774	18,482	18,416	18,105	18,366	19,045	20,049
Physics	11,728	11,147	10,809	10,869	10,841	11,248	11,701	12,555
Other	397	406	464	574	551	508	605	614
Psychology	53,122	53,126	52,557	51,727	50,466	50,467	51,165	52,025
Clinical	12,787	13,098	12,733	12,798	12,488	12,488	12,609	13,203
General	16,833	17,249	17,098	16,238	15,624	15,837	15,159	15,562
Nonclinical	23,502	22,779	22,726	22,691	22,354	22,142	23,397	23,260
Social sciences	88,635	86,085	84,053	84,984	83,327	85,682	90,215	94,826
Agricultural economics	2,117	2,043	1,995	2,014	2,079	2,161	2,187	2,296
Anthropology (cultural and social)	7,773	7,560	7,577	7,633	7,626	7,491	7,481	7,806
Economics	12,080	11,097	10,701	10,562	10,748	11,408	12,009	12,307
Geography	4,331	4,287	4,326	4,250	4,036	4,304	4,383	4,654
History and philosophy of science	409	443	508	557	532	571	663	677
Linguistics	3,156	3,068	2,935	2,799	2,674	2,744	2,875	3,028
Political science and public administration	33,252	32,083	30,828	31,372	31,131	31,805	34,934	36,855
Sociology	9,425	9,413	9,058	8,966	8,652	8,812	8,946	9,127
Other	16,092	16,091	16,125	16,831	15,849	16,386	16,737	18,076
Engineering	103,224	101,148	100,038	101,691	104,112	109,493	119,668	127,375
Aerospace	3,208	3,083	3,137	3,349	3,407	3,451	3,685	4,048
Agricultural	1,012	941	925	934	899	907	912	1,012
Biomedical	2,732	2,847	2,905	3,121	3,241	3,639	4,378	5,347
Chemical	7,408	7,288	7,093	6,883	7,056	6,913	7,414	7,516
Civil	18,528	17,193	16,517	16,226	16,451	16,665	17,713	18,838
Electrical	29,941	30,787	31,384	31,822	33,611	36,100	39,948	41,745
Engineering science/physics	1,751	1,647	1,701	1,627	1,632	1,798	2,121	2,240
Industrial/manufacturing	12,675	11,957	11,221	11,803	12,119	12,940	14,033	14,295

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mechanical	15,509	15,045	14,696	14,956	15,235	15,852	17,139	18,440
Metallurgical and materials	4,747	4,688	4,680	4,481	4,377	4,721	4,992	5,154
Mining	371	348	304	328	287	240	267	278
Nuclear	980	868	821	830	792	801	795	885
Petroleum	562	561	571	642	627	656	766	849
Other	3,800	3,895	4,083	4,689	4,378	4,810	5,505	6,728
U.S. citizens and permanent residents	317,075	308,668	302,879	301,254	290,711	294,711	309,280	327,332
Science	248,907	244,026	240,630	241,066	234,000	237,740	247,918	259,778
Agricultural sciences	9,283	9,414	9,514	9,774	9,612	9,722	10,085	10,619
Biological sciences	46,377	45,641	45,359	45,770	44,521	45,205	47,307	49,914
Anatomy	705	686	630	596	618	559	752	709
Biochemistry	3,750	3,691	3,695	3,646	3,377	3,332	3,459	3,655
Biology	12,641	12,609	12,197	11,997	11,353	11,159	11,377	12,182
Biometry and epidemiology	2,444	2,384	2,835	2,953	2,794	2,914	2,972	3,243
Biophysics	658	577	571	556	547	614	654	713
Botany	1,589	1,470	1,436	1,386	1,320	1,347	1,355	1,317
Cell and molecular biology	3,325	3,413	3,482	3,739	3,789	3,778	4,113	4,291
Ecology	1,470	1,471	1,498	1,530	1,576	1,694	1,749	1,968
Entomology and parasitology	916	871	877	843	824	895	908	920
Genetics	1,352	1,358	1,331	1,400	1,335	1,408	1,485	1,558
Microbiology, immunology, and virology	3,849	3,826	3,813	3,872	3,879	3,794	4,011	4,113
Nutrition	3,757	3,495	3,415	3,444	3,297	3,269	3,377	3,495
Pathology	1,326	1,380	1,292	1,285	1,230	1,344	1,314	1,210
Pharmacology	2,090	2,044	2,154	2,188	2,338	2,492	2,554	2,584
Physiology	1,929	1,875	1,713	1,629	1,569	1,536	1,622	1,807
Zoology	1,584	1,436	1,396	1,364	1,271	1,210	1,130	1,121
Other	2,992	3,055	3,024	3,342	3,404	3,860	4,475	5,028
Computer sciences	22,779	23,074	23,605	25,323	25,088	26,142	28,203	29,535
Earth, atmospheric, and ocean sciences	12,417	12,033	11,759	11,563	11,249	11,059	11,472	11,892
Atmospheric	803	801	710	639	659	639	730	882
Earth	5,847	5,666	5,443	5,413	5,294	5,189	5,333	5,456
Ocean	2,058	1,972	2,029	2,108	2,142	2,071	2,152	2,206
Other	3,709	3,594	3,577	3,403	3,154	3,160	3,257	3,348
Mathematics and statistics	12,247	11,175	11,064	10,330	9,593	10,167	11,139	12,144
Mathematics/applied mathematics	10,252	9,521	9,447	8,861	8,146	8,722	9,488	10,281
Statistics	1,995	1,654	1,617	1,469	1,447	1,445	1,651	1,863
Physical sciences	21,155	20,210	19,837	19,559	18,730	18,835	19,251	20,226
Astronomy	658	593	607	593	617	633	687	747
Chemistry	13,059	12,662	12,457	12,331	11,883	11,797	11,792	12,210
Physics	7,098	6,608	6,379	6,140	5,757	5,991	6,259	6,757
Other	340	347	394	495	473	414	513	512
Psychology	51,149	51,118	50,371	49,488	48,203	47,946	48,308	48,845
Clinical	12,483	12,763	12,370	12,402	12,098	12,060	12,014	12,583
General	16,170	16,582	16,403	15,518	14,812	14,903	14,177	14,379
Nonclinical	22,496	21,773	21,598	21,568	21,293	20,983	22,117	21,883
Social sciences	73,500	71,361	69,121	69,259	67,004	68,664	72,153	76,603
Agricultural economics	1,217	1,123	1,091	1,089	1,065	1,109	1,141	1,211
Anthropology (cultural and social)	7,083	6,858	6,838	6,810	6,797	6,722	6,634	6,957
Economics	6,559	5,714	5,461	5,029	4,941	5,124	5,389	5,733
Geography	3,849	3,763	3,767	3,652	3,408	3,579	3,636	3,876
History and philosophy of science	359	376	441	498	463	501	595	616
Linguistics	2,154	2,086	1,912	1,837	1,714	1,782	1,893	2,065
Political science and public administration	29,709	28,657	27,276	27,453	26,972	27,582	30,280	31,978
Sociology	8,294	8,252	7,949	7,790	7,397	7,505	7,625	7,782
Other	14,276	14,532	14,386	15,101	14,247	14,760	14,960	16,385
Engineering	68,168	64,642	62,249	60,188	56,711	56,971	61,362	67,554
Aerospace	1,935	1,765	1,720	1,817	1,894	1,805	1,999	2,361
Agricultural	540	521	519	526	513	497	495	531

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Biomedical	2,027	2,137	2,177	2,254	2,281	2,503	2,856	3,463
Chemical	4,521	4,424	4,208	3,869	3,726	3,418	3,701	3,752
Civil	13,263	12,090	11,555	10,801	10,306	10,072	10,553	11,439
Electrical	18,489	18,032	17,459	16,517	15,315	15,534	16,579	18,098
Engineering science/physics	1,258	1,199	1,149	1,093	955	1,054	1,239	1,230
Industrial/manufacturing	9,349	8,616	7,869	8,073	7,574	7,607	8,318	8,877
Mechanical	10,026	9,351	9,046	8,760	8,097	8,183	8,604	9,638
Metallurgical and materials	2,827	2,721	2,670	2,438	2,265	2,385	2,482	2,561
Mining	237	223	228	219	155	136	165	167
Nuclear	670	565	527	498	457	445	464	532
Petroleum	201	149	123	148	265	267	298	174
Other	2,825	2,849	2,999	3,175	2,908	3,065	3,609	4,731
White	238,032	228,007	220,667	216,750	205,569	206,027	213,162	222,118
Science	188,943	181,914	176,569	174,687	166,486	167,568	172,603	178,681
Agricultural sciences	7,983	7,990	8,093	8,383	8,152	8,147	8,486	8,740
Biological sciences	36,116	34,778	34,323	34,319	33,255	33,193	34,586	35,787
Anatomy	544	518	484	447	470	440	525	503
Biochemistry	2,784	2,669	2,742	2,665	2,532	2,373	2,509	2,515
Biology	9,683	9,463	9,122	8,929	8,447	8,309	8,468	8,894
Biometry and epidemiology	1,753	1,646	1,911	2,022	1,851	1,920	1,964	2,155
Biophysics	481	415	377	383	374	425	460	502
Botany	1,377	1,271	1,210	1,189	1,133	1,122	1,087	1,065
Cell and molecular biology	2,656	2,669	2,626	2,773	2,708	2,628	2,816	2,882
Ecology	1,299	1,279	1,325	1,363	1,360	1,466	1,507	1,631
Entomology and parasitology	791	749	778	757	733	764	794	800
Genetics	1,110	1,098	1,063	1,022	977	1,029	1,084	1,107
Microbiology, immunology, and virology	2,968	2,845	2,849	2,791	2,799	2,658	2,814	2,818
Nutrition	2,958	2,750	2,647	2,667	2,566	2,445	2,546	2,575
Pathology	1,060	1,044	961	926	906	962	937	834
Pharmacology	1,599	1,543	1,568	1,589	1,731	1,779	1,795	1,809
Physiology	1,390	1,283	1,220	1,119	1,064	1,035	1,086	1,210
Zoology	1,451	1,318	1,216	1,240	1,147	1,088	1,006	985
Other	2,212	2,218	2,224	2,437	2,457	2,750	3,188	3,502
Computer sciences	14,479	14,062	13,948	14,377	14,468	15,057	15,962	17,199
Earth, atmospheric, and ocean sciences	10,873	10,402	10,098	10,007	9,812	9,573	9,799	9,995
Atmospheric	709	657	601	552	557	547	623	713
Earth	5,212	4,989	4,776	4,796	4,720	4,603	4,639	4,691
Ocean	1,752	1,699	1,732	1,815	1,872	1,769	1,845	1,871
Other	3,200	3,057	2,989	2,844	2,663	2,654	2,692	2,720
Mathematics and statistics	9,196	8,351	8,097	7,659	6,955	7,386	7,923	8,415
Mathematics/applied mathematics	7,663	7,074	6,899	6,560	5,905	6,313	6,758	7,131
Statistics	1,533	1,277	1,198	1,099	1,050	1,073	1,165	1,284
Physical sciences	16,757	15,767	15,218	15,037	14,343	14,248	14,620	15,107
Astronomy	570	514	507	511	523	527	570	610
Chemistry	10,203	9,712	9,484	9,394	9,028	8,977	8,926	8,955
Physics	5,696	5,268	4,967	4,840	4,514	4,485	4,789	5,209
Other	288	273	260	292	278	259	335	333
Psychology	39,327	38,724	37,622	36,267	33,801	33,578	33,473	33,409
Clinical	9,898	9,848	9,353	9,212	8,662	8,361	8,185	8,532
General	12,377	12,667	12,302	11,548	10,582	10,639	10,200	10,042
Nonclinical	17,052	16,209	15,967	15,507	14,557	14,578	15,088	14,835
Social sciences	54,212	51,840	49,170	48,638	45,700	46,386	47,754	50,029
Agricultural economics	999	906	860	881	866	888	914	964
Anthropology (cultural and social)	5,867	5,641	5,549	5,440	5,311	5,190	5,153	5,311
Economics	4,935	4,201	3,828	3,595	3,448	3,504	3,567	3,780
Geography	3,321	3,266	3,211	3,131	2,906	3,048	3,068	3,200
History and philosophy of science	312	303	380	424	386	414	426	467
Linguistics	1,689	1,518	1,404	1,375	1,237	1,293	1,335	1,418

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Political science and public administration	20,955	19,984	18,526	18,317	17,401	17,635	18,785	19,504
Sociology	5,965	5,840	5,455	5,304	4,982	5,095	5,081	5,132
Other	10,169	10,181	9,957	10,171	9,163	9,319	9,425	10,253
Engineering	49,089	46,093	44,098	42,063	39,083	38,459	40,559	43,437
Aerospace	1,577	1,440	1,391	1,437	1,451	1,434	1,512	1,747
Agricultural	427	385	403	423	400	375	397	431
Biomedical	1,519	1,567	1,623	1,664	1,631	1,695	1,924	2,196
Chemical	3,394	3,365	3,124	2,805	2,627	2,417	2,565	2,554
Civil	9,983	9,208	8,665	8,088	7,759	7,492	7,707	8,316
Electrical	11,759	11,092	10,729	9,897	8,982	8,876	9,121	9,700
Engineering science/physics	942	881	843	787	673	717	893	928
Industrial/manufacturing	6,864	6,391	5,764	5,761	5,329	5,255	5,668	5,679
Mechanical	7,461	6,979	6,657	6,491	6,005	5,932	6,254	6,847
Metallurgical and materials	2,261	2,019	2,079	1,935	1,751	1,839	1,882	1,923
Mining	164	161	151	162	133	115	136	138
Nuclear	571	475	449	424	382	364	383	439
Petroleum	141	105	101	124	110	112	121	125
Other	2,026	2,025	2,119	2,065	1,850	1,836	1,996	2,414
Asian/Pacific Islander	25,929	26,012	26,726	27,570	25,058	26,584	29,352	32,450
Science	17,489	17,879	18,714	19,409	17,784	18,577	19,968	21,542
Agricultural sciences	291	309	315	310	250	262	286	326
Biological sciences	4,458	4,479	4,439	4,476	4,246	4,710	4,855	5,210
Anatomy	90	87	64	71	74	63	112	95
Biochemistry	611	566	527	541	423	477	412	466
Biology	875	882	817	793	721	725	731	836
Biometry and epidemiology	323	312	357	387	424	444	497	488
Biophysics	109	86	90	100	101	129	119	126
Botany	83	69	82	73	73	94	119	108
Cell and molecular biology	385	384	467	496	508	527	584	608
Ecology	37	48	50	45	42	47	43	59
Entomology and parasitology	40	41	37	19	24	46	27	29
Genetics	121	133	128	161	109	147	168	193
Microbiology, immunology, and virology	428	475	444	412	417	479	467	492
Nutrition	309	285	269	255	224	254	246	299
Pathology	138	171	166	180	155	181	188	183
Pharmacology	256	245	299	288	289	365	374	341
Physiology	318	333	265	276	268	288	309	331
Zoology	48	38	48	33	27	32	29	31
Other	287	324	329	346	367	412	430	525
Computer sciences	4,266	4,626	5,219	6,144	5,332	5,427	5,953	5,956
Earth, atmospheric, and ocean sciences	409	417	424	400	351	341	355	375
Atmospheric	52	56	55	41	41	26	31	67
Earth	145	166	153	144	132	139	149	126
Ocean	80	60	62	67	64	51	64	48
Other	132	135	154	148	114	125	111	134
Mathematics and statistics	1,223	1,051	1,174	1,002	948	985	1,184	1,446
Mathematics/applied mathematics	943	820	939	799	742	826	958	1,136
Statistics	280	231	235	203	206	159	226	310
Physical sciences	1,745	1,638	1,760	1,682	1,524	1,458	1,424	1,629
Astronomy	38	39	32	31	33	36	44	53
Chemistry	1,144	1,106	1,179	1,133	1,079	983	950	1,103
Physics	542	467	528	490	393	422	405	441
Other	21	26	21	28	19	17	25	32
Psychology	1,757	1,909	2,019	2,038	2,063	2,176	2,186	2,384
Clinical	494	557	553	579	569	578	554	623
General	585	610	703	675	712	739	674	793
Nonclinical	678	742	763	784	782	859	958	968

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Social sciences	3,340	3,450	3,364	3,357	3,070	3,218	3,725	4,216
Agricultural economics	53	49	54	53	30	29	39	39
Anthropology (cultural and social)	242	236	241	256	260	253	252	281
Economics	536	552	611	597	476	495	584	689
Geography	131	119	87	101	85	99	114	139
History and philosophy of science	18	21	22	20	20	21	28	29
Linguistics	181	212	187	148	106	154	183	215
Political science and public administration	1,155	1,264	1,180	1,163	1,206	1,225	1,489	1,622
Sociology	440	399	405	398	352	360	375	443
Other	584	598	577	621	535	582	661	759
Engineering	8,440	8,133	8,012	8,161	7,274	8,007	9,384	10,908
Aerospace	159	153	140	153	206	138	186	207
Agricultural	57	47	43	41	38	44	39	35
Biomedical	284	313	268	308	361	427	496	667
Chemical	482	512	469	486	501	494	566	556
Civil	1,254	1,050	1,104	931	744	771	855	1,024
Electrical	3,548	3,489	3,443	3,491	3,119	3,454	4,079	4,600
Engineering science/physics	153	202	187	170	103	123	161	152
Industrial/manufacturing	750	739	643	784	628	686	878	1,057
Mechanical	1,073	947	973	1,008	804	945	912	1,027
Metallurgical and materials	272	295	272	240	246	244	298	316
Mining	19	46	57	50	11	12	21	5
Nuclear	46	38	36	22	24	27	31	30
Petroleum	44	16	7	11	38	39	44	12
Other	299	286	370	466	451	603	818	1,220
Black	19,066	19,341	19,651	20,273	20,834	21,459	22,673	24,134
Science	16,167	16,462	16,830	17,308	17,857	18,544	19,599	20,922
Agricultural sciences	304	288	344	310	292	327	375	462
Biological sciences	1,974	2,105	2,141	2,218	2,241	2,351	2,480	2,762
Anatomy	26	35	30	31	31	20	38	37
Biochemistry	116	126	143	140	144	129	123	159
Biology	733	763	741	744	745	755	690	797
Biometry and epidemiology	144	154	174	188	164	176	201	229
Biophysics	18	17	18	17	17	17	18	17
Botany	30	30	28	22	16	24	29	26
Cell and molecular biology	94	115	126	114	135	143	160	172
Ecology	17	11	17	22	24	26	24	43
Entomology and parasitology	16	14	11	17	14	15	17	15
Genetics	33	43	51	55	57	56	60	75
Microbiology, immunology, and virology	171	194	172	186	191	178	218	245
Nutrition	179	196	213	218	208	231	252	246
Pathology	30	39	44	49	44	51	52	56
Pharmacology	105	114	136	151	147	169	173	185
Physiology	95	101	95	78	102	98	94	102
Zoology	16	11	14	16	13	10	16	11
Other	151	142	128	170	189	253	315	347
Computer sciences	1,276	1,300	1,355	1,485	1,512	1,709	1,898	1,945
Earth, atmospheric, and ocean sciences	219	203	202	213	220	227	266	270
Atmospheric	15	12	8	7	18	19	25	32
Earth	70	56	59	62	56	57	64	75
Ocean	33	26	25	28	28	31	36	35
Other	101	109	110	116	118	120	141	128
Mathematics and statistics	711	657	613	594	572	590	626	658
Mathematics/applied mathematics	639	607	561	543	509	525	546	564
Statistics	72	50	52	51	63	65	80	94
Physical sciences	986	952	913	903	918	875	893	939
Astronomy	14	11	9	9	9	12	10	9
Chemistry	679	667	635	633	650	631	636	663

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Physics	280	245	242	234	235	211	220	236
Other	13	29	27	27	24	21	27	31
Psychology	3,452	3,644	3,813	3,749	4,214	4,347	4,491	4,670
Clinical	652	736	725	710	756	740	786	857
General	1,443	1,544	1,507	1,405	1,463	1,489	1,532	1,559
Nonclinical	1,357	1,364	1,581	1,634	1,995	2,118	2,173	2,254
Social sciences	7,245	7,313	7,449	7,836	7,888	8,118	8,570	9,216
Agricultural economics	62	65	70	84	80	76	83	76
Anthropology (cultural and social)	251	254	266	291	270	274	248	275
Economics	371	324	317	291	317	314	322	363
Geography	109	83	108	92	86	114	112	141
History and philosophy of science	10	8	12	14	14	16	24	24
Linguistics	43	45	46	49	44	47	44	49
Political science and public administration	3,627	3,699	3,795	4,097	4,073	4,264	4,632	4,847
Sociology	1,019	1,053	1,114	1,061	984	1,001	1,032	1,080
Other	1,753	1,782	1,721	1,857	2,020	2,012	2,073	2,361
Engineering	2,899	2,879	2,821	2,965	2,977	2,915	3,074	3,212
Aerospace	47	35	34	52	57	45	51	59
Agricultural	17	21	27	23	23	26	24	27
Biomedical	84	83	86	104	114	122	144	159
Chemical	191	172	185	147	168	167	160	173
Civil	491	443	410	450	448	431	453	427
Electrical	778	874	874	886	830	812	846	812
Engineering science/physics	40	39	39	35	34	33	36	42
Industrial/manufacturing	535	489	465	541	557	591	616	685
Mechanical	417	428	412	375	396	354	358	382
Metallurgical and materials	104	112	75	92	94	107	112	111
Mining	0	0	1	1	5	1	1	2
Nuclear	16	21	13	15	17	13	11	12
Petroleum	2	8	5	5	7	4	6	11
Other	177	154	195	239	227	209	256	310
Hispanic	14,571	14,984	15,487	16,520	17,203	17,974	19,639	21,264
Science	11,635	12,172	12,587	13,596	14,185	14,791	16,178	17,288
Agricultural sciences	376	411	391	422	440	425	406	496
Biological sciences	1,849	1,987	2,053	2,185	2,183	2,338	2,590	2,849
Anatomy	25	15	15	26	24	21	43	42
Biochemistry	111	148	141	152	144	171	184	229
Biology	621	694	691	676	708	700	786	806
Biometry and epidemiology	118	135	159	164	167	149	170	196
Biophysics	14	17	14	17	14	20	20	28
Botany	53	47	54	47	36	42	47	38
Cell and molecular biology	114	113	122	153	157	181	213	225
Ecology	51	47	43	41	51	58	59	61
Entomology and parasitology	43	42	26	27	31	39	35	41
Genetics	39	44	53	59	57	68	67	61
Microbiology, immunology, and virology	164	170	187	201	196	220	243	286
Nutrition	163	155	172	186	152	162	167	201
Pathology	39	44	42	56	54	67	62	63
Pharmacology	76	85	88	92	112	116	127	134
Physiology	60	65	70	84	65	60	66	81
Zoology	38	30	36	31	28	29	28	32
Other	120	136	140	173	187	235	273	325
Computer sciences	700	723	754	865	863	894	1,004	1,099
Earth, atmospheric, and ocean sciences	374	399	370	400	355	397	413	484
Atmospheric	11	12	13	7	12	15	16	21
Earth	141	161	137	154	136	155	163	187
Ocean	106	116	108	132	113	137	131	158
Other	116	110	112	107	94	90	103	118

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mathematics and statistics	425	427	454	447	460	482	542	604
Mathematics/applied mathematics	376	386	404	399	413	442	494	538
Statistics	49	41	50	48	47	40	48	66
Physical sciences	742	782	832	895	844	896	981	1,097
Astronomy	13	11	12	13	17	17	17	25
Chemistry	504	523	562	618	602	629	668	750
Physics	216	237	226	229	202	239	274	300
Other	9	11	32	35	23	11	22	22
Psychology	2,937	3,075	3,228	3,567	4,145	4,309	4,655	4,682
Clinical	842	925	1,119	1,182	1,403	1,492	1,588	1,631
General	890	909	911	931	969	1,006	926	985
Nonclinical	1,205	1,241	1,198	1,454	1,773	1,811	2,141	2,066
Social sciences	4,232	4,368	4,505	4,815	4,895	5,050	5,587	5,977
Agricultural economics	60	53	42	36	39	40	30	42
Anthropology (cultural and social)	336	338	344	327	368	383	409	435
Economics	310	277	276	247	238	306	332	369
Geography	90	91	98	111	103	107	123	150
History and philosophy of science	8	10	12	22	17	18	55	38
Linguistics	131	157	150	135	142	126	140	136
Political science and public administration	1,895	1,926	1,989	2,166	2,303	2,223	2,587	2,746
Sociology	518	581	602	641	607	608	655	664
Other	884	935	992	1,130	1,078	1,239	1,256	1,397
Engineering	2,936	2,812	2,900	2,924	3,018	3,183	3,461	3,976
Aerospace	62	71	76	80	80	71	92	119
Agricultural	19	17	15	16	22	27	22	14
Biomedical	60	56	80	86	92	102	114	155
Chemical	200	142	179	182	182	180	206	249
Civil	712	694	723	701	776	747	778	845
Electrical	793	810	812	769	717	825	941	1,093
Engineering science/physics	55	41	42	44	36	40	47	49
Industrial/manufacturing	421	396	364	426	439	469	477	561
Mechanical	383	360	389	388	366	407	450	537
Metallurgical and materials	89	86	84	75	84	80	79	97
Mining	4	7	4	2	2	3	3	3
Nuclear	20	22	22	28	30	34	26	31
Petroleum	13	10	6	5	59	63	57	13
Other	105	100	104	122	133	135	169	210
American Indian/Alaska Native	1,538	1,599	1,607	1,553	1,602	1,683	1,735	1,872
Science	1,304	1,360	1,371	1,311	1,394	1,456	1,491	1,568
Agricultural sciences	48	62	71	69	56	58	76	77
Biological sciences	200	197	191	186	189	205	211	236
Anatomy	4	3	3	3	4	3	3	4
Biochemistry	14	15	13	6	8	15	8	11
Biology	62	60	51	59	58	52	50	56
Biometry and epidemiology	9	11	7	7	11	11	14	16
Biophysics	0	1	1	1	1	1	2	1
Botany	4	3	3	4	3	9	10	10
Cell and molecular biology	8	9	11	9	13	11	12	14
Ecology	3	8	5	5	5	8	6	10
Entomology and parasitology	2	1	3	1	1	2	5	4
Genetics	4	6	4	4	6	7	7	12
Microbiology, immunology, and virology	14	10	18	15	21	13	24	14
Nutrition	14	12	16	15	13	15	14	13
Pathology	9	11	10	7	6	11	3	3
Pharmacology	8	5	6	14	8	10	15	19
Physiology	9	7	10	8	3	7	8	11
Zoology	18	12	9	7	7	8	6	8
Other	18	23	21	21	21	22	24	30

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Computer sciences	54	60	92	74	80	87	83	104
Earth, atmospheric, and ocean sciences	65	82	84	63	61	70	81	63
Atmospheric	3	2	2	2	3	4	4	5
Earth	31	38	36	26	27	32	36	26
Ocean	12	17	16	12	10	12	11	8
Other	19	25	30	23	21	22	30	24
Mathematics and statistics	41	43	34	30	25	38	24	25
Mathematics/applied mathematics	36	40	30	26	20	34	20	24
Statistics	5	3	4	4	5	4	4	1
Physical sciences	60	70	64	69	75	81	83	79
Astronomy	2	1	2	2	1	0	2	3
Chemistry	45	50	46	53	61	62	58	51
Physics	13	18	14	13	12	19	22	24
Other	0	1	2	1	1	0	1	1
Psychology	359	341	311	300	360	334	320	322
Clinical	117	111	112	93	104	92	101	107
General	118	109	93	96	124	104	87	92
Nonclinical	124	121	106	111	132	138	132	123
Social sciences	477	505	524	520	548	583	613	662
Agricultural economics	5	3	5	7	7	4	4	7
Anthropology (cultural and social)	106	103	119	105	109	102	89	99
Economics	16	16	16	13	17	21	28	31
Geography	18	15	13	14	20	28	26	22
History and philosophy of science	0	1	1	2	2	2	2	4
Linguistics	4	7	9	15	13	13	12	16
Political science and public administration	154	155	172	177	175	192	217	240
Sociology	63	76	68	66	68	66	68	65
Other	111	129	121	121	137	155	167	178
Engineering	234	239	236	242	208	227	244	304
Aerospace	5	3	7	8	8	8	11	15
Agricultural	1	8	4	1	3	3	2	2
Biomedical	6	6	7	8	5	5	6	7
Chemical	31	18	21	16	20	13	21	19
Civil	48	58	43	56	39	43	58	65
Electrical	50	46	33	47	37	45	39	63
Engineering science/physics	3	4	7	6	8	9	9	11
Industrial/manufacturing	22	23	34	39	41	43	34	52
Mechanical	35	35	25	33	27	32	32	42
Metallurgical and materials	8	11	33	10	5	8	11	8
Mining	1	0	0	0	1	0	3	4
Nuclear	3	3	2	2	1	0	2	1
Petroleum	1	2	2	0	1	1	1	0
Other	20	22	18	16	12	17	15	15
Other race/ethnicity	17,939	18,725	18,741	18,588	20,445	20,984	22,719	25,494
Science	13,369	14,239	14,559	14,755	16,294	16,804	18,079	19,777
Agricultural sciences	281	354	300	280	422	503	456	518
Biological sciences	1,780	2,095	2,212	2,386	2,407	2,408	2,585	3,070
Anatomy	16	28	34	18	15	12	31	28
Biochemistry	114	167	129	142	126	167	223	275
Biology	667	747	775	796	674	618	652	793
Biometry and epidemiology	97	126	227	185	177	214	126	159
Biophysics	36	41	71	38	40	22	35	39
Botany	42	50	59	51	59	56	63	70
Cell and molecular biology	68	123	130	194	268	288	328	390
Ecology	63	78	58	54	94	89	110	164
Entomology and parasitology	24	24	22	22	21	29	30	31
Genetics	45	34	32	99	129	101	99	110
Microbiology, immunology, and virology	104	132	143	267	255	246	245	258

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Nutrition	134	97	98	103	134	162	152	161
Pathology	50	71	69	67	65	72	72	71
Pharmacology	46	52	57	54	51	53	70	96
Physiology	57	86	53	64	67	48	59	72
Zoology	13	27	73	37	49	43	45	54
Other	204	212	182	195	183	188	245	299
Computer sciences	2,004	2,303	2,237	2,378	2,833	2,968	3,303	3,232
Earth, atmospheric, and ocean sciences	477	530	581	480	450	451	558	705
Atmospheric	13	62	31	30	28	28	31	44
Earth	248	256	282	231	223	203	282	351
Ocean	75	54	86	54	55	71	65	86
Other	141	158	182	165	144	149	180	224
Mathematics and statistics	651	646	692	598	633	686	840	996
Mathematics/applied mathematics	595	594	614	534	557	582	712	888
Statistics	56	52	78	64	76	104	128	108
Physical sciences	865	1,001	1,050	973	1,026	1,277	1,250	1,375
Astronomy	21	17	45	27	34	41	44	47
Chemistry	484	604	551	500	463	515	554	688
Physics	351	373	402	334	401	615	549	547
Other	9	7	52	112	128	106	103	93
Psychology	3,317	3,425	3,378	3,567	3,620	3,202	3,183	3,378
Clinical	480	586	508	626	604	797	800	833
General	757	743	887	863	962	926	758	908
Nonclinical	2,080	2,096	1,983	2,078	2,054	1,479	1,625	1,637
Social sciences	3,994	3,885	4,109	4,093	4,903	5,309	5,904	6,503
Agricultural economics	38	47	60	28	43	72	71	83
Anthropology (cultural and social)	281	286	319	391	479	520	483	556
Economics	391	344	413	286	445	484	556	501
Geography	180	189	250	203	208	183	193	224
History and philosophy of science	11	33	14	16	24	30	60	54
Linguistics	106	147	116	115	172	149	179	231
Political science and public administration	1,923	1,629	1,614	1,533	1,814	2,043	2,570	3,019
Sociology	289	303	305	320	404	375	414	398
Other	775	907	1,018	1,201	1,314	1,453	1,378	1,437
Engineering	4,570	4,486	4,182	3,833	4,151	4,180	4,640	5,717
Aerospace	85	63	72	87	92	109	147	214
Agricultural	19	43	27	22	27	22	11	22
Biomedical	74	112	113	84	78	152	172	279
Chemical	223	215	230	233	228	147	183	201
Civil	775	637	610	575	540	588	702	762
Electrical	1,561	1,721	1,568	1,427	1,630	1,522	1,553	1,830
Engineering science/physics	65	32	31	51	101	132	93	48
Industrial/manufacturing	757	578	599	522	580	563	645	843
Mechanical	657	602	590	465	499	513	598	803
Metallurgical and materials	93	198	127	86	85	107	100	106
Mining	49	9	15	4	3	5	1	15
Nuclear	14	6	5	7	3	7	11	19
Petroleum	0	8	2	3	50	48	69	13
Other	198	262	193	267	235	265	355	562
Temporary residents	98,106	98,962	101,977	109,928	122,825	134,531	145,612	146,871
Sciences	63,050	62,456	64,188	68,425	75,424	82,009	87,306	87,050
Agricultural sciences	3,018	2,789	2,654	2,538	2,411	2,513	2,613	2,578
Biological sciences	11,372	11,064	11,336	11,189	11,761	12,434	13,826	14,770
Anatomy	173	170	155	153	177	176	199	199
Biochemistry	1,525	1,411	1,453	1,455	1,589	1,585	1,731	1,897
Biology	1,970	2,037	2,080	1,992	2,054	2,193	2,445	2,538
Biometry and epidemiology	561	512	679	751	821	903	1,099	1,196
Biophysics	175	171	166	154	204	263	299	319

TABLE D-1. S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Botany	624	612	606	588	584	574	618	584
Cell and molecular biology	882	887	897	898	1,031	1,133	1,262	1,431
Ecology	162	169	172	174	186	194	218	262
Entomology and parasitology	318	290	291	302	280	275	283	286
Genetics	389	418	396	383	377	433	424	515
Microbiology, immunology, and virology	1,063	979	960	943	935	1,004	1,197	1,143
Nutrition	1,161	1,109	1,071	1,064	1,116	1,160	1,162	1,200
Pathology	330	294	288	295	301	293	299	331
Pharmacology	573	553	576	569	625	648	680	773
Physiology	448	423	438	454	446	431	454	521
Zoology	224	191	190	159	174	201	219	180
Other	794	838	918	855	861	968	1,237	1,395
Computer sciences	11,847	12,917	14,422	17,155	22,262	26,054	27,066	24,143
Earth, atmospheric, and ocean sciences	2,766	2,515	2,499	2,520	2,692	2,782	2,768	2,763
Atmospheric	283	291	255	274	304	285	306	268
Earth	1,457	1,293	1,244	1,224	1,302	1,355	1,379	1,433
Ocean	557	507	533	516	526	514	466	489
Other	469	424	467	506	560	628	617	573
Mathematics and statistics	5,761	5,544	5,421	5,927	6,057	6,484	7,024	7,321
Mathematics/applied mathematics	4,696	4,506	4,380	4,660	4,677	4,847	5,214	5,288
Statistics	1,065	1,038	1,041	1,267	1,380	1,637	1,810	2,033
Physical sciences	11,178	10,895	10,738	11,132	11,655	12,203	13,090	14,072
Astronomy	216	185	213	239	271	283	303	333
Chemistry	6,275	6,112	6,025	6,085	6,222	6,569	7,253	7,839
Physics	4,630	4,539	4,430	4,729	5,084	5,257	5,442	5,798
Other	57	59	70	79	78	94	92	102
Psychology	1,973	2,008	2,186	2,239	2,263	2,521	2,857	3,180
Clinical	304	335	363	396	390	428	595	620
General	663	667	695	720	812	934	982	1,183
Nonclinical	1,006	1,006	1,128	1,123	1,061	1,159	1,280	1,377
Social sciences	15,135	14,724	14,932	15,725	16,323	17,018	18,062	18,223
Agricultural economics	900	920	904	925	1,014	1,052	1,046	1,085
Anthropology (cultural and social)	690	702	739	823	829	769	847	849
Economics	5,521	5,383	5,240	5,533	5,807	6,284	6,620	6,574
Geography	482	524	559	598	628	725	747	778
History and philosophy of science	50	67	67	59	69	70	68	61
Linguistics	1,002	982	1,023	962	960	962	982	963
Political science and public administration	3,543	3,426	3,552	3,919	4,159	4,223	4,654	4,877
Sociology	1,131	1,161	1,109	1,176	1,255	1,307	1,321	1,345
Other	1,816	1,559	1,739	1,730	1,602	1,626	1,777	1,691
Engineering	35,056	36,506	37,789	41,503	47,401	52,522	58,306	59,821
Aerospace	1,273	1,318	1,417	1,532	1,513	1,646	1,686	1,687
Agricultural	472	420	406	408	386	410	417	481
Biomedical	705	710	728	867	960	1,136	1,522	1,884
Chemical	2,887	2,864	2,885	3,014	3,330	3,495	3,713	3,764
Civil	5,265	5,103	4,962	5,425	6,145	6,593	7,160	7,399
Electrical	11,452	12,755	13,925	15,305	18,296	20,566	23,369	23,647
Engineering science/physics	493	448	552	534	677	744	882	1,010
Industrial/manufacturing	3,326	3,341	3,352	3,730	4,545	5,333	5,715	5,418
Mechanical	5,483	5,694	5,650	6,196	7,138	7,669	8,535	8,802
Metallurgical and materials	1,920	1,967	2,010	2,043	2,112	2,336	2,510	2,593
Mining	134	125	76	109	132	104	102	111
Nuclear	310	303	294	332	335	356	331	353
Petroleum	361	412	448	494	362	389	468	675
Other	975	1,046	1,084	1,514	1,470	1,745	1,896	1,997

NOTES: Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary residents include all racial/ethnic groups.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 1996–2003.

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
All female S&E graduate students	161,671	162,011	163,427	168,396	170,479	177,430	188,644	198,113
Science	143,417	143,291	144,439	148,509	149,733	155,173	163,677	170,524
Agricultural sciences	4,585	4,706	4,852	5,049	5,088	5,343	5,653	6,026
Biological sciences	28,642	28,476	28,953	29,621	29,807	31,049	33,427	35,872
Anatomy	400	383	342	345	367	352	467	466
Biochemistry	2,288	2,176	2,229	2,266	2,231	2,223	2,422	2,595
Biology	7,129	7,287	7,213	7,143	7,006	7,189	7,514	8,134
Biometry/epidemiology	1,774	1,776	2,153	2,323	2,241	2,427	2,552	2,771
Biophysics	244	216	209	213	231	262	306	339
Botany	998	996	1,011	982	986	974	1,019	996
Cell/molecular biology	1,981	2,055	2,141	2,360	2,494	2,521	2,791	3,020
Ecology	777	798	830	881	916	979	1,039	1,208
Entomology/parasitology	424	410	414	406	442	480	492	537
Genetics	908	968	983	1,016	973	1,046	1,112	1,216
Microbiology, immunology, and virology	2,432	2,396	2,371	2,450	2,432	2,495	2,808	2,933
Nutrition	3,680	3,460	3,413	3,431	3,379	3,436	3,512	3,658
Pathology	809	832	804	804	829	895	906	910
Pharmacology	1,291	1,229	1,325	1,343	1,516	1,658	1,773	1,818
Physiology	981	934	886	898	882	911	994	1,144
Zoology	767	703	694	670	642	667	638	645
Other	1,759	1,857	1,935	2,090	2,240	2,534	3,082	3,482
Computer sciences	8,797	9,881	10,802	12,545	14,080	15,302	16,025	14,791
Earth, atmospheric, and ocean sciences	5,447	5,416	5,568	5,725	5,753	5,892	6,247	6,555
Atmospheric	234	263	234	242	268	298	333	374
Earth	2,320	2,296	2,315	2,400	2,455	2,483	2,613	2,764
Ocean	1,070	1,055	1,162	1,222	1,267	1,255	1,309	1,392
Other	1,823	1,802	1,857	1,861	1,763	1,856	1,992	2,025
Mathematics and statistics	6,219	5,868	5,988	6,043	5,780	6,270	6,886	7,289
Mathematics/applied mathematics	4,986	4,783	4,895	4,862	4,508	4,818	5,239	5,406
Statistics	1,233	1,085	1,093	1,181	1,272	1,452	1,647	1,883
Physical sciences	9,045	8,848	8,753	8,915	9,115	9,336	10,066	10,778
Astronomy	227	208	230	225	267	265	302	345
Chemistry	6,839	6,722	6,564	6,617	6,756	6,855	7,325	7,839
Physics	1,809	1,744	1,780	1,876	1,910	2,042	2,201	2,366
Other	170	174	179	197	182	174	238	228
Psychology	37,747	37,619	37,462	37,271	36,872	37,318	37,728	38,668
Clinical	9,087	9,312	9,173	9,285	9,283	9,399	9,467	10,035
General	11,646	11,877	11,847	11,387	11,027	11,283	10,676	10,985
Nonclinical	17,014	16,430	16,442	16,599	16,562	16,636	17,585	17,648
Social sciences	42,935	42,477	42,061	43,340	43,238	44,663	47,645	50,545
Agricultural economics	710	688	680	715	789	835	844	895
Anthropology (cultural and social)	4,686	4,501	4,556	4,644	4,685	4,562	4,617	4,864
Economics	3,783	3,512	3,464	3,499	3,765	3,995	4,268	4,500
Geography	1,561	1,625	1,663	1,703	1,627	1,801	1,843	2,000
History and philosophy of science	152	162	193	212	219	244	301	287
Linguistics	2,023	2,017	1,953	1,833	1,744	1,793	1,891	2,005
Political science and public administration	15,632	15,404	14,961	15,573	15,927	16,501	18,619	19,830
Sociology	5,785	5,822	5,696	5,739	5,580	5,732	5,768	5,901
Other	8,603	8,746	8,895	9,422	8,902	9,200	9,494	10,263
Engineering	18,254	18,720	18,988	19,887	20,746	22,257	24,967	27,589
Aerospace	352	371	382	423	469	485	516	603
Agricultural	210	218	243	251	268	284	272	297
Biomedical	733	826	870	1,004	1,070	1,254	1,529	1,962
Chemical	1,651	1,720	1,727	1,733	1,875	1,829	1,995	2,100
Civil	4,300	4,164	4,102	4,157	4,277	4,503	4,905	5,392
Electrical	4,229	4,550	4,872	5,133	5,536	6,212	7,270	7,791
Engineering science/physics	295	278	331	319	342	363	430	465
Industrial/manufacturing	2,769	2,656	2,452	2,659	2,713	2,808	3,076	3,260

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mechanical	1,636	1,779	1,762	1,788	1,832	1,944	2,083	2,364
Metallurgical/materials	1,077	1,117	1,130	1,084	1,041	1,173	1,251	1,332
Mining	54	63	55	55	46	36	37	42
Nuclear	153	143	134	144	156	157	148	182
Petroleum	60	77	55	82	87	91	107	129
Other	735	758	873	1,055	1,034	1,118	1,348	1,670
U.S. citizens and permanent residents	134,556	133,734	133,389	135,431	133,688	136,696	144,276	152,305
Science	121,721	121,203	121,008	123,050	121,633	124,269	130,471	136,828
Agricultural sciences	3,718	3,871	4,006	4,194	4,241	4,406	4,641	4,992
Biological sciences	23,389	23,353	23,503	24,180	23,964	24,669	26,274	27,999
Anatomy	331	322	284	279	294	278	383	369
Biochemistry	1,615	1,581	1,596	1,604	1,511	1,463	1,600	1,681
Biology	6,187	6,312	6,192	6,166	5,979	6,060	6,242	6,759
Biometry/epidemiology	1,497	1,520	1,818	1,947	1,808	1,915	1,940	2,073
Biophysics	192	171	164	170	175	187	221	231
Botany	748	730	732	725	717	701	716	703
Cell/molecular biology	1,566	1,642	1,715	1,886	1,931	1,908	2,095	2,228
Ecology	711	736	758	807	831	895	947	1,076
Entomology/parasitology	326	325	334	322	357	395	396	432
Genetics	753	789	786	844	792	837	894	942
Microbiology, immunology, and virology	1,945	1,943	1,907	1,968	1,963	1,951	2,177	2,299
Nutrition	2,971	2,764	2,707	2,745	2,648	2,672	2,756	2,908
Pathology	674	707	671	678	698	758	752	728
Pharmacology	1,012	960	1,043	1,064	1,197	1,308	1,382	1,377
Physiology	797	765	702	710	693	698	770	880
Zoology	673	628	616	602	560	579	540	556
Other	1,391	1,458	1,478	1,663	1,810	2,064	2,463	2,757
Computer sciences	5,736	6,198	6,577	7,412	7,406	7,643	8,206	8,096
Earth, atmospheric, and ocean sciences	4,675	4,697	4,805	4,868	4,857	4,911	5,235	5,518
Atmospheric	151	165	146	137	166	192	216	273
Earth	2,001	2,006	2,021	2,069	2,100	2,098	2,181	2,287
Ocean	903	891	980	1,038	1,065	1,049	1,124	1,196
Other	1,620	1,635	1,658	1,624	1,526	1,572	1,714	1,762
Mathematics and statistics	4,557	4,169	4,205	3,982	3,661	3,927	4,379	4,584
Mathematics/applied mathematics	3,759	3,513	3,563	3,367	3,034	3,299	3,653	3,783
Statistics	798	656	642	615	627	628	726	801
Physical sciences	6,004	5,837	5,833	5,862	5,832	5,859	6,178	6,526
Astronomy	178	169	181	172	197	191	229	253
Chemistry	4,611	4,537	4,441	4,477	4,477	4,453	4,583	4,819
Physics	1,070	981	1,062	1,047	999	1,075	1,162	1,252
Other	145	150	149	166	159	140	204	202
Psychology	36,482	36,361	36,074	35,822	35,361	35,574	35,963	36,678
Clinical	8,884	9,084	8,923	9,005	8,977	9,065	9,094	9,644
General	11,258	11,498	11,461	10,952	10,527	10,676	10,113	10,277
Nonclinical	16,340	15,779	15,690	15,865	15,857	15,833	16,756	16,757
Social sciences	37,160	36,717	36,005	36,730	36,311	37,280	39,595	42,435
Agricultural economics	441	414	390	393	413	423	428	465
Anthropology (cultural and social)	4,324	4,127	4,169	4,196	4,220	4,141	4,157	4,408
Economics	2,135	1,867	1,808	1,719	1,815	1,835	1,938	2,087
Geography	1,397	1,428	1,454	1,466	1,383	1,508	1,523	1,666
History and philosophy of science	137	141	170	194	189	219	274	269
Linguistics	1,403	1,388	1,297	1,233	1,130	1,161	1,237	1,378
Political science and public administration	14,277	14,045	13,537	13,932	14,128	14,598	16,382	17,532
Sociology	5,237	5,239	5,098	5,074	4,857	4,947	4,985	5,108
Other	7,809	8,068	8,082	8,523	8,176	8,448	8,671	9,522
Engineering	12,835	12,531	12,381	12,381	12,055	12,427	13,805	15,477
Aerospace	246	227	224	255	282	275	300	390
Agricultural	108	128	141	150	173	182	169	176

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Biomedical	569	646	676	744	778	884	1,031	1,334
Chemical	1,064	1,076	1,059	1,020	1,054	985	1,086	1,093
Civil	3,317	3,115	3,046	2,955	2,909	2,957	3,209	3,549
Electrical	2,537	2,497	2,518	2,389	2,246	2,380	2,668	2,958
Engineering science/physics	216	209	220	215	195	209	252	235
Industrial/manufacturing	2,219	2,079	1,869	2,003	1,896	1,890	2,114	2,263
Mechanical	1,144	1,166	1,153	1,141	1,051	1,117	1,164	1,370
Metallurgical/materials	703	701	677	618	581	622	668	702
Mining	41	55	51	43	32	32	30	30
Nuclear	105	100	88	87	95	88	87	115
Petroleum	16	18	15	17	40	40	40	24
Other	550	514	644	744	723	766	987	1,238
White	98,707	96,515	94,933	94,940	91,787	92,768	96,542	100,292
Science	90,087	88,244	86,767	87,076	84,161	85,167	88,483	91,408
Agricultural sciences	3,114	3,219	3,334	3,527	3,526	3,600	3,816	4,046
Biological sciences	17,962	17,446	17,454	17,808	17,677	17,846	18,972	19,733
Anatomy	246	240	221	209	229	222	263	265
Biochemistry	1,172	1,088	1,144	1,158	1,123	1,017	1,140	1,122
Biology	4,607	4,591	4,486	4,459	4,342	4,389	4,554	4,803
Biometry/epidemiology	1,061	1,045	1,199	1,326	1,179	1,256	1,301	1,370
Biophysics	143	126	111	117	121	135	161	164
Botany	648	630	605	613	612	582	567	562
Cell/molecular biology	1,248	1,278	1,272	1,364	1,353	1,296	1,389	1,442
Ecology	633	650	673	709	709	763	807	880
Entomology/parasitology	277	271	291	283	310	341	345	371
Genetics	634	642	637	627	593	623	678	695
Microbiology, immunology, and virology	1,481	1,395	1,382	1,387	1,390	1,353	1,501	1,542
Nutrition	2,353	2,171	2,100	2,124	2,074	2,009	2,086	2,138
Pathology	544	531	501	490	526	555	547	513
Pharmacology	736	686	734	737	864	901	940	941
Physiology	552	494	492	484	478	465	506	576
Zoology	609	573	533	539	497	521	486	493
Other	1,018	1,035	1,073	1,182	1,277	1,418	1,701	1,856
Computer sciences	3,040	3,143	3,198	3,521	3,629	3,778	3,962	4,027
Earth, atmospheric, and ocean sciences	4,053	4,039	4,065	4,134	4,200	4,211	4,410	4,557
Atmospheric	118	117	108	111	126	156	175	211
Earth	1,772	1,771	1,753	1,810	1,870	1,851	1,878	1,934
Ocean	772	765	829	885	921	897	954	1,002
Other	1,391	1,386	1,375	1,328	1,283	1,307	1,403	1,410
Mathematics and statistics	3,290	3,035	3,040	2,861	2,601	2,799	3,046	3,061
Mathematics/applied mathematics	2,704	2,558	2,586	2,431	2,177	2,356	2,556	2,545
Statistics	586	477	454	430	424	443	490	516
Physical sciences	4,371	4,180	4,170	4,165	4,167	4,164	4,497	4,592
Astronomy	146	137	145	146	163	154	182	199
Chemistry	3,338	3,220	3,176	3,182	3,173	3,171	3,315	3,336
Physics	771	717	759	739	741	755	863	921
Other	116	106	90	98	90	84	137	136
Psychology	27,753	27,408	26,707	26,072	24,442	24,553	24,655	24,777
Clinical	6,941	6,924	6,617	6,577	6,320	6,156	6,084	6,434
General	8,483	8,708	8,514	8,068	7,394	7,474	7,167	7,077
Nonclinical	12,329	11,776	11,576	11,427	10,728	10,923	11,404	11,266
Social sciences	26,504	25,774	24,799	24,988	23,919	24,216	25,125	26,615
Agricultural economics	355	315	295	309	331	331	325	358
Anthropology (cultural and social)	3,569	3,364	3,359	3,310	3,262	3,148	3,191	3,326
Economics	1,575	1,351	1,227	1,150	1,218	1,200	1,231	1,330
Geography	1,192	1,230	1,239	1,242	1,161	1,263	1,262	1,340
History and philosophy of science	119	120	149	163	158	182	197	199
Linguistics	1,071	995	934	901	801	830	869	929

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Political science and public administration	9,442	9,244	8,645	8,763	8,550	8,690	9,479	10,002
Sociology	3,778	3,701	3,509	3,506	3,299	3,395	3,334	3,368
Other	5,403	5,454	5,442	5,644	5,139	5,177	5,237	5,763
Engineering	8,620	8,271	8,166	7,864	7,626	7,601	8,059	8,884
Aerospace	198	183	175	198	218	210	217	279
Agricultural	86	82	103	113	118	117	117	129
Biomedical	410	472	483	520	542	572	647	805
Chemical	705	742	704	643	663	610	653	635
Civil	2,408	2,312	2,206	2,098	2,118	2,111	2,228	2,496
Electrical	1,316	1,166	1,234	1,099	981	1,011	1,028	1,035
Engineering science/physics	154	142	150	137	134	138	170	179
Industrial/manufacturing	1,544	1,438	1,272	1,315	1,211	1,162	1,249	1,323
Mechanical	766	762	791	749	687	728	743	899
Metallurgical/materials	547	500	506	443	426	449	468	483
Mining	30	43	37	33	29	29	25	27
Nuclear	84	71	71	66	69	64	63	87
Petroleum	10	9	9	13	15	10	11	12
Other	362	349	425	437	415	390	440	495
Asian/Pacific Islander	9,983	10,330	10,830	11,524	10,654	11,395	12,677	14,062
Science	8,201	8,548	8,996	9,515	8,870	9,324	10,021	10,913
Agricultural sciences	144	141	155	167	138	147	150	168
Biological sciences	2,207	2,317	2,350	2,377	2,253	2,539	2,656	2,921
Anatomy	42	44	25	29	23	29	61	49
Biochemistry	283	260	244	235	192	211	191	219
Biology	449	471	454	438	384	410	401	486
Biometry/epidemiology	197	199	246	268	290	305	328	323
Biophysics	27	21	18	29	29	35	38	43
Botany	35	34	48	48	51	55	69	66
Cell/molecular biology	174	188	244	274	262	272	305	321
Ecology	19	27	29	27	26	29	30	41
Entomology/parasitology	16	17	17	10	15	19	12	15
Genetics	62	67	66	82	56	73	81	93
Microbiology, immunology, and virology	209	253	234	216	220	244	253	276
Nutrition	225	226	212	199	168	201	196	250
Pathology	63	86	82	86	72	94	98	105
Pharmacology	138	129	149	142	151	197	200	183
Physiology	115	121	97	106	102	133	149	153
Zoology	22	15	22	18	14	15	13	17
Other	131	159	163	170	198	217	231	281
Computer sciences	1,432	1,648	1,920	2,318	2,009	1,987	2,143	2,036
Earth, atmospheric, and ocean sciences	160	164	186	192	172	170	197	205
Atmospheric	16	20	17	8	16	11	15	26
Earth	49	48	57	66	60	55	70	63
Ocean	32	25	26	36	35	30	37	31
Other	63	71	86	82	61	74	75	85
Mathematics and statistics	522	429	470	437	417	433	531	676
Mathematics/applied mathematics	397	321	369	328	307	346	412	499
Statistics	125	108	101	109	110	87	119	177
Physical sciences	648	594	610	636	573	542	531	651
Astronomy	15	17	15	13	14	15	18	17
Chemistry	513	478	485	495	473	432	411	510
Physics	108	86	96	117	76	88	93	111
Other	12	13	14	11	10	7	9	13
Psychology	1,292	1,399	1,468	1,502	1,531	1,628	1,633	1,809
Clinical	378	432	426	453	453	468	451	519
General	424	455	514	503	520	552	489	562
Nonclinical	490	512	528	546	558	608	693	728

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Social sciences	1,796	1,856	1,837	1,886	1,777	1,878	2,180	2,447
Agricultural economics	25	22	25	18	13	15	20	19
Anthropology (cultural and social)	155	162	167	183	192	186	174	188
Economics	204	202	225	240	212	202	258	305
Geography	71	61	45	54	46	57	59	78
History and philosophy of science	8	6	9	9	9	10	16	17
Linguistics	126	150	133	114	78	106	135	160
Political science and public administration	614	653	632	634	680	704	855	935
Sociology	268	258	262	254	235	240	255	307
Other	325	342	339	380	312	358	408	438
Engineering	1,782	1,782	1,834	2,009	1,784	2,071	2,656	3,149
Aerospace	19	16	21	21	26	27	31	36
Agricultural	12	15	13	15	19	21	16	15
Biomedical	83	85	86	105	125	164	208	272
Chemical	137	151	148	176	165	160	204	204
Civil	351	290	313	316	238	279	298	366
Electrical	671	692	709	704	662	728	972	1,163
Engineering science/physics	32	45	44	43	19	25	43	36
Industrial/manufacturing	176	176	156	198	164	194	267	288
Mechanical	163	143	138	179	130	168	169	177
Metallurgical/materials	59	77	75	85	73	78	102	99
Mining	3	10	13	10	1	1	2	2
Nuclear	7	12	8	6	5	8	7	9
Petroleum	5	2	4	1	1	4	6	3
Other	64	68	106	150	156	214	331	479
Black	10,819	11,012	11,331	11,708	12,536	13,076	13,763	14,693
Science	9,875	10,096	10,452	10,732	11,509	12,095	12,701	13,652
Agricultural sciences	160	160	176	151	153	201	213	266
Biological sciences	1,266	1,352	1,377	1,457	1,481	1,559	1,667	1,903
Anatomy	18	18	17	19	21	14	24	22
Biochemistry	65	63	76	76	81	76	73	96
Biology	459	483	481	482	502	507	459	543
Biometry/epidemiology	94	100	118	130	118	127	139	166
Biophysics	6	7	8	8	7	7	8	8
Botany	21	22	18	14	9	13	17	14
Cell/molecular biology	52	63	67	65	76	80	92	117
Ecology	7	5	8	11	11	13	15	27
Entomology/parasitology	10	8	6	8	8	6	8	10
Genetics	20	28	34	35	32	33	40	55
Microbiology, immunology, and virology	109	122	111	124	123	121	153	173
Nutrition	141	158	169	176	167	185	200	208
Pathology	23	30	30	35	31	32	33	35
Pharmacology	67	73	85	96	91	110	119	115
Physiology	65	71	58	51	60	56	58	67
Zoology	11	8	10	11	8	5	9	6
Other	98	93	81	116	136	174	220	241
Computer sciences	560	535	591	670	668	766	835	821
Earth, atmospheric, and ocean sciences	104	98	99	101	100	102	131	140
Atmospheric	7	4	3	4	9	7	10	12
Earth	29	20	24	31	24	25	27	35
Ocean	14	15	15	14	14	15	23	26
Other	54	59	57	52	53	55	71	67
Mathematics and statistics	343	310	274	270	273	270	286	282
Mathematics/applied mathematics	306	286	254	248	239	241	250	243
Statistics	37	24	20	22	34	29	36	39
Physical sciences	436	444	432	402	425	413	407	431
Astronomy	7	5	3	3	4	4	4	5
Chemistry	343	348	332	318	342	341	332	349

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Physics	78	71	83	70	67	53	52	57
Other	8	20	14	11	12	15	19	20
Psychology	2,644	2,736	2,926	2,844	3,343	3,479	3,545	3,744
Clinical	505	574	560	545	593	592	633	709
General	1,101	1,124	1,137	1,052	1,137	1,166	1,188	1,200
Nonclinical	1,038	1,038	1,229	1,247	1,613	1,721	1,724	1,835
Social sciences	4,362	4,461	4,577	4,837	5,066	5,305	5,617	6,065
Agricultural economics	28	36	25	35	38	35	41	38
Anthropology (cultural and social)	167	175	184	209	196	216	189	214
Economics	159	127	126	133	155	151	137	154
Geography	35	36	43	44	39	53	57	80
History and philosophy of science	3	2	4	7	6	9	11	8
Linguistics	31	30	32	36	31	32	27	35
Political science and public administration	2,187	2,254	2,339	2,530	2,628	2,796	3,042	3,238
Sociology	658	669	727	688	659	685	709	737
Other	1,094	1,132	1,097	1,155	1,314	1,328	1,404	1,561
Engineering	944	916	879	976	1,027	981	1,062	1,041
Aerospace	8	7	7	8	8	4	6	9
Agricultural	6	7	10	6	10	16	15	15
Biomedical	46	49	44	50	59	62	75	89
Chemical	97	87	80	79	79	89	81	78
Civil	161	144	133	173	178	158	182	155
Electrical	167	194	194	200	201	192	201	183
Engineering science/physics	12	8	7	7	13	10	7	6
Industrial/manufacturing	241	219	208	232	247	242	264	266
Mechanical	90	104	104	88	104	81	79	86
Metallurgical/materials	47	44	31	43	43	46	51	51
Mining	0	0	0	0	1	0	0	0
Nuclear	9	9	4	8	11	6	6	8
Petroleum	1	3	0	0	0	1	0	1
Other	59	41	57	82	73	74	95	94
Hispanic	6,924	7,289	7,645	8,324	8,935	9,460	10,448	11,070
Science	6,255	6,650	6,958	7,622	8,197	8,618	9,487	10,014
Agricultural sciences	169	163	180	213	217	215	209	240
Biological sciences	1,000	1,090	1,129	1,217	1,220	1,329	1,467	1,622
Anatomy	15	7	4	11	10	8	16	16
Biochemistry	54	77	69	70	70	84	88	110
Biology	321	369	376	358	378	387	437	454
Biometry/epidemiology	77	96	110	117	113	103	99	118
Biophysics	3	4	1	2	2	3	3	6
Botany	20	18	28	25	16	19	24	18
Cell/molecular biology	56	54	60	77	89	97	123	129
Ecology	25	20	20	26	33	40	37	37
Entomology/parasitology	15	16	8	11	13	18	19	25
Genetics	19	26	28	34	33	44	39	37
Microbiology, immunology, and virology	94	101	103	107	107	120	139	163
Nutrition	136	125	145	155	127	134	147	164
Pathology	21	25	23	28	29	36	34	33
Pharmacology	43	43	45	52	62	63	73	79
Physiology	33	32	27	40	26	26	28	36
Zoology	17	13	18	10	12	13	8	10
Other	51	64	64	94	100	134	153	187
Computer sciences	177	210	195	212	246	244	271	285
Earth, atmospheric, and ocean sciences	144	163	168	200	169	201	222	261
Atmospheric	2	3	2	3	4	7	6	8
Earth	44	59	54	70	56	78	81	100
Ocean	47	57	60	70	59	65	71	86
Other	51	44	52	57	50	51	64	67

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mathematics and statistics	159	173	178	177	150	160	207	223
Mathematics/applied mathematics	139	152	153	158	136	147	187	196
Statistics	20	21	25	19	14	13	20	27
Physical sciences	287	283	307	346	337	357	376	417
Astronomy	3	2	2	3	3	5	8	11
Chemistry	235	235	247	289	287	292	307	339
Physics	44	40	43	41	40	58	53	61
Other	5	6	15	13	7	2	8	6
Psychology	2,130	2,215	2,347	2,610	3,106	3,261	3,527	3,551
Clinical	634	680	858	922	1,080	1,159	1,228	1,252
General	623	632	635	653	705	726	659	716
Nonclinical	873	903	854	1,035	1,321	1,376	1,640	1,583
Social sciences	2,189	2,353	2,454	2,647	2,752	2,851	3,208	3,415
Agricultural economics	21	21	21	17	16	18	13	18
Anthropology (cultural and social)	194	195	195	198	220	224	243	260
Economics	100	92	98	88	78	102	118	134
Geography	30	31	34	47	46	48	52	64
History and philosophy of science	2	2	4	8	6	6	18	16
Linguistics	92	106	117	100	103	93	95	93
Political science and public administration	967	1,040	1,087	1,187	1,294	1,291	1,530	1,581
Sociology	322	368	359	379	373	366	394	407
Other	461	498	539	623	616	703	745	842
Engineering	669	639	687	702	738	842	961	1,056
Aerospace	9	8	9	10	13	17	23	26
Agricultural	2	5	5	4	11	16	14	8
Biomedical	18	17	27	36	29	32	36	57
Chemical	70	37	65	54	69	72	84	106
Civil	204	206	219	203	236	239	274	282
Electrical	121	121	120	138	99	142	175	204
Engineering science/physics	6	9	12	15	10	11	8	5
Industrial/manufacturing	118	115	117	135	141	167	175	178
Mechanical	60	62	57	52	49	65	83	96
Metallurgical/materials	31	34	30	26	24	26	28	37
Mining	2	1	0	0	1	2	2	0
Nuclear	2	6	4	5	8	9	9	7
Petroleum	0	2	1	2	16	17	11	6
Other	26	16	21	22	32	27	39	44
American Indian/Alaska Native	770	795	810	809	868	875	924	984
Science	727	736	747	742	798	810	855	899
Agricultural sciences	26	28	26	23	22	23	40	39
Biological sciences	107	106	103	106	110	110	123	147
Anatomy	3	2	2	2	1	0	1	3
Biochemistry	4	8	4	4	3	6	3	6
Biology	36	30	27	32	36	25	28	34
Biometry/epidemiology	8	7	5	5	9	9	10	13
Biophysics	0	1	1	1	1	1	1	0
Botany	3	3	2	4	3	5	6	6
Cell/molecular biology	5	7	7	8	11	10	10	11
Ecology	3	6	3	2	3	5	4	6
Entomology/parasitology	1	0	2	1	1	1	1	1
Genetics	1	5	3	3	5	6	6	8
Microbiology, immunology, and virology	6	4	9	4	5	3	10	5
Nutrition	14	11	13	13	12	15	13	12
Pathology	4	3	3	1	1	2	0	2
Pharmacology	3	2	4	10	4	3	7	8
Physiology	3	4	5	5	2	4	7	8
Zoology	6	2	3	3	4	3	3	4
Other	7	11	10	8	9	12	13	20

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Computer sciences	14	17	24	24	30	29	31	36
Earth, atmospheric, and ocean sciences	29	35	40	31	28	33	36	33
Atmospheric	1	1	0	0	0	1	0	0
Earth	14	17	18	13	10	15	18	12
Ocean	5	8	7	5	4	6	6	6
Other	9	9	15	13	14	11	12	15
Mathematics and statistics	17	14	18	18	10	16	6	7
Mathematics/applied mathematics	15	13	15	15	6	14	6	7
Statistics	2	1	3	3	4	2	0	0
Physical sciences	18	24	23	29	21	27	28	25
Astronomy	1	1	1	1	0	0	1	2
Chemistry	14	20	18	23	18	23	20	18
Physics	3	3	4	5	3	4	7	5
Other	0	0	0	0	0	0	0	0
Psychology	248	223	224	212	257	251	237	227
Clinical	79	72	84	63	72	69	73	75
General	86	74	68	70	87	80	73	70
Nonclinical	83	77	72	79	98	102	91	82
Social sciences	268	289	289	299	320	321	354	385
Agricultural economics	2	3	3	1	1	0	2	2
Anthropology (cultural and social)	62	59	70	60	60	56	52	64
Economics	7	8	5	9	11	9	12	15
Geography	5	5	5	5	7	10	7	4
History and philosophy of science	0	0	0	1	2	2	1	2
Linguistics	2	4	7	10	8	9	8	10
Political science and public administration	80	86	84	91	90	99	119	132
Sociology	43	50	45	40	48	41	39	39
Other	67	74	70	82	93	95	114	117
Engineering	43	59	63	67	70	65	69	85
Aerospace	0	0	0	0	2	2	2	4
Agricultural	0	2	2	0	2	2	2	2
Biomedical	1	1	2	1	1	1	2	3
Chemical	8	8	8	5	11	8	8	6
Civil	10	17	12	13	10	14	18	23
Electrical	5	7	8	11	11	6	12	14
Engineering science/physics	0	1	1	1	2	2	3	4
Industrial/manufacturing	4	6	11	16	14	13	7	15
Mechanical	7	8	5	8	9	9	9	7
Metallurgical/materials	1	2	6	5	2	2	2	2
Mining	0	0	0	0	0	0	1	1
Nuclear	1	1	1	1	1	0	0	0
Petroleum	0	1	0	0	0	0	0	0
Other	6	5	7	6	5	6	3	4
Other race/ethnicity	7,353	7,793	7,840	8,126	8,908	9,122	9,922	11,204
Science	6,576	6,929	7,088	7,363	8,098	8,255	8,924	9,942
Agricultural sciences	105	160	135	113	185	220	213	233
Biological sciences	847	1,042	1,090	1,215	1,223	1,286	1,389	1,673
Anatomy	7	11	15	9	10	5	18	14
Biochemistry	37	85	59	61	42	69	105	128
Biology	315	368	368	397	337	342	363	439
Biometry/epidemiology	60	73	140	101	99	115	63	83
Biophysics	13	12	25	13	15	6	10	10
Botany	21	23	31	21	26	27	33	37
Cell/molecular biology	31	52	65	98	140	153	176	208
Ecology	24	28	25	32	49	45	54	85
Entomology/parasitology	7	13	10	9	10	10	11	10
Genetics	17	21	18	63	73	58	50	54
Microbiology, immunology, and virology	46	68	68	130	118	110	121	140

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Nutrition	102	73	68	78	100	128	114	136
Pathology	19	32	32	38	39	39	40	40
Pharmacology	25	27	26	27	25	34	43	51
Physiology	29	43	23	24	25	14	22	40
Zoology	8	17	30	21	25	22	21	26
Other	86	96	87	93	90	109	145	172
Computer sciences	513	645	649	667	824	839	964	891
Earth, atmospheric, and ocean sciences	185	198	247	210	188	194	239	322
Atmospheric	7	20	16	11	11	10	10	16
Earth	93	91	115	79	80	74	107	143
Ocean	33	21	43	28	32	36	33	45
Other	52	66	73	92	65	74	89	118
Mathematics and statistics	226	208	225	219	210	249	303	335
Mathematics/applied mathematics	198	183	186	187	169	195	242	293
Statistics	28	25	39	32	41	54	61	42
Physical sciences	244	312	291	284	309	356	339	410
Astronomy	6	7	15	6	13	13	16	19
Chemistry	168	236	183	170	184	194	198	267
Physics	66	64	77	75	72	117	94	97
Other	4	5	16	33	40	32	31	27
Psychology	2,415	2,380	2,402	2,582	2,682	2,402	2,366	2,570
Clinical	347	402	378	445	459	621	625	655
General	541	505	593	606	684	678	537	652
Nonclinical	1,527	1,473	1,431	1,531	1,539	1,103	1,204	1,263
Social sciences	2,041	1,984	2,049	2,073	2,477	2,709	3,111	3,508
Agricultural economics	10	17	21	13	14	24	27	30
Anthropology (cultural and social)	177	172	194	236	290	311	308	356
Economics	90	87	127	99	141	171	182	149
Geography	64	65	88	74	84	77	86	100
History and philosophy of science	5	11	4	6	8	10	31	27
Linguistics	81	103	74	72	109	91	103	151
Political science and public administration	987	768	750	727	886	1,018	1,357	1,644
Sociology	168	193	196	207	243	220	254	250
Other	459	568	595	639	702	787	763	801
Engineering	777	864	752	763	810	867	998	1,262
Aerospace	12	13	12	18	15	15	21	36
Agricultural	2	17	8	12	13	10	5	7
Biomedical	11	22	34	32	22	53	63	108
Chemical	47	51	54	63	67	46	56	64
Civil	183	146	163	152	129	156	209	227
Electrical	257	317	253	237	292	301	280	359
Engineering science/physics	12	4	6	12	17	23	21	5
Industrial/manufacturing	136	125	105	107	119	112	152	193
Mechanical	58	87	58	65	72	66	81	105
Metallurgical/materials	18	44	29	16	13	21	17	30
Mining	6	1	1	0	0	0	0	0
Nuclear	2	1	0	1	1	1	2	4
Petroleum	0	1	1	1	8	8	12	2
Other	33	35	28	47	42	55	79	122
Temporary residents	27,115	28,277	30,038	32,965	36,791	40,734	44,368	45,808
Science	21,696	22,088	23,431	25,459	28,100	30,904	33,206	33,696
Agricultural sciences	867	835	846	855	847	937	1,012	1,034
Biological sciences	5,253	5,123	5,450	5,441	5,843	6,380	7,153	7,873
Anatomy	69	61	58	66	73	74	84	97
Biochemistry	673	595	633	662	720	760	822	914
Biology	942	975	1,021	977	1,027	1,129	1,272	1,375
Biometry/epidemiology	277	256	335	376	433	512	612	698
Biophysics	52	45	45	43	56	75	85	108

TABLE D-2. Female S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Botany	250	266	279	257	269	273	303	293
Cell/molecular biology	415	413	426	474	563	613	696	792
Ecology	66	62	72	74	85	84	92	132
Entomology/parasitology	98	85	80	84	85	85	96	105
Genetics	155	179	197	172	181	209	218	274
Microbiology, immunology, and virology	487	453	464	482	469	544	631	634
Nutrition	709	696	706	686	731	764	756	750
Pathology	135	125	133	126	131	137	154	182
Pharmacology	279	269	282	279	319	350	391	441
Physiology	184	169	184	188	189	213	224	264
Zoology	94	75	78	68	82	88	98	89
Other	368	399	457	427	430	470	619	725
Computer sciences	3,061	3,683	4,225	5,133	6,674	7,659	7,819	6,695
Earth, atmospheric, and ocean sciences	772	719	763	857	896	981	1,012	1,037
Atmospheric	83	98	88	105	102	106	117	101
Earth	319	290	294	331	355	385	432	477
Ocean	167	164	182	184	202	206	185	196
Other	203	167	199	237	237	284	278	263
Mathematics and statistics	1,662	1,699	1,783	2,061	2,119	2,343	2,507	2,705
Mathematics/applied mathematics	1,227	1,270	1,332	1,495	1,474	1,519	1,586	1,623
Statistics	435	429	451	566	645	824	921	1,082
Physical sciences	3,041	3,011	2,920	3,053	3,283	3,477	3,888	4,252
Astronomy	49	39	49	53	70	74	73	92
Chemistry	2,228	2,185	2,123	2,140	2,279	2,402	2,742	3,020
Physics	739	763	718	829	911	967	1,039	1,114
Other	25	24	30	31	23	34	34	26
Psychology	1,265	1,258	1,388	1,449	1,511	1,744	1,765	1,990
Clinical	203	228	250	280	306	334	373	391
General	388	379	386	435	500	607	563	708
Nonclinical	674	651	752	734	705	803	829	891
Social sciences	5,775	5,760	6,056	6,610	6,927	7,383	8,050	8,110
Agricultural economics	269	274	290	322	376	412	416	430
Anthropology (cultural and social)	362	374	387	448	465	421	460	456
Economics	1,648	1,645	1,656	1,780	1,950	2,160	2,330	2,413
Geography	164	197	209	237	244	293	320	334
History and philosophy of science	15	21	23	18	30	25	27	18
Linguistics	620	629	656	600	614	632	654	627
Political science and public administration	1,355	1,359	1,424	1,641	1,799	1,903	2,237	2,298
Sociology	548	583	598	665	723	785	783	793
Other	794	678	813	899	726	752	823	741
Engineering	5,419	6,189	6,607	7,506	8,691	9,830	11,162	12,112
Aerospace	106	144	158	168	187	210	216	213
Agricultural	102	90	102	101	95	102	103	121
Biomedical	164	180	194	260	292	370	498	628
Chemical	587	644	668	713	821	844	909	1,007
Civil	983	1,049	1,056	1,202	1,368	1,546	1,696	1,843
Electrical	1,692	2,053	2,354	2,744	3,290	3,832	4,602	4,833
Engineering science/physics	79	69	111	104	147	154	178	230
Industrial/manufacturing	550	577	583	656	817	918	962	997
Mechanical	492	613	609	647	781	827	919	994
Metallurgical/materials	374	416	453	466	460	551	583	630
Mining	13	8	4	12	14	4	7	12
Nuclear	48	43	46	57	61	69	61	67
Petroleum	44	59	40	65	47	51	67	105
Other	185	244	229	311	311	352	361	432

NOTES: Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary residents include all racial/ethnic groups.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 1996–2003.

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
All male S&E graduate students	253,510	245,619	241,429	242,786	243,057	251,812	266,248	276,090
Science	168,540	163,191	160,379	160,982	159,691	164,576	171,547	176,304
Agricultural sciences	7,716	7,497	7,316	7,263	6,935	6,892	7,045	7,171
Biological sciences	29,107	28,229	27,742	27,338	26,475	26,590	27,706	28,812
Anatomy	478	473	443	404	428	383	484	442
Biochemistry	2,987	2,926	2,919	2,835	2,735	2,694	2,768	2,957
Biology	7,482	7,359	7,064	6,846	6,401	6,163	6,308	6,586
Biometry/epidemiology	1,231	1,120	1,361	1,381	1,374	1,390	1,519	1,668
Biophysics	589	532	528	497	520	615	647	693
Botany	1,215	1,086	1,031	992	918	947	954	905
Cell/molecular biology	2,226	2,245	2,238	2,277	2,326	2,390	2,584	2,702
Ecology	855	842	840	823	846	909	928	1,022
Entomology/parasitology	810	751	754	739	662	690	699	669
Genetics	833	808	744	767	739	795	797	857
Microbiology, immunology, and virology	2,480	2,409	2,402	2,365	2,382	2,303	2,400	2,323
Nutrition	1,238	1,144	1,073	1,077	1,034	993	1,027	1,037
Pathology	847	842	776	776	702	742	707	631
Pharmacology	1,372	1,368	1,405	1,414	1,447	1,482	1,461	1,539
Physiology	1,396	1,364	1,265	1,185	1,133	1,056	1,082	1,184
Zoology	1,041	924	892	853	803	744	711	656
Other	2,027	2,036	2,007	2,107	2,025	2,294	2,630	2,941
Computer sciences	25,829	26,110	27,225	29,933	33,270	36,894	39,244	38,887
Earth, atmospheric, and ocean sciences	9,736	9,132	8,690	8,358	8,188	7,949	7,993	8,100
Atmospheric	852	829	731	671	695	626	703	776
Earth	4,984	4,663	4,372	4,237	4,141	4,061	4,099	4,125
Ocean	1,545	1,424	1,400	1,402	1,401	1,330	1,309	1,303
Other	2,355	2,216	2,187	2,048	1,951	1,932	1,882	1,896
Mathematics and statistics	11,789	10,851	10,497	10,214	9,870	10,381	11,277	12,176
Mathematics/applied mathematics	9,962	9,244	8,932	8,659	8,315	8,751	9,463	10,163
Statistics	1,827	1,607	1,565	1,555	1,555	1,630	1,814	2,013
Physical sciences	23,288	22,257	21,822	21,776	21,270	21,702	22,275	23,520
Astronomy	647	570	590	607	621	651	688	735
Chemistry	12,495	12,052	11,918	11,799	11,349	11,511	11,720	12,210
Physics	9,919	9,403	9,029	8,993	8,931	9,206	9,500	10,189
Other	227	232	285	377	369	334	367	386
Psychology	15,375	15,507	15,095	14,456	13,594	13,149	13,437	13,357
Clinical	3,700	3,786	3,560	3,513	3,205	3,089	3,142	3,168
General	5,187	5,372	5,251	4,851	4,597	4,554	4,483	4,577
Nonclinical	6,488	6,349	6,284	6,092	5,792	5,506	5,812	5,612
Social sciences	45,700	43,608	41,992	41,644	40,089	41,019	42,570	44,281
Agricultural economics	1,407	1,355	1,315	1,299	1,290	1,326	1,343	1,401
Anthropology (cultural and social)	3,087	3,059	3,021	2,989	2,941	2,929	2,864	2,942
Economics	8,297	7,585	7,237	7,063	6,983	7,413	7,741	7,807
Geography	2,770	2,662	2,663	2,547	2,409	2,503	2,540	2,654
History and philosophy of science	257	281	315	345	313	327	362	390
Linguistics	1,133	1,051	982	966	930	951	984	1,023
Political science and public administration	17,620	16,679	15,867	15,799	15,204	15,304	16,315	17,025
Sociology	3,640	3,591	3,362	3,227	3,072	3,080	3,178	3,226
Other	7,489	7,345	7,230	7,409	6,947	7,186	7,243	7,813
Engineering	84,970	82,428	81,050	81,804	83,366	87,236	94,701	99,786
Aerospace	2,856	2,712	2,755	2,926	2,938	2,966	3,169	3,445
Agricultural	802	723	682	683	631	623	640	715
Biomedical	1,999	2,021	2,035	2,117	2,171	2,385	2,849	3,385
Chemical	5,757	5,568	5,366	5,150	5,181	5,084	5,419	5,416
Civil	14,228	13,029	12,415	12,069	12,174	12,162	12,808	13,446
Electrical	25,712	26,237	26,512	26,689	28,075	29,888	32,678	33,954
Engineering science/physics	1,456	1,369	1,370	1,308	1,290	1,435	1,691	1,775
Industrial/manufacturing	9,906	9,301	8,769	9,144	9,406	10,132	10,957	11,035

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mechanical	13,873	13,266	12,934	13,168	13,403	13,908	15,056	16,076
Metallurgical/materials	3,670	3,571	3,550	3,397	3,336	3,548	3,741	3,822
Mining	317	285	249	273	241	204	230	236
Nuclear	827	725	687	686	636	644	647	703
Petroleum	502	484	516	560	540	565	659	720
Other	3,065	3,137	3,210	3,634	3,344	3,692	4,157	5,058
U.S. citizens and permanent residents	182,519	174,934	169,490	165,823	157,023	158,015	165,004	175,027
Science	127,186	122,823	119,622	118,016	112,367	113,471	117,447	122,950
Agricultural sciences	5,565	5,543	5,508	5,580	5,371	5,316	5,444	5,627
Biological sciences	22,988	22,288	21,856	21,590	20,557	20,536	21,033	21,915
Anatomy	374	364	346	317	324	281	369	340
Biochemistry	2,135	2,110	2,099	2,042	1,866	1,869	1,859	1,974
Biology	6,454	6,297	6,005	5,831	5,374	5,099	5,135	5,423
Biometry/epidemiology	947	864	1,017	1,006	986	999	1,032	1,170
Biophysics	466	406	407	386	372	427	433	482
Botany	841	740	704	661	603	646	639	614
Cell/molecular biology	1,759	1,771	1,767	1,853	1,858	1,870	2,018	2,063
Ecology	759	735	740	723	745	799	802	892
Entomology/parasitology	590	546	543	521	467	500	512	488
Genetics	599	569	545	556	543	571	591	616
Microbiology, immunology, and virology	1,904	1,883	1,906	1,904	1,916	1,843	1,834	1,814
Nutrition	786	731	708	699	649	597	621	587
Pathology	652	673	621	607	532	586	562	482
Pharmacology	1,078	1,084	1,111	1,124	1,141	1,184	1,172	1,207
Physiology	1,132	1,110	1,011	919	876	838	852	927
Zoology	911	808	780	762	711	631	590	565
Other	1,601	1,597	1,546	1,679	1,594	1,796	2,012	2,271
Computer sciences	17,043	16,876	17,028	17,911	17,682	18,499	19,997	21,439
Earth, atmospheric, and ocean sciences	7,742	7,336	6,954	6,695	6,392	6,148	6,237	6,374
Atmospheric	652	636	564	502	493	447	514	609
Earth	3,846	3,660	3,422	3,344	3,194	3,091	3,152	3,169
Ocean	1,155	1,081	1,049	1,070	1,077	1,022	1,028	1,010
Other	2,089	1,959	1,919	1,779	1,628	1,588	1,543	1,586
Mathematics and statistics	7,690	7,006	6,859	6,348	5,932	6,240	6,760	7,560
Mathematics/applied mathematics	6,493	6,008	5,884	5,494	5,112	5,423	5,835	6,498
Statistics	1,197	998	975	854	820	817	925	1,062
Physical sciences	15,151	14,373	14,004	13,697	12,898	12,976	13,073	13,700
Astronomy	480	424	426	421	420	442	458	494
Chemistry	8,448	8,125	8,016	7,854	7,406	7,344	7,209	7,391
Physics	6,028	5,627	5,317	5,093	4,758	4,916	5,097	5,505
Other	195	197	245	329	314	274	309	310
Psychology	14,667	14,757	14,297	13,666	12,842	12,372	12,345	12,167
Clinical	3,599	3,679	3,447	3,397	3,121	2,995	2,920	2,939
General	4,912	5,084	4,942	4,566	4,285	4,227	4,064	4,102
Nonclinical	6,156	5,994	5,908	5,703	5,436	5,150	5,361	5,126
Social sciences	36,340	34,644	33,116	32,529	30,693	31,384	32,558	34,168
Agricultural economics	776	709	701	696	652	686	713	746
Anthropology (cultural and social)	2,759	2,731	2,669	2,614	2,577	2,581	2,477	2,549
Economics	4,424	3,847	3,653	3,310	3,126	3,289	3,451	3,646
Geography	2,452	2,335	2,313	2,186	2,025	2,071	2,113	2,210
History and philosophy of science	222	235	271	304	274	282	321	347
Linguistics	751	698	615	604	584	621	656	687
Political science and public administration	15,432	14,612	13,739	13,521	12,844	12,984	13,898	14,446
Sociology	3,057	3,013	2,851	2,716	2,540	2,558	2,640	2,674
Other	6,467	6,464	6,304	6,578	6,071	6,312	6,289	6,863
Engineering	55,333	52,111	49,868	47,807	44,656	44,544	47,557	52,077
Aerospace	1,689	1,538	1,496	1,562	1,612	1,530	1,699	1,971
Agricultural	432	393	378	376	340	315	326	355

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Biomedical	1,458	1,491	1,501	1,510	1,503	1,619	1,825	2,129
Chemical	3,457	3,348	3,149	2,849	2,672	2,433	2,615	2,659
Civil	9,946	8,975	8,509	7,846	7,397	7,115	7,344	7,890
Electrical	15,952	15,535	14,941	14,128	13,069	13,154	13,911	15,140
Engineering science/physics	1,042	990	929	878	760	845	987	995
Industrial/manufacturing	7,130	6,537	6,000	6,070	5,678	5,717	6,204	6,614
Mechanical	8,882	8,185	7,893	7,619	7,046	7,066	7,440	8,268
Metallurgical/materials	2,124	2,020	1,993	1,820	1,684	1,763	1,814	1,859
Mining	196	168	177	176	123	104	135	137
Nuclear	565	465	439	411	362	357	377	417
Petroleum	185	131	108	131	225	227	258	150
Other	2,275	2,335	2,355	2,431	2,185	2,299	2,622	3,493
White	139,325	131,492	125,734	121,810	113,782	113,259	116,620	121,826
Science	98,856	93,670	89,802	87,611	82,325	82,401	84,120	87,273
Agricultural sciences	4,869	4,771	4,759	4,856	4,626	4,547	4,670	4,694
Biological sciences	18,154	17,332	16,869	16,511	15,578	15,347	15,614	16,054
Anatomy	298	278	263	238	241	218	262	238
Biochemistry	1,612	1,581	1,598	1,507	1,409	1,356	1,369	1,393
Biology	5,076	4,872	4,636	4,470	4,105	3,920	3,914	4,091
Biometry/epidemiology	692	601	712	696	672	664	663	785
Biophysics	338	289	266	266	253	290	299	338
Botany	729	641	605	576	521	540	520	503
Cell/molecular biology	1,408	1,391	1,354	1,409	1,355	1,332	1,427	1,440
Ecology	666	629	652	654	651	703	700	751
Entomology/parasitology	514	478	487	474	423	423	449	429
Genetics	476	456	426	395	384	406	406	412
Microbiology, immunology, and virology	1,487	1,450	1,467	1,404	1,409	1,305	1,313	1,276
Nutrition	605	579	547	543	492	436	460	437
Pathology	516	513	460	436	380	407	390	321
Pharmacology	863	857	834	852	867	878	855	868
Physiology	838	789	728	635	586	570	580	634
Zoology	842	745	683	701	650	567	520	492
Other	1,194	1,183	1,151	1,255	1,180	1,332	1,487	1,646
Computer sciences	11,439	10,919	10,750	10,856	10,839	11,279	12,000	13,172
Earth, atmospheric, and ocean sciences	6,820	6,363	6,033	5,873	5,612	5,362	5,389	5,438
Atmospheric	591	540	493	441	431	391	448	502
Earth	3,440	3,218	3,023	2,986	2,850	2,752	2,761	2,757
Ocean	980	934	903	930	951	872	891	869
Other	1,809	1,671	1,614	1,516	1,380	1,347	1,289	1,310
Mathematics and statistics	5,906	5,316	5,057	4,798	4,354	4,587	4,877	5,354
Mathematics/applied mathematics	4,959	4,516	4,313	4,129	3,728	3,957	4,202	4,586
Statistics	947	800	744	669	626	630	675	768
Physical sciences	12,386	11,587	11,048	10,872	10,176	10,084	10,123	10,515
Astronomy	424	377	362	365	360	373	388	411
Chemistry	6,865	6,492	6,308	6,212	5,855	5,806	5,611	5,619
Physics	4,925	4,551	4,208	4,101	3,773	3,730	3,926	4,288
Other	172	167	170	194	188	175	198	197
Psychology	11,574	11,316	10,915	10,195	9,359	9,025	8,818	8,632
Clinical	2,957	2,924	2,736	2,635	2,342	2,205	2,101	2,098
General	3,894	3,959	3,788	3,480	3,188	3,165	3,033	2,965
Nonclinical	4,723	4,433	4,391	4,080	3,829	3,655	3,684	3,569
Social sciences	27,708	26,066	24,371	23,650	21,781	22,170	22,629	23,414
Agricultural economics	644	591	565	572	535	557	589	606
Anthropology (cultural and social)	2,298	2,277	2,190	2,130	2,049	2,042	1,962	1,985
Economics	3,360	2,850	2,601	2,445	2,230	2,304	2,336	2,450
Geography	2,129	2,036	1,972	1,889	1,745	1,785	1,806	1,860
History and philosophy of science	193	183	231	261	228	232	229	268
Linguistics	618	523	470	474	436	463	466	489

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Political science and public administration	11,513	10,740	9,881	9,554	8,851	8,945	9,306	9,502
Sociology	2,187	2,139	1,946	1,798	1,683	1,700	1,747	1,764
Other	4,766	4,727	4,515	4,527	4,024	4,142	4,188	4,490
Engineering	40,469	37,822	35,932	34,199	31,457	30,858	32,500	34,553
Aerospace	1,379	1,257	1,216	1,239	1,233	1,224	1,295	1,468
Agricultural	341	303	300	310	282	258	280	302
Biomedical	1,109	1,095	1,140	1,144	1,089	1,123	1,277	1,391
Chemical	2,689	2,623	2,420	2,162	1,964	1,807	1,912	1,919
Civil	7,575	6,896	6,459	5,990	5,641	5,381	5,479	5,820
Electrical	10,443	9,926	9,495	8,798	8,001	7,865	8,093	8,665
Engineering science/physics	788	739	693	650	539	579	723	749
Industrial/manufacturing	5,320	4,953	4,492	4,446	4,118	4,093	4,419	4,356
Mechanical	6,695	6,217	5,866	5,742	5,318	5,204	5,511	5,948
Metallurgical/materials	1,714	1,519	1,573	1,492	1,325	1,390	1,414	1,440
Mining	134	118	114	129	104	86	111	111
Nuclear	487	404	378	358	313	300	320	352
Petroleum	131	96	92	111	95	102	110	113
Other	1,664	1,676	1,694	1,628	1,435	1,446	1,556	1,919
Asian/Pacific Islander	15,946	15,682	15,896	16,046	14,404	15,189	16,675	18,388
Science	9,288	9,331	9,718	9,894	8,914	9,253	9,947	10,629
Agricultural sciences	147	168	160	143	112	115	136	158
Biological sciences	2,251	2,162	2,089	2,099	1,993	2,171	2,199	2,289
Anatomy	48	43	39	42	51	34	51	46
Biochemistry	328	306	283	306	231	266	221	247
Biology	426	411	363	355	337	315	330	350
Biometry/epidemiology	126	113	111	119	134	139	169	165
Biophysics	82	65	72	71	72	94	81	83
Botany	48	35	34	25	22	39	50	42
Cell/molecular biology	211	196	223	222	246	255	279	287
Ecology	18	21	21	18	16	18	13	18
Entomology/parasitology	24	24	20	9	9	27	15	14
Genetics	59	66	62	79	53	74	87	100
Microbiology, immunology, and virology	219	222	210	196	197	235	214	216
Nutrition	84	59	57	56	56	53	50	49
Pathology	75	85	84	94	83	87	90	78
Pharmacology	118	116	150	146	138	168	174	158
Physiology	203	212	168	170	166	155	160	178
Zoology	26	23	26	15	13	17	16	14
Other	156	165	166	176	169	195	199	244
Computer sciences	2,834	2,978	3,299	3,826	3,323	3,440	3,810	3,920
Earth, atmospheric, and ocean sciences	249	253	238	208	179	171	158	170
Atmospheric	36	36	38	33	25	15	16	41
Earth	96	118	96	78	72	84	79	63
Ocean	48	35	36	31	29	21	27	17
Other	69	64	68	66	53	51	36	49
Mathematics and statistics	701	622	704	565	531	552	653	770
Mathematics/applied mathematics	546	499	570	471	435	480	546	637
Statistics	155	123	134	94	96	72	107	133
Physical sciences	1,097	1,044	1,150	1,046	951	916	893	978
Astronomy	23	22	17	18	19	21	26	36
Chemistry	631	628	694	638	606	551	539	593
Physics	434	381	432	373	317	334	312	330
Other	9	13	7	17	9	10	16	19
Psychology	465	510	551	536	532	548	553	575
Clinical	116	125	127	126	116	110	103	104
General	161	155	189	172	192	187	185	231
Nonclinical	188	230	235	238	224	251	265	240

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Social sciences	1,544	1,594	1,527	1,471	1,293	1,340	1,545	1,769
Agricultural economics	28	27	29	35	17	14	19	20
Anthropology (cultural and social)	87	74	74	73	68	67	78	93
Economics	332	350	386	357	264	293	326	384
Geography	60	58	42	47	39	42	55	61
History and philosophy of science	10	15	13	11	11	11	12	12
Linguistics	55	62	54	34	28	48	48	55
Political science and public administration	541	611	548	529	526	521	634	687
Sociology	172	141	143	144	117	120	120	136
Other	259	256	238	241	223	224	253	321
Engineering	6,658	6,351	6,178	6,152	5,490	5,936	6,728	7,759
Aerospace	140	137	119	132	180	111	155	171
Agricultural	45	32	30	26	19	23	23	20
Biomedical	201	228	182	203	236	263	288	395
Chemical	345	361	321	310	336	334	362	352
Civil	903	760	791	615	506	492	557	658
Electrical	2,877	2,797	2,734	2,787	2,457	2,726	3,107	3,437
Engineering science/physics	121	157	143	127	84	98	118	116
Industrial/manufacturing	574	563	487	586	464	492	611	769
Mechanical	910	804	835	829	674	777	743	850
Metallurgical/materials	213	218	197	155	173	166	196	217
Mining	16	36	44	40	10	11	19	3
Nuclear	39	26	28	16	19	19	24	21
Petroleum	39	14	3	10	37	35	38	9
Other	235	218	264	316	295	389	487	741
Black	8,247	8,329	8,320	8,565	8,298	8,383	8,910	9,441
Science	6,292	6,366	6,378	6,576	6,348	6,449	6,898	7,270
Agricultural sciences	144	128	168	159	139	126	162	196
Biological sciences	708	753	764	761	760	792	813	859
Anatomy	8	17	13	12	10	6	14	15
Biochemistry	51	63	67	64	63	53	50	63
Biology	274	280	260	262	243	248	231	254
Biometry/epidemiology	50	54	56	58	46	49	62	63
Biophysics	12	10	10	9	10	10	10	9
Botany	9	8	10	8	7	11	12	12
Cell/molecular biology	42	52	59	49	59	63	68	55
Ecology	10	6	9	11	13	13	9	16
Entomology/parasitology	6	6	5	9	6	9	9	5
Genetics	13	15	17	20	25	23	20	20
Microbiology, immunology, and virology	62	72	61	62	68	57	65	72
Nutrition	38	38	44	42	41	46	52	38
Pathology	7	9	14	14	13	19	19	21
Pharmacology	38	41	51	55	56	59	54	70
Physiology	30	30	37	27	42	42	36	35
Zoology	5	3	4	5	5	5	7	5
Other	53	49	47	54	53	79	95	106
Computer sciences	716	765	764	815	844	943	1,063	1,124
Earth, atmospheric, and ocean sciences	115	105	103	112	120	125	135	130
Atmospheric	8	8	5	3	9	12	15	20
Earth	41	36	35	31	32	32	37	40
Ocean	19	11	10	14	14	16	13	9
Other	47	50	53	64	65	65	70	61
Mathematics and statistics	368	347	339	324	299	320	340	376
Mathematics/applied mathematics	333	321	307	295	270	284	296	321
Statistics	35	26	32	29	29	36	44	55
Physical sciences	550	508	481	501	493	462	486	508
Astronomy	7	6	6	6	5	8	6	4
Chemistry	336	319	303	315	308	290	304	314

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Physics	202	174	159	164	168	158	168	179
Other	5	9	13	16	12	6	8	11
Psychology	808	908	887	905	871	868	946	926
Clinical	147	162	165	165	163	148	153	148
General	342	420	370	353	326	323	344	359
Nonclinical	319	326	352	387	382	397	449	419
Social sciences	2,883	2,852	2,872	2,999	2,822	2,813	2,953	3,151
Agricultural economics	34	29	45	49	42	41	42	38
Anthropology (cultural and social)	84	79	82	82	74	58	59	61
Economics	212	197	191	158	162	163	185	209
Geography	74	47	65	48	47	61	55	61
History and philosophy of science	7	6	8	7	8	7	13	16
Linguistics	12	15	14	13	13	15	17	14
Political science and public administration	1,440	1,445	1,456	1,567	1,445	1,468	1,590	1,609
Sociology	361	384	387	373	325	316	323	343
Other	659	650	624	702	706	684	669	800
Engineering	1,955	1,963	1,942	1,989	1,950	1,934	2,012	2,171
Aerospace	39	28	27	44	49	41	45	50
Agricultural	11	14	17	17	13	10	9	12
Biomedical	38	34	42	54	55	60	69	70
Chemical	94	85	105	68	89	78	79	95
Civil	330	299	277	277	270	273	271	272
Electrical	611	680	680	686	629	620	645	629
Engineering science/physics	28	31	32	28	21	23	29	36
Industrial/manufacturing	294	270	257	309	310	349	352	419
Mechanical	327	324	308	287	292	273	279	296
Metallurgical/materials	57	68	44	49	51	61	61	60
Mining	0	0	1	1	4	1	1	2
Nuclear	7	12	9	7	6	7	5	4
Petroleum	1	5	5	5	7	3	6	10
Other	118	113	138	157	154	135	161	216
Hispanic	7,647	7,695	7,842	8,196	8,268	8,514	9,191	10,194
Science	5,380	5,522	5,629	5,974	5,988	6,173	6,691	7,274
Agricultural sciences	207	248	211	209	223	210	197	256
Biological sciences	849	897	924	968	963	1,009	1,123	1,227
Anatomy	10	8	11	15	14	13	27	26
Biochemistry	57	71	72	82	74	87	96	119
Biology	300	325	315	318	330	313	349	352
Biometry/epidemiology	41	39	49	47	54	46	71	78
Biophysics	11	13	13	15	12	17	17	22
Botany	33	29	26	22	20	23	23	20
Cell/molecular biology	58	59	62	76	68	84	90	96
Ecology	26	27	23	15	18	18	22	24
Entomology/parasitology	28	26	18	16	18	21	16	16
Genetics	20	18	25	25	24	24	28	24
Microbiology, immunology, and virology	70	69	84	94	89	100	104	123
Nutrition	27	30	27	31	25	28	20	37
Pathology	18	19	19	28	25	31	28	30
Pharmacology	33	42	43	40	50	53	54	55
Physiology	27	33	43	44	39	34	38	45
Zoology	21	17	18	21	16	16	20	22
Other	69	72	76	79	87	101	120	138
Computer sciences	523	513	559	653	617	650	733	814
Earth, atmospheric, and ocean sciences	230	236	202	200	186	196	191	223
Atmospheric	9	9	11	4	8	8	10	13
Earth	97	102	83	84	80	77	82	87
Ocean	59	59	48	62	54	72	60	72
Other	65	66	60	50	44	39	39	51

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Mathematics and statistics	266	254	276	270	310	322	335	381
Mathematics/applied mathematics	237	234	251	241	277	295	307	342
Statistics	29	20	25	29	33	27	28	39
Physical sciences	455	499	525	549	507	539	605	680
Astronomy	10	9	10	10	14	12	9	14
Chemistry	269	288	315	329	315	337	361	411
Physics	172	197	183	188	162	181	221	239
Other	4	5	17	22	16	9	14	16
Psychology	807	860	881	957	1,039	1,048	1,128	1,131
Clinical	208	245	261	260	323	333	360	379
General	267	277	276	278	264	280	267	269
Nonclinical	332	338	344	419	452	435	501	483
Social sciences	2,043	2,015	2,051	2,168	2,143	2,199	2,379	2,562
Agricultural economics	39	32	21	19	23	22	17	24
Anthropology (cultural and social)	142	143	149	129	148	159	166	175
Economics	210	185	178	159	160	204	214	235
Geography	60	60	64	64	57	59	71	86
History and philosophy of science	6	8	8	14	11	12	37	22
Linguistics	39	51	33	35	39	33	45	43
Political science and public administration	928	886	902	979	1,009	932	1,057	1,165
Sociology	196	213	243	262	234	242	261	257
Other	423	437	453	507	462	536	511	555
Engineering	2,267	2,173	2,213	2,222	2,280	2,341	2,500	2,920
Aerospace	53	63	67	70	67	54	69	93
Agricultural	17	12	10	12	11	11	8	6
Biomedical	42	39	53	50	63	70	78	98
Chemical	130	105	114	128	113	108	122	143
Civil	508	488	504	498	540	508	504	563
Electrical	672	689	692	631	618	683	766	889
Engineering science/physics	49	32	30	29	26	29	39	44
Industrial/manufacturing	303	281	247	291	298	302	302	383
Mechanical	323	298	332	336	317	342	367	441
Metallurgical/materials	58	52	54	49	60	54	51	60
Mining	2	6	4	2	1	1	1	3
Nuclear	18	16	18	23	22	25	17	24
Petroleum	13	8	5	3	43	46	46	7
Other	79	84	83	100	101	108	130	166
American Indian/Alaska Native	768	804	797	744	734	808	811	888
Science	577	624	624	569	596	646	636	669
Agricultural sciences	22	34	45	46	34	35	36	38
Biological sciences	93	91	88	80	79	95	88	89
Anatomy	1	1	1	1	3	3	2	1
Biochemistry	10	7	9	2	5	9	5	5
Biology	26	30	24	27	22	27	22	22
Biometry/epidemiology	1	4	2	2	2	2	4	3
Biophysics	0	0	0	0	0	0	1	1
Botany	1	0	1	0	0	4	4	4
Cell/molecular biology	3	2	4	1	2	1	2	3
Ecology	0	2	2	3	2	3	2	4
Entomology/parasitology	1	1	1	0	0	1	4	3
Genetics	3	1	1	1	1	1	1	4
Microbiology, immunology, and virology	8	6	9	11	16	10	14	9
Nutrition	0	1	3	2	1	0	1	1
Pathology	5	8	7	6	5	9	3	1
Pharmacology	5	3	2	4	4	7	8	11
Physiology	6	3	5	3	1	3	1	3
Zoology	12	10	6	4	3	5	3	4
Other	11	12	11	13	12	10	11	10

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Computer sciences	40	43	68	50	50	58	52	68
Earth, atmospheric, and ocean sciences	36	47	44	32	33	37	45	30
Atmospheric	2	1	2	2	3	3	4	5
Earth	17	21	18	13	17	17	18	14
Ocean	7	9	9	7	6	6	5	2
Other	10	16	15	10	7	11	18	9
Mathematics and statistics	24	29	16	12	15	22	18	18
Mathematics/applied mathematics	21	27	15	11	14	20	14	17
Statistics	3	2	1	1	1	2	4	1
Physical sciences	42	46	41	40	54	54	55	54
Astronomy	1	0	1	1	1	0	1	1
Chemistry	31	30	28	30	43	39	38	33
Physics	10	15	10	8	9	15	15	19
Other	0	1	2	1	1	0	1	1
Psychology	111	118	87	88	103	83	83	95
Clinical	38	39	28	30	32	23	28	32
General	32	35	25	26	37	24	14	22
Nonclinical	41	44	34	32	34	36	41	41
Social sciences	209	216	235	221	228	262	259	277
Agricultural economics	3	0	2	6	6	4	2	5
Anthropology (cultural and social)	44	44	49	45	49	46	37	35
Economics	9	8	11	4	6	12	16	16
Geography	13	10	8	9	13	18	19	18
History and philosophy of science	0	1	1	1	0	0	1	2
Linguistics	2	3	2	5	5	4	4	6
Political science and public administration	74	69	88	86	85	93	98	108
Sociology	20	26	23	26	20	25	29	26
Other	44	55	51	39	44	60	53	61
Engineering	191	180	173	175	138	162	175	219
Aerospace	5	3	7	8	6	6	9	11
Agricultural	1	6	2	1	1	1	0	0
Biomedical	5	5	5	7	4	4	4	4
Chemical	23	10	13	11	9	5	13	13
Civil	38	41	31	43	29	29	40	42
Electrical	45	39	25	36	26	39	27	49
Engineering science/physics	3	3	6	5	6	7	6	7
Industrial/manufacturing	18	17	23	23	27	30	27	37
Mechanical	28	27	20	25	18	23	23	35
Metallurgical/materials	7	9	27	5	3	6	9	6
Mining	1	0	0	0	1	0	2	3
Nuclear	2	2	1	1	0	0	2	1
Petroleum	1	1	2	0	1	1	1	0
Other	14	17	11	10	7	11	12	11
Other race/ethnicity	10,586	10,932	10,901	10,462	11,537	11,862	12,797	14,290
Science	6,793	7,310	7,471	7,392	8,196	8,549	9,155	9,835
Agricultural sciences	176	194	165	167	237	283	243	285
Biological sciences	933	1,053	1,122	1,171	1,184	1,122	1,196	1,397
Anatomy	9	17	19	9	5	7	13	14
Biochemistry	77	82	70	81	84	98	118	147
Biology	352	379	407	399	337	276	289	354
Biometry/epidemiology	37	53	87	84	78	99	63	76
Biophysics	23	29	46	25	25	16	25	29
Botany	21	27	28	30	33	29	30	33
Cell/molecular biology	37	71	65	96	128	135	152	182
Ecology	39	50	33	22	45	44	56	79
Entomology/parasitology	17	11	12	13	11	19	19	21
Genetics	28	13	14	36	56	43	49	56
Microbiology, immunology, and virology	58	64	75	137	137	136	124	118

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Nutrition	32	24	30	25	34	34	38	25
Pathology	31	39	37	29	26	33	32	31
Pharmacology	21	25	31	27	26	19	27	45
Physiology	28	43	30	40	42	34	37	32
Zoology	5	10	43	16	24	21	24	28
Other	118	116	95	102	93	79	100	127
Computer sciences	1,491	1,658	1,588	1,711	2,009	2,129	2,339	2,341
Earth, atmospheric, and ocean sciences	292	332	334	270	262	257	319	383
Atmospheric	6	42	15	19	17	18	21	28
Earth	155	165	167	152	143	129	175	208
Ocean	42	33	43	26	23	35	32	41
Other	89	92	109	73	79	75	91	106
Mathematics and statistics	425	438	467	379	423	437	537	661
Mathematics/applied mathematics	397	411	428	347	388	387	470	595
Statistics	28	27	39	32	35	50	67	66
Physical sciences	621	689	759	689	717	921	911	965
Astronomy	15	10	30	21	21	28	28	28
Chemistry	316	368	368	330	279	321	356	421
Physics	285	309	325	259	329	498	455	450
Other	5	2	36	79	88	74	72	66
Psychology	902	1,045	976	985	938	800	817	808
Clinical	133	184	130	181	145	176	175	178
General	216	238	294	257	278	248	221	256
Nonclinical	553	623	552	547	515	376	421	374
Social sciences	1,953	1,901	2,060	2,020	2,426	2,600	2,793	2,995
Agricultural economics	28	30	39	15	29	48	44	53
Anthropology (cultural and social)	104	114	125	155	189	209	175	200
Economics	301	257	286	187	304	313	374	352
Geography	116	124	162	129	124	106	107	124
History and philosophy of science	6	22	10	10	16	20	29	27
Linguistics	25	44	42	43	63	58	76	80
Political science and public administration	936	861	864	806	928	1,025	1,213	1,375
Sociology	121	110	109	113	161	155	160	148
Other	316	339	423	562	612	666	615	636
Engineering	3,793	3,622	3,430	3,070	3,341	3,313	3,642	4,455
Aerospace	73	50	60	69	77	94	126	178
Agricultural	17	26	19	10	14	12	6	15
Biomedical	63	90	79	52	56	99	109	171
Chemical	176	164	176	170	161	101	127	137
Civil	592	491	447	423	411	432	493	535
Electrical	1,304	1,404	1,315	1,190	1,338	1,221	1,273	1,471
Engineering science/physics	53	28	25	39	84	109	72	43
Industrial/manufacturing	621	453	494	415	461	451	493	650
Mechanical	599	515	532	400	427	447	517	698
Metallurgical/materials	75	154	98	70	72	86	83	76
Mining	43	8	14	4	3	5	1	15
Nuclear	12	5	5	6	2	6	9	15
Petroleum	0	7	1	2	42	40	57	11
Other	165	227	165	220	193	210	276	440
Temporary residents	70,991	70,685	71,939	76,963	86,034	93,797	101,244	101,063
Science	41,354	40,368	40,757	42,966	47,324	51,105	54,100	53,354
Agricultural sciences	2,151	1,954	1,808	1,683	1,564	1,576	1,601	1,544
Biological sciences	6,119	5,941	5,886	5,748	5,918	6,054	6,673	6,897
Anatomy	104	109	97	87	104	102	115	102
Biochemistry	852	816	820	793	869	825	909	983
Biology	1,028	1,062	1,059	1,015	1,027	1,064	1,173	1,163
Biometry/epidemiology	284	256	344	375	388	391	487	498
Biophysics	123	126	121	111	148	188	214	211

TABLE D-3. Male S&E graduate students, by field, citizenship, and race/ethnicity: 1996–2003

Field, citizenship, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Botany	374	346	327	331	315	301	315	291
Cell/molecular biology	467	474	471	424	468	520	566	639
Ecology	96	107	100	100	101	110	126	130
Entomology/parasitology	220	205	211	218	195	190	187	181
Genetics	234	239	199	211	196	224	206	241
Microbiology, immunology, and virology	576	526	496	461	466	460	566	509
Nutrition	452	413	365	378	385	396	406	450
Pathology	195	169	155	169	170	156	145	149
Pharmacology	294	284	294	290	306	298	289	332
Physiology	264	254	254	266	257	218	230	257
Zoology	130	116	112	91	92	113	121	91
Other	426	439	461	428	431	498	618	670
Computer sciences	8,786	9,234	10,197	12,022	15,588	18,395	19,247	17,448
Earth, atmospheric, and ocean sciences	1,994	1,796	1,736	1,663	1,796	1,801	1,756	1,726
Atmospheric	200	193	167	169	202	179	189	167
Earth	1,138	1,003	950	893	947	970	947	956
Ocean	390	343	351	332	324	308	281	293
Other	266	257	268	269	323	344	339	310
Mathematics and statistics	4,099	3,845	3,638	3,866	3,938	4,141	4,517	4,616
Mathematics/applied mathematics	3,469	3,236	3,048	3,165	3,203	3,328	3,628	3,665
Statistics	630	609	590	701	735	813	889	951
Physical sciences	8,137	7,884	7,818	8,079	8,372	8,726	9,202	9,820
Astronomy	167	146	164	186	201	209	230	241
Chemistry	4,047	3,927	3,902	3,945	3,943	4,167	4,511	4,819
Physics	3,891	3,776	3,712	3,900	4,173	4,290	4,403	4,684
Other	32	35	40	48	55	60	58	76
Psychology	708	750	798	790	752	777	1,092	1,190
Clinical	101	107	113	116	84	94	222	229
General	275	288	309	285	312	327	419	475
Nonclinical	332	355	376	389	356	356	451	486
Social sciences	9,360	8,964	8,876	9,115	9,396	9,635	10,012	10,113
Agricultural economics	631	646	614	603	638	640	630	655
Anthropology (cultural and social)	328	328	352	375	364	348	387	393
Economics	3,873	3,738	3,584	3,753	3,857	4,124	4,290	4,161
Geography	318	327	350	361	384	432	427	444
History and philosophy of science	35	46	44	41	39	45	41	43
Linguistics	382	353	367	362	346	330	328	336
Political science and public administration	2,188	2,067	2,128	2,278	2,360	2,320	2,417	2,579
Sociology	583	578	511	511	532	522	538	552
Other	1,022	881	926	831	876	874	954	950
Engineering	29,637	30,317	31,182	33,997	38,710	42,692	47,144	47,709
Aerospace	1,167	1,174	1,259	1,364	1,326	1,436	1,470	1,474
Agricultural	370	330	304	307	291	308	314	360
Biomedical	541	530	534	607	668	766	1,024	1,256
Chemical	2,300	2,220	2,217	2,301	2,509	2,651	2,804	2,757
Civil	4,282	4,054	3,906	4,223	4,777	5,047	5,464	5,556
Electrical	9,760	10,702	11,571	12,561	15,006	16,734	18,767	18,814
Engineering science/physics	414	379	441	430	530	590	704	780
Industrial/manufacturing	2,776	2,764	2,769	3,074	3,728	4,415	4,753	4,421
Mechanical	4,991	5,081	5,041	5,549	6,357	6,842	7,616	7,808
Metallurgical/materials	1,546	1,551	1,557	1,577	1,652	1,785	1,927	1,963
Mining	121	117	72	97	118	100	95	99
Nuclear	262	260	248	275	274	287	270	286
Petroleum	317	353	408	429	315	338	401	570
Other	790	802	855	1,203	1,159	1,393	1,535	1,565

NOTES: Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary residents include all racial/ethnic groups.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 1996–2003.

TABLE D-4. First-time enrollment of full-time S&E graduate students, by field and sex: 1996–2003

Field and sex	1996	1997	1998	1999	2000	2001	2002	2003
S&E	73,448	73,600	74,373	75,447	78,332	82,411	86,822	89,344
Science	55,442	54,752	55,112	54,934	56,141	59,105	62,226	64,903
Agricultural sciences	2,180	2,157	2,299	2,253	2,335	2,338	2,320	2,424
Biological sciences	10,766	11,053	11,335	10,959	10,955	11,608	12,133	12,698
Anatomy	205	175	180	161	198	159	199	178
Biochemistry	947	998	1,022	896	929	851	880	958
Biology	2,579	2,687	2,498	2,521	2,282	2,376	2,532	2,567
Biometry/epidemiology	669	656	815	825	837	953	1,001	1,022
Biophysics	155	133	158	118	128	162	166	223
Botany	394	366	409	363	357	315	335	307
Cell/molecular biology	803	859	903	867	977	993	1,085	1,139
Ecology	245	251	261	251	280	348	317	345
Entomology/parasitology	202	194	233	179	185	202	203	175
Genetics	389	441	397	427	380	382	362	373
Microbiology, immunology, and virology	844	864	857	904	823	884	914	909
Nutrition	831	797	940	834	830	906	890	895
Pathology	291	350	279	320	276	320	294	256
Pharmacology	422	458	513	487	549	507	554	552
Physiology	725	633	654	608	570	615	633	760
Zoology	313	303	274	263	230	247	231	258
Other	752	888	942	935	1,124	1,388	1,537	1,781
Computer sciences	4,917	5,018	5,758	6,677	8,431	9,077	9,037	8,148
Earth, atmospheric, and ocean sciences	2,631	2,681	2,859	2,746	2,649	2,794	3,085	3,104
Atmospheric	213	224	189	203	222	205	213	268
Earth	1,326	1,339	1,348	1,296	1,230	1,383	1,437	1,412
Ocean	371	410	471	474	479	511	533	567
Other	721	708	851	773	718	695	902	857
Mathematics and statistics	3,450	3,302	3,334	3,271	3,419	3,686	3,918	4,185
Mathematics/applied mathematics	2,845	2,741	2,721	2,650	2,757	2,892	3,114	3,266
Statistics	605	561	613	621	662	794	804	919
Physical sciences	6,015	6,037	5,932	6,004	5,829	6,011	6,280	6,841
Astronomy	157	125	162	171	183	193	194	225
Chemistry	3,702	3,758	3,682	3,672	3,482	3,651	3,746	3,983
Physics	2,088	2,074	2,046	2,074	2,101	2,102	2,231	2,543
Other	68	80	42	87	63	65	109	90
Psychology	9,140	8,800	8,590	8,305	7,545	7,691	8,420	8,922
Clinical	2,115	2,059	2,001	1,992	1,829	1,731	1,898	2,012
General	3,178	3,188	3,060	2,745	2,534	2,652	2,657	3,006
Nonclinical	3,847	3,553	3,529	3,568	3,182	3,308	3,865	3,904
Social sciences	16,343	15,704	15,005	14,719	14,978	15,900	17,033	18,581
Agricultural economics	436	467	417	482	455	496	575	536
Anthropology (cultural and social)	1,252	1,196	1,219	1,193	1,157	1,119	1,177	1,279
Economics	2,466	2,368	2,352	2,355	2,508	2,562	2,843	2,921
Geography	870	914	805	830	784	872	812	908
History and philosophy of science	58	79	89	91	78	72	97	101
Linguistics	620	579	493	422	454	495	466	588
Political science and public administration	5,842	5,264	4,953	4,837	5,142	5,562	6,241	6,948
Sociology	1,505	1,525	1,428	1,307	1,300	1,431	1,535	1,543
Other	3,294	3,312	3,249	3,202	3,100	3,291	3,287	3,757
Engineering	18,006	18,848	19,261	20,513	22,191	23,306	24,596	24,441
Aerospace	687	735	717	727	775	767	712	845
Agricultural	183	165	155	202	177	187	187	187
Biomedical	572	671	695	734	926	889	1,139	1,341
Chemical	1,478	1,467	1,503	1,491	1,595	1,541	1,616	1,600
Civil	3,845	3,792	3,785	3,726	3,840	3,820	4,107	4,363
Electrical	4,898	5,548	5,741	6,369	7,195	7,882	8,221	7,841
Engineering science/physics	273	274	308	255	299	339	404	392
Industrial/manufacturing	1,605	1,549	1,547	1,851	2,005	2,216	2,238	2,022

TABLE D-4. First-time enrollment of full-time S&E graduate students, by field and sex: 1996–2003

Field and sex	1996	1997	1998	1999	2000	2001	2002	2003
Mechanical	2,785	2,829	2,923	3,119	3,269	3,583	3,698	3,476
Metallurgical/materials	791	870	900	892	1,005	975	1,044	958
Mining	51	73	44	45	48	40	41	73
Nuclear	182	178	153	150	163	164	149	177
Petroleum	122	121	132	149	149	153	198	166
Other	534	576	658	803	745	750	842	1,000
Female	29,729	29,990	30,494	31,113	32,155	34,229	37,023	38,845
Science	26,168	26,200	26,630	26,860	27,336	29,181	31,334	32,795
Agricultural sciences	870	932	1,043	1,018	1,156	1,172	1,160	1,247
Biological sciences	5,483	5,739	6,038	5,944	6,118	6,647	7,012	7,346
Anatomy	93	89	92	77	115	90	110	106
Biochemistry	420	423	463	413	451	434	457	461
Biology	1,295	1,372	1,297	1,349	1,224	1,339	1,455	1,478
Biometry/epidemiology	403	385	508	521	535	627	613	627
Biophysics	36	32	40	41	43	45	75	85
Botany	186	205	224	188	195	171	199	168
Cell/molecular biology	403	422	449	455	516	526	572	627
Ecology	128	135	123	138	153	199	173	220
Entomology/parasitology	72	73	84	64	101	92	91	88
Genetics	231	274	256	262	245	244	239	254
Microbiology, immunology, and virology	425	453	458	487	443	514	535	530
Nutrition	655	630	722	649	650	717	714	724
Pathology	143	181	157	175	173	202	184	168
Pharmacology	217	221	274	270	293	291	329	309
Physiology	286	244	258	251	257	291	296	391
Zoology	144	149	133	123	108	132	127	134
Other	346	451	500	481	616	733	843	976
Computer sciences	1,223	1,288	1,517	1,797	2,234	2,389	2,308	2,020
Earth, atmospheric, and ocean sciences	1,030	1,076	1,264	1,278	1,211	1,315	1,459	1,559
Atmospheric	47	67	49	71	68	87	73	100
Earth	464	475	547	543	513	586	612	655
Ocean	180	191	242	244	254	271	278	331
Other	339	343	426	420	376	371	496	473
Mathematics and statistics	1,243	1,225	1,238	1,257	1,282	1,442	1,525	1,606
Mathematics/applied mathematics	991	999	965	961	945	1,030	1,131	1,175
Statistics	252	226	273	296	337	412	394	431
Physical sciences	1,831	1,885	1,724	1,921	1,899	1,924	2,220	2,342
Astronomy	49	40	46	46	62	53	76	85
Chemistry	1,372	1,454	1,294	1,434	1,401	1,395	1,624	1,667
Physics	373	355	371	409	408	450	462	555
Other	37	36	13	32	28	26	58	35
Psychology	6,408	6,230	6,172	6,022	5,601	5,848	6,390	6,753
Clinical	1,516	1,467	1,435	1,485	1,410	1,303	1,477	1,575
General	2,145	2,202	2,140	1,902	1,820	1,962	1,928	2,185
Nonclinical	2,747	2,561	2,597	2,635	2,371	2,583	2,985	2,993
Social sciences	8,080	7,825	7,634	7,623	7,835	8,444	9,260	9,922
Agricultural economics	158	166	157	193	195	203	254	225
Anthropology (cultural and social)	783	723	724	734	710	702	771	843
Economics	765	820	847	810	976	936	1,107	1,102
Geography	339	349	317	363	321	378	354	387
History and philosophy of science	24	33	38	41	31	31	43	39
Linguistics	415	416	329	275	286	327	304	380
Political science and public administration	2,848	2,541	2,418	2,503	2,634	2,962	3,496	3,735
Sociology	950	949	922	852	857	957	1,010	1,020
Other	1,798	1,828	1,882	1,852	1,825	1,948	1,921	2,191
Engineering	3,561	3,790	3,864	4,253	4,819	5,048	5,689	6,050
Aerospace	86	94	89	96	127	111	120	131
Agricultural	48	57	47	76	64	68	61	69

TABLE D-4. First-time enrollment of full-time S&E graduate students, by field and sex: 1996–2003

Field and sex	1996	1997	1998	1999	2000	2001	2002	2003
Biomedical	181	231	222	247	348	326	465	523
Chemical	359	390	386	382	398	400	474	501
Civil	988	1,007	1,015	1,066	1,175	1,098	1,238	1,441
Electrical	745	852	926	1,112	1,247	1,558	1,712	1,667
Engineering science/physics	57	52	68	48	72	71	89	99
Industrial/manufacturing	314	327	313	349	459	443	476	528
Mechanical	379	393	350	390	432	478	482	516
Metallurgical/materials	208	211	251	248	243	262	297	261
Mining	10	16	9	10	11	7	9	14
Nuclear	39	25	29	35	43	40	26	40
Petroleum	15	9	15	21	25	23	34	31
Other	132	126	144	173	175	163	206	229
Male	43,719	43,610	43,879	44,334	46,177	48,182	49,799	50,499
Science	29,274	28,552	28,482	28,074	28,805	29,924	30,892	32,108
Agricultural sciences	1,310	1,225	1,256	1,235	1,179	1,166	1,160	1,177
Biological sciences	5,283	5,314	5,297	5,015	4,837	4,961	5,121	5,352
Anatomy	112	86	88	84	83	69	89	72
Biochemistry	527	575	559	483	478	417	423	497
Biology	1,284	1,315	1,201	1,172	1,058	1,037	1,077	1,089
Biometry/epidemiology	266	271	307	304	302	326	388	395
Biophysics	119	101	118	77	85	117	91	138
Botany	208	161	185	175	162	144	136	139
Cell/molecular biology	400	437	454	412	461	467	513	512
Ecology	117	116	138	113	127	149	144	125
Entomology/parasitology	130	121	149	115	84	110	112	87
Genetics	158	167	141	165	135	138	123	119
Microbiology, immunology, and virology	419	411	399	417	380	370	379	379
Nutrition	176	167	218	185	180	189	176	171
Pathology	148	169	122	145	103	118	110	88
Pharmacology	205	237	239	217	256	216	225	243
Physiology	439	389	396	357	313	324	337	369
Zoology	169	154	141	140	122	115	104	124
Other	406	437	442	454	508	655	694	805
Computer sciences	3,694	3,730	4,241	4,880	6,197	6,688	6,729	6,128
Earth, atmospheric, and ocean sciences	1,601	1,605	1,595	1,468	1,438	1,479	1,626	1,545
Atmospheric	166	157	140	132	154	118	140	168
Earth	862	864	801	753	717	797	825	757
Ocean	191	219	229	230	225	240	255	236
Other	382	365	425	353	342	324	406	384
Mathematics and statistics	2,207	2,077	2,096	2,014	2,137	2,244	2,393	2,579
Mathematics/applied mathematics	1,854	1,742	1,756	1,689	1,812	1,862	1,983	2,091
Statistics	353	335	340	325	325	382	410	488
Physical sciences	4,184	4,152	4,208	4,083	3,930	4,087	4,060	4,499
Astronomy	108	85	116	125	121	140	118	140
Chemistry	2,330	2,304	2,388	2,238	2,081	2,256	2,122	2,316
Physics	1,715	1,719	1,675	1,665	1,693	1,652	1,769	1,988
Other	31	44	29	55	35	39	51	55
Psychology	2,732	2,570	2,418	2,283	1,944	1,843	2,030	2,169
Clinical	599	592	566	507	419	428	421	437
General	1,033	986	920	843	714	690	729	821
Nonclinical	1,100	992	932	933	811	725	880	911
Social sciences	8,263	7,879	7,371	7,096	7,143	7,456	7,773	8,659
Agricultural economics	278	301	260	289	260	293	321	311
Anthropology (cultural and social)	469	473	495	459	447	417	406	436
Economics	1,701	1,548	1,505	1,545	1,532	1,626	1,736	1,819
Geography	531	565	488	467	463	494	458	521
History and philosophy of science	34	46	51	50	47	41	54	62
Linguistics	205	163	164	147	168	168	162	208

TABLE D-4. First-time enrollment of full-time S&E graduate students, by field and sex: 1996–2003

Field and sex	1996	1997	1998	1999	2000	2001	2002	2003
Political science and public administration	2,994	2,723	2,535	2,334	2,508	2,600	2,745	3,213
Sociology	555	576	506	455	443	474	525	523
Other	1,496	1,484	1,367	1,350	1,275	1,343	1,366	1,566
Engineering	14,445	15,058	15,397	16,260	17,372	18,258	18,907	18,391
Aerospace	601	641	628	631	648	656	592	714
Agricultural	135	108	108	126	113	119	126	118
Biomedical	391	440	473	487	578	563	674	818
Chemical	1,119	1,077	1,117	1,109	1,197	1,141	1,142	1,099
Civil	2,857	2,785	2,770	2,660	2,665	2,722	2,869	2,922
Electrical	4,153	4,696	4,815	5,257	5,948	6,324	6,509	6,174
Engineering science/physics	216	222	240	207	227	268	315	293
Industrial/manufacturing	1,291	1,222	1,234	1,502	1,546	1,773	1,762	1,494
Mechanical	2,406	2,436	2,573	2,729	2,837	3,105	3,216	2,960
Metallurgical/materials	583	659	649	644	762	713	747	697
Mining	41	57	35	35	37	33	32	59
Nuclear	143	153	124	115	120	124	123	137
Petroleum	107	112	117	128	124	130	164	135
Other	402	450	514	630	570	587	636	771

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 1996–2003.

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE D-5. Black U.S.-citizen and permanent-resident S&E graduate students in all institutions and HBCUs, by field and sex: 2003

Field	All institutions			HBCUs			Black students in HBCUs		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
	Number						Percent		
S&E	24,134	14,693	9,441	4,000	2,588	1,412	16.6	17.6	15.0
Science	20,922	13,652	7,270	3,672	2,470	1,202	17.6	18.1	16.5
Agricultural sciences	462	266	196	260	145	115	56.3	54.5	58.7
Biological sciences	2,762	1,903	859	573	407	166	20.7	21.4	19.3
Anatomy	37	22	15	4	3	1	10.8	13.6	6.7
Biochemistry	159	96	63	24	15	9	15.1	15.6	14.3
Biology	797	543	254	277	196	81	34.8	36.1	31.9
Biometry and epidemiology	229	166	63	0	0	0	0.0	0.0	0.0
Biophysics	17	8	9	0	0	0	0.0	0.0	0.0
Botany	26	14	12	0	0	0	0.0	0.0	0.0
Cell and molecular biology	172	117	55	0	0	0	0.0	0.0	0.0
Ecology	43	27	16	0	0	0	0.0	0.0	0.0
Entomology and parasitology	15	10	5	0	0	0	0.0	0.0	0.0
Genetics	75	55	20	21	14	7	28.0	25.5	35.0
Microbiology, immunology, and virology	245	173	72	39	27	12	15.9	15.6	16.7
Nutrition	246	208	38	74	63	11	30.1	30.3	28.9
Pathology	56	35	21	0	0	0	0.0	0.0	0.0
Pharmacology	185	115	70	53	34	19	28.6	29.6	27.1
Physiology	102	67	35	25	16	9	24.5	23.9	25.7
Zoology	11	6	5	0	0	0	0.0	0.0	0.0
Other	347	241	106	56	39	17	16.1	16.2	16.0
Computer sciences	1,945	821	1,124	283	139	144	14.6	16.9	12.8
Earth, atmospheric, and ocean sciences	270	140	130	51	24	27	18.9	17.1	20.8
Atmospheric	32	12	20	14	4	10	43.8	33.3	50.0
Earth	75	35	40	37	20	17	49.3	57.1	42.5
Ocean	35	26	9	0	0	0	0.0	0.0	0.0
Other	128	67	61	0	0	0	0.0	0.0	0.0
Mathematics and statistics	658	282	376	105	43	62	16.0	15.2	16.5
Mathematics/applied mathematics	564	243	321	105	43	62	18.6	17.7	19.3
Statistics	94	39	55	0	0	0	0.0	0.0	0.0
Physical sciences	939	431	508	167	75	92	17.8	17.4	18.1
Astronomy	9	5	4	0	0	0	0.0	0.0	0.0
Chemistry	663	349	314	94	51	43	14.2	14.6	13.7
Physics	236	57	179	73	24	49	30.9	42.1	27.4
Other	31	20	11	0	0	0	0.0	0.0	0.0
Psychology	4,670	3,744	926	891	745	146	19.1	19.9	15.8
Clinical	857	709	148	0	0	0	0.0	0.0	0.0
General	1,559	1,200	359	345	288	57	22.1	24.0	15.9
Nonclinical	2,254	1,835	419	546	457	89	24.2	24.9	21.2
Social sciences	9,216	6,065	3,151	1,342	892	450	14.6	14.7	14.3
Agricultural economics	76	38	38	35	22	13	46.1	57.9	34.2
Anthropology (cultural and social)	275	214	61	0	0	0	0.0	0.0	0.0
Economics	363	154	209	16	8	8	4.4	5.2	3.8
Geography	141	80	61	0	0	0	0.0	0.0	0.0
History and philosophy of science	24	8	16	0	0	0	0.0	0.0	0.0
Linguistics	49	35	14	0	0	0	0.0	0.0	0.0
Political science and public administration	4,847	3,238	1,609	726	477	249	15.0	14.7	15.5
Sociology	1,080	737	343	181	138	43	16.8	18.7	12.5
Other	2,361	1,561	800	384	247	137	16.3	15.8	17.1
Engineering	3,212	1,041	2,171	328	118	210	10.2	11.3	9.7
Aerospace	59	9	50	0	0	0	0.0	0.0	0.0
Agricultural	27	15	12	0	0	0	0.0	0.0	0.0
Biomedical	159	89	70	0	0	0	0.0	0.0	0.0
Chemical	173	78	95	10	2	8	5.8	2.6	8.4
Civil	427	155	272	59	27	32	13.8	17.4	11.8
Electrical	812	183	629	44	9	35	5.4	4.9	5.6
Engineering sciences/physics	42	6	36	0	0	0	0.0	0.0	0.0

TABLE D-5. Black U.S.-citizen and permanent-resident S&E graduate students in all institutions and HBCUs, by field and sex: 2003

Field	All institutions			HBCUs			Black students in HBCUs		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
	Number						Percent		
Industrial/manufacturing	685	266	419	52	24	28	7.6	9.0	6.7
Mechanical	382	86	296	50	15	35	13.1	17.4	11.8
Metallurgical and materials	111	51	60	6	3	3	5.4	5.9	5.0
Mining	2	0	2	0	0	0	0.0	0.0	0.0
Nuclear	12	8	4	0	0	0	0.0	0.0	0.0
Petroleum	11	1	10	0	0	0	0.0	0.0	0.0
Other	310	94	216	107	38	69	34.5	40.4	31.9

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, 2003.

TABLE D-6. Hispanic U.S.-citizen and permanent-resident S&E graduate students in all institutions and HSIs, by field and sex: 2003

Field	All institutions			HSIs			Hispanic students in HSIs		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
	Number						Percent		
S&E	21,264	11,070	10,194	5,400	2,899	2,501	25.4	26.2	24.5
Science	17,288	10,014	7,274	4,409	2,625	1,784	25.5	26.2	24.5
Agricultural sciences	496	240	256	200	102	98	40.3	42.5	38.3
Biological sciences	2,849	1,622	1,227	734	449	285	25.8	27.7	23.2
Anatomy	42	16	26	6	2	4	14.3	12.5	15.4
Biochemistry	229	110	119	34	15	19	14.8	13.6	16.0
Biology	806	454	352	427	248	179	53.0	54.6	50.9
Biometry and epidemiology	196	118	78	73	52	21	37.2	44.1	26.9
Biophysics	28	6	22	0	0	0	0.0	0.0	0.0
Botany	38	18	20	0	0	0	0.0	0.0	0.0
Cell and molecular biology	225	129	96	15	8	7	6.7	6.2	7.3
Ecology	61	37	24	0	0	0	0.0	0.0	0.0
Entomology and parasitology	41	25	16	0	0	0	0.0	0.0	0.0
Genetics	61	37	24	0	0	0	0.0	0.0	0.0
Microbiology, immunology, and virology	286	163	123	35	24	11	12.2	14.7	8.9
Nutrition	201	164	37	61	50	11	30.3	30.5	29.7
Pathology	63	33	30	6	5	1	9.5	15.2	3.3
Pharmacology	134	79	55	17	12	5	12.7	15.2	9.1
Physiology	81	36	45	15	9	6	18.5	25.0	13.3
Zoology	32	10	22	0	0	0	0.0	0.0	0.0
Other	325	187	138	45	24	21	13.8	12.8	15.2
Computer sciences	1,099	285	814	149	38	111	13.6	13.3	13.6
Earth, atmospheric, and ocean sciences	484	261	223	164	81	83	33.9	31.0	37.2
Atmospheric	21	8	13	0	0	0	0.0	0.0	0.0
Earth	187	100	87	43	20	23	23.0	20.0	26.4
Ocean	158	86	72	90	46	44	57.0	53.5	61.1
Other	118	67	51	31	15	16	26.3	22.4	31.4
Mathematics and statistics	604	223	381	197	74	123	32.6	33.2	32.3
Mathematics/applied mathematics	538	196	342	188	71	117	34.9	36.2	34.2
Statistics	66	27	39	9	3	6	13.6	11.1	15.4
Physical sciences	1,097	417	680	324	151	173	29.5	36.2	25.4
Astronomy	25	11	14	1	0	1	4.0	0.0	7.1
Chemistry	750	339	411	233	131	102	31.1	38.6	24.8
Physics	300	61	239	84	20	64	28.0	32.8	26.8
Other	22	6	16	6	0	6	27.3	0.0	37.5
Psychology	4,682	3,551	1,131	863	647	216	18.4	18.2	19.1
Clinical	1,631	1,252	379	160	116	44	9.8	9.3	11.6
General	985	716	269	221	160	61	22.4	22.3	22.7
Nonclinical	2,066	1,583	483	482	371	111	23.3	23.4	23.0
Social sciences	5,977	3,415	2,562	1,778	1,083	695	29.7	31.7	27.1
Agricultural economics	42	18	24	9	5	4	21.4	27.8	16.7
Anthropology (cultural and social)	435	260	175	49	29	20	11.3	11.2	11.4
Economics	369	134	235	95	34	61	25.7	25.4	26.0
Geography	150	64	86	21	8	13	14.0	12.5	15.1
History and philosophy of science	38	16	22	29	12	17	76.3	75.0	77.3
Linguistics	136	93	43	48	34	14	35.3	36.6	32.6
Political science and public administration	2,746	1,581	1,165	951	605	346	34.6	38.3	29.7
Sociology	664	407	257	159	101	58	23.9	24.8	22.6
Other	1,397	842	555	417	255	162	29.8	30.3	29.2
Engineering	3,976	1,056	2,920	991	274	717	24.9	25.9	24.6
Aerospace	119	26	93	0	0	0	0.0	0.0	0.0
Agricultural	14	8	6	0	0	0	0.0	0.0	0.0
Biomedical	155	57	98	22	5	17	14.2	8.8	17.3
Chemical	249	106	143	63	29	34	25.3	27.4	23.8
Civil	845	282	563	294	86	208	34.8	30.5	36.9
Electrical	1,093	204	889	310	74	236	28.4	36.3	26.5
Engineering sciences/physics	49	5	44	0	0	0	0.0	0.0	0.0

TABLE D-6. Hispanic U.S.-citizen and permanent-resident S&E graduate students in all institutions and HSIs, by field and sex: 2003

Field	All institutions			HSIs			Hispanic students in HSIs		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
	Number						Percent		
Industrial/manufacturing	561	178	383	144	56	88	25.7	31.5	23.0
Mechanical	537	96	441	125	13	112	23.3	13.5	25.4
Metallurgical and materials	97	37	60	5	2	3	5.2	5.4	5.0
Mining	3	0	3	0	0	0	0.0	0.0	0.0
Nuclear	31	7	24	6	1	5	19.4	14.3	20.8
Petroleum	13	6	7	0	0	0	0.0	0.0	0.0
Other	210	44	166	22	8	14	10.5	18.2	8.4

HSIs = Hispanic-serving institutions

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2003.

TABLE D-9. Enrollment status of S&E graduate students, by field and sex: 2003

Field	All graduate students			Female			Male		
	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time
S&E	474,203	339,208	134,995	198,113	140,597	57,516	276,090	198,611	77,479
Science	346,828	248,829	97,999	170,524	120,499	50,025	176,304	128,330	47,974
Agricultural sciences	13,197	10,003	3,194	6,026	4,643	1,383	7,171	5,360	1,811
Biological sciences	64,684	54,346	10,338	35,872	29,662	6,210	28,812	24,684	4,128
Anatomy	908	829	79	466	421	45	442	408	34
Biochemistry	5,552	5,326	226	2,595	2,479	116	2,957	2,847	110
Biology	14,720	11,126	3,594	8,134	6,049	2,085	6,586	5,077	1,509
Biometry and epidemiology	4,439	3,208	1,231	2,771	2,044	727	1,668	1,164	504
Biophysics	1,032	968	64	339	321	18	693	647	46
Botany	1,901	1,730	171	996	913	83	905	817	88
Cell and molecular biology	5,722	5,253	469	3,020	2,725	295	2,702	2,528	174
Ecology	2,230	1,484	746	1,208	818	390	1,022	666	356
Entomology and parasitology	1,206	1,024	182	537	464	73	669	560	109
Genetics	2,073	1,983	90	1,216	1,157	59	857	826	31
Microbiology, immunology, and virology	5,256	4,980	276	2,933	2,768	165	2,323	2,212	111
Nutrition	4,695	3,414	1,281	3,658	2,627	1,031	1,037	787	250
Pathology	1,541	1,319	222	910	775	135	631	544	87
Pharmacology	3,357	2,926	431	1,818	1,573	245	1,539	1,353	186
Physiology	2,328	2,165	163	1,144	1,061	83	1,184	1,104	80
Zoology	1,301	1,094	207	645	545	100	656	549	107
Other	6,423	5,517	906	3,482	2,922	560	2,941	2,595	346
Computer sciences	53,678	30,850	22,828	14,791	7,886	6,905	38,887	22,964	15,923
Earth, atmospheric, and ocean sciences	14,655	11,511	3,144	6,555	5,188	1,367	8,100	6,323	1,777
Atmospheric	1,150	1,019	131	374	337	37	776	682	94
Earth	6,889	5,574	1,315	2,764	2,291	473	4,125	3,283	842
Ocean	2,695	2,259	436	1,392	1,163	229	1,303	1,096	207
Other	3,921	2,659	1,262	2,025	1,397	628	1,896	1,262	634
Mathematics and statistics	19,465	14,627	4,838	7,289	5,139	2,150	12,176	9,488	2,688
Mathematics/applied mathematics	15,569	11,622	3,947	5,406	3,665	1,741	10,163	7,957	2,206
Statistics	3,896	3,005	891	1,883	1,474	409	2,013	1,531	482
Physical sciences	34,298	30,441	3,857	10,778	9,427	1,351	23,520	21,014	2,506
Astronomy	1,080	1,023	57	345	331	14	735	692	43
Chemistry	20,049	17,694	2,355	7,839	6,842	997	12,210	10,852	1,358
Physics	12,555	11,430	1,125	2,366	2,144	222	10,189	9,286	903
Other	614	294	320	228	110	118	386	184	202
Psychology	52,025	35,777	16,248	38,668	26,395	12,273	13,357	9,382	3,975
Clinical	13,203	9,720	3,483	10,035	7,403	2,632	3,168	2,317	851
General	15,562	11,497	4,065	10,985	8,043	2,942	4,577	3,454	1,123
Nonclinical	23,260	14,560	8,700	17,648	10,949	6,699	5,612	3,611	2,001
Social sciences	94,826	61,274	33,552	50,545	32,159	18,386	44,281	29,115	15,166
Agricultural economics	2,296	2,043	253	895	812	83	1,401	1,231	170
Anthropology (cultural and social)	7,806	5,945	1,861	4,864	3,711	1,153	2,942	2,234	708
Economics	12,307	10,009	2,298	4,500	3,615	885	7,807	6,394	1,413
Geography	4,654	3,133	1,521	2,000	1,366	634	2,654	1,767	887
History and philosophy of science	677	432	245	287	180	107	390	252	138
Linguistics	3,028	2,389	639	2,005	1,559	446	1,023	830	193
Political science and public administration	36,855	19,969	16,886	19,830	10,453	9,377	17,025	9,516	7,509
Sociology	9,127	6,683	2,444	5,901	4,292	1,609	3,226	2,391	835
Other	18,076	10,671	7,405	10,263	6,171	4,092	7,813	4,500	3,313
Engineering	127,375	90,379	36,996	27,589	20,098	7,491	99,786	70,281	29,505
Aerospace	4,048	3,243	805	603	453	150	3,445	2,790	655
Agricultural	1,012	870	142	297	267	30	715	603	112
Biomedical	5,347	4,747	600	1,962	1,770	192	3,385	2,977	408
Chemical	7,516	6,414	1,102	2,100	1,810	290	5,416	4,604	812
Civil	18,838	13,710	5,128	5,392	4,118	1,274	13,446	9,592	3,854
Electrical	41,745	28,952	12,793	7,791	5,567	2,224	33,954	23,385	10,569
Engineering sciences/physics	2,240	1,770	470	465	364	101	1,775	1,406	369

TABLE D-9. Enrollment status of S&E graduate students, by field and sex: 2003

Field	All graduate students			Female			Male		
	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time
Industrial/manufacturing	14,295	7,085	7,210	3,260	1,627	1,633	11,035	5,458	5,577
Mechanical	18,440	13,375	5,065	2,364	1,756	608	16,076	11,619	4,457
Metallurgical and materials	5,154	4,386	768	1,332	1,128	204	3,822	3,258	564
Mining	278	219	59	42	32	10	236	187	49
Nuclear	885	752	133	182	154	28	703	598	105
Petroleum	849	684	165	129	116	13	720	568	152
Other	6,728	4,172	2,556	1,670	936	734	5,058	3,236	1,822

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2003.

TABLE D-10. Enrollment status of S&E graduate students, by field, citizenship, and race/ethnicity: 2003

Field and enrollment status	U.S. citizens and permanent residents								
	S&E graduate students						American	Other/ unknown	Temporary resident
		White	Asian/ Pacific Islander	Black	Hispanic	Indian/ Alaska Native			
S&E	474,203	222,118	32,450	24,134	21,264	1,872	25,494	146,871	
Full time	339,208	148,954	20,726	13,520	13,710	1,231	15,208	125,859	
Part time	134,995	73,164	11,724	10,614	7,554	641	10,286	21,012	
Science	346,828	178,681	21,542	20,922	17,288	1,568	19,777	87,050	
Full time	248,829	123,077	14,359	11,681	11,419	1,065	12,208	75,020	
Part time	97,999	55,604	7,183	9,241	5,869	503	7,569	12,030	
Agricultural sciences	13,197	8,740	326	462	496	77	518	2,578	
Full time	10,003	6,263	269	348	374	54	363	2,332	
Part time	3,194	2,477	57	114	122	23	155	246	
Biological sciences	64,684	35,787	5,210	2,762	2,849	236	3,070	14,770	
Full time	54,346	29,010	4,520	2,103	2,356	192	2,442	13,723	
Part time	10,338	6,777	690	659	493	44	628	1,047	
Anatomy	908	503	95	37	42	4	28	199	
Full time	829	445	93	33	42	4	26	186	
Part time	79	58	2	4	0	0	2	13	
Biochemistry	5,552	2,515	466	159	229	11	275	1,897	
Full time	5,326	2,411	447	146	215	10	252	1,845	
Part time	226	104	19	13	14	1	23	52	
Biology	14,720	8,894	836	797	806	56	793	2,538	
Full time	11,126	6,549	619	489	596	39	573	2,261	
Part time	3,594	2,345	217	308	210	17	220	277	
Biometry and epidemiology	4,439	2,155	488	229	196	16	159	1,196	
Full time	3,208	1,414	350	142	149	13	111	1,029	
Part time	1,231	741	138	87	47	3	48	167	
Biophysics	1,032	502	126	17	28	1	39	319	
Full time	968	462	116	15	26	0	39	310	
Part time	64	40	10	2	2	1	0	9	
Botany	1,901	1,065	108	26	38	10	70	584	
Full time	1,730	944	100	25	32	7	64	558	
Part time	171	121	8	1	6	3	6	26	
Cell and molecular biology	5,722	2,882	608	172	225	14	390	1,431	
Full time	5,253	2,639	571	154	212	12	337	1,328	
Part time	469	243	37	18	13	2	53	103	
Ecology	2,230	1,631	59	43	61	10	164	262	
Full time	1,484	1,063	28	23	40	10	109	211	
Part time	746	568	31	20	21	0	55	51	
Entomology and parasitology	1,206	800	29	15	41	4	31	286	
Full time	1,024	647	23	14	37	4	28	271	
Part time	182	153	6	1	4	0	3	15	
Genetics	2,073	1,107	193	75	61	12	110	515	
Full time	1,983	1,053	187	71	56	8	105	503	
Part time	90	54	6	4	5	4	5	12	
Microbiology, immunology, and virology	5,256	2,818	492	245	286	14	258	1,143	
Full time	4,980	2,626	472	223	281	14	242	1,122	
Part time	276	192	20	22	5	0	16	21	
Nutrition	4,695	2,575	299	246	201	13	161	1,200	
Full time	3,414	1,738	225	163	124	9	110	1,045	
Part time	1,281	837	74	83	77	4	51	155	
Pathology	1,541	834	183	56	63	3	71	331	
Full time	1,319	688	161	50	53	3	46	318	
Part time	222	146	22	6	10	0	25	13	
Pharmacology	3,357	1,809	341	185	134	19	96	773	
Full time	2,926	1,489	308	165	121	18	84	741	
Part time	431	320	33	20	13	1	12	32	

TABLE D-10. Enrollment status of S&E graduate students, by field, citizenship, and race/ethnicity: 2003

Field and enrollment status	S&E graduate students	U.S. citizens and permanent residents						
		White	Asian/ Pacific Islander	Black	Hispanic	American		Temporary resident
						Alaska Native	Other/ unknown	
Physiology	2,328	1,210	331	102	81	11	72	521
Full time	2,165	1,100	322	97	73	11	59	503
Part time	163	110	9	5	8	0	13	18
Zoology	1,301	985	31	11	32	8	54	180
Full time	1,094	817	31	10	22	6	46	162
Part time	207	168	0	1	10	2	8	18
Other	6,423	3,502	525	347	325	30	299	1,395
Full time	5,517	2,925	467	283	277	24	211	1,330
Part time	906	577	58	64	48	6	88	65
Computer sciences	53,678	17,199	5,956	1,945	1,099	104	3,232	24,143
Full time	30,850	7,775	2,518	801	465	51	1,211	18,029
Part time	22,828	9,424	3,438	1,144	634	53	2,021	6,114
Earth, atmospheric, and ocean sciences	14,655	9,995	375	270	484	63	705	2,763
Full time	11,511	7,529	307	195	394	50	536	2,500
Part time	3,144	2,466	68	75	90	13	169	263
Atmospheric	1,150	713	67	32	21	5	44	268
Full time	1,019	616	60	30	18	5	36	254
Part time	131	97	7	2	3	0	8	14
Earth	6,889	4,691	126	75	187	26	351	1,433
Full time	5,574	3,656	109	57	153	21	263	1,315
Part time	1,315	1,035	17	18	34	5	88	118
Ocean	2,695	1,871	48	35	158	8	86	489
Full time	2,259	1,497	40	29	147	8	73	465
Part time	436	374	8	6	11	0	13	24
Other	3,921	2,720	134	128	118	24	224	573
Full time	2,659	1,760	98	79	76	16	164	466
Part time	1,262	960	36	49	42	8	60	107
Mathematics and statistics	19,465	8,415	1,446	658	604	25	996	7,321
Full time	14,627	5,788	867	383	364	16	567	6,642
Part time	4,838	2,627	579	275	240	9	429	679
Mathematics	15,569	7,131	1,136	564	538	24	888	5,288
Full time	11,622	4,935	668	326	316	16	507	4,854
Part time	3,947	2,196	468	238	222	8	381	434
Statistics	3,896	1,284	310	94	66	1	108	2,033
Full time	3,005	853	199	57	48	0	60	1,788
Part time	891	431	111	37	18	1	48	245
Physical sciences	34,298	15,107	1,629	939	1,097	79	1,375	14,072
Full time	30,441	13,154	1,345	736	926	70	1,017	13,193
Part time	3,857	1,953	284	203	171	9	358	879
Astronomy	1,080	610	53	9	25	3	47	333
Full time	1,023	579	51	9	22	3	42	317
Part time	57	31	2	0	3	0	5	16
Chemistry	20,049	8,955	1,103	663	750	51	688	7,839
Full time	17,694	7,821	881	524	643	46	508	7,271
Part time	2,355	1,134	222	139	107	5	180	568
Physics	12,555	5,209	441	236	300	24	547	5,798
Full time	11,430	4,588	392	189	253	20	461	5,527
Part time	1,125	621	49	47	47	4	86	271
Other	614	333	32	31	22	1	93	102
Full time	294	166	21	14	8	1	6	78
Part time	320	167	11	17	14	0	87	24
Psychology	52,025	33,409	2,384	4,670	4,682	322	3,378	3,180
Full time	35,777	23,323	1,700	2,567	3,276	240	2,195	2,476
Part time	16,248	10,086	684	2,103	1,406	82	1,183	704

TABLE D-10. Enrollment status of S&E graduate students, by field, citizenship, and race/ethnicity: 2003

Field and enrollment status	U.S. citizens and permanent residents								
	S&E graduate students						American	Other/ unknown	Temporary resident
		White	Asian/ Pacific Islander	Black	Hispanic	Indian/ Alaska Native			
Clinical	13,203	8,532	623	857	1,631	107	833	620	
Full time	9,720	6,318	457	598	1,276	92	556	423	
Part time	3,483	2,214	166	259	355	15	277	197	
General	15,562	10,042	793	1,559	985	92	908	1,183	
Full time	11,497	7,532	612	928	698	71	647	1,009	
Part time	4,065	2,510	181	631	287	21	261	174	
Nonclinical	23,260	14,835	968	2,254	2,066	123	1,637	1,377	
Full time	14,560	9,473	631	1,041	1,302	77	992	1,044	
Part time	8,700	5,362	337	1,213	764	46	645	333	
Social sciences	94,826	50,029	4,216	9,216	5,977	662	6,503	18,223	
Full time	61,274	30,235	2,833	4,548	3,264	392	3,877	16,125	
Part time	33,552	19,794	1,383	4,668	2,713	270	2,626	2,098	
Agricultural economics	2,296	964	39	76	42	7	83	1,085	
Full time	2,043	829	34	51	35	5	70	1,019	
Part time	253	135	5	25	7	2	13	66	
Anthropology (cultural and social)	7,806	5,311	281	275	435	99	556	849	
Full time	5,945	3,966	237	215	324	66	410	727	
Part time	1,861	1,345	44	60	111	33	146	122	
Economics	12,307	3,780	689	363	369	31	501	6,574	
Full time	10,009	2,639	462	218	250	24	388	6,028	
Part time	2,298	1,141	227	145	119	7	113	546	
Geography	4,654	3,200	139	141	150	22	224	778	
Full time	3,133	2,053	105	76	99	10	138	652	
Part time	1,521	1,147	34	65	51	12	86	126	
History and philosophy of science	677	467	29	24	38	4	54	61	
Full time	432	283	23	10	16	3	38	59	
Part time	245	184	6	14	22	1	16	2	
Linguistics	3,028	1,418	215	49	136	16	231	963	
Full time	2,389	1,058	153	35	91	13	161	878	
Part time	639	360	62	14	45	3	70	85	
Political science/public administration	36,855	19,504	1,622	4,847	2,746	240	3,019	4,877	
Full time	19,969	9,860	951	2,094	1,220	106	1,615	4,123	
Part time	16,886	9,644	671	2,753	1,526	134	1,404	754	
Sociology	9,127	5,132	443	1,080	664	65	398	1,345	
Full time	6,683	3,724	350	630	459	43	277	1,200	
Part time	2,444	1,408	93	450	205	22	121	145	
Sociology/anthropology	773	470	13	121	45	18	36	70	
Full time	559	331	12	83	31	14	24	64	
Part time	214	139	1	38	14	4	12	6	
Other	17,303	9,783	746	2,240	1,352	160	1,401	1,621	
Full time	10,112	5,492	506	1,136	739	108	756	1,375	
Part time	7,191	4,291	240	1,104	613	52	645	246	
Engineering	127,375	43,437	10,908	3,212	3,976	304	5,717	59,821	
Full time	90,379	25,877	6,367	1,839	2,291	166	3,000	50,839	
Part time	36,996	17,560	4,541	1,373	1,685	138	2,717	8,982	
Aerospace	4,048	1,747	207	59	119	15	214	1,687	
Full time	3,243	1,283	141	43	72	12	129	1,563	
Part time	805	464	66	16	47	3	85	124	
Agricultural	1,012	431	35	27	14	2	22	481	
Full time	870	344	31	22	11	1	21	440	
Part time	142	87	4	5	3	1	1	41	
Biomedical	5,347	2,196	667	159	155	7	279	1,884	
Full time	4,747	1,921	575	137	128	7	245	1,734	
Part time	600	275	92	22	27	0	34	150	

TABLE D-10. Enrollment status of S&E graduate students, by field, citizenship, and race/ethnicity: 2003

Field and enrollment status	U.S. citizens and permanent residents								
	S&E graduate students						American	Other/ unknown	Temporary resident
		White	Asian/ Pacific Islander	Black	Hispanic	Indian/ Alaska Native			
Chemical	7,516	2,554	556	173	249	19	201	3,764	
Full time	6,414	2,040	422	133	205	18	116	3,480	
Part time	1,102	514	134	40	44	1	85	284	
Civil	18,838	8,316	1,024	427	845	65	762	7,399	
Full time	13,710	5,359	656	251	561	36	438	6,409	
Part time	5,128	2,957	368	176	284	29	324	990	
Electrical	41,745	9,700	4,600	812	1,093	63	1,830	23,647	
Full time	28,952	5,183	2,548	438	555	32	859	19,337	
Part time	12,793	4,517	2,052	374	538	31	971	4,310	
Engineering sciences/physics	2,240	928	152	42	49	11	48	1,010	
Full time	1,770	651	127	32	42	8	32	878	
Part time	470	277	25	10	7	3	16	132	
Industrial/manufacturing	14,295	5,679	1,057	685	561	52	843	5,418	
Full time	7,085	1,615	404	259	189	14	302	4,302	
Part time	7,210	4,064	653	426	372	38	541	1,116	
Mechanical	18,440	6,847	1,027	382	537	42	803	8,802	
Full time	13,375	4,183	650	247	315	22	418	7,540	
Part time	5,065	2,664	377	135	222	20	385	1,262	
Metallurgical and materials	5,154	1,923	316	111	97	8	106	2,593	
Full time	4,386	1,441	264	93	82	6	74	2,426	
Part time	768	482	52	18	15	2	32	167	
Mining	278	138	5	2	3	4	15	111	
Full time	219	98	5	1	2	2	10	101	
Part time	59	40	0	1	1	2	5	10	
Nuclear	885	439	30	12	31	1	19	353	
Full time	752	341	22	9	22	0	18	340	
Part time	133	98	8	3	9	1	1	13	
Petroleum	849	125	12	11	13	0	13	675	
Full time	684	60	10	6	11	0	7	590	
Part time	165	65	2	5	2	0	6	85	
Other	6,728	2,414	1,220	310	210	15	562	1,997	
Full time	4,172	1,358	512	168	96	8	331	1,699	
Part time	2,556	1,056	708	142	114	7	231	298	

NOTES: Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary residents include all racial/ethnic groups.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2003.

TABLE D-11. Primary source of support for full-time S&E graduate students, by sex and field: 2003

Sex and field	All sources	Federal support										Other outside support			Self-support	
		Total	DOD	DOE	HHS							Institutional support	Total	United States		Foreign
					Total	NIH	Other	NASA	NSF	USDA	Other					
All S&E graduate students	339,208	72,387	8,925	3,998	22,208	20,395	1,813	3,211	19,167	3,424	11,454	139,071	26,498	23,712	2,786	101,252
Science	248,829	50,854	3,427	2,277	20,252	18,751	1,501	1,572	12,441	2,970	7,915	107,990	15,354	13,504	1,850	74,631
Agricultural sciences	10,003	2,505	33	58	89	60	29	90	211	1,333	691	3,949	1,584	1,413	171	1,965
Biological sciences	54,346	20,195	364	195	14,868	14,143	725	99	2,139	1,034	1,496	22,312	4,016	3,726	290	7,823
Computer sciences	30,850	5,360	1,381	159	306	234	72	226	2,727	39	522	9,212	1,939	1,741	198	14,339
Earth, atmospheric, and ocean sciences	11,511	3,306	254	155	68	52	16	420	1,376	85	948	5,056	883	767	116	2,266
Mathematics and statistics	14,627	1,680	232	53	154	119	35	23	975	9	234	9,620	520	425	95	2,807
Physical sciences	30,441	10,566	885	1,590	2,414	2,147	267	574	3,868	66	1,169	16,007	2,104	1,977	127	1,764
Psychology	35,777	3,576	149	10	1,882	1,625	257	26	326	16	1,167	13,294	1,288	1,205	83	17,619
Social sciences	61,274	3,666	129	57	471	371	100	114	819	388	1,688	28,540	3,020	2,250	770	26,048
Engineering	90,379	21,533	5,498	1,721	1,956	1,644	312	1,639	6,726	454	3,539	31,081	11,144	10,208	936	26,621
Aerospace	3,243	1,197	471	44	10	8	2	462	122	1	87	1,021	296	253	43	729
Biomedical	4,747	1,440	72	13	895	860	35	37	231	3	189	1,332	870	848	22	1,105
Chemical	6,414	2,055	265	327	245	210	35	103	841	35	239	2,521	995	932	63	843
Civil	13,710	2,185	148	94	61	45	16	87	704	69	1,022	5,486	1,483	1,378	105	4,556
Electrical	28,952	6,198	2,233	189	356	246	110	373	2,256	57	734	8,892	3,288	3,058	230	10,574
Industrial/manufacturing	7,085	990	251	58	73	36	37	58	388	11	151	2,355	696	618	78	3,044
Mechanical	13,375	3,409	876	348	166	135	31	347	1,101	20	551	5,034	1,740	1,610	130	3,192
Metallurgical and materials	4,386	1,686	482	268	38	29	9	62	653	3	180	1,381	806	726	80	513
Other	8,467	2,373	700	380	112	75	37	110	430	255	386	3,059	970	785	185	2,065
Female	140,597	26,540	1,663	880	11,133	10,264	869	822	5,922	1,516	4,604	58,855	9,033	8,230	803	46,169
Science	120,499	22,076	810	571	10,540	9,747	793	547	4,360	1,389	3,859	51,596	6,660	6,044	616	40,167
Agricultural sciences	4,643	1,081	14	21	45	26	19	40	96	560	305	1,904	707	646	61	951
Biological sciences	29,662	10,636	190	101	7,813	7,437	376	40	1,116	572	804	12,218	2,043	1,918	125	4,765
Computer sciences	7,886	1,051	204	29	73	61	12	57	547	11	130	2,321	427	372	55	4,087
Earth, atmospheric, and ocean sciences	5,188	1,413	72	57	36	29	7	182	588	34	444	2,360	356	329	27	1,059
Mathematics and statistics	5,139	524	40	13	69	49	20	7	299	3	93	3,345	195	162	33	1,075
Physical sciences	9,427	3,085	201	311	908	800	108	158	1,128	27	352	5,178	618	591	27	546
Psychology	26,395	2,452	63	10	1,284	1,099	185	14	201	10	870	9,538	929	872	57	13,476
Social sciences	32,159	1,834	26	29	312	246	66	49	385	172	861	14,732	1,385	1,154	231	14,208
Engineering	20,098	4,464	853	309	593	517	76	275	1,562	127	745	7,259	2,373	2,186	187	6,002
Aerospace	453	136	40	8	2	1	1	59	17	0	10	181	34	31	3	102
Biomedical	1,770	518	19	7	322	310	12	11	98	0	61	494	326	319	7	432
Chemical	1,810	558	64	73	82	74	8	28	235	15	61	760	261	246	15	231
Civil	4,118	623	37	37	18	14	4	30	220	19	262	1,712	410	378	32	1,373
Electrical	5,567	1,063	349	36	89	60	29	53	419	11	106	1,704	547	508	39	2,253
Industrial	1,627	210	52	9	13	3	10	11	95	0	30	614	156	135	21	647
Mechanical	1,756	488	107	30	33	28	5	41	208	1	68	681	232	216	16	355
Metallurgical and materials	1,128	391	98	49	10	8	2	13	163	1	57	393	215	195	20	129
Other	1,869	477	87	60	24	19	5	29	107	80	90	720	192	158	34	480

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE D-11. Primary source of support for full-time S&E graduate students, by sex and field: 2003

Sex and field	All sources	Federal support										Other outside support			Self-support	
		Total	DOD	DOE	HHS				Institutional support	Total	United States	Foreign				
					Total	NIH	Other	NASA					NSF	USDA		Other
Male	198,611	45,847	7,262	3,118	11,075	10,131	944	2,389	13,245	1,908	6,850	80,216	17,465	15,482	1,983	55,083
Science	128,330	28,778	2,617	1,706	9,712	9,004	708	1,025	8,081	1,581	4,056	56,394	8,694	7,460	1,234	34,464
Agricultural sciences	5,360	1,424	19	37	44	34	10	50	115	773	386	2,045	877	767	110	1,014
Biological sciences	24,684	9,559	174	94	7,055	6,706	349	59	1,023	462	692	10,094	1,973	1,808	165	3,058
Computer sciences	22,964	4,309	1,177	130	233	173	60	169	2,180	28	392	6,891	1,512	1,369	143	10,252
Earth, atmospheric, and ocean sciences	6,323	1,893	182	98	32	23	9	238	788	51	504	2,696	527	438	89	1,207
Mathematics and statistics	9,488	1,156	192	40	85	70	15	16	676	6	141	6,275	325	263	62	1,732
Physical sciences	21,014	7,481	684	1,279	1,506	1,347	159	416	2,740	39	817	10,829	1,486	1,386	100	1,218
Psychology	9,382	1,124	86	0	598	526	72	12	125	6	297	3,756	359	333	26	4,143
Social sciences	29,115	1,832	103	28	159	125	34	65	434	216	827	13,808	1,635	1,096	539	11,840
Engineering	70,281	17,069	4,645	1,412	1,363	1,127	236	1,364	5,164	327	2,794	23,822	8,771	8,022	749	20,619
Aerospace	2,790	1,061	431	36	8	7	1	403	105	1	77	840	262	222	40	627
Biomedical	2,977	922	53	6	573	550	23	26	133	3	128	838	544	529	15	673
Chemical	4,604	1,497	201	254	163	136	27	75	606	20	178	1,761	734	686	48	612
Civil	9,592	1,562	111	57	43	31	12	57	484	50	760	3,774	1,073	1,000	73	3,183
Electrical	23,385	5,135	1,884	153	267	186	81	320	1,837	46	628	7,188	2,741	2,550	191	8,321
Industrial	5,458	780	199	49	60	33	27	47	293	11	121	1,741	540	483	57	2,397
Mechanical	11,619	2,921	769	318	133	107	26	306	893	19	483	4,353	1,508	1,394	114	2,837
Metallurgical and materials	3,258	1,295	384	219	28	21	7	49	490	2	123	988	591	531	60	384
Other	6,598	1,896	613	320	88	56	32	81	323	175	296	2,339	778	627	151	1,585

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, 2003.

TABLE E-1. Master's degrees, by field: 1995–2002

Field	1995	1996	1997	1998	2000	2001	2002
All fields	399,428	408,932	420,954	431,871	456,260	466,645	481,132
S&E	94,309	95,313	93,485	93,918	95,683	98,986	99,173
Sciences	65,679	67,552	67,611	67,780	69,947	72,463	72,907
Agricultural sciences	3,574	4,021	3,927	3,862	3,858	3,752	4,019
Biological sciences	5,495	6,286	6,594	6,368	6,325	6,487	6,334
Computer sciences	10,563	10,613	10,489	11,752	14,529	16,341	16,582
Earth, atmospheric, and ocean sciences	1,483	1,487	1,435	1,426	1,345	1,363	1,406
Atmospheric sciences	203	199	177	199	156	140	141
Earth sciences	1,142	1,146	1,145	1,105	1,104	1,121	1,151
Ocean sciences	138	142	113	122	85	102	114
Mathematics and statistics	3,932	3,742	3,599	3,525	3,295	3,280	3,408
Physical sciences	4,241	4,364	4,141	3,969	3,512	3,737	3,624
Astronomy	119	115	93	101	102	93	112
Chemistry	2,105	2,273	2,268	2,173	1,908	2,009	1,866
Physics	1,826	1,686	1,497	1,401	1,244	1,376	1,353
Other	191	290	283	294	258	259	293
Psychology	13,132	13,043	13,633	13,146	13,708	14,335	14,041
Social sciences	23,259	23,996	23,793	23,732	23,375	23,168	23,493
Anthropology	1,053	1,051	1,111	1,098	950	1,092	1,017
Area and ethnic studies	1,584	1,657	1,587	1,550	1,529	1,515	1,497
Economics	2,838	2,964	2,804	2,843	2,515	2,492	2,651
History of science	13	10	18	22	24	26	35
Linguistics	603	601	642	568	553	552	520
Political science and public administration	12,802	13,370	13,368	13,151	13,035	12,929	13,183
Sociology	1,790	1,822	1,752	1,774	2,036	1,901	1,957
Other	2,576	2,521	2,511	2,726	2,733	2,661	2,633
Engineering	28,630	27,761	25,874	26,138	25,736	26,523	26,266
Aerospace engineering	821	774	625	584	560	611	682
Chemical engineering	1,369	1,416	1,345	1,372	1,352	1,368	1,267
Civil engineering	5,168	5,002	4,880	4,736	4,140	4,013	3,947
Electrical engineering	8,743	8,156	7,341	7,971	8,339	8,630	8,279
Industrial engineering	2,873	3,027	2,935	3,109	3,048	3,401	3,388
Materials engineering	852	774	724	698	759	709	630
Mechanical engineering	4,368	4,009	3,756	3,551	3,378	3,472	3,519
Other	4,436	4,603	4,268	4,117	4,160	4,319	4,554
Non-S&E	305,119	313,619	327,469	337,953	360,577	367,659	381,959

S&E = Science and engineering.

NOTE: Data not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE E-2. Master's degrees awarded to women, by field: 1995–2002

Field	1995	1996	1997	1998	2000	2001	2002	1995	2002
	Number							Percent	
All fields	220,230	228,572	239,497	246,810	265,026	273,639	283,035	55.1	58.8
S&E	35,791	37,453	38,262	38,583	41,470	43,393	43,472	38.0	43.8
Sciences	31,159	32,701	33,567	33,420	36,130	37,765	37,898	47.4	52.0
Agricultural sciences	1,471	1,707	1,695	1,709	1,819	1,837	1,997	41.2	49.7
Biological sciences	2,858	3,341	3,518	3,354	3,510	3,755	3,669	52.0	57.9
Computer sciences	2,786	2,850	2,979	3,414	4,868	5,508	5,499	26.4	33.2
Earth, atmospheric, and ocean sciences	451	436	487	494	513	564	572	30.4	40.7
Atmospheric sciences	51	35	42	52	37	40	46	25.1	32.6
Earth sciences	353	347	393	397	434	472	473	30.9	41.1
Ocean sciences	47	54	52	45	42	52	53	34.1	46.5
Mathematics and statistics	1,579	1,506	1,489	1,470	1,498	1,389	1,471	40.2	43.2
Physical sciences	1,283	1,450	1,333	1,440	1,215	1,301	1,326	30.3	36.6
Astronomy	31	27	32	30	25	36	27	26.1	24.1
Chemistry	885	998	927	998	823	825	852	42.0	45.7
Physics	291	301	255	255	244	286	286	15.9	21.1
Other	76	124	119	157	123	154	161	39.8	54.9
Psychology	9,397	9,373	9,918	9,540	10,293	10,858	10,672	71.6	76.0
Social sciences	11,334	12,038	12,148	11,999	12,414	12,553	12,692	48.7	54.0
Anthropology	668	631	712	686	587	689	642	63.4	63.1
Area and ethnic studies	818	856	845	842	879	896	879	51.6	58.7
Economics	894	1,002	953	944	952	973	1,050	31.5	39.6
History of science	4	4	7	7	6	10	17	30.8	48.6
Linguistics	416	393	418	389	407	380	360	69.0	69.2
Political science and public administration	6,124	6,654	6,691	6,566	6,720	6,841	6,978	47.8	52.9
Sociology	1,112	1,180	1,142	1,118	1,387	1,258	1,315	62.1	67.2
Other	1,298	1,318	1,380	1,447	1,476	1,506	1,451	50.4	55.1
Engineering	4,632	4,752	4,695	5,163	5,340	5,628	5,574	16.2	21.2
Aerospace engineering	99	92	75	81	76	90	125	12.1	18.3
Chemical engineering	306	306	332	344	344	352	335	22.4	26.4
Civil engineering	1,045	1,064	1,099	1,154	1,075	1,061	1,063	20.2	26.9
Electrical engineering	1,204	1,196	1,144	1,376	1,558	1,673	1,561	13.8	18.9
Industrial engineering	512	624	604	676	648	789	795	17.8	23.5
Materials engineering	184	175	174	170	201	173	171	21.6	27.1
Mechanical engineering	450	454	419	461	455	448	468	10.3	13.3
Other	832	841	848	901	983	1,042	1,056	18.8	23.2
Non-S&E	184,439	191,119	201,235	208,227	223,556	230,246	239,563	60.4	62.7

S&E = Science and engineering.

NOTE: Data not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE E-3. Master's degrees, by field, citizenship, and race/ethnicity: 1995-2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
All fields	399,428	408,932	420,954	431,871	456,260	466,645	481,132
S&E	94,309	95,313	93,485	93,918	95,683	98,986	99,173
Sciences	65,679	67,552	67,611	67,780	69,947	72,463	72,907
Agricultural sciences	3,574	4,021	3,927	3,862	3,858	3,752	4,019
Biological sciences	5,495	6,286	6,594	6,368	6,325	6,487	6,334
Computer sciences	10,563	10,613	10,489	11,752	14,529	16,341	16,582
Mathematics and statistics	3,932	3,742	3,599	3,525	3,295	3,280	3,408
Physical sciences	5,724	5,851	5,576	5,395	4,857	5,100	5,030
Psychology	13,132	13,043	13,633	13,146	13,708	14,335	14,041
Social sciences	23,259	23,996	23,793	23,732	23,375	23,168	23,493
Engineering	28,630	27,761	25,874	26,138	25,736	26,523	26,266
Non-S&E	305,119	313,619	327,469	337,953	360,577	367,659	381,959
U.S. citizen/permanent resident							
All fields	350,672	360,682	371,477	379,666	400,689	405,455	417,821
S&E	72,092	73,635	72,220	71,295	70,933	71,564	71,623
Sciences	53,161	54,870	54,982	54,318	55,020	56,042	56,160
Agricultural sciences	2,921	3,363	3,269	3,264	3,342	3,281	3,540
Biological sciences	4,610	5,295	5,671	5,468	5,575	5,614	5,529
Computer sciences	6,667	6,712	6,516	6,957	7,966	8,596	8,895
Mathematics and statistics	2,816	2,712	2,606	2,499	2,184	2,050	2,114
Physical sciences	3,972	4,117	3,932	3,898	3,522	3,689	3,643
Psychology	12,659	12,619	13,231	12,686	13,241	13,871	13,562
Social sciences	19,516	20,052	19,757	19,546	19,190	18,941	18,877
Engineering	18,931	18,765	17,238	16,977	15,913	15,522	15,463
Non-S&E	278,580	287,047	299,257	308,371	329,756	333,891	346,198
White							
All fields	277,437	282,713	288,353	291,962	297,226	293,390	296,978
S&E	54,610	55,349	53,769	52,328	49,850	48,792	48,410
Sciences	40,779	41,773	41,277	40,243	38,830	38,326	38,006
Agricultural sciences	2,447	2,918	2,809	2,827	2,864	2,782	2,951
Biological sciences	3,642	4,131	4,395	4,212	4,179	4,124	4,085
Computer sciences	4,354	4,353	4,105	4,277	4,435	4,541	4,738
Mathematics and statistics	2,222	2,083	2,005	1,895	1,655	1,515	1,555
Physical sciences	3,171	3,324	3,172	3,129	2,810	2,917	2,847
Psychology	10,367	10,071	10,444	9,820	9,646	9,798	9,315
Social sciences	14,576	14,893	14,347	14,083	13,241	12,649	12,515
Engineering	13,831	13,576	12,492	12,085	11,020	10,466	10,404
Non-S&E	222,827	227,364	234,584	239,634	247,376	244,598	248,568
Asian/Pacific Islander							
All fields	15,906	17,281	17,912	19,936	21,412	21,946	22,610
S&E	5,989	6,328	6,180	6,554	6,990	7,045	6,814
Sciences	3,417	3,707	3,861	4,103	4,611	4,631	4,613
Agricultural sciences	97	110	103	83	94	97	126
Biological sciences	426	528	575	591	595	540	537
Computer sciences	1,266	1,283	1,322	1,579	2,028	2,053	2,004
Mathematics and statistics	228	220	238	216	180	205	214
Physical sciences	288	304	308	278	262	248	250
Psychology	289	322	364	379	472	498	526
Social sciences	823	940	951	977	980	990	956

TABLE E-3. Master's degrees, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
Engineering	2,572	2,621	2,319	2,451	2,379	2,414	2,201
Non-S&E	9,917	10,953	11,732	13,382	14,422	14,901	15,796
Black							
All fields	22,954	24,588	26,948	28,616	33,305	35,059	36,524
S&E	4,210	4,420	4,870	4,894	5,492	6,117	6,133
Sciences	3,545	3,746	4,196	4,180	4,834	5,417	5,395
Agricultural sciences	74	88	96	95	84	96	88
Biological sciences	163	199	236	190	223	313	288
Computer sciences	373	435	411	424	580	654	659
Mathematics and statistics	140	145	154	142	98	113	113
Physical sciences	147	116	144	146	124	151	139
Psychology	802	870	1,059	1,020	1,346	1,598	1,631
Social sciences	1,846	1,893	2,096	2,163	2,379	2,492	2,477
Engineering	665	674	674	714	658	700	738
Non-S&E	18,744	20,168	22,078	23,722	27,813	28,942	30,391
Hispanic							
All fields	13,905	15,394	16,360	17,416	20,803	22,163	23,165
S&E	2,945	3,090	3,220	3,462	3,746	4,077	4,089
Sciences	2,234	2,342	2,455	2,655	2,894	3,239	3,234
Agricultural sciences	96	95	105	116	133	123	175
Biological sciences	167	194	214	192	268	310	267
Computer sciences	210	188	211	219	288	440	333
Mathematics and statistics	72	88	63	85	100	72	82
Physical sciences	129	127	139	149	126	147	171
Psychology	622	667	718	787	837	937	953
Social sciences	938	983	1,005	1,107	1,142	1,210	1,253
Engineering	711	748	765	807	852	838	855
Non-S&E	10,960	12,304	13,140	13,954	17,057	18,086	19,076
American Indian/Alaskan Native							
All fields	1,542	1,693	1,844	1,951	2,099	2,274	2,382
S&E	307	321	370	372	383	472	420
Sciences	264	265	317	318	319	412	363
Agricultural sciences	13	14	18	23	23	18	25
Biological sciences	20	17	25	21	26	29	34
Computer sciences	16	26	25	15	32	68	32
Mathematics and statistics	11	5	14	9	9	9	8
Physical sciences	19	10	16	24	18	20	19
Psychology	81	78	97	108	69	106	96
Social sciences	104	115	122	118	142	162	149
Engineering	43	56	53	54	64	60	57
Non-S&E	1,235	1,372	1,474	1,579	1,716	1,802	1,962
Other or unknown race/ethnicity							
All fields	18,928	19,013	20,060	19,785	25,844	30,623	36,162
S&E	4,031	4,127	3,811	3,685	4,472	5,061	5,757
Sciences	2,922	3,037	2,876	2,819	3,532	4,017	4,549
Agricultural sciences	194	138	138	120	144	165	175
Biological sciences	192	226	226	262	284	298	318
Computer sciences	448	427	442	443	603	840	1,129
Mathematics and statistics	143	171	132	152	142	136	142

TABLE E-3. Master's degrees, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
Physical sciences	218	236	153	172	182	206	217
Psychology	498	611	549	572	871	934	1,041
Social sciences	1,229	1,228	1,236	1,098	1,306	1,438	1,527
Engineering	1,109	1,090	935	866	940	1,044	1,208
Non-S&E	14,897	14,886	16,249	16,100	21,372	25,562	30,405
Temporary resident							
All fields	48,756	48,250	49,477	52,205	55,571	61,190	63,311
S&E	22,217	21,678	21,265	22,623	24,750	27,422	27,550
Sciences	12,518	12,682	12,629	13,462	14,927	16,421	16,747
Agricultural sciences	653	658	658	598	516	471	479
Biological sciences	885	991	923	900	750	873	805
Computer sciences	3,896	3,901	3,973	4,795	6,563	7,745	7,687
Mathematics and statistics	1,116	1,030	993	1,026	1,111	1,230	1,294
Physical sciences	1,752	1,734	1,644	1,497	1,335	1,411	1,387
Psychology	473	424	402	460	467	464	479
Social sciences	3,743	3,944	4,036	4,186	4,185	4,227	4,616
Engineering	9,699	8,996	8,636	9,161	9,823	11,001	10,803
Non-S&E	26,539	26,572	28,212	29,582	30,821	33,768	35,761

S&E = Science and engineering.

NOTES: Physical sciences includes earth, atmospheric, and ocean sciences; physics; astronomy; and chemistry. Temporary resident includes all racial/ethnic groups. Data are not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE E-4. Race/ethnicity distribution of S&E master's degrees awarded to U.S. citizens and permanent residents, by field: 1995–2002
(Percent)

Race/ethnicity and field	1995	1996	1997	1998	2000	2001	2002
White							
All fields	79.1	78.4	77.6	76.9	74.2	72.4	71.1
S&E	75.8	75.2	74.5	73.4	70.3	68.2	67.6
Sciences	76.7	76.1	75.1	74.1	70.6	68.4	67.7
Agricultural sciences	83.8	86.8	85.9	86.6	85.7	84.8	83.4
Biological sciences	79.0	78.0	77.5	77.0	75.0	73.5	73.9
Computer sciences	65.3	64.9	63.0	61.5	55.7	52.8	53.3
Mathematics and statistics	78.9	76.8	76.9	75.8	75.8	73.9	73.6
Physical sciences	79.8	80.7	80.7	80.3	79.8	79.1	78.1
Psychology	81.9	79.8	78.9	77.4	72.8	70.6	68.7
Social sciences	74.7	74.3	72.6	72.1	69.0	66.8	66.3
Engineering	73.1	72.3	72.5	71.2	69.3	67.4	67.3
Non-S&E	80.0	79.2	78.4	77.7	75.0	73.3	71.8
Asian/Pacific Islander							
All fields	4.5	4.8	4.8	5.3	5.3	5.4	5.4
S&E	8.3	8.6	8.6	9.2	9.9	9.8	9.5
Sciences	6.4	6.8	7.0	7.6	8.4	8.3	8.2
Agricultural sciences	3.3	3.3	3.2	2.5	2.8	3.0	3.6
Biological sciences	9.2	10.0	10.1	10.8	10.7	9.6	9.7
Computer sciences	19.0	19.1	20.3	22.7	25.5	23.9	22.5
Mathematics and statistics	8.1	8.1	9.1	8.6	8.2	10.0	10.1
Physical sciences	7.3	7.4	7.8	7.1	7.4	6.7	6.9
Psychology	2.3	2.6	2.8	3.0	3.6	3.6	3.9
Social sciences	4.2	4.7	4.8	5.0	5.1	5.2	5.1
Engineering	13.6	14.0	13.5	14.4	15.0	15.6	14.2
Non-S&E	3.6	3.8	3.9	4.3	4.4	4.5	4.6
Black							
All fields	6.5	6.8	7.3	7.5	8.3	8.6	8.7
S&E	5.8	6.0	6.7	6.9	7.7	8.5	8.6
Sciences	6.7	6.8	7.6	7.7	8.8	9.7	9.6
Agricultural sciences	2.5	2.6	2.9	2.9	2.5	2.9	2.5
Biological sciences	3.5	3.8	4.2	3.5	4.0	5.6	5.2
Computer sciences	5.6	6.5	6.3	6.1	7.3	7.6	7.4
Mathematics and statistics	5.0	5.3	5.9	5.7	4.5	5.5	5.3
Physical sciences	3.7	2.8	3.7	3.7	3.5	4.1	3.8
Psychology	6.3	6.9	8.0	8.0	10.2	11.5	12.0
Social sciences	9.5	9.4	10.6	11.1	12.4	13.2	13.1
Engineering	3.5	3.6	3.9	4.2	4.1	4.5	4.8
Non-S&E	6.7	7.0	7.4	7.7	8.4	8.7	8.8
Hispanic							
All fields	4.0	4.3	4.4	4.6	5.2	5.5	5.5
S&E	4.1	4.2	4.5	4.9	5.3	5.7	5.7
Sciences	4.2	4.3	4.5	4.9	5.3	5.8	5.8
Agricultural sciences	3.3	2.8	3.2	3.6	4.0	3.7	4.9
Biological sciences	3.6	3.7	3.8	3.5	4.8	5.5	4.8
Computer sciences	3.1	2.8	3.2	3.1	3.6	5.1	3.7
Mathematics and statistics	2.6	3.2	2.4	3.4	4.6	3.5	3.9
Physical sciences	3.2	3.1	3.5	3.8	3.6	4.0	4.7
Psychology	4.9	5.3	5.4	6.2	6.3	6.8	7.0

TABLE E-4. Race/ethnicity distribution of S&E master's degrees awarded to U.S. citizens and permanent residents, by field: 1995–2002 (Percent)

Race/ethnicity and field	1995	1996	1997	1998	2000	2001	2002
Social sciences	4.8	4.9	5.1	5.7	6.0	6.4	6.6
Engineering	3.8	4.0	4.4	4.8	5.4	5.4	5.5
Non-S&E	3.9	4.3	4.4	4.5	5.2	5.4	5.5
American Indian/Alaskan Native							
All fields	0.4	0.5	0.5	0.5	0.5	0.6	0.6
S&E	0.4	0.4	0.5	0.5	0.5	0.7	0.6
Sciences	0.5	0.5	0.6	0.6	0.6	0.7	0.6
Agricultural sciences	0.4	0.4	0.6	0.7	0.7	0.5	0.7
Biological sciences	0.4	0.3	0.4	0.4	0.5	0.5	0.6
Computer sciences	0.2	0.4	0.4	0.2	0.4	0.8	0.4
Mathematics and statistics	0.4	0.2	0.5	0.4	0.4	0.4	0.4
Physical sciences	0.5	0.2	0.4	0.6	0.5	0.5	0.5
Psychology	0.6	0.6	0.7	0.9	0.5	0.8	0.7
Social sciences	0.5	0.6	0.6	0.6	0.7	0.9	0.8
Engineering	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Non-S&E	0.4	0.5	0.5	0.5	0.5	0.5	0.6
Other or unknown race/ethnicity							
All fields	5.4	5.3	5.4	5.2	6.4	7.6	8.7
S&E	5.6	5.6	5.3	5.2	6.3	7.1	8.0
Sciences	5.5	5.5	5.2	5.2	6.4	7.2	8.1
Agricultural sciences	6.6	4.1	4.2	3.7	4.3	5.0	4.9
Biological sciences	4.2	4.3	4.0	4.8	5.1	5.3	5.8
Computer sciences	6.7	6.4	6.8	6.4	7.6	9.8	12.7
Mathematics and statistics	5.1	6.3	5.1	6.1	6.5	6.6	6.7
Physical sciences	5.5	5.7	3.9	4.4	5.2	5.6	6.0
Psychology	3.9	4.8	4.1	4.5	6.6	6.7	7.7
Social sciences	6.3	6.1	6.3	5.6	6.8	7.6	8.1
Engineering	5.9	5.8	5.4	5.1	5.9	6.7	7.8
Non-S&E	5.3	5.2	5.4	5.2	6.5	7.7	8.8

S&E = Science and engineering.

NOTES: Physical sciences include earth, atmospheric, and ocean sciences; physics; astronomy; and chemistry. Data are not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE E-5. Master's degrees awarded to women, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002	1995	2002
	Number							Percent	
All fields	220,230	228,572	239,497	246,810	265,026	273,639	283,035	55.1	58.8
S&E	35,791	37,453	38,262	38,583	41,470	43,393	43,472	38.0	43.8
Sciences	31,159	32,701	33,567	33,420	36,130	37,765	37,898	47.4	52.0
Agricultural sciences	1,471	1,707	1,695	1,709	1,819	1,837	1,997	41.2	49.7
Biology sciences	2,858	3,341	3,518	3,354	3,510	3,755	3,669	52.0	57.9
Computer sciences	2,786	2,850	2,979	3,414	4,868	5,508	5,499	26.4	33.2
Mathematics and statistics	1,579	1,506	1,489	1,470	1,498	1,389	1,471	40.2	43.2
Physical sciences	1,734	1,886	1,820	1,934	1,728	1,865	1,898	30.3	37.7
Psychology	9,397	9,373	9,918	9,540	10,293	10,858	10,672	71.6	76.0
Social sciences	11,334	12,038	12,148	11,999	12,414	12,553	12,692	48.7	54.0
Engineering	4,632	4,752	4,695	5,163	5,340	5,628	5,574	16.2	21.2
Non-S&E	184,439	191,119	201,235	208,227	223,556	230,246	239,563	60.4	62.7
U.S. citizen/permanent resident									
All fields	202,633	210,372	220,221	226,085	242,244	248,590	256,938	57.8	61.5
S&E	30,119	31,300	31,983	31,669	33,169	34,334	34,383	41.8	48.0
Sciences	26,822	27,940	28,737	28,229	29,856	30,961	30,941	50.5	55.1
Agricultural sciences	1,239	1,447	1,448	1,466	1,601	1,611	1,751	42.4	49.5
Biological sciences	2,426	2,810	3,010	2,850	3,051	3,248	3,177	52.6	57.5
Computer sciences	1,807	1,853	1,867	2,020	2,546	2,774	2,871	27.1	32.3
Mathematics and statistics	1,205	1,147	1,142	1,100	1,011	888	936	42.8	44.3
Physical sciences	1,202	1,338	1,315	1,415	1,288	1,388	1,410	30.3	38.7
Psychology	9,069	9,070	9,641	9,193	9,947	10,521	10,325	71.6	76.1
Social sciences	9,874	10,275	10,314	10,185	10,412	10,531	10,471	50.6	55.5
Engineering	3,297	3,360	3,246	3,440	3,313	3,373	3,442	17.4	22.3
Non-S&E	172,514	179,072	188,238	194,416	209,075	214,256	222,555	61.9	64.3
White									
All fields	160,782	165,154	170,411	173,498	179,311	179,684	182,078	58.0	61.3
S&E	22,680	23,175	23,213	22,717	22,749	22,792	22,558	41.5	46.6
Sciences	20,440	20,985	21,108	20,496	20,712	20,751	20,462	50.1	53.8
Agricultural sciences	1,017	1,238	1,211	1,251	1,350	1,328	1,453	41.6	49.2
Biological sciences	1,889	2,165	2,275	2,196	2,278	2,381	2,324	51.9	56.9
Computer sciences	1,033	1,015	965	1,027	1,162	1,163	1,255	23.7	26.5
Mathematics and statistics	942	864	860	815	753	652	683	42.4	43.9
Physical sciences	923	1,038	1,001	1,085	1,007	1,067	1,067	29.1	37.5
Psychology	7,405	7,181	7,557	7,049	7,240	7,343	7,019	71.4	75.4
Social sciences	7,231	7,484	7,239	7,073	6,922	6,817	6,661	49.6	53.2
Engineering	2,240	2,190	2,105	2,221	2,037	2,041	2,096	16.2	20.1
Non-S&E	138,102	141,979	147,198	150,781	156,562	156,892	159,520	62.0	64.2
Asian/Pacific Islander									
All fields	7,521	8,404	9,327	10,298	11,307	11,802	12,292	47.3	54.4
S&E	2,115	2,428	2,575	2,678	3,045	3,033	3,001	35.3	44.0
Sciences	1,566	1,807	2,014	2,050	2,385	2,406	2,425	45.8	52.6
Agricultural sciences	53	61	72	40	58	63	84	54.6	66.7
Biological sciences	210	286	324	294	304	305	304	49.3	56.6
Computer sciences	460	473	530	629	860	860	812	36.3	40.5
Mathematics and statistics	104	101	116	105	94	104	99	45.6	46.3
Physical sciences	101	136	140	128	108	106	114	35.1	45.6
Psychology	213	244	279	289	365	372	411	73.7	78.1

TABLE E-5. Master's degrees awarded to women, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002	1995	2002
	Number							Percent	
Social sciences	425	506	553	565	596	596	601	51.6	62.9
Engineering	549	621	561	628	660	627	576	21.3	26.2
Non-S&E	5,406	5,976	6,752	7,620	8,262	8,769	9,291	54.5	58.8
Black									
All fields	15,318	16,590	18,504	19,509	22,996	24,658	26,011	66.7	71.2
S&E	2,319	2,520	2,887	2,828	3,294	3,855	3,855	55.1	62.9
Sciences	2,118	2,310	2,662	2,584	3,087	3,609	3,590	59.7	66.5
Agricultural sciences	39	39	40	59	47	51	49	52.7	55.7
Biological sciences	113	122	167	122	150	221	200	69.3	69.4
Computer sciences	159	201	182	162	255	309	294	42.6	44.6
Mathematics and statistics	82	71	79	77	52	48	64	58.6	56.6
Physical sciences	61	57	70	65	59	69	71	41.5	51.1
Psychology	598	647	814	766	1,035	1,297	1,288	74.6	79.0
Social sciences	1,066	1,173	1,310	1,333	1,489	1,614	1,624	57.7	65.6
Engineering	201	210	225	244	207	246	265	30.2	35.9
Non-S&E	12,999	14,070	15,617	16,681	19,702	20,803	22,156	69.4	72.9
Hispanic									
All fields	8,180	9,322	9,894	10,568	12,799	13,925	14,736	58.8	63.6
S&E	1,333	1,426	1,502	1,667	1,836	2,119	2,116	45.3	51.7
Sciences	1,200	1,258	1,326	1,489	1,635	1,898	1,864	53.7	57.6
Agricultural sciences	40	40	54	58	74	74	85	41.7	48.6
Biological sciences	92	109	104	95	146	168	141	55.1	52.8
Computer sciences	51	51	59	77	89	156	105	24.3	31.5
Mathematics and statistics	22	33	17	39	41	32	30	30.6	36.6
Physical sciences	41	47	53	62	49	57	71	31.8	41.5
Psychology	454	495	518	578	607	701	716	73.0	75.1
Social sciences	500	483	521	580	629	710	716	53.3	57.1
Engineering	133	168	176	178	201	221	252	18.7	29.5
Non-S&E	6,847	7,896	8,392	8,901	10,963	11,806	12,620	62.5	66.2
American Indian/Alaskan Native									
All fields	919	1,028	1,147	1,212	1,321	1,446	1,502	59.6	63.1
S&E	150	154	174	190	190	255	219	48.9	52.1
Sciences	147	149	167	182	174	238	202	55.7	55.6
Agricultural sciences	3	8	8	8	5	7	7	23.1	28.0
Biological sciences	9	8	14	12	12	14	20	45.0	58.8
Computer sciences	5	7	9	3	10	29	13	31.3	40.6
Mathematics and statistics	6	1	6	6	4	3	1	54.5	12.5
Physical sciences	8	4	5	11	5	11	9	42.1	47.4
Psychology	51	56	63	76	54	77	68	63.0	70.8
Social sciences	65	65	62	66	84	97	84	62.5	56.4
Engineering	3	5	7	8	16	17	17	7.0	29.8
Non-S&E	769	874	973	1,022	1,131	1,191	1,283	62.3	65.4
Other or unknown race/ethnicity									
All fields	9,913	9,874	10,938	11,000	14,510	17,075	20,319	52.4	56.2
S&E	1,522	1,597	1,632	1,589	2,055	2,280	2,634	37.8	45.8
Sciences	1,351	1,431	1,460	1,428	1,863	2,059	2,398	46.2	52.7

TABLE E-5. Master's degrees awarded to women, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002	1995	2002
	Number							Percent	
Agricultural sciences	87	61	63	50	67	88	73	44.8	41.7
Biological sciences	113	120	126	131	161	159	188	58.9	59.1
Computer sciences	99	106	122	122	170	257	392	22.1	34.7
Mathematics and statistics	49	77	64	58	67	49	59	34.3	41.5
Physical sciences	68	56	46	64	60	78	78	31.2	35.9
Psychology	348	447	410	435	646	731	823	69.9	79.1
Social sciences	587	564	629	568	692	697	785	47.8	51.4
Engineering	171	166	172	161	192	221	236	15.4	19.5
Non-S&E	8,391	8,277	9,306	9,411	12,455	14,795	17,685	56.3	58.2
Temporary resident									
All fields	17,597	18,200	19,276	20,725	22,782	25,049	26,097	36.1	41.2
S&E	5,672	6,153	6,279	6,914	8,301	9,059	9,089	25.5	33.0
Sciences	4,337	4,761	4,830	5,191	6,274	6,804	6,957	34.6	41.5
Agricultural sciences	232	260	247	243	218	226	246	35.5	51.4
Biological sciences	432	531	508	504	459	507	492	48.8	61.1
Computer sciences	979	997	1,112	1,394	2,322	2,734	2,628	25.1	34.2
Mathematics and statistics	374	359	347	370	487	501	535	33.5	41.3
Physical sciences	532	548	505	519	440	477	488	30.4	35.2
Psychology	328	303	277	347	346	337	347	69.3	72.4
Social sciences	1,460	1,763	1,834	1,814	2,002	2,022	2,221	39.0	48.1
Engineering	1,335	1,392	1,449	1,723	2,027	2,255	2,132	13.8	19.7
Non-S&E	11,925	12,047	12,997	13,811	14,481	15,990	17,008	44.9	47.6

S&E = Science and engineering.

NOTES: Physical sciences include earth, atmospheric, and ocean sciences; physics; astronomy; and chemistry. Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary resident includes all racial/ethnic groups. Data are not available for 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE E-6. Master's degrees awarded to men, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
All fields	179,198	180,360	181,457	185,061	191,234	193,006	198,097
S&E	58,518	57,860	55,223	55,335	54,213	55,593	55,701
Sciences	34,520	34,851	34,044	34,360	33,817	34,698	35,009
Agricultural sciences	2,103	2,314	2,232	2,153	2,039	1,915	2,022
Biology sciences	2,637	2,945	3,076	3,014	2,815	2,732	2,665
Computer sciences	7,777	7,763	7,510	8,338	9,661	10,833	11,083
Mathematics and statistics	2,353	2,236	2,110	2,055	1,797	1,891	1,937
Physical sciences	3,990	3,965	3,756	3,461	3,129	3,235	3,132
Psychology	3,735	3,670	3,715	3,606	3,415	3,477	3,369
Social sciences	11,925	11,958	11,645	11,733	10,961	10,615	10,801
Engineering	23,998	23,009	21,179	20,975	20,396	20,895	20,692
Non-S&E	120,680	122,500	126,234	129,726	137,021	137,413	142,396
U.S. citizen/permanent resident							
All fields	148,039	150,310	151,256	153,581	158,445	156,865	160,883
S&E	41,973	42,335	40,237	39,626	37,764	37,230	37,240
Sciences	26,339	26,930	26,245	26,089	25,164	25,081	25,219
Agricultural sciences	1,682	1,916	1,821	1,798	1,741	1,670	1,789
Biological sciences	2,184	2,485	2,661	2,618	2,524	2,366	2,352
Computer sciences	4,860	4,859	4,649	4,937	5,420	5,822	6,024
Mathematics and statistics	1,611	1,565	1,464	1,399	1,173	1,162	1,178
Physical sciences	2,770	2,779	2,617	2,483	2,234	2,301	2,233
Psychology	3,590	3,549	3,590	3,493	3,294	3,350	3,237
Social sciences	9,642	9,777	9,443	9,361	8,778	8,410	8,406
Engineering	15,634	15,405	13,992	13,537	12,600	12,149	12,021
Non-S&E	106,066	107,975	111,019	113,955	120,681	119,635	123,643
White							
All fields	116,655	117,559	117,942	118,464	117,915	113,706	114,900
S&E	31,930	32,174	30,556	29,611	27,101	26,000	25,852
Sciences	20,339	20,788	20,169	19,747	18,118	17,575	17,544
Agricultural sciences	1,430	1,680	1,598	1,576	1,514	1,454	1,498
Biological sciences	1,753	1,966	2,120	2,016	1,901	1,743	1,761
Computer sciences	3,321	3,338	3,140	3,250	3,273	3,378	3,483
Mathematics and statistics	1,280	1,219	1,145	1,080	902	863	872
Physical sciences	2,248	2,286	2,171	2,044	1,803	1,850	1,780
Psychology	2,962	2,890	2,887	2,771	2,406	2,455	2,296
Social sciences	7,345	7,409	7,108	7,010	6,319	5,832	5,854
Engineering	11,591	11,386	10,387	9,864	8,983	8,425	8,308
Non-S&E	84,725	85,385	87,386	88,853	90,814	87,706	89,048
Asian/Pacific Islander							
All fields	8,385	8,877	8,585	9,638	10,105	10,144	10,318
S&E	3,874	3,900	3,605	3,876	3,945	4,012	3,813
Sciences	1,851	1,900	1,847	2,053	2,226	2,225	2,188
Agricultural sciences	44	49	31	43	36	34	42
Biological sciences	216	242	251	297	291	235	233
Computer sciences	806	810	792	950	1,168	1,193	1,192
Mathematics and statistics	124	119	122	111	86	101	115
Physical sciences	187	168	168	150	154	142	136
Psychology	76	78	85	90	107	126	115
Social sciences	398	434	398	412	384	394	355

TABLE E-6. Master's degrees awarded to men, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
Engineering	2,023	2,000	1,758	1,823	1,719	1,787	1,625
Non-S&E	4,511	4,977	4,980	5,762	6,160	6,132	6,505
Black							
All fields	7,636	7,998	8,444	9,107	10,309	10,401	10,513
S&E	1,891	1,900	1,983	2,066	2,198	2,262	2,278
Sciences	1,427	1,436	1,534	1,596	1,747	1,808	1,805
Agricultural sciences	35	49	56	36	37	45	39
Biological sciences	50	77	69	68	73	92	88
Computer sciences	214	234	229	262	325	345	365
Mathematics and statistics	58	74	75	65	46	65	49
Physical sciences	86	59	74	81	65	82	68
Psychology	204	223	245	254	311	301	343
Social sciences	780	720	786	830	890	878	853
Engineering	464	464	449	470	451	454	473
Non-S&E	5,745	6,098	6,461	7,041	8,111	8,139	8,235
Hispanic							
All fields	5,725	6,072	6,466	6,848	8,004	8,238	8,429
S&E	1,612	1,664	1,718	1,795	1,910	1,958	1,973
Sciences	1,034	1,084	1,129	1,166	1,259	1,341	1,370
Agricultural sciences	56	55	51	58	59	49	90
Biological sciences	75	85	110	97	122	142	126
Computer sciences	159	137	152	142	199	284	228
Mathematics and statistics	50	55	46	46	59	40	52
Physical sciences	88	80	86	87	77	90	100
Psychology	168	172	200	209	230	236	237
Social sciences	438	500	484	527	513	500	537
Engineering	578	580	589	629	651	617	603
Non-S&E	4,113	4,408	4,748	5,053	6,094	6,280	6,456
American Indian/Alaskan Native							
All fields	623	665	697	739	778	828	880
S&E	157	167	196	182	193	217	201
Sciences	117	116	150	136	145	174	161
Agricultural sciences	10	6	10	15	18	11	18
Biological sciences	11	9	11	9	14	15	14
Computer sciences	11	19	16	12	22	39	19
Mathematics and statistics	5	4	8	3	5	6	7
Physical sciences	11	6	11	13	13	9	10
Psychology	30	22	34	32	15	29	28
Social sciences	39	50	60	52	58	65	65
Engineering	40	51	46	46	48	43	40
Non-S&E	466	498	501	557	585	611	679
Other or unknown race/ethnicity							
All fields	9,015	9,139	9,122	8,785	11,334	13,548	15,843
S&E	2,509	2,530	2,179	2,096	2,417	2,781	3,123
Sciences	1,571	1,606	1,416	1,391	1,669	1,958	2,151
Agricultural sciences	107	77	75	70	77	77	102
Biological sciences	79	106	100	131	123	139	130
Computer sciences	349	321	320	321	433	583	737
Mathematics and statistics	94	94	68	94	75	87	83

TABLE E-6. Master's degrees awarded to men, by field, citizenship, and race/ethnicity: 1995–2002

Field, citizenship, and race/ethnicity	1995	1996	1997	1998	2000	2001	2002
Physical sciences	150	180	107	108	122	128	139
Psychology	150	164	139	137	225	203	218
Social sciences	642	664	607	530	614	741	742
Engineering	938	924	763	705	748	823	972
Non-S&E	6,506	6,609	6,943	6,689	8,917	10,767	12,720
Temporary resident							
All fields	31,159	30,050	30,201	31,480	32,789	36,141	37,214
S&E	16,545	15,525	14,986	15,709	16,449	18,363	18,461
Sciences	8,181	7,921	7,799	8,271	8,653	9,617	9,790
Agricultural sciences	421	398	411	355	298	245	233
Biological sciences	453	460	415	396	291	366	313
Computer sciences	2,917	2,904	2,861	3,401	4,241	5,011	5,059
Mathematics and statistics	742	671	646	656	624	729	759
Physical sciences	1,220	1,186	1,139	978	895	934	899
Psychology	145	121	125	113	121	127	132
Social sciences	2,283	2,181	2,202	2,372	2,183	2,205	2,395
Engineering	8,364	7,604	7,187	7,438	7,796	8,746	8,671
Non-S&E	14,614	14,525	15,215	15,771	16,340	17,778	18,753

S&E = Science and engineering.

NOTES: Physical sciences include earth, atmospheric, and ocean sciences; physics; astronomy; and chemistry. Race/ethnicity breakouts are for U.S. citizens and permanent residents only. Temporary resident includes all racial/ethnic groups. Data are not available for 1999.

SOURCE: NSF, Division of Science Resources Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 1995–2002.

TABLE F-1. S&E doctoral degrees awarded, by field: 1996–2003

Field	1996	1997	1998	1999	2000	2001	2002	2003
All S&E	27,240	27,232	27,278	25,932	25,966	25,540	24,571	25,258
Science	20,931	21,117	21,354	20,602	20,645	20,038	19,500	19,993
Agricultural sciences	1,035	982	1,037	966	943	853	893	922
Biological sciences	5,723	5,789	5,845	5,582	5,854	5,690	5,687	5,694
Computer sciences	920	909	927	855	859	826	807	866
Earth, atmospheric, and ocean sciences	794	878	814	805	758	749	785	783
Atmospheric	125	149	125	124	143	116	117	139
Earth	452	489	504	452	386	393	428	373
Ocean	134	144	112	130	134	121	128	133
Other	83	96	73	99	95	119	112	138
Mathematics and statistics	1,122	1,123	1,177	1,083	1,050	1,007	918	994
Physical sciences	3,839	3,769	3,824	3,579	3,407	3,393	3,209	3,320
Astronomy	192	198	206	159	185	186	144	167
Chemistry	2,149	2,148	2,216	2,132	1,989	1,980	1,923	2,037
Physics	1,485	1,401	1,378	1,271	1,204	1,197	1,124	1,080
Other	13	22	24	17	29	30	18	36
Psychology	3,495	3,557	3,675	3,668	3,618	3,442	3,198	3,275
Social sciences	4,003	4,110	4,055	4,064	4,156	4,078	4,003	4,139
Anthropology	418	469	459	489	482	450	521	505
Area and ethnic studies	143	94	114	109	127	146	122	106
Economics	1,177	1,163	1,156	1,075	1,086	1,081	1,023	1,051
History of science	37	35	44	50	42	40	46	46
Linguistics	230	244	220	251	230	230	195	224
Political science and public administration	928	975	959	1016	987	984	938	1,026
Sociology	528	601	579	572	637	577	565	612
Other	542	529	524	502	565	570	593	569
Engineering	6,309	6,115	5,924	5,330	5,321	5,502	5,071	5,265
Aerospace	287	273	241	206	214	203	208	199
Chemical	798	767	776	674	725	728	705	643
Civil	698	655	650	584	556	594	625	672
Electrical	1,741	1,720	1,596	1,478	1,544	1,576	1,392	1,463
Industrial	259	246	229	211	176	205	230	211
Materials	574	582	565	469	451	497	396	473
Mechanical	1,052	1,022	1,022	855	864	953	827	814
Other	900	850	845	853	791	746	688	790

NOTE: Totals include those with unknown gender and will not equal the sum of female and male in tables F-2 and F-3.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-2. S&E doctoral degrees awarded to women, by field: 1996–2003

Field	1996	1997	1998	1999	2000	2001	2002	2003	1996	2003
	Number								Percent	
All S&E	8,649	8,934	9,348	9,081	9,393	9,328	9,158	9,472	31.8	37.5
Science	7,872	8,184	8,574	8,293	8,556	8,400	8,270	8,576	37.6	42.9
Agricultural sciences	281	260	298	280	274	290	278	313	27.1	33.9
Biological sciences	2,415	2,495	2,536	2,394	2,622	2,549	2,544	2,598	42.2	45.6
Computer sciences	139	150	159	156	141	155	166	175	15.1	20.2
Earth, atmospheric, and ocean sciences	172	209	219	210	230	236	242	259	21.7	33.1
Atmospheric	22	25	30	22	33	28	31	39	17.6	28.1
Earth	88	119	127	112	108	115	121	104	19.5	27.9
Ocean	39	38	32	45	46	46	50	59	29.1	44.4
Other	23	27	30	31	43	47	40	57	27.7	41.3
Mathematics and statistics	231	263	297	277	259	276	265	263	20.6	26.5
Physical sciences	842	852	926	831	835	838	861	892	21.9	26.9
Astronomy	41	37	45	33	40	41	28	41	21.4	24.6
Chemistry	605	613	695	632	624	628	647	647	28.2	31.8
Physics	193	193	177	160	163	160	177	193	13.0	17.9
Other	3	9	9	6	8	9	9	11	23.1	30.6
Psychology	2,330	2,363	2,455	2,449	2,411	2,306	2,133	2,229	66.7	68.1
Social sciences	1,462	1,592	1,684	1,696	1,784	1,750	1,781	1,847	36.5	44.6
Anthropology	225	261	262	275	276	263	304	308	53.8	61.0
Area and ethnic studies	76	52	63	59	67	97	70	73	53.1	68.9
Economics	263	266	312	291	293	306	281	302	22.3	28.7
History of science	10	13	20	18	17	8	11	23	27.0	50.0
Linguistics	113	135	123	148	135	136	114	132	49.1	58.9
Political science and public administration	305	298	364	356	365	330	394	397	32.9	38.7
Sociology	276	334	317	342	376	337	345	361	52.3	59.0
Other	194	233	223	207	255	273	262	251	35.8	44.1
Engineering	777	750	774	788	837	928	888	896	12.3	17.0
Aerospace	24	16	15	17	21	28	24	27	8.4	13.6
Chemical	143	122	140	123	151	180	176	154	17.9	24.0
Civil	79	80	100	89	88	111	120	125	11.3	18.6
Electrical	169	150	156	155	195	203	163	179	9.7	12.2
Industrial	51	40	40	42	35	44	67	53	19.7	25.1
Materials	84	106	84	88	83	105	80	101	14.6	21.4
Mechanical	78	88	93	96	96	91	96	84	7.4	10.3
Other	149	148	146	178	168	166	162	173	16.6	21.9

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-3. S&E doctoral degrees awarded to men, by field: 1996–2003

Field	1996	1997	1998	1999	2000	2001	2002	2003
All S&E	18,453	18,083	17,810	16,735	16,521	16,172	15,372	15,716
Science	12,965	12,767	12,699	12,231	12,062	11,607	11,202	11,370
Agricultural sciences	754	715	738	682	669	557	613	606
Biological sciences	3,286	3,262	3,294	3,171	3,226	3,133	3,142	3,083
Computer sciences	775	743	765	692	716	669	638	690
Earth, atmospheric, and ocean sciences	614	663	592	591	523	512	541	523
Atmospheric	100	124	93	101	108	87	86	100
Earth	361	366	376	338	277	278	307	269
Ocean	94	105	80	85	88	75	78	74
Other	59	68	43	67	50	72	70	80
Mathematics and statistics	881	851	872	803	790	731	650	729
Physical sciences	2,970	2,893	2,879	2,733	2,567	2,551	2,346	2,418
Astronomy	151	161	161	126	145	145	116	126
Chemistry	1,526	1,523	1,509	1,493	1,361	1,349	1,275	1,385
Physics	1,283	1,196	1,195	1,103	1,040	1,036	946	882
Other	10	13	14	11	21	21	9	25
Psychology	1,162	1,162	1,206	1,209	1,204	1,132	1,061	1,042
Social sciences	2,523	2,478	2,353	2,350	2,367	2,322	2,211	2,279
Anthropology	193	203	194	214	206	187	217	197
Area and ethnic studies	67	42	51	48	60	49	52	33
Economics	905	876	840	781	791	773	736	744
History of science	27	21	24	32	25	32	35	23
Linguistics	116	107	96	99	95	94	80	91
Political science and public administration	620	674	594	655	620	650	541	625
Sociology	247	265	260	228	260	240	220	251
Other	348	290	294	293	310	297	330	315
Engineering	5,488	5,316	5,111	4,504	4,459	4,565	4,170	4,346
Aerospace	262	254	225	188	191	174	184	172
Chemical	653	641	630	550	571	546	527	488
Civil	616	571	544	495	466	482	504	544
Electrical	1,556	1,560	1,429	1,310	1,339	1,372	1,223	1,276
Industrial	208	205	188	169	140	160	162	156
Materials	483	470	477	376	367	392	315	372
Mechanical	963	928	922	751	767	860	729	726
Other	747	687	696	665	618	579	526	612

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-4. Top 50 baccalaureate institutions of S&E doctorate recipients, by sex: 1999–2003

Academic institution	Doctorates	Academic institution	Doctorates
Female, all institutions	46,432	Male, all institutions	80,516
Foreign	10,155	Foreign	28,001
Unknown	4,113	Unknown	7,695
Top 50 U.S.	11,522	Top 50 U.S.	18,039
University of California-Berkeley	552	University of California-Berkeley	957
Cornell University all campuses	462	Cornell University all campuses	719
University of Michigan at Ann Arbor	450	University of Illinois at Urbana-Champaign	671
University of California-Los Angeles	379	Massachusetts Institute of Technology	650
University of Wisconsin-Madison	324	Pennsylvania State University main campus	591
Harvard University	321	Harvard University	558
University of Illinois at Urbana-Champaign	317	University of Michigan at Ann Arbor	558
University of California-San Diego	311	Brigham Young University main campus	524
University of Texas at Austin	305	University of Wisconsin-Madison	510
University of California-Davis	302	University of Texas at Austin	501
Stanford University	297	University of California-Los Angeles	462
Massachusetts Institute of Technology	286	University of California-Davis	437
Pennsylvania State University main campus	269	Texas A&M University main campus	427
University of Pennsylvania	264	Purdue University main campus	411
Michigan State University	233	Virginia Polytechnic Institute and State University	401
University of Maryland at College Park	231	University of California-San Diego	397
Texas A&M University main campus	230	Stanford University	382
University of Florida	226	University of Florida	370
University of Virginia main campus	225	University of Minnesota-Twin Cities	352
Yale University	225	Princeton University	347
Brown University	223	University of Virginia main campus	339
Rutgers the State University of New Jersey New Brunswick	216	Rutgers the State University of New Jersey New Brunswick	332
University of North Carolina at Chapel Hill	213	University of Colorado at Boulder	316
University of Colorado at Boulder	208	Michigan State University	315
University of Washington-Seattle	205	University of Maryland at College Park	313
Wellesley College	205	Yale University	312
Duke University	204	University of Washington-Seattle	310
University of California-Irvine	203	Ohio State University main campus	302
Princeton University	198	University of Pennsylvania	279
University of Minnesota-Twin Cities	191	Duke University	276
University of California-Santa Cruz	189	North Carolina State University at Raleigh	273
University of Arizona	188	California Institute of Technology	272
Ohio State University main campus	181	Georgia Institute of Technology main campus	268
Purdue University main campus	181	Brown University	260
University of California-Santa Barbara	175	Rensselaer Polytechnic Institute	258
Virginia Polytechnic Institute and State University	174	University of California-Santa Cruz	258
Smith College	172	University of Chicago	252
Northwestern University	169	University of Arizona	245
University of Massachusetts at Amherst	168	Carnegie Mellon University	240
Indiana University at Bloomington	167	Iowa State University	238
Boston University	163	Johns Hopkins University	228
College of William and Mary	159	Northwestern University	225
University of Puerto Rico Rio Piedras Campus	159	University of California-Santa Barbara	222
University of Chicago	155	University of California-Irvine	219
Bryn Mawr College	145	SUNY at Buffalo	218
SUNY at Binghamton	145	University of North Carolina at Chapel Hill	216
Washington University	144	Rice University	214
Dartmouth College	141	University of Notre Dame	207
Oberlin College	136	University of Rochester	206
Tufts University	136	Columbia University in the City of New York	201
Other U.S.	20,642	Other U.S.	26,781

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-5. Field distribution of doctorate recipients, by race/ethnicity and citizenship: 2003

Race/ethnicity and citizenship	All fields	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmo-	Mathe-	Physical sciences	Psych-ology	Social sciences	Engi-neering	Non-S&E
							spheric, and ocean sciences	matics and statistics					
All doctorate recipients	40,710	25,258	19,993	922	5,694	866	783	994	3,320	3,275	4,139	5,265	15,452
U.S. citizen	26,413	14,571	12,673	443	3,782	384	474	470	1,815	2,776	2,529	1,898	11,842
Permanent resident	1,631	1,098	833	34	265	56	38	46	151	70	173	265	533
Temporary resident	10,585	8,388	5,479	392	1,401	379	228	440	1,224	197	1,218	2,909	2,197
Unknown citizenship	2,081	1,201	1,008	53	246	47	43	38	130	232	219	193	880
White	24,405	14,281	12,136	499	3,367	424	504	585	1,948	2,381	2,428	2,145	10,124
U.S. citizen	20,818	11,575	10,122	388	2,970	291	415	379	1,495	2,215	1,969	1,453	9,243
Permanent resident	668	414	311	8	83	13	14	28	57	39	69	103	254
Temporary resident	2,814	2,221	1,645	103	309	119	71	176	390	94	383	576	593
Unknown citizenship	105	71	58	0	5	1	4	2	6	33	7	13	34
Asian ^a	8,251	6,569	4,184	198	1,442	296	139	263	909	197	740	2,385	1,682
U.S. citizen	1,350	987	783	6	373	43	09	38	108	103	103	204	363
Permanent resident	668	518	383	15	151	36	16	13	73	15	64	135	150
Temporary resident	6,209	5,047	3,004	177	915	217	114	211	723	77	570	2,043	1,162
Unknown citizenship	24	17	14	0	3	0	0	1	5	2	3	3	7
Black	2,097	835	733	43	133	20	20	22	78	176	241	102	1,262
U.S. citizen	1,708	612	543	12	100	17	15	14	50	162	173	69	1,096
Permanent resident	88	49	43	4	8	0	2	2	7	6	14	6	39
Temporary resident	266	163	138	27	23	3	3	6	20	3	53	25	103
Unknown citizenship	35	11	9	0	2	0	0	0	1	5	1	2	24
Hispanic	2,206	1,336	1,087	98	286	28	44	48	117	180	286	249	870
U.S. citizen	1,270	654	564	16	157	8	13	14	61	161	134	90	616
Permanent resident	149	84	71	6	18	2	5	2	11	8	19	13	65
Temporary resident	780	594	449	76	111	18	26	32	45	9	132	145	186
Unknown citizenship	7	4	3	0	0	0	0	0	0	2	1	1	3
American Indian/Alaska Native	141	75	64	4	11	2	2	2	3	22	18	11	66
U.S. citizen	133	71	61	4	11	2	2	2	2	22	16	10	62
Permanent resident	3	1	0	0	0	0	0	0	0	0	0	1	2
Temporary resident	5	3	3	0	0	0	0	0	1	0	2	0	2
Unknown citizenship	0	0	0	0	0	0	0	0	0	0	0	0	0
Other/unknown race/ethnicity ^b	3,610	2,162	1,789	80	455	96	74	74	265	319	426	373	1,448
U.S. citizen	1,134	672	600	17	171	23	20	23	99	113	134	72	462
Permanent resident	55	32	25	1	5	5	1	1	3	2	7	7	23
Temporary resident	511	360	240	9	43	22	14	15	45	14	78	120	151
Unknown citizenship	1,910	1,098	924	53	236	46	39	35	118	190	207	174	812

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-5. Field distribution of doctorate recipients, by race/ethnicity and citizenship: 2003

Race/ethnicity and citizenship	All fields	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Non-S&E
All doctorate recipients	100.0	62.0	49.1	2.3	14.0	2.1	1.9	2.4	8.2	8.0	10.2	12.9	38.0
U.S. citizen	100.0	55.2	48.0	1.7	14.3	1.5	1.8	1.8	6.9	10.5	9.6	7.2	44.8
Permanent resident	100.0	67.3	51.1	2.1	16.2	3.4	2.3	2.8	9.3	4.3	10.6	16.2	32.7
Temporary resident	100.0	79.2	51.8	3.7	13.2	3.6	2.2	4.2	11.6	1.9	11.5	27.5	20.8
Unknown citizenship	100.0	57.7	48.4	2.5	11.8	2.3	2.1	1.8	6.2	11.1	10.5	9.3	42.3
White	100.0	58.5	49.7	2.0	13.8	1.7	2.1	2.4	8.0	9.8	9.9	8.8	41.5
U.S. citizen	100.0	55.6	48.6	1.9	14.3	1.4	2.0	1.8	7.2	10.6	9.5	7.0	44.4
Permanent resident	100.0	62.0	46.6	1.2	12.4	1.9	2.1	4.2	8.5	5.8	10.3	15.4	38.0
Temporary resident	100.0	78.9	58.5	3.7	11.0	4.2	2.5	6.3	13.9	3.3	13.6	20.5	21.1
Unknown citizenship	100.0	67.6	55.2	0.0	4.8	1.0	3.8	1.9	5.7	31.4	6.7	12.4	32.4
Asian ^a	100.0	79.6	50.7	2.4	17.5	3.6	1.7	3.2	11.0	2.4	9.0	28.9	20.4
U.S. citizen	100.0	73.1	58.0	0.4	27.6	3.2	0.7	2.8	8.0	7.6	7.6	15.1	26.9
Permanent resident	100.0	77.5	57.3	2.2	22.6	5.4	2.4	1.9	10.9	2.2	9.6	20.2	22.5
Temporary resident	100.0	81.3	48.4	2.9	14.7	3.5	1.8	3.4	11.6	1.2	9.2	32.9	18.7
Unknown citizenship	100.0	70.8	58.3	0.0	12.5	0.0	0.0	4.2	20.8	8.3	12.5	12.5	29.2
Black	100.0	39.8	35.0	2.1	6.3	1.0	1.0	1.0	3.7	8.4	11.5	4.9	60.2
U.S. citizen	100.0	35.8	31.8	0.7	5.9	1.0	0.9	0.8	2.9	9.5	10.1	4.0	64.2
Permanent resident	100.0	55.7	48.9	4.5	9.1	0.0	2.3	2.3	8.0	6.8	15.9	6.8	44.3
Temporary resident	100.0	61.3	51.9	10.2	8.6	1.1	1.1	2.3	7.5	1.1	19.9	9.4	38.7
Unknown citizenship	100.0	31.4	25.7	0.0	5.7	0.0	0.0	0.0	2.9	14.3	2.9	5.7	68.6
Hispanic	100.0	60.6	49.3	4.4	13.0	1.3	2.0	2.2	5.3	8.2	13.0	11.3	39.4
U.S. citizen	100.0	51.5	44.4	1.3	12.4	0.6	1.0	1.1	4.8	12.7	10.6	7.1	48.5
Permanent resident	100.0	56.4	47.7	4.0	12.1	1.3	3.4	1.3	7.4	5.4	12.8	8.7	43.6
Temporary resident	100.0	76.2	57.6	9.7	14.2	2.3	3.3	4.1	5.8	1.2	16.9	18.6	23.8
Unknown citizenship	100.0	57.1	42.9	0.0	0.0	0.0	0.0	0.0	0.0	28.6	14.3	14.3	42.9
American Indian/Alaska Native	100.0	53.2	45.4	2.8	7.8	1.4	1.4	1.4	2.1	15.6	12.8	7.8	46.8
U.S. citizen	100.0	53.4	45.9	3.0	8.3	1.5	1.5	1.5	1.5	16.5	12.0	7.5	46.6
Permanent resident	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7
Temporary resident	100.0	60.0	60.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	40.0	0.0	40.0
Unknown citizenship	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-5. Field distribution of doctorate recipients, by race/ethnicity and citizenship: 2003

Race/ethnicity and citizenship	All fields	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering	Non-S&E
Other/unknown race/ethnicity ^b	100.0	59.9	49.6	2.2	12.6	2.7	2.0	2.0	7.3	8.8	11.8	10.3	40.1
U.S. citizen	100.0	59.3	52.9	1.5	15.1	2.0	1.8	2.0	8.7	10.0	11.8	6.3	40.7
Permanent resident	100.0	58.2	45.5	1.8	9.1	9.1	1.8	1.8	5.5	3.6	12.7	12.7	41.8
Temporary resident	100.0	70.5	47.0	1.8	8.4	4.3	2.7	2.9	8.8	2.7	15.3	23.5	29.5
Unknown citizenship	100.0	57.5	48.4	2.8	12.4	2.4	2.0	1.8	6.2	9.9	10.8	9.1	42.5

^a Excludes Native Hawaiians/other Pacific Islanders per revised Office of Management and Budget guidelines.

^b This category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 2003.

TABLE F-6. S&E doctorates awarded to U.S. citizens and permanent residents, by field and race/ethnicity: 1996–2003

Field and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
All S&E fields	18,647	18,393	18,256	17,565	17,114	16,338	15,508	15,669
White	13,996	13,828	14,003	13,718	13,443	12,754	11,909	11,989
Asian ^a	3,079	2,529	2,135	1,932	1,706	1,616	1,616	1,505
Black	572	615	644	714	710	703	685	661
Hispanic	626	658	754	722	729	673	724	738
American Indian/Alaska Native	95	79	96	114	88	74	70	72
Other/unknown race/ethnicity ^b	279	684	624	365	438	518	504	704
Science	15,258	15,061	15,212	14,677	14,543	13,899	13,345	13,506
White	11,733	11,540	11,833	11,609	11,554	11,007	10,433	10,433
Asian ^a	2,183	1,822	1,581	1,420	1,267	1,195	1,208	1,166
Black	498	517	563	616	629	611	600	586
Hispanic	527	562	644	639	647	583	627	635
American Indian/Alaska Native	81	62	83	102	80	67	63	61
Other/unknown race/ethnicity ^b	236	558	508	291	366	436	414	625
Agricultural sciences	575	550	543	494	502	431	421	477
White	442	411	417	398	414	371	357	396
Asian ^a	80	63	47	46	30	16	23	21
Black	24	24	19	24	18	13	12	16
Hispanic	13	26	35	15	26	20	18	22
American Indian/Alaska Native	6	5	9	1	4	0	2	4
Other/unknown race/ethnicity ^b	10	21	16	10	10	11	9	18
Biological sciences	4,364	4,256	4,308	4,124	4,268	4,243	4,111	4,047
White	3,170	3,158	3,246	3,128	3,308	3,255	3,117	3,053
Asian ^a	885	721	657	608	539	546	561	524
Black	98	112	111	116	118	139	124	108
Hispanic	131	146	168	175	173	165	182	175
American Indian/Alaska Native	20	7	12	20	17	15	12	11
Other/unknown race/ethnicity ^b	60	112	114	77	113	123	115	176
Computer sciences	514	520	561	492	457	423	419	440
White	356	361	412	356	336	322	290	304
Asian ^a	111	107	90	87	76	61	86	79
Black	12	4	14	18	18	15	17	17
Hispanic	16	16	15	14	14	8	14	10
American Indian/Alaska Native	4	1	4	1	1	1	2	2
Other/unknown race/ethnicity ^b	15	31	26	16	12	16	10	28
Earth, atmospheric, and ocean sciences	558	607	562	526	510	467	494	512
White	449	488	464	434	431	396	424	429
Asian ^a	77	70	51	39	28	34	30	25
Black	4	8	8	14	7	6	6	17
Hispanic	19	16	16	21	18	15	17	18
American Indian/Alaska Native	2	2	3	6	5	0	0	2
Other/unknown race/ethnicity ^b	7	23	20	12	21	16	17	21
Atmospheric	83	102	85	77	86	61	68	78
White	61	80	69	63	73	51	59	65
Asian ^a	19	18	9	9	6	5	5	7
Black	0	0	2	2	1	0	1	3
Hispanic	1	1	1	3	2	1	2	0
American Indian/Alaska Native	1	0	0	0	0	0	0	0
Other/unknown race/ethnicity ^b	1	3	4	0	4	4	1	3
Earth	330	349	348	295	270	259	266	256
White	274	286	291	242	234	223	234	222
Asian ^a	37	34	29	20	13	18	11	10
Black	2	5	3	6	1	2	3	4
Hispanic	12	10	9	11	8	7	6	4
American Indian/Alaska Native	0	0	3	6	4	0	0	1
Other/unknown race/ethnicity ^b	5	14	13	10	10	9	12	15

TABLE F-6. S&E doctorates awarded to U.S. citizens and permanent residents, by field and race/ethnicity: 1996–2003

Field and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Ocean	92	87	81	87	97	75	90	95
White	71	68	67	71	86	64	72	74
Asian ^a	14	8	6	6	3	4	8	4
Black	0	1	0	3	1	3	1	4
Hispanic	6	4	6	6	5	1	6	11
American Indian/Alaska Native	0	2	0	0	0	0	0	1
Other/unknown race/ethnicity ^b	1	4	2	1	2	3	3	1
Other	53	69	48	67	57	72	70	83
White	43	54	37	58	38	58	59	68
Asian ^a	7	10	7	4	6	7	6	4
Black	2	2	3	3	4	1	1	6
Hispanic	0	1	0	1	3	6	3	3
American Indian/Alaska Native	1	0	0	0	1	0	0	0
Other/unknown race/ethnicity ^b	0	2	1	1	5	0	1	2
Mathematics and statistics	648	629	669	605	574	524	442	516
White	478	479	526	506	464	428	369	407
Asian ^a	140	97	71	56	70	48	28	51
Black	8	7	16	12	14	19	14	16
Hispanic	11	20	27	15	15	15	12	16
American Indian/Alaska Native	1	1	3	1	2	2	3	2
Other/unknown race/ethnicity ^b	10	25	26	15	9	12	16	24
Physical sciences	2,571	2,497	2,455	2,277	2,092	2,045	1,939	1,966
White	1,886	1,884	1,916	1,840	1,691	1,649	1,547	1,552
Asian ^a	501	400	331	252	203	197	194	181
Black	59	51	56	66	62	55	67	57
Hispanic	67	69	54	63	78	65	64	72
American Indian/Alaska Native	6	10	9	9	9	12	7	2
Other/unknown race/ethnicity ^b	52	83	89	47	49	67	60	102
Astronomy	149	158	147	117	139	123	109	130
White	131	132	120	109	115	103	87	104
Asian ^a	12	8	13	3	13	6	13	8
Black	0	2	1	2	1	1	1	1
Hispanic	2	3	2	1	3	7	4	3
American Indian/Alaska Native	0	1	1	1	1	1	0	0
Other/unknown race/ethnicity ^b	4	12	10	1	6	5	4	14
Chemistry	1,463	1,439	1,467	1,406	1,241	1,230	1,229	1,262
White	1,062	1,078	1,129	1,090	988	974	987	1,001
Asian ^a	295	234	206	183	121	123	122	110
Black	45	35	45	56	44	42	44	42
Hispanic	36	44	34	46	51	43	38	45
American Indian/Alaska Native	4	6	7	5	7	11	5	2
Other/unknown race/ethnicity ^b	21	42	46	26	30	37	33	62
Physics	949	883	823	742	692	677	589	552
White	684	659	651	630	571	557	461	429
Asian ^a	193	157	111	66	68	68	59	62
Black	14	14	10	8	16	12	22	12
Hispanic	29	22	18	16	23	15	22	24
American Indian/Alaska Native	2	2	1	3	1	0	2	0
Other/unknown race/ethnicity ^b	27	29	32	19	13	25	23	25
Other	10	17	18	12	20	15	12	22
White	9	15	16	11	17	15	12	18
Asian ^a	1	1	1	0	1	0	0	1
Black	0	0	0	0	1	0	0	2
Hispanic	0	0	0	0	1	0	0	0
American Indian/Alaska Native	0	1	0	0	0	0	0	0
Other/unknown race/ethnicity ^b	0	0	1	1	0	0	0	1

TABLE F-6. S&E doctorates awarded to U.S. citizens and permanent residents, by field and race/ethnicity: 1996–2003

Field and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Psychology	3,233	3,125	3,274	3,292	3,231	3,033	2,794	2,846
White	2,744	2,523	2,645	2,701	2,607	2,454	2,228	2,254
Asian ^a	121	126	113	132	145	116	119	118
Black	152	152	158	172	189	174	171	168
Hispanic	173	171	208	215	211	175	185	169
American Indian/Alaska Native	17	18	31	35	22	17	15	22
Other/unknown race/ethnicity ^b	26	135	119	37	57	97	76	115
Social sciences	2,795	2,877	2,840	2,867	2,909	2,733	2,725	2,702
White	2,208	2,236	2,207	2,246	2,303	2,132	2,101	2,038
Asian ^a	268	238	221	200	176	177	167	167
Black	141	159	181	194	203	190	189	187
Hispanic	97	98	121	121	112	120	135	153
American Indian/Alaska Native	25	18	12	29	20	20	22	16
Other/unknown race/ethnicity ^b	56	128	98	77	95	94	111	141
Anthropology	341	376	380	401	411	369	430	422
White	289	299	298	330	337	290	333	310
Asian ^a	15	14	18	19	19	19	14	18
Black	6	12	10	15	21	13	24	24
Hispanic	13	16	21	12	13	20	25	34
American Indian/Alaska Native	5	3	5	8	5	8	7	2
Other/unknown race/ethnicity ^b	13	32	28	17	16	19	27	34
Area and ethnic studies	123	88	104	94	118	132	103	93
White	95	70	79	69	93	99	74	60
Asian ^a	8	3	2	4	5	4	2	5
Black	9	9	17	13	11	17	13	12
Hispanic	3	1	4	3	5	5	6	8
American Indian/Alaska Native	2	4	1	3	1	2	2	2
Other/unknown race/ethnicity ^b	6	1	1	2	3	5	6	6
Economics	608	590	578	543	502	460	425	406
White	450	431	428	417	396	358	328	312
Asian ^a	103	89	85	65	48	56	56	54
Black	22	22	23	28	22	13	13	11
Hispanic	20	25	26	21	22	18	16	17
American Indian/Alaska Native	1	1	0	1	1	2	0	1
Other/unknown race/ethnicity ^b	12	22	16	11	13	13	12	11
History of science	29	33	36	42	35	39	39	36
White	27	25	32	36	32	31	37	31
Asian ^a	0	2	0	3	0	3	0	0
Black	1	3	0	1	1	1	0	0
Hispanic	1	0	1	0	1	2	1	1
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Other/unknown race/ethnicity ^b	0	3	3	2	1	2	1	4
Linguistics	118	159	136	156	119	123	109	114
White	88	117	103	123	98	97	85	86
Asian ^a	20	25	22	13	11	9	10	12
Black	4	3	4	4	1	6	3	0
Hispanic	4	7	6	13	5	4	7	9
American Indian/Alaska Native	1	1	0	1	0	0	0	1
Other/unknown race/ethnicity ^b	1	6	1	2	4	7	4	6
Political science and public administration	743	789	791	805	802	751	732	760
White	592	655	633	640	637	587	577	590
Asian ^a	46	45	42	45	38	36	33	30
Black	59	37	55	59	61	71	62	70
Hispanic	29	19	35	31	28	23	36	31
American Indian/Alaska Native	4	4	3	7	4	5	3	7
Other/unknown race/ethnicity ^b	13	29	23	23	34	29	21	32

TABLE F-6. S&E doctorates awarded to U.S. citizens and permanent residents, by field and race/ethnicity: 1996–2003

Field and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Sociology	424	461	442	459	515	471	476	487
White	328	346	345	346	383	351	349	348
Asian ^a	44	29	23	30	32	27	29	22
Black	25	42	40	45	57	44	46	47
Hispanic	13	19	15	26	26	38	25	40
American Indian/Alaska Native	7	4	3	4	6	2	7	0
Other/unknown race/ethnicity ^b	7	21	16	8	11	9	20	30
Other	409	381	373	367	407	388	411	384
White	339	293	289	285	327	319	318	301
Asian ^a	32	31	29	21	23	23	23	26
Black	15	31	32	29	29	25	28	23
Hispanic	14	11	13	15	12	10	19	13
American Indian/Alaska Native	5	1	0	5	3	1	3	3
Other/unknown race/ethnicity ^b	4	14	10	12	13	10	20	18
Engineering	3,389	3,332	3,044	2,888	2,571	2,439	2,163	2,163
White	2,263	2,288	2,170	2,109	1,889	1,747	1,476	1,556
Asian ^a	896	707	554	512	439	421	408	339
Black	74	98	81	98	81	92	85	75
Hispanic	99	96	110	83	82	90	97	103
American Indian/Alaska Native	14	17	13	12	8	7	7	11
Other/unknown race/ethnicity ^b	43	126	116	74	72	82	90	79
Aerospace	184	168	152	112	127	102	91	80
White	149	137	126	97	107	79	73	66
Asian ^a	28	16	12	13	11	12	11	7
Black	5	3	1	1	4	1	2	1
Hispanic	2	4	5	0	3	5	3	4
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Other/unknown race/ethnicity ^b	0	8	8	1	2	5	2	2
Chemical	391	409	374	371	382	358	336	292
White	274	293	275	286	280	269	223	210
Asian ^a	80	73	65	58	69	53	70	46
Black	12	16	3	11	8	17	12	9
Hispanic	19	7	13	7	18	7	16	16
American Indian/Alaska Native	1	4	3	2	1	1	2	1
Other/unknown race/ethnicity ^b	5	16	15	7	6	11	13	10
Civil	305	327	297	312	261	269	247	269
White	199	220	217	241	194	194	185	217
Asian ^a	89	72	38	46	43	37	29	20
Black	8	10	9	6	6	11	13	9
Hispanic	6	12	16	12	9	9	8	13
American Indian/Alaska Native	2	2	0	2	1	0	0	1
Other/unknown race/ethnicity ^b	1	11	17	5	8	18	12	9
Electrical	929	940	804	766	648	560	507	494
White	589	579	523	510	443	368	306	295
Asian ^a	276	256	205	172	141	133	130	129
Black	22	31	23	30	21	22	16	19
Hispanic	27	26	31	30	22	22	31	23
American Indian/Alaska Native	2	5	3	1	0	1	0	5
Other/unknown race/ethnicity ^b	13	43	19	23	21	14	24	23
Industrial	136	119	101	99	77	87	81	70
White	94	80	72	80	59	53	56	47
Asian ^a	28	22	11	7	11	21	10	14
Black	3	9	8	7	4	6	4	3
Hispanic	6	5	7	4	0	2	6	3
American Indian/Alaska Native	3	0	0	0	0	1	1	0
Other/unknown race/ethnicity ^b	2	3	3	1	3	4	4	3

TABLE F-6. S&E doctorates awarded to U.S. citizens and permanent residents, by field and race/ethnicity: 1996–2003

Field and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Materials	337	315	313	260	244	225	174	200
White	217	234	225	184	190	165	122	154
Asian ^a	102	59	55	52	34	37	33	23
Black	3	4	10	7	5	6	5	4
Hispanic	6	10	8	8	8	9	7	13
American Indian/Alaska Native	2	0	2	2	0	1	1	0
Other/unknown race/ethnicity ^b	7	8	13	7	7	7	6	6
Mechanical	588	538	515	463	396	427	342	332
White	392	377	371	335	279	301	226	246
Asian ^a	166	113	89	88	72	75	70	50
Black	10	12	13	12	18	17	17	9
Hispanic	13	14	19	9	12	21	12	13
American Indian/Alaska Native	3	6	2	2	3	1	1	1
Other/unknown race/ethnicity ^b	4	16	21	17	12	12	16	13
Other	519	516	488	505	436	411	385	426
White	349	368	361	376	337	318	285	321
Asian ^a	127	96	79	76	58	53	55	50
Black	11	13	14	24	15	12	16	21
Hispanic	20	18	11	13	10	15	14	18
American Indian/Alaska Native	1	0	3	3	3	2	2	3
Other/unknown race/ethnicity ^b	11	21	20	13	13	11	13	13

^a Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2001–03 per revised Office of Management and Budget guidelines.

^b Includes only those with unknown race/ethnicity through 2000. In 2001, this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-7. Top baccalaureate institutions of black S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
All institutions	4,389
Foreign	944
Unknown	185
Top 53 U.S.	1,419
Howard University	105
Spelman College	79
Hampton University	67
Morehouse College	54
Harvard University	43
Florida Agricultural and Mechanical University	35
Southern University A&M College at Baton Rouge	35
University of California-Berkeley	35
Massachusetts Institute of Technology	34
Tuskegee University	32
Xavier University of Louisiana	32
North Carolina Agricultural & Technical State University	31
Stanford University	31
University of Maryland at College Park	31
Jackson State University	29
University of Virginia main campus	29
University of Michigan at Ann Arbor	28
Yale University	28
Princeton University	26
University of North Carolina at Chapel Hill	26
University of California-Los Angeles	25
Cornell University all campuses	24
CUNY City College	24
Clark Atlanta University	23
North Carolina Central University	23
North Carolina State University at Raleigh	22
Brown University	21
Tennessee State University	21
University of Georgia	21
Prairie View A&M University	20
Rutgers the State University of New Jersey New Brunswick	20
University of Illinois at Urbana-Champaign	20
Morgan State University	19
Tougaloo College	19
Norfolk State University	18
University of Pennsylvania	18
University of South Carolina at Columbia	18
University of Texas at Austin	18
Alabama Agricultural and Mechanical University	17
Alabama State University	17
Louisiana State University & Agricultural & Mechanical College	17
Northwestern University	17
Temple University	17
Fisk University	16
Michigan State University	16
Oakwood College	16
Texas Southern University	16
Purdue University main campus	15
Texas A&M University main campus	15
Florida State University	14
Pennsylvania State University main campus	14

TABLE F-7. Top baccalaureate institutions of black S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
SUNY at Buffalo	14
University of Florida	14
Other U.S.	1,841

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-8. Top baccalaureate institutions of Hispanic S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
All institutions	6,189
Foreign	2,420
Unknown	550
Top 52 U.S.	1,826
University of Puerto Rico Rio Piedras Campus	264
University of Puerto Rico Mayaguez Campus	136
University of California-Berkeley	86
University of Texas at Austin	72
Florida International University	60
University of California-Los Angeles	58
Massachusetts Institute of Technology	57
Texas A&M University main campus	55
University of Florida	52
University of California-Irvine	48
University of California-San Diego	44
University of Miami	41
Stanford University	39
Cornell University all campuses	38
University of Texas at El Paso	38
University of California-Davis	37
University of New Mexico all campuses	37
University of California-Santa Cruz	34
New Mexico State University all campuses	32
Rutgers the State University of New Jersey New Brunswick	30
University of Illinois at Urbana-Champaign	28
Harvard University	27
California State University-Long Beach	24
University of Maryland at College Park	24
University of Michigan at Ann Arbor	23
CUNY City College	22
California State Polytechnic University-San Luis Obispo	20
California State University-Northridge	20
Princeton University	20
University of California-Santa Barbara	20
Purdue University main campus	18
Rensselaer Polytechnic Institute	18
San Diego State University	18
University of Arizona	18
University of Houston	17
Brown University	16
University of Puerto Rico Humacao University College	16
University of South Florida	16
University of Texas at San Antonio	16
California State University-Los Angeles	15
Inter American University of Puerto Rico San German Campus	15
University of California-Riverside	15
University of Pennsylvania	15
University of Puerto Rico Cayey University College	15
Brigham Young University main campus	14
California Institute of Technology	14
Columbia University in the City of New York	14
New York University	14
Rice University	14
University of Washington-Seattle	14

TABLE F-8. Top baccalaureate institutions of Hispanic S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
University of Wisconsin-Madison	14
Yale University	14
Other U.S.	1,393

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-9. Top baccalaureate institutions of American Indian/Alaska Native S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
All institutions	433
Foreign	33
Unknown	22
Top 35 U.S.	128
University of Oklahoma, Norman Campus	9
University of California-Berkeley	6
University of Central Oklahoma	6
University of California-Davis	5
University of Texas at Austin	5
University of Washington-Seattle	5
Dartmouth College	4
Purdue University main campus	4
San Jose State University	4
University of California-San Diego	4
University of Florida	4
Baylor University	3
Bemidji State University	3
Brigham Young University main campus	3
California State University-Fresno	3
Colorado College	3
New Mexico State University all campuses	3
Northern Arizona University	3
Oklahoma State University all campuses	3
Oregon State University	3
Pennsylvania State University main campus	3
San Francisco State University	3
Southeastern Oklahoma State University	3
Texas A&M University main campus	3
University of California-Los Angeles	3
University of California-Santa Cruz	3
University of Minnesota-Twin Cities	3
University of New Mexico all campuses	3
University of North Dakota all campuses	3
University of Oregon	3
University of Portland	3
University of Utah	3
University of Wisconsin-Madison	3
Virginia Polytechnic Institute and State University	3
West Virginia University	3
Other U.S.	250

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-10. Top baccalaureate institutions of Asian/Pacific Islander S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
All institutions	32,398
Foreign	24,671
Unknown	1,468
Top 50 U.S.	3,778
University of California-Berkeley	464
University of California-Los Angeles	229
Massachusetts Institute of Technology	210
Harvard University	185
Cornell University all campuses	166
Stanford University	131
University of California-Davis	120
University of California-Irvine	117
University of Texas at Austin	107
University of Illinois at Urbana-Champaign	100
University of California-San Diego	99
California Institute of Technology	94
University of Michigan at Ann Arbor	94
University of Maryland at College Park	74
Yale University	74
University of Washington-Seattle	72
University of Wisconsin-Madison	72
University of Pennsylvania	68
Princeton University	67
Rutgers the State University of New Jersey New Brunswick	64
University of Chicago	63
University of Minnesota-Twin Cities	55
University of Southern California	52
Northwestern University	51
Boston University	50
Brown University	47
Columbia University in the City of New York	46
Johns Hopkins University	46
University of Hawaii at Manoa	45
Purdue University main campus	44
Carnegie Mellon University	43
Rice University	43
SUNY at Stony Brook all campuses	43
Iowa State University	40
Pennsylvania State University main campus	38
Washington University	38
Texas A&M University main campus	37
University of Virginia main campus	37
Ohio State University main campus	35
University of Rochester	35
University of Arizona	34
Georgia Institute of Technology main campus	30
New York University	29
Rensselaer Polytechnic Institute	29
Duke University	28
Pomona College	28
University of California-Riverside	28
Mount Holyoke College	27

TABLE F-10. Top baccalaureate institutions of Asian/Pacific Islander S&E doctorate recipients: 1999–2003

Academic institution	Doctorates
Brandeis University	25
University of North Carolina at Chapel Hill	25
Other U.S.	2,481

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-11. S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, and race/ethnicity: 1996–2003

Field, sex, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
All S&E	18,647	18,393	18,256	17,565	17,114	16,338	15,508	15,669
Female	6,965	6,988	7,171	7,071	7,132	6,911	6,700	6,801
Male	11,682	11,391	11,067	10,494	9,980	9,427	8,807	8,866
Unknown	0	14	18	0	2	0	1	2
White	13,996	13,828	14,003	13,718	13,443	12,754	11,909	11,989
Female	5,349	5,266	5,493	5,457	5,511	5,283	5,038	5,117
Male	8,647	8,560	8,510	8,261	7,932	7,471	6,870	6,872
Unknown	0	2	0	0	0	0	1	0
Asian ^a	3,079	2,529	2,135	1,932	1,706	1,616	1,616	1,505
Female	974	889	760	715	679	681	677	636
Male	2,105	1,639	1,369	1,217	1,027	935	939	868
Unknown	0	1	6	0	0	0	0	1
Black	572	615	644	714	710	703	685	661
Female	251	286	351	367	391	375	370	376
Male	321	329	293	347	319	328	315	285
Hispanic	626	658	754	722	729	673	724	738
Female	273	266	326	362	349	337	379	362
Male	353	392	428	360	379	336	345	376
Unknown	0	0	0	0	1	0	0	0
American Indian/Alaska Native	95	79	96	114	88	74	70	72
Female	35	34	42	55	45	32	33	38
Male	60	45	54	59	43	42	37	34
Other/unknown race/ethnicity ^b	279	684	624	365	438	518	504	704
Female	83	247	199	115	157	203	203	272
Male	196	426	413	250	280	315	301	431
Unknown	0	11	12	0	1	0	0	1
Science	15,258	15,061	15,212	14,677	14,543	13,899	13,345	13,506
Female	6,439	6,476	6,719	6,580	6,641	6,433	6,258	6,364
Male	8,819	8,572	8,481	8,097	7,900	7,466	7,086	7,140
Unknown	0	13	12	0	2	0	1	2
White	11,733	11,540	11,833	11,609	11,554	11,007	10,433	10,433
Female	5,001	4,934	5,186	5,106	5,177	4,965	4,762	4,817
Male	6,732	6,604	6,647	6,503	6,377	6,042	5,670	5,616
Unknown	0	2	0	0	0	0	1	0
Asian ^a	2,183	1,822	1,581	1,420	1,267	1,195	1,208	1,166
Female	840	770	663	631	570	583	579	556
Male	1,343	1,051	915	789	697	612	629	609
Unknown	0	1	3	0	0	0	0	1
Black	498	517	563	616	629	611	600	586
Female	232	263	329	343	367	350	342	358
Male	266	254	234	273	262	261	258	228
Hispanic	527	562	644	639	647	583	627	635
Female	258	243	313	339	336	315	354	339
Male	269	319	331	300	310	268	273	296
Unknown	0	0	0	0	1	0	0	0
American Indian/Alaska Native	81	62	83	102	80	67	63	61
Female	33	31	38	53	41	30	33	36
Male	48	31	45	49	39	37	30	25
Other/unknown race/ethnicity ^b	236	558	508	291	366	436	414	625
Female	75	235	190	108	150	190	188	258
Male	161	313	309	183	215	246	226	366
Unknown	0	10	9	0	1	0	0	1
Agricultural sciences	575	550	543	494	502	431	421	477
Female	174	155	183	161	166	165	152	160
Male	401	394	360	333	336	266	268	317
Unknown	0	1	0	0	0	0	1	0

TABLE F-11. S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, and race/ethnicity: 1996–2003

Field, sex, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
White	442	411	417	398	414	371	357	396
Female	135	118	140	125	136	135	125	127
Male	307	293	277	273	278	236	231	269
Unknown	0	0	0	0	0	0	1	0
Asian ^a	80	63	47	46	30	16	23	21
Female	29	18	18	18	9	9	12	12
Male	51	45	29	28	21	7	11	9
Black	24	24	19	24	18	13	12	16
Female	0	6	4	8	8	6	5	6
Male	24	18	15	16	10	7	7	10
Hispanic	13	26	35	15	26	20	18	22
Female	4	7	13	7	11	10	7	8
Male	9	19	22	8	15	10	11	14
American Indian/Alaska Native	6	5	9	1	4	0	2	4
Female	4	0	2	0	1	0	0	1
Male	2	5	7	1	3	0	2	3
Other/unknown race/ethnicity ^b	10	21	16	10	10	11	9	18
Female	2	6	6	3	1	5	3	6
Male	8	14	10	7	9	6	6	12
Unknown	0	1	0	0	0	0	0	0
Biological sciences	4,364	4,256	4,308	4,124	4,268	4,243	4,111	4,047
Female	1,941	1,920	1,921	1,864	1,987	1,971	1,918	1,911
Male	2,423	2,333	2,385	2,260	2,281	2,272	2,193	2,134
Unknown	0	3	2	0	0	0	0	2
White	3,170	3,158	3,246	3,128	3,308	3,255	3,117	3,053
Female	1,399	1,398	1,436	1,402	1,510	1,487	1,392	1,447
Male	1,771	1,759	1,810	1,726	1,798	1,768	1,725	1,606
Unknown	0	1	0	0	0	0	0	0
Asian ^a	885	721	657	608	539	546	561	524
Female	403	348	291	276	263	266	290	249
Male	482	373	365	332	276	280	271	274
Unknown	0	0	1	0	0	0	0	1
Black	98	112	111	116	118	139	124	108
Female	40	60	70	66	74	84	67	64
Male	58	52	41	50	44	55	57	44
Hispanic	131	146	168	175	173	165	182	175
Female	66	63	79	76	91	77	114	79
Male	65	83	89	99	82	88	68	96
American Indian/Alaska Native	20	7	12	20	17	15	12	11
Female	9	3	6	10	7	7	6	8
Male	11	4	6	10	10	8	6	3
Other/unknown race/ethnicity ^b	60	112	114	77	113	123	115	176
Female	24	48	39	34	42	50	49	64
Male	36	62	74	43	71	73	66	111
Unknown	0	2	1	0	0	0	0	1
Computer sciences	514	520	561	492	457	423	419	440
Female	91	100	123	105	86	98	97	97
Male	423	419	437	387	371	325	322	343
Unknown	0	1	1	0	0	0	0	0
White	356	361	412	356	336	322	290	304
Female	61	66	84	71	62	60	59	64
Male	295	295	328	285	274	262	231	240
Asian ^a	111	107	90	87	76	61	86	79
Female	16	26	23	19	15	20	26	17
Male	95	81	67	68	61	41	60	62

TABLE F-11. S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, and race/ethnicity: 1996–2003

Field, sex, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Black	12	4	14	18	18	15	17	17
Female	3	1	8	9	5	10	7	5
Male	9	3	6	9	13	5	10	12
Hispanic	16	16	15	14	14	8	14	10
Female	7	2	1	3	3	4	2	4
Male	9	14	14	11	11	4	12	6
American Indian/Alaska Native	4	1	4	1	1	1	2	2
Female	2	1	0	1	0	0	0	0
Male	2	0	4	0	1	1	2	2
Other/unknown race/ethnicity ^b	15	31	26	16	12	16	10	28
Female	2	4	7	2	1	4	3	7
Male	13	26	18	14	11	12	7	21
Unknown	0	1	1	0	0	0	0	0
Earth, atmospheric, and ocean sciences	558	607	562	526	510	467	494	512
Female	130	164	171	153	168	163	187	185
Male	428	442	391	373	342	304	307	327
Unknown	0	1	0	0	0	0	0	0
White	449	488	464	434	431	396	424	429
Female	109	129	140	127	141	140	160	149
Male	340	358	324	307	290	256	264	280
Unknown	0	1	0	0	0	0	0	0
Asian ^a	77	70	51	39	28	34	30	25
Female	12	19	19	11	11	10	13	11
Male	65	51	32	28	17	24	17	14
Black	4	8	8	14	7	6	6	17
Female	2	1	2	5	4	2	0	7
Male	2	7	6	9	3	4	6	10
Hispanic	19	16	16	21	18	15	17	18
Female	6	5	6	4	3	9	3	9
Male	13	11	10	17	15	6	14	9
American Indian/Alaska Native	2	2	3	6	5	0	0	2
Female	0	1	1	3	1	0	0	1
Male	2	1	2	3	4	0	0	1
Other/unknown race/ethnicity ^b	7	23	20	12	21	16	17	21
Female	1	9	3	3	8	2	11	8
Male	6	14	17	9	13	14	6	13
Mathematics and statistics	648	629	669	605	574	524	442	516
Female	145	177	198	192	164	154	134	152
Male	503	452	470	413	409	370	308	364
Unknown	0	0	1	0	1	0	0	0
White	478	479	526	506	464	428	369	407
Female	105	135	150	159	126	120	111	110
Male	373	344	376	347	338	308	258	297
Asian ^a	140	97	71	56	70	48	28	51
Female	36	28	27	20	21	16	5	24
Male	104	69	44	36	49	32	23	27
Black	8	7	16	12	14	19	14	16
Female	2	2	7	6	7	7	8	5
Male	6	5	9	6	7	12	6	11
Hispanic	11	20	27	15	15	15	12	16
Female	0	6	7	5	7	5	4	7
Male	11	14	20	10	8	10	8	9
American Indian/Alaska Native	1	1	3	1	2	2	3	2
Female	0	0	2	0	1	1	1	1
Male	1	1	1	1	1	1	2	1

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-11. S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, and race/ethnicity: 1996–2003

Field, sex, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Other/unknown race/ethnicity ^b	10	25	26	15	9	12	16	24
Female	2	6	5	2	2	5	5	5
Male	8	19	20	13	6	7	11	19
Unknown	0	0	1	0	1	0	0	0
Physical sciences	2,571	2,497	2,455	2,277	2,092	2,045	1,939	1,966
Female	610	587	604	553	546	527	541	567
Male	1,961	1,909	1,849	1,724	1,546	1,518	1,398	1,399
Unknown	0	1	2	0	0	0	0	0
White	1,886	1,884	1,916	1,840	1,691	1,649	1,547	1,552
Female	430	412	449	396	419	395	419	426
Male	1,456	1,472	1,467	1,444	1,272	1,254	1,128	1,126
Asian ^a	501	400	331	252	203	197	194	181
Female	145	132	101	93	71	73	62	70
Male	356	267	228	159	132	124	132	111
Unknown	0	1	2	0	0	0	0	0
Black	59	51	56	66	62	55	67	57
Female	13	11	31	29	21	20	28	21
Male	46	40	25	37	41	35	39	36
Hispanic	67	69	54	63	78	65	64	72
Female	12	15	11	22	25	22	22	23
Male	55	54	43	41	53	43	42	49
American Indian/Alaska Native	6	10	9	9	9	12	7	2
Female	1	0	1	3	2	2	0	1
Male	5	10	8	6	7	10	7	1
Other/unknown race/ethnicity ^b	52	83	89	47	49	67	60	102
Female	9	17	11	10	8	15	10	26
Male	43	66	78	37	41	52	50	76
Psychology	3,233	3,125	3,274	3,292	3,231	3,033	2,794	2,846
Female	2,185	2,106	2,211	2,229	2,178	2,050	1,878	1,954
Male	1,048	1,014	1,058	1,063	1,052	983	916	892
Unknown	0	5	5	0	1	0	0	0
White	2,744	2,523	2,645	2,701	2,607	2,454	2,228	2,254
Female	1,835	1,690	1,763	1,789	1,725	1,628	1,480	1,542
Male	909	833	882	912	882	826	748	712
Asian ^a	121	126	113	132	145	116	119	118
Female	90	95	84	98	99	91	80	81
Male	31	31	29	34	46	25	39	37
Black	152	152	158	172	189	174	171	168
Female	114	111	115	135	144	124	129	125
Male	38	41	43	37	45	50	42	43
Hispanic	173	171	208	215	211	175	185	169
Female	120	107	152	158	151	129	129	115
Male	53	64	56	57	59	46	56	54
Unknown	0	0	0	0	1	0	0	0
American Indian/Alaska Native	17	18	31	35	22	17	15	22
Female	9	12	18	23	19	12	8	14
Male	8	6	13	12	3	5	7	8
Other/unknown race/ethnicity ^b	26	135	119	37	57	97	76	115
Female	17	91	79	26	40	66	52	77
Male	9	39	35	11	17	31	24	38
Unknown	0	5	5	0	0	0	0	0
Social sciences	2,795	2,877	2,840	2,867	2,909	2,733	2,725	2,702
Female	1,163	1,267	1,308	1,323	1,346	1,305	1,351	1,338
Male	1,632	1,609	1,531	1,544	1,563	1,428	1,374	1,364
Unknown	0	1	1	0	0	0	0	0
White	2,208	2,236	2,207	2,246	2,303	2,132	2,101	2,038
Female	927	986	1,024	1,037	1,058	1,000	1,016	952
Male	1,281	1,250	1,183	1,209	1,245	1,132	1,085	1,086

TABLE F-11. S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, and race/ethnicity: 1996–2003

Field, sex, and race/ethnicity	1996	1997	1998	1999	2000	2001	2002	2003
Asian ^a	268	238	221	200	176	177	167	167
Female	109	104	100	96	81	98	91	92
Male	159	134	121	104	95	79	76	75
Black	141	159	181	194	203	190	189	187
Female	58	71	92	85	104	97	98	125
Male	83	88	89	109	99	93	91	62
Hispanic	97	98	121	121	112	120	135	153
Female	43	38	44	64	45	59	73	94
Male	54	60	77	57	67	61	62	59
American Indian/Alaska Native	25	18	12	29	20	20	22	16
Female	8	14	8	13	10	8	18	10
Male	17	4	4	16	10	12	4	6
Other/unknown race/ethnicity ^b	56	128	98	77	95	94	111	141
Female	18	54	40	28	48	43	55	65
Male	38	73	57	49	47	51	56	76
Unknown	0	1	1	0	0	0	0	0
Engineering	3,389	3,332	3,044	2,888	2,571	2,439	2,163	2,163
Female	526	512	452	491	491	478	442	437
Male	2,863	2,819	2,586	2,397	2,080	1,961	1,721	1,726
Unknown	0	1	6	0	0	0	0	0
White	2,263	2,288	2,170	2,109	1,889	1,747	1,476	1,556
Female	348	332	307	351	334	318	276	300
Male	1,915	1,956	1,863	1,758	1,555	1,429	1,200	1,256
Asian ^a	896	707	554	512	439	421	408	339
Female	134	119	97	84	109	98	98	80
Male	762	588	454	428	330	323	310	259
Unknown	0	0	3	0	0	0	0	0
Black	74	98	81	98	81	92	85	75
Female	19	23	22	24	24	25	28	18
Male	55	75	59	74	57	67	57	57
Hispanic	99	96	110	83	82	90	97	103
Female	15	23	13	23	13	22	25	23
Male	84	73	97	60	69	68	72	80
American Indian/Alaska Native	14	17	13	12	8	7	7	11
Female	2	3	4	2	4	2	0	2
Male	12	14	9	10	4	5	7	9
Other/unknown race/ethnicity ^b	43	126	116	74	72	82	90	79
Female	8	12	9	7	7	13	15	14
Male	35	113	104	67	65	69	75	65
Unknown	0	1	3	0	0	0	0	0

^a Includes Native Hawaiians/other Pacific Islanders through 2000, but excludes them in 2001–03 per revised Office of Management and Budget guidelines.

^b Includes only those with unknown race/ethnicity through 2000. In 2001, this category was expanded to include Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-12. S&E doctorates awarded to U.S. citizens and permanent residents, by sex, race/ethnicity, and field: 2003
(Percent distribution)

Sex and field	All U.S. citizens and permanent residents	White	Asian ^a	Black	Hispanic	American Indian/ Alaska Native	Other/ unknown race/ ethnicity ^b
Female (number)	6,801	5,117	636	376	362	38	272
S&E	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Science	93.6	94.1	87.4	95.2	93.6	94.7	94.9
Agricultural sciences	2.4	2.5	1.9	1.6	2.2	2.6	2.2
Biological sciences	28.1	28.3	39.2	17.0	21.8	21.1	23.5
Computer sciences	1.4	1.3	2.7	1.3	1.1	0.0	2.6
Earth, atmospheric, and ocean sciences	2.7	2.9	1.7	1.9	2.5	2.6	2.9
Atmospheric	0.3	0.3	0.5	0.5	0.0	0.0	0.4
Earth	1.1	1.3	0.2	0.5	0.3	0.0	1.8
Ocean	0.7	0.7	0.5	0.3	1.4	2.6	0.4
Other	0.6	0.6	0.6	0.5	0.8	0.0	0.4
Mathematics and statistics	2.2	2.1	3.8	1.3	1.9	2.6	1.8
Physical sciences	8.3	8.3	11.0	5.6	6.4	2.6	9.6
Astronomy	0.5	0.5	0.5	0.0	0.3	0.0	0.7
Chemistry	6.1	6.2	7.5	3.7	5.0	2.6	7.0
Physics	1.7	1.6	2.8	1.3	1.1	0.0	1.5
Other	0.1	0.1	0.2	0.5	0.0	0.0	0.4
Psychology	28.7	30.1	12.7	33.2	31.8	36.8	28.3
Social sciences	19.7	18.6	14.5	33.2	26.0	26.3	23.9
Anthropology	3.9	3.6	2.4	5.1	7.2	0.0	7.4
Area/ethnic studies	1.0	0.8	0.6	2.4	1.9	5.3	2.2
Economics	1.9	1.7	3.1	1.6	2.8	2.6	0.7
History of science	0.3	0.3	0.0	0.0	0.0	0.0	0.7
Linguistics	1.0	1.0	1.4	0.0	1.4	2.6	0.7
Political science/public administration	4.6	4.3	2.4	12.5	3.9	7.9	3.7
Sociology	4.4	4.1	2.2	8.8	6.6	0.0	5.9
Other	2.7	2.8	2.4	2.9	2.2	7.9	2.6
Engineering	6.4	5.9	12.6	4.8	6.4	5.3	5.1
Aerospace	0.2	0.2	0.3	0.0	0.0	0.0	0.4
Chemical	1.1	1.0	1.6	0.8	1.1	2.6	1.5
Civil	1.0	1.1	0.5	0.5	1.4	0.0	0.4
Electrical	0.9	0.5	4.7	0.8	1.1	0.0	1.1
Industrial	0.3	0.3	0.5	0.5	0.3	0.0	0.4
Materials	0.7	0.6	0.9	0.3	0.8	0.0	0.7
Mechanical	0.6	0.5	1.4	0.3	0.3	2.6	0.4
Other	1.7	1.7	2.7	1.6	1.4	0.0	0.4
Male (number)	8,866	6,872	868	285	376	34	431
S&E	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Science	80.5	81.7	70.2	80.0	78.7	73.5	84.9
Agricultural sciences	3.6	3.9	1.0	3.5	3.7	8.8	2.8
Biological sciences	24.1	23.4	31.6	15.4	25.5	8.8	25.8
Computer sciences	3.9	3.5	7.1	4.2	1.6	5.9	4.9
Earth, atmospheric, and ocean sciences	3.7	4.1	1.6	3.5	2.4	2.9	3.0
Atmospheric	0.6	0.7	0.5	0.4	0.0	0.0	0.5
Earth	2.0	2.3	1.0	0.7	0.8	2.9	2.3
Ocean	0.5	0.5	0.1	1.1	1.6	0.0	0.0
Other	0.5	0.6	0.0	1.4	0.0	0.0	0.2
Mathematics and statistics	4.1	4.3	3.1	3.9	2.4	2.9	4.4
Physical sciences	15.8	16.4	12.8	12.6	13.0	2.9	17.6
Astronomy	1.1	1.1	0.6	0.4	0.5	0.0	2.8
Chemistry	9.6	10.0	7.1	9.8	7.2	2.9	10.0
Physics	5.0	5.0	5.1	2.5	5.3	0.0	4.9
Other	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Psychology	10.1	10.4	4.3	15.1	14.4	23.5	8.8

TABLE F-12. S&E doctorates awarded to U.S. citizens and permanent residents, by sex, race/ethnicity, and field: 2003
(Percent distribution)

Sex and field	All U.S. citizens and permanent residents	White	Asian ^a	Black	Hispanic	American Indian/ Alaska Native	Other/ unknown race/ ethnicity ^b
Social sciences	15.4	15.8	8.6	21.8	15.7	17.6	17.6
Anthropology	1.8	1.8	0.3	1.8	2.1	5.9	3.2
Area/ethnic studies	0.3	0.3	0.1	1.1	0.3	0.0	0.0
Economics	3.2	3.3	3.9	1.8	1.9	0.0	2.1
History of science	0.2	0.2	0.0	0.0	0.3	0.0	0.5
Linguistics	0.5	0.5	0.3	0.0	1.1	0.0	0.9
Political science/public administration	5.1	5.4	1.7	8.1	4.5	11.8	5.1
Sociology	2.1	2.0	0.9	4.9	4.3	0.0	3.2
Other	2.2	2.3	1.3	4.2	1.3	0.0	2.6
Engineering	19.5	18.3	29.8	20.0	21.3	26.5	15.1
Aerospace	0.8	0.8	0.6	0.4	1.1	0.0	0.2
Chemical	2.5	2.3	4.1	2.1	3.2	0.0	1.4
Civil	2.3	2.3	2.0	2.5	2.1	2.9	1.9
Electrical	4.8	3.9	11.4	5.6	5.1	14.7	4.6
Industrial	0.5	0.5	1.3	0.4	0.5	0.0	0.5
Materials	1.7	1.8	2.0	1.1	2.7	0.0	0.9
Mechanical	3.3	3.2	4.7	2.8	3.2	0.0	2.8
Other	3.5	3.4	3.8	5.3	3.5	8.8	2.8

^a Excludes Native Hawaiians/other Pacific Islanders per revised Office of Management and Budget guidelines.

^b This category includes Native Hawaiians and other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 2003.

TABLE F-13. S&E doctorate recipients, by disability status: 1996–2003

Disability status	1996	1997	1998	1999	2000	2001	2002	2003
All S&E doctorate recipients	27,240	27,232	27,278	25,932	25,966	25,540	24,571	25,258
No disability	26,956	26,912	26,956	25,595	25,638	25,199	24,245	24,949
With disability	284	320	322	337	328	341	326	309
Auditory	41	45	36	40	38	48	42	45
Learning ^a	na	na	na	na	na	84	78	69
Orthopedic	81	104	92	96	94	99	120	95
Visual	46	39	55	54	49	39	26	26
Vocal	7	7	11	6	6	8	8	11
Other/more than one	97	98	96	110	110	58	47	58
Unspecified	12	27	32	31	31	5	5	5

na = not applicable.

^a Not included in survey before 2001.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1996–2003.

TABLE F-14. Top baccalaureate institutions of S&E doctorate recipients with disabilities, by disability type: 1999–2003

Academic institution	All disabilities							Other/more than one	Unspecified
	Auditory	Learning ^a	Orthopedic	Visual	Vocal				
All institutions	1,641	213	231	504	194	39	383	77	
Foreign	198	31	14	66	37	7	17	26	
Unknown	62	5	6	18	11	1	15	6	
Top 75 U.S.	620	84	106	177	64	17	152	20	
University of California-Berkeley	40	4	7	6	5	2	14	2	
Cornell University-Endowed Colleges	22	1	3	7	4	1	6	0	
University of Minnesota-Twin Cities	20	1	4	5	3	1	5	1	
University of California-Los Angeles	18	3	3	5	1	0	6	0	
Pennsylvania State University main campus	13	3	1	4	0	2	3	0	
University of Maryland College Park Campus	13	2	1	4	0	1	3	2	
University of Wisconsin-Madison	13	1	1	4	2	0	5	0	
Ohio State University main campus	12	0	2	2	3	1	4	0	
Texas A&M University main campus	12	3	1	2	0	0	5	1	
University of California-Davis	12	1	4	3	2	0	1	1	
University of California-Santa Cruz	12	4	7	0	0	0	1	0	
Brigham Young University	11	1	3	3	0	0	2	2	
Purdue University main campus	11	1	1	4	1	1	3	0	
University of California-San Diego	11	2	1	4	2	0	2	0	
University of California-Santa Barbara	11	1	2	3	1	0	4	0	
Michigan State University	10	2	2	1	2	0	2	1	
Oberlin College	10	1	1	3	3	0	2	0	
University of Colorado at Boulder	10	0	2	3	1	0	4	0	
University of Illinois Urbana Campus	10	2	2	2	2	0	1	1	
University of Washington-Seattle	10	1	2	4	0	0	3	0	
Brown University	9	1	4	0	1	0	2	1	
San Francisco State University	9	2	2	2	1	0	2	0	
University of Florida	9	3	0	4	0	0	2	0	
University of Virginia main campus	9	2	1	5	1	0	0	0	
California State Polytechnic University-San Luis Obispo	8	2	2	3	1	0	0	0	
Duke University	8	2	2	1	0	0	2	1	
Rutgers the State University of New Jersey New Brunswick	8	2	1	2	1	0	2	0	
University of Massachusetts at Amherst	8	1	2	2	0	0	3	0	
University of Michigan Ann Arbor	8	1	0	3	0	0	4	0	
University of Texas at Austin	8	0	1	4	0	1	2	0	
Harvard University	7	0	0	3	1	0	3	0	
Princeton University	7	1	2	4	0	0	0	0	
Rensselaer Polytechnic Institute	7	0	1	2	1	1	1	1	
San Jose State University	7	2	1	3	0	0	1	0	
Stanford University	7	2	1	0	1	0	3	0	
SUNY at Buffalo	7	1	2	4	0	0	0	0	
University of Delaware	7	0	0	5	1	0	1	0	
University of Kansas main campus	7	0	1	2	1	1	2	0	
University of Pittsburgh main campus	7	0	1	3	2	0	1	0	
Dartmouth College	6	2	2	1	0	0	0	1	
Florida State University	6	2	0	2	0	1	1	0	
Indiana University Bloomington	6	1	3	0	0	1	1	0	
Massachusetts Institute of Technology	6	0	1	3	0	0	2	0	
Rice University	6	1	1	0	0	2	2	0	
United States Military Academy	6	1	0	5	0	0	0	0	
University of California-Irvine	6	1	2	2	1	0	0	0	
University of Kentucky	6	2	1	0	2	0	1	0	
University of Nebraska-Lincoln	6	1	0	2	1	0	2	0	
University of New Mexico all campuses	6	0	2	3	0	0	1	0	
University of South Florida	6	1	1	2	0	0	2	0	
Washington State University	6	0	0	4	2	0	0	0	
Arizona State University main campus	5	1	1	1	1	0	1	0	
Bryn Mawr College	5	0	0	3	1	0	1	0	

TABLE F-14. Top baccalaureate institutions of S&E doctorate recipients with disabilities, by disability type: 1999–2003

Academic institution	All disabilities							Other/more than one	Unspecified
	Auditory	Learning ^a	Orthopedic	Visual	Vocal				
California State University-Fresno	5	1	1	2	0	0	1	0	
California State University-Long Beach	5	0	0	2	0	0	3	0	
California State University-Los Angeles	5	0	0	1	1	0	2	1	
College of William and Mary	5	0	0	3	2	0	0	0	
Gallaudet University	5	4	0	1	0	0	0	0	
George Mason University	5	0	1	2	1	0	1	0	
Iowa State University	5	1	0	2	1	0	1	0	
James Madison University	5	1	0	0	0	0	3	1	
SUNY at Albany	5	0	1	1	1	0	2	0	
Swarthmore College	5	0	1	0	2	0	2	0	
University of Arizona	5	1	1	1	0	0	2	0	
University of California-Riverside	5	1	0	2	1	0	1	0	
University of Chicago	5	0	1	2	1	0	1	0	
University of Cincinnati main campus	5	1	0	1	0	1	2	0	
University of Connecticut	5	1	1	1	0	0	2	0	
University of Iowa	5	0	1	1	0	0	3	0	
University of Oklahoma Norman campus	5	1	1	2	0	0	1	0	
University of Southern California	5	0	3	1	0	0	1	0	
University of Utah	5	1	3	0	0	0	1	0	
Virginia Polytechnic Institute and State University	5	1	1	0	1	0	1	1	
Washington University	5	1	1	0	0	0	1	2	
West Virginia University	5	0	1	3	1	0	0	0	
Other U.S.	761	93	105	243	82	14	199	25	

^a Not included in survey before 2001.

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-15. S&E doctorate recipients, by field and disability status: 2003

Field	All recipients	No disability		With disability	
		Number	Percent	Number	Percent
S&E	25,258	24,949	100.0	309	100.0
Science	19,993	19,723	79.1	270	87.4
Agricultural sciences	922	907	3.6	15	4.9
Biological sciences	5,694	5,635	22.6	59	19.1
Computer sciences	866	858	3.4	8	2.6
Earth, atmospheric, and ocean sciences	783	775	3.1	8	2.6
Atmospheric	139	137	0.5	2	0.6
Earth	373	371	1.5	2	0.6
Ocean	133	132	0.5	1	0.3
Other	138	135	0.5	3	1.0
Mathematics and statistics	994	988	4.0	6	1.9
Physical sciences	3,320	3,288	13.2	32	10.4
Astronomy	167	165	0.7	2	0.6
Chemistry	2,037	2,016	8.1	21	6.8
Physics	1,080	1,071	4.3	9	2.9
Other	36	36	0.1	0	0.0
Psychology	3,275	3,209	12.9	66	21.4
Social sciences	4,139	4,063	16.3	76	24.6
Anthropology	505	493	2.0	12	3.9
Area/ethnic studies	106	101	0.4	5	1.6
Economics	1,051	1,040	4.2	11	3.6
History of science	46	45	0.2	1	0.3
Linguistics	224	219	0.9	5	1.6
Political science	1,026	1,013	4.1	13	4.2
Sociology	612	592	2.4	20	6.5
Other	569	560	2.2	9	2.9
Engineering	5,265	5,226	20.9	39	12.6
Aerospace	199	199	0.8	0	0.0
Chemical	643	638	2.6	5	1.6
Civil	672	666	2.7	6	1.9
Electrical	1,463	1,452	5.8	11	3.6
Industrial	211	210	0.8	1	0.3
Materials	473	472	1.9	1	0.3
Mechanical	814	813	3.3	1	0.3
Other	790	776	3.1	14	4.5

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 2003.

TABLE F-16. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by sex and doctorate field: 1999–2003
(Percent)

Sex and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
All recipients (number) ^a	82,194	69,970	2,325	20,793	2,231	2,509	2,661	10,319	15,196	13,936	12,224
Personal/family funds	22.9	24.4	21.9	11.3	25.0	15.4	11.5	7.4	48.8	34.2	14.5
Loans	7.1	8.0	4.4	2.3	2.6	2.2	1.5	1.3	22.4	9.6	2.0
Savings	1.8	1.9	2.0	0.7	3.5	2.0	0.9	0.5	3.0	3.3	1.8
Other earnings in graduate school	6.7	6.8	8.3	3.0	12.1	6.5	3.9	1.8	10.0	12.1	6.4
Other family earnings or savings	7.2	7.7	7.2	5.3	6.7	4.7	5.1	3.9	13.3	9.1	4.3
Teaching assistantship	15.3	16.8	7.0	10.9	9.5	13.3	52.5	20.5	13.9	22.4	6.7
Research assistantship, traineeship, and internship	29.8	27.5	45.7	34.6	33.2	39.2	10.7	49.2	16.0	10.5	43.2
Research assistantship	26.8	24.1	45.3	27.3	32.1	38.1	9.7	48.0	12.5	9.7	42.1
Traineeship	2.7	3.1	0.3	7.0	0.6	0.8	0.9	1.1	2.7	0.7	0.8
Internship or residency	0.3	0.3	0.1	0.3	0.4	0.3	0.1	0.2	0.8	0.1	0.3
Fellowship/scholarship and dissertation grant	23.5	23.7	14.5	36.8	16.6	24.9	19.4	16.7	12.4	24.9	22.3
Fellowship/scholarship	22.1	22.3	12.4	34.4	15.7	22.0	19.1	15.7	12.1	23.7	20.8
Dissertation grant	1.4	1.4	2.1	2.4	0.9	2.9	0.3	1.0	0.3	1.2	1.5
Employer reimbursement or assistance	3.2	2.3	5.7	1.8	9.1	3.4	2.2	1.8	1.3	2.6	8.3
Foreign	0.3	0.2	0.6	0.2	0.4	0.3	0.1	0.1	0.1	0.3	0.5
Other	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.3	0.1	0.2
Not reported	4.9	5.0	4.4	4.2	6.0	3.3	3.5	4.2	7.1	4.9	4.3
Female (number)	34,615	32,276	804	9,651	483	856	796	2,734	10,289	6,663	2,339
Personal/family funds	27.7	28.9	20.6	11.7	29.0	13.4	13.2	7.6	50.0	34.6	11.9
Loans	9.6	10.2	4.7	2.1	3.1	2.1	1.4	1.1	22.6	9.7	1.9
Savings	1.8	1.9	1.7	0.6	2.5	1.6	0.6	0.4	2.9	2.9	0.9
Other earnings in graduate school	6.7	6.9	6.8	3.1	12.8	5.7	2.4	1.3	9.2	11.5	4.4
Other family earnings or savings	9.6	9.9	7.3	5.9	10.6	4.0	8.8	4.8	15.4	10.6	4.7
Teaching assistantship	14.6	15.2	7.8	10.0	9.5	12.3	50.1	20.8	13.2	21.2	6.0
Research assistantship, traineeship, and internship	25.3	24.3	44.2	34.5	24.6	38.4	10.9	46.0	16.0	10.9	38.9
Research assistantship	21.5	20.3	43.7	26.5	23.6	36.9	9.4	44.1	12.5	9.9	37.3
Traineeship	3.4	3.6	0.5	7.7	0.2	1.2	1.1	1.7	2.8	0.9	1.2
Internship or residency	0.4	0.4	0.0	0.2	0.8	0.4	0.4	0.1	0.7	0.1	0.3
Fellowship/scholarship and dissertation grant	24.9	24.3	17.4	37.6	21.9	31.2	20.7	20.5	12.3	25.8	33.5
Fellowship/scholarship	23.5	22.9	15.2	34.9	21.5	28.0	20.5	19.4	12.0	24.5	31.6
Dissertation grant	1.4	1.4	2.2	2.7	0.4	3.2	0.3	1.1	0.3	1.3	1.8
Employer reimbursement or assistance	1.9	1.7	5.2	1.7	7.2	1.8	1.6	1.0	1.0	2.1	5.1
Foreign	0.2	0.2	0.6	0.2	0.2	0.2	0.1	0.1	0.1	0.4	0.4
Other	0.2	0.2	0.1	0.3	0.2	0.1	0.1	0.0	0.3	0.1	0.1
Not reported	5.1	5.2	4.0	4.0	7.2	2.6	3.1	4.0	7.1	4.9	4.1
Male (number)	47,574	37,689	1,520	11,140	1,748	1,653	1,864	7,585	4,906	7,273	9,885
Personal/family funds	19.4	20.5	22.6	10.9	23.9	16.4	10.8	7.3	46.4	33.8	15.1
Loans	5.3	6.2	4.3	2.5	2.5	2.2	1.6	1.3	22.2	9.6	2.1

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-16. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by sex and doctorate field: 1999–2003
(Percent)

Sex and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
Savings	1.9	1.9	2.1	0.8	3.8	2.1	1.1	0.5	3.2	3.7	2.0
Other earnings in graduate school	6.7	6.7	9.1	2.9	12.0	7.0	4.6	1.9	11.9	12.7	6.9
Other family earnings or savings	5.4	5.8	7.2	4.8	5.7	5.1	3.5	3.5	9.1	7.8	4.1
Teaching assistantship	15.7	18.0	6.6	11.7	9.5	13.8	53.6	20.4	15.4	23.5	6.9
Research assistantship, traineeship, and internship	33.1	30.2	46.4	34.8	35.5	39.6	10.6	50.4	15.9	10.2	44.2
Research assistantship	30.6	27.3	46.2	28.1	34.4	38.7	9.9	49.3	12.4	9.5	43.2
Traineeship	2.2	2.6	0.1	6.4	0.7	0.6	0.8	0.9	2.6	0.5	0.7
Internship or residency	0.3	0.3	0.1	0.3	0.3	0.3	0.0	0.2	0.9	0.1	0.3
Fellowship/scholarship and dissertation grant	22.4	23.2	13.0	36.1	15.2	21.6	18.8	15.4	12.7	24.1	19.6
Fellowship/scholarship	21.1	21.8	11.0	33.9	14.1	18.9	18.5	14.4	12.3	23.0	18.2
Dissertation grant	1.4	1.4	2.0	2.2	1.0	2.7	0.3	1.0	0.4	1.1	1.4
Employer reimbursement or assistance	4.1	2.8	5.9	1.8	9.6	4.2	2.5	2.1	2.0	3.0	9.0
Foreign	0.3	0.2	0.6	0.2	0.4	0.3	0.1	0.1	0.1	0.3	0.5
Other	0.2	0.2	0.2	0.2	0.3	0.4	0.1	0.1	0.3	0.2	0.3
Not reported	4.7	4.8	4.7	4.3	5.6	3.7	3.6	4.3	7.1	5.0	4.4

^a All recipients include those with unknown gender. The data for all recipients, therefore, will not equal the sum of female and male.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-17. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by race/ethnicity and doctorate field: 1999–2003
(Percent)

Race/ethnicity and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
All recipients (number)	82,194	69,970	2,325	20,793	2,231	2,509	2,661	10,319	15,196	13,936	12,224
Personal/family funds	22.9	24.4	21.9	11.3	25.0	15.4	11.5	7.4	48.8	34.2	14.5
Loans	7.1	8.0	4.4	2.3	2.6	2.2	1.5	1.3	22.4	9.6	2.0
Savings	1.8	1.9	2.0	0.7	3.5	2.0	0.9	0.5	3.0	3.3	1.8
Other earnings in graduate school	6.7	6.8	8.3	3.0	12.1	6.5	3.9	1.8	10.0	12.1	6.4
Other family earnings or savings	7.2	7.7	7.2	5.3	6.7	4.7	5.1	3.9	13.3	9.1	4.3
Teaching assistantship	15.3	16.8	7.0	10.9	9.5	13.3	52.5	20.5	13.9	22.4	6.7
Research assistantship, traineeship, and internship	29.8	27.5	45.7	34.6	33.2	39.2	10.7	49.2	16.0	10.5	43.2
Research assistantship	26.8	24.1	45.3	27.3	32.1	38.1	9.7	48.0	12.5	9.7	42.1
Traineeship	2.7	3.1	0.3	7.0	0.6	0.8	0.9	1.1	2.7	0.7	0.8
Internship or residency	0.3	0.3	0.1	0.3	0.4	0.3	0.1	0.2	0.8	0.1	0.3
Fellowship/scholarship or dissertation grant	23.5	23.7	14.5	36.8	16.6	24.9	19.4	16.7	12.4	24.9	22.3
Fellowship/scholarship	22.1	22.3	12.4	34.4	15.7	22.0	19.1	15.7	12.1	23.7	20.8
Dissertation grant	1.4	1.4	2.1	2.4	0.9	2.9	0.3	1.0	0.3	1.2	1.5
Employer reimbursement or assistance	3.2	2.3	5.7	1.8	9.1	3.4	2.2	1.8	1.3	2.6	8.3
Foreign	0.3	0.2	0.6	0.2	0.4	0.3	0.1	0.1	0.1	0.3	0.5
Other	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.3	0.1	0.2
Unknown	4.9	5.0	4.4	4.2	6.0	3.3	3.5	4.2	7.1	4.9	4.3
White (number)	63,813	55,036	1,936	15,861	1,608	2,114	2,174	8,279	12,244	10,820	8,777
Personal/family funds	24.2	25.6	23.8	12.2	26.3	15.8	11.7	7.9	50.7	35.1	15.5
Loans	7.3	8.1	4.6	2.4	2.2	1.7	1.3	1.3	22.5	9.4	2.0
Savings	1.9	1.9	1.8	0.7	3.5	2.1	0.9	0.5	3.1	3.3	1.8
Other earnings in graduate school	7.2	7.2	9.2	3.2	13.6	6.8	4.1	1.8	10.7	12.6	7.1
Other family earnings or savings	7.8	8.4	8.1	5.9	7.0	5.2	5.3	4.3	14.4	9.7	4.6
Teaching assistantship	16.2	17.7	7.2	11.8	9.2	14.2	54.4	20.8	15.0	23.6	6.6
Research assistantship, traineeship, and internship	30.1	28.1	45.4	35.3	32.2	38.7	11.1	50.3	16.7	11.2	42.9
Research assistantship	27.0	24.6	45.1	27.8	31.1	37.7	10.0	49.0	13.1	10.3	41.8
Traineeship	2.8	3.1	0.2	7.2	0.6	0.9	1.0	1.1	2.8	0.8	0.8
Internship or residency	0.3	0.4	0.1	0.3	0.4	0.2	0.1	0.2	0.9	0.1	0.3
Fellowship/scholarship or dissertation grant	21.7	21.7	13.4	35.0	16.7	24.5	17.7	15.7	9.8	22.9	21.8
Fellowship/scholarship	20.3	20.3	11.3	32.5	15.8	21.4	17.4	14.7	9.5	21.7	20.2
Dissertation grant	1.4	1.4	2.1	2.5	0.9	3.1	0.3	1.0	0.3	1.3	1.6
Employer reimbursement or assistance	3.3	2.3	5.8	1.9	9.4	3.6	2.2	1.8	1.3	2.7	9.1
Foreign	0.2	0.1	0.5	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3
Other	0.2	0.2	0.2	0.3	0.4	0.3	0.0	0.1	0.4	0.2	0.3
Unknown	4.1	4.2	3.8	3.4	5.7	2.6	2.8	3.4	6.1	4.1	3.6
Asian/Pacific Islander (number)	8,501	6,371	139	2,828	392	159	254	1,043	652	904	2,130
Personal/family funds	12.6	13.1	10.1	6.3	17.6	10.1	14.2	3.7	38.2	26.0	10.9
Loans	2.8	3.2	0.7	0.9	1.3	1.9	1.6	0.4	18.7	4.6	1.4

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-17. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by race/ethnicity and doctorate field: 1999–2003
(Percent)

Race/ethnicity and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
Savings	1.5	1.4	2.9	0.7	3.1	0.6	1.6	0.7	1.7	3.4	1.6
Other earnings in graduate school	3.6	3.3	2.9	1.4	7.1	4.4	4.3	1.2	5.4	8.2	4.4
Other family earnings or savings	4.7	5.1	3.6	3.2	6.1	3.1	6.7	1.4	12.4	9.7	3.5
Teaching assistantship	13.6	15.4	6.5	7.7	12.0	7.5	54.7	22.4	14.9	25.0	8.2
Research assistantship, traineeship, and internship	40.4	36.2	61.2	40.3	45.4	61.0	12.2	52.4	18.1	12.3	53.0
Research assistantship	36.9	31.9	60.4	32.5	44.1	58.5	11.4	51.3	14.4	11.6	51.9
Traineeship	3.2	4.1	0.7	7.7	0.5	0.6	0.8	1.0	3.4	0.6	0.7
Internship or residency	0.2	0.2	0.0	0.1	0.8	1.9	0.0	0.2	0.3	0.1	0.3
Fellowship/scholarship or dissertation grant	24.8	27.5	12.2	39.1	10.5	17.6	14.2	13.3	18.3	29.3	16.6
Fellowship/scholarship	23.4	26.1	10.8	37.0	9.2	15.7	13.8	12.8	17.8	28.1	15.3
Dissertation grant	1.4	1.4	1.4	2.1	1.3	1.9	0.4	0.6	0.5	1.2	1.3
Employer reimbursement or assistance	2.9	1.9	2.2	1.3	9.2	0.6	2.4	1.8	0.9	1.7	5.6
Foreign	0.6	0.4	2.9	0.1	0.8	0.6	0.0	0.2	0.3	1.3	0.9
Other	0.1	0.2	0.0	0.3	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Unknown	5.1	5.2	5.0	4.8	4.6	2.5	2.4	5.9	9.2	4.4	4.8
Black (number)	3,473	3,042	83	605	85	50	75	307	874	963	431
Personal/family funds	25.1	26.7	13.3	9.6	37.6	16.0	6.7	7.5	38.6	35.2	13.2
Loans	13.4	14.6	7.2	4.3	16.5	8.0	5.3	4.2	24.3	17.1	5.1
Savings	1.9	1.9	1.2	0.3	5.9	2.0	0.0	0.3	2.3	2.9	1.9
Other earnings in graduate school	6.2	6.5	4.8	2.8	10.6	6.0	0.0	1.0	6.8	10.7	3.9
Other family earnings or savings	3.5	3.7	0.0	2.1	4.7	0.0	1.3	2.0	5.3	4.5	2.3
Teaching assistantship	9.3	9.7	1.2	7.6	3.5	6.0	29.3	16.6	6.4	11.8	6.3
Research assistantship, traineeship, and internship	15.2	14.1	39.8	20.0	8.2	24.0	1.3	27.0	11.9	7.1	23.0
Research assistantship	12.9	11.8	38.6	13.6	7.1	24.0	1.3	26.4	9.6	6.3	20.9
Traineeship	2.1	2.2	1.2	6.4	1.2	0.0	0.0	0.7	2.1	0.6	1.6
Internship or residency	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.5
Fellowship/scholarship or dissertation grant	40.5	39.5	33.7	54.2	35.3	34.0	54.7	41.4	33.3	35.2	48.0
Fellowship/scholarship	39.5	38.4	33.7	51.1	35.3	34.0	54.7	39.4	32.8	34.9	46.9
Dissertation grant	1.1	1.1	0.0	3.1	0.0	0.0	0.0	2.0	0.5	0.3	1.2
Employer reimbursement or assistance	2.6	2.3	3.6	1.5	5.9	6.0	1.3	1.6	1.8	3.0	4.4
Foreign	0.1	0.1	0.0	0.2	1.2	0.0	0.0	0.0	0.1	0.1	0.2
Other	0.2	0.2	0.0	0.3	0.0	2.0	1.3	0.0	0.1	0.2	0.0
Unknown	7.0	7.3	8.4	6.6	8.2	12.0	5.3	5.9	7.8	7.4	4.9
Hispanic (number)	3,586	3,131	101	870	60	89	73	342	955	641	455
Personal/family funds	23.8	25.4	15.8	11.4	20.0	18.0	5.5	7.0	45.7	29.3	12.5
Loans	10.2	11.2	6.9	3.2	1.7	6.7	2.7	1.8	24.8	10.1	3.1
Savings	1.4	1.5	3.0	0.3	5.0	1.1	0.0	0.3	2.2	2.2	1.1
Other earnings in graduate school	6.1	6.4	2.0	3.0	5.0	9.0	1.4	2.3	9.0	10.1	4.4
Other family earnings or savings	6.0	6.3	4.0	4.8	8.3	1.1	1.4	2.6	9.6	6.9	4.0

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-17. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by race/ethnicity and doctorate field: 1999–2003
(Percent)

Race/ethnicity and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
Teaching assistantship	11.3	12.2	6.9	7.9	11.7	11.2	35.6	19.6	7.9	18.9	5.5
Research assistantship, traineeship, and internship	18.7	16.7	41.6	21.3	30.0	27.0	4.1	36.3	9.6	5.6	31.9
Research assistantship	16.6	14.5	40.6	17.1	28.3	25.8	4.1	34.5	7.3	5.0	31.4
Traineeship	1.8	2.0	0.0	4.1	1.7	1.1	0.0	1.8	1.8	0.5	0.4
Internship or residency	0.2	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.0
Fellowship/scholarship or dissertation grant	34.4	34.4	19.8	50.1	20.0	34.8	47.9	29.5	21.2	37.3	34.3
Fellowship/scholarship	32.9	33.0	16.8	47.6	20.0	33.7	47.9	28.7	20.5	35.9	32.5
Dissertation grant	1.5	1.4	3.0	2.5	0.0	1.1	0.0	0.9	0.6	1.4	1.8
Employer reimbursement or assistance	3.0	2.1	7.9	1.8	8.3	4.5	4.1	2.3	1.5	1.2	8.8
Foreign	1.1	0.9	1.0	1.0	3.3	1.1	0.0	0.6	0.4	1.2	2.9
Other	0.1	0.2	1.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Unknown	7.7	8.2	5.9	6.2	6.7	3.4	2.7	4.7	13.6	6.4	4.2
American Indian/Alaska Native (number)	418	373	11	75	7	13	10	39	111	107	45
Personal/family funds	30.4	30.6	0.0	13.3	42.9	15.4	0.0	20.5	45.0	38.3	28.9
Loans	9.3	9.7	0.0	6.7	14.3	0.0	0.0	2.6	18.0	8.4	6.7
Savings	3.8	3.8	0.0	1.3	0.0	7.7	0.0	2.6	2.7	7.5	4.4
Other earnings in graduate school	8.9	8.6	0.0	4.0	28.6	7.7	0.0	2.6	8.1	15.0	11.1
Other family earnings or savings	8.4	8.6	0.0	1.3	0.0	0.0	0.0	12.8	16.2	7.5	6.7
Teaching assistantship	9.1	10.2	9.1	6.7	0.0	15.4	50.0	10.3	7.2	12.1	0.0
Research assistantship, traineeship, and internship	17.7	17.2	27.3	26.7	14.3	30.8	30.0	38.5	9.0	7.5	22.2
Research assistantship	16.3	15.8	27.3	21.3	14.3	30.8	30.0	38.5	8.1	7.5	20.0
Traineeship	1.0	1.1	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Internship or residency	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	2.2
Fellowship/scholarship or dissertation grant	29.9	30.6	18.2	49.3	14.3	30.8	0.0	12.8	27.0	32.7	24.4
Fellowship/scholarship	29.2	30.0	18.2	48.0	14.3	30.8	0.0	12.8	26.1	32.7	22.2
Dissertation grant	0.7	0.5	0.0	1.3	0.0	0.0	0.0	0.0	0.9	0.0	2.2
Employer reimbursement or assistance	3.1	1.9	27.3	0.0	14.3	0.0	10.0	0.0	0.0	1.9	13.3
Foreign	1.0	0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.9	0.9	2.2
Other	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
Unknown	8.4	8.3	18.2	2.7	14.3	7.7	10.0	17.9	9.0	6.5	8.9
Other or unknown race/ethnicity (number)	2,403	2,017	55	554	79	84	75	309	360	501	386
Personal/family funds	20.0	21.4	16.4	12.3	22.8	11.9	9.3	4.5	38.9	32.9	12.7
Loans	5.6	6.4	0.0	2.2	1.3	6.0	1.3	0.3	18.6	8.4	1.3
Savings	2.0	2.1	5.5	0.7	2.5	0.0	1.3	0.0	3.6	3.8	1.8
Other earnings in graduate school	7.1	7.2	7.3	4.3	13.9	2.4	4.0	1.9	8.1	13.2	6.7
Other family earnings or savings	5.2	5.7	3.6	5.1	5.1	3.6	2.7	2.3	8.6	7.6	2.8
Teaching assistantship	11.8	13.0	9.1	9.4	8.9	6.0	32.0	12.9	10.8	18.0	5.4
Research assistantship, traineeship, and internship	23.8	22.2	36.4	25.5	24.1	33.3	8.0	46.6	15.6	6.6	32.6
Research assistantship	21.6	19.7	36.4	19.7	24.1	32.1	8.0	46.6	11.1	6.4	31.9

Women, Minorities, and Persons with Disabilities in Science and Engineering

TABLE F-17. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients, by race/ethnicity and doctorate field: 1999–2003
(Percent)

Race/ethnicity and primary source of support	All S&E	Science	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Engineering
Traineeship	2.0	2.2	0.0	5.6	0.0	0.0	0.0	0.0	3.3	0.2	0.8
Internship or residency	0.2	0.3	0.0	0.2	0.0	1.2	0.0	0.0	1.1	0.0	0.0
Fellowship/scholarship or dissertation grant	23.8	24.2	20.0	35.4	24.1	32.1	24.0	17.8	13.9	22.6	21.5
Fellowship/scholarship	22.4	22.8	16.4	33.2	22.8	28.6	24.0	15.9	13.3	21.8	20.5
Dissertation grant	1.4	1.5	3.6	2.2	1.3	3.6	0.0	1.9	0.6	0.8	1.0
Employer reimbursement or assistance	2.6	1.5	5.5	1.3	6.3	0.0	1.3	1.6	0.8	1.4	8.0
Foreign	0.5	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.8	1.3
Other	0.3	0.1	0.0	0.2	0.0	0.0	0.0	0.3	0.3	0.0	1.0
Unknown	17.3	17.3	12.7	15.9	13.9	16.7	25.3	16.2	19.4	17.8	17.4

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-18. Primary source of support for U.S.-citizen and permanent-resident S&E doctorate recipients by disability status: 1999–2003

(Percent)

Primary source of support	All recipients	No disability	With disability
All recipients (numbers)	82,194	80,760	1,434
Personal/family funds	22.9	22.6	38.7
Loans	7.1	7.0	13.4
Savings	1.8	1.8	4.7
Other earnings in graduate school	6.7	6.7	11.2
Other family earnings or savings	7.2	7.1	9.4
Teaching assistantship	15.3	15.3	13.7
Research assistantship, traineeship, and internship	29.8	30.0	19.6
Research assistantship	26.8	26.9	16.8
Traineeship	2.7	2.7	2.1
Internship or residency	0.3	0.3	0.7
Fellowship/scholarship and dissertation grant	23.5	23.5	20.3
Fellowship/scholarship	22.1	22.1	18.8
Dissertation grant	1.4	1.4	1.5
Employer reimbursement or assistance	3.2	3.2	4.1
Foreign	0.3	0.3	0.1
Other	0.2	0.2	1.3
Unknown	4.9	4.9	2.2

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-19. Location and type of postgraduate activity for U.S.-citizen and permanent-resident S&E doctorate recipients with definite postgraduate plans, by sex: 2003

(Percent distribution)

Location and type of postgraduate activity	Both sexes ^a	Female	Male
All recipients (number)	10,863	4,545	6,316
United States	96.4	96.7	96.1
Academic employment	24.0	26.6	22.2
Industry employment	16.6	11.7	20.1
Postdoctoral study	42.9	45.3	41.2
Other ^b	12.8	13.1	12.6
Abroad	3.3	3.1	3.5
Location unknown	0.3	0.2	0.4

^a Both sexes include those with unknown gender. The data for all recipients, therefore, will not equal the sum of female and male.

^b Includes elementary/secondary schools, government, nonprofit, and other or unknown.

NOTES: Definite postgraduate plans are defined as Am returning to, or continuing in, postdoctoral employment or Have signed contract or made definite commitment for other work or study by doctoral degree recipients who responded to the question, How definite are your immediate (within the next year) postgraduate plans?

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 2003.

TABLE F-20. S&E doctoral degrees awarded by leading institutions, by sex: 1999–2003

Academic institution	Doctoral degrees	Academic institution	Doctoral degrees
Female		Male	
All institutions	46,432	All institutions	80,516
Top 50 institutions	23,061	Top 50 institutions	45,301
University of California-Berkeley	911	University of California-Berkeley	1,835
University of Wisconsin-Madison	746	University of Illinois at Urbana-Champaign	1,640
University of Michigan at Ann Arbor	705	Massachusetts Institute of Technology	1,629
University of Minnesota-Twin Cities	670	Stanford University	1,554
University of California-Los Angeles	657	University of Wisconsin-Madison	1,517
University of Texas at Austin	641	University of Michigan at Ann Arbor	1,469
Stanford University	616	University of Texas at Austin	1,405
Ohio State University main campus	612	Texas A&M University main campus	1,364
Cornell University all campuses	603	Purdue University main campus	1,271
University of Illinois at Urbana-Champaign	599	Pennsylvania State University main campus	1,266
University of Washington-Seattle	597	University of California-Los Angeles	1,263
Harvard University	581	Ohio State University main campus	1,207
University of California-Davis	579	University of Minnesota-Twin Cities	1,178
University of Maryland at College Park	550	Cornell University all campuses	1,111
Pennsylvania State University main campus	545	University of Washington-Seattle	1,074
Massachusetts Institute of Technology	510	University of Florida	1,056
University of Florida	509	University of Maryland at College Park	1,006
University of North Carolina at Chapel Hill	494	Harvard University	967
Purdue University main campus	486	Georgia Institute of Technology main campus	902
Michigan State University	483	University of Southern California	897
University of Arizona	468	North Carolina State University at Raleigh	882
Texas A&M University main campus	467	Michigan State University	856
University of Pennsylvania	455	University of California-Davis	851
North Carolina State University at Raleigh	454	University of Arizona	830
Rutgers the State University of New Jersey New Brunswick	449	University of Chicago	762
Yale University	428	University of California-San Diego	754
Johns Hopkins University	424	Columbia University in the City of New York	744
Northwestern University	422	Northwestern University	734
University of Southern California	419	University of Pennsylvania	730
University of Georgia	418	University of Colorado at Boulder	723
Columbia University in the City of New York	383	Johns Hopkins University	712
University of California-San Diego	383	Virginia Polytechnic Institute and State University	709
University of Colorado at Boulder	377	Iowa State University	708
CUNY Graduate School and University Center	368	Rutgers the State University of New Jersey New Brunswick	704
University of Pittsburgh main campus	356	Princeton University	661
New York University+A6	355	University of North Carolina at Chapel Hill	621
Indiana University at Bloomington	350	Yale University	606
University of Chicago	347	University of Virginia main campus	587
Boston University	330	SUNY at Stony Brook all campuses	573
Duke University	327	University of Pittsburgh main campus	572
University of Massachusetts at Amherst	320	University of Georgia	571
University of Virginia main campus	318	Carnegie Mellon University	563
University of Kansas main campus	315	University of California-Santa Barbara	559
SUNY at Stony Brook all campuses	310	California Institute of Technology	543
University of Connecticut	305	Indiana University at Bloomington	534
Wayne State University	294	University of Utah	526
Virginia Polytechnic Institute and State University	293	Louisiana State University & Agricultural & Mechanical Col	523
Iowa State University	282	SUNY at Buffalo	523
SUNY at Buffalo	275	University of Massachusetts at Amherst	518
University of Missouri, Columbia	275	Arizona State University main campus	511
Other institutions	23,371	Other institutions	35,215

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.

TABLE F-21. S&E doctoral degrees awarded by leading institutions, by race/ethnicity of minority graduates: 1999–2003

Academic institution	Doctoral degrees	Academic institution	Doctoral degrees
Asian/Pacific Islander		Black	
All institutions	32,398	All institutions	4,389
University of Illinois at Urbana-Champaign	762	Howard University	229
Purdue University main campus	698	University of Michigan at Ann Arbor	103
University of California-Berkeley	688	University of Maryland at College Park	85
University of California-Los Angeles	662	Pennsylvania State University main campus	76
Texas A&M University main campus	652	Michigan State University	74
University of Michigan at Ann Arbor	640	University of Florida	65
Ohio State University main campus	636	Purdue University main campus	64
Stanford University	636	Ohio State University main campus	63
University of Texas at Austin	628	Louisiana State University & A&M College	62
University of Wisconsin-Madison	579	University of California-Berkeley	62
University of Southern California	534	University of North Carolina at Chapel Hill	59
Pennsylvania State University main campus	523	North Carolina State University at Raleigh	57
Massachusetts Institute of Technology	464	University of Illinois at Urbana-Champaign	56
University of Maryland at College Park	464	Georgia Institute of Technology main campus	53
University of Minnesota-Twin Cities	442	Harvard University	53
Cornell University all campuses	441	Cornell University all campuses	51
Columbia University in the City of New York	431	CUNY Graduate School and University Center	51
Rutgers the State University of New Jersey New Brunswick	425	Texas A&M University main campus	50
North Carolina State University at Raleigh	398	Temple University	47
Michigan State University	382	Meharry Medical College	46
Georgia Institute of Technology main campus	378	Northwestern University	46
Iowa State University	375	Wayne State University	46
Other institutions	20,560	Other institutions	2,891
Hispanic		American Indian/Alaska Native	
All institutions	6,189	All institutions	433
Texas A&M University main campus	167	Oklahoma State University all campuses	14
University of Texas at Austin	153	University of California-Berkeley	11
University of California-Berkeley	144	University of Oklahoma, Norman campus	10
Cornell University all campuses	137	University of Washington-Seattle	10
University of Puerto Rico Rio Piedras campus	137	Cornell University all campuses	8
Caribbean Center for Advanced Studies	134	University of New Mexico all campuses	8
University of Wisconsin-Madison	127	University of Texas at Austin	8
University of Florida	123	Stanford University	7
University of California-Los Angeles	117	University of California-Davis	7
University of Arizona	109	University of Florida	7
University of Illinois at Urbana-Champaign	108	University of Michigan at Ann Arbor	7
Stanford University	102	University of Tennessee at Knoxville	7
University of California-Davis	98	University of Wisconsin-Madison	7
University of Minnesota-Twin Cities	88	Harvard University	6
University of Michigan at Ann Arbor	83	Texas A&M University main campus	6
Purdue University main campus	80	University of Arizona	6
Harvard University	79	University of Minnesota-Twin Cities	6
Ohio State University main campus	78	University of North Dakota all campuses	6
Massachusetts Institute of Technology	76	California School of Professional Psychology at San Diego	5
University of Chicago	76	North Carolina State University at Raleigh	5
Pennsylvania State University main campus	75	Northwestern University	5
University of Maryland at College Park	66	University of California-Los Angeles	5
Other institutions	3,832	University of Maryland at College Park	5
		Other institutions	267

NOTE: Institutions with the same number of doctorate recipients are listed alphabetically.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, 1999–2003.