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ABSTRACT

This document presents estimates of graduate enrollment and postdoctoral employment at the beginning of the academic year 1995-96 at all institutions in the United States that granted doctorate or Master's degrees in any science or engineering field. The survey universe is derived from the ongoing National Science Foundation/National Institutes of Health Survey of Graduate Students and Postdoctorates in Science and Engineering; for the fall 1995 it encompassed 722 reporting units at 602 graduate institutions. The response rate was 98.5 percent. Data tables include total enrollment in all institutions of higher education, by level of enrollment and broad field: 1975-95; graduate student enrollments in science, engineering, and health in all institutions, by field: 1975-95; student enrollment by full time and part-time status; and by gender, citizenship status, racial/ethnic background for 1988-95; by source of major support: 1988-95; students in doctorate-granting institutions; students in Master's-granting institutions; science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field: 1988-95; science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field; source of support; and number of postdoctoral appointees who were non-U.S. citizens in 1995. Technical notes cover description of survey universe, instruments, and methodology; the response rate; and changes and revisions in data items. (JLS)

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Fall 1995

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National Science Foundation

NSF 97-312

AE 030 546



# **Graduate Students and Postdoctorates in Science and Engineering**

**Fall 1995**

**Joan Burrelli, Project Officer**

**Division of Science Resources Studies  
Directorate for Social, Behavioral and Economic Sciences**



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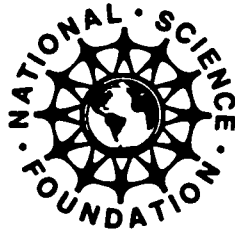
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## Contributors

Data collection, preparation, and tabulations were performed by Quantum Research Corp. for the National Science Foundation. The Project Officer for this report was Joan Burrelli.



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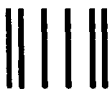
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# GENERAL NOTES

Data presented in these tables are derived from the National Science Foundation/National Institutes of Health (NSF/NIH) Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey), Fall 1995. Unless otherwise specified, the published data represent estimates of total enrollment in science and engineering (S&E) programs in approximately 11,598 graduate departments at 602 institutions in the United States and outlying areas.

All eligible institutions were included in the survey population in the years 1988 through 1995. From 1984 through 1987 the surveys were conducted on a stratified random sample basis, with all doctorate-granting institutions, all master's-granting historically black colleges and universities, and all land-grant institutions included in the certainty stratum. The remaining master's-granting institutions were divided into two sample strata on the basis of enrollment size. Data for sampled institutions for the years 1984-87 were reestimated in 1988 on the basis of 1983 and 1988 data. During the 1989 survey cycle, S&E field definitions were reviewed and some departments were deleted. Data for 1975 through 1988 were adjusted to conform to the revised definitions.

In 1992, the citizenship categories requested were modified to conform to those used in other surveys conducted by NSF, the Department of Education's National Center for Education Statistics

(NCES), and others. Prior to that time, permanent residents (those who held green cards but had not yet been granted U.S. citizenship) were to be included in "Foreign"; in subsequent years these individuals were included in the "U.S. citizens" total and reported according to racial/ethnic background.

For these reasons, and because institutions may revise their data for earlier years, only the latest trend data should be used in historical analyses.

To meet the needs of those interested in more detailed data of a specific type, NSF has developed a series of Supplementary Data Releases focusing on specific data topics. The supplementary tables as well as the full report are available through the Division of Science Resources Studies World Wide Web site (<http://www.nsf.gov/sbe/srs/stats.htm>). For further information on data availability, please contact—

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# TECHNICAL NOTES

## THE SURVEY UNIVERSE

The data collected in the fall 1995 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSPSE) represent national estimates of graduate enrollment and postdoctoral employment at the beginning of academic year 1995–96 in all academic institutions in the United States that granted doctorate or master's degrees in any science or engineering field. Included are data for all branch campuses, affiliated research centers, and separately organized components such as medical or dental schools, schools of nursing, public health, etc. The survey universe consisted of 722 reporting units at 602 graduate institutions. Included were 257 master's-granting institutions and 465 reporting units associated with 345 doctorate-granting institutions.

The National Science Foundation has collected data on graduate science and engineering (S&E) enrollment and postdoctoral appointees since 1966. From fall 1966 through fall 1971, data from a limited number of doctorate-granting institutions were collected through the NSF Graduate Traineeship Program, which requested data only on those S&E fields supported by NSF. Beginning with the fall 1972 survey, this data collection effort was assigned to the Universities and Nonprofit Institutions Studies Group and was gradually expanded during the period 1972–75 to include additional S&E fields as well as all institutions known to have programs leading to the master's or doctorate degree. Because of this expansion, data for 1974 and earlier years are not strictly comparable with 1975 and later data. Technical Table 1 shows the number of institutions, reporting units, and departments at each level included in the data, as well as the total enrollment reported for each year between 1966 and 1995. No attempt has been made to inflate the data for 1966–74 to reflect universe totals.

Beginning with the 1984–85 academic year, master's-granting institutions were surveyed on a sample basis. The fall 1988 survey included the entire survey population for the first time since 1983–84. For each year since 1988, any institutions that begin S&E master's or doctoral programs are added to the survey universe and any that close all their S&E graduate programs are deleted. (See Survey Methodology, below.)

Technical Tables 2 and 3 present data on departmental coverage by S&E field for doctorate-granting and master's-granting institutions for the last 8 years surveyed.

## THE SURVEY INSTRUMENTS

The Survey Questionnaire on which data were reported in fall 1995 was identical to the fall 1994 version, except for changes in the instructions to clarify some data items.

Each survey package also included the following items:

1. an enclosure detailing mailing package contents;
2. a flyer explaining NSF's academic S&E surveys;
3. cover letter to survey coordinators at graduate schools or at medical schools;
4. cover letter to departmental respondents;
5. a computer-generated List of Departments or Programs (NSF Form 811) specific to each institution surveyed and based on the departments known to exist in the previous survey cycle;
6. a "crosswalk" showing National Center for Education Statistics (NCES) instructional program codes corresponding to each S&E field as defined by NSF;
7. a "How To Avoid Common Survey Errors" sheet with guidelines for avoiding the most common mistakes made in the graduate student survey; and
8. a postcard acknowledging receipt of the survey and requesting the respondent to indicate changes in coordinator name, address, telephone number, or e-mail address.

## SURVEY METHODOLOGY

The survey packages were mailed out by November 30, 1995. The final survey universe consisted of 722 responding units at 602 institutions.

The acknowledgment postcard requested that institutional coordinators indicate how the data were collected, whether the data were maintained centrally or collected from individual departments, and whether

they were derived from a computerized database or were hand tabulated. Of the 722 responding schools surveyed, coordinators at 702 units, or 97 percent, have provided this information over the past 8 years.

The number of schools using computerized systems to assemble the requested data increased, as did those using a combination of data sources. The number of schools using automated systems with department input and those hand tabulating data at the school level remained relatively the same as last year, whereas those hand tabulating data at the department level decreased.

Institutional coordinators were asked to review the departmental listing provided on the Survey Questionnaire, to indicate any changes in their departmental structure such as departments newly formed, phased out, split, or merged, and to check off any departments that had neither graduate students nor postdoctorates and for which Survey Questionnaires would therefore not be submitted. The revised Form 811s were returned to the data processing contractor for use as a checklist in tracking departmental responses.

A Survey Questionnaire was completed for each department either centrally or at the departmental level and was returned to the data processing contractor for data entry, editing, and tabulation. Arithmetic errors, inconsistencies between items, and sharp year-to-year fluctuations were referred to the institutional coordinators for correction or clarification.

## THE RESPONSE RATE

Of the 722 responding units included in the fall 1995 survey, 712, or 98.5 percent, were able to provide at least partial data, distributed as follows:

At the departmental level 11,244 departments responded, or 96.9 percent of the 11,598 departments surveyed. This includes 9,514 departments providing complete responses, or 82.0 percent of the total. A total of 354 departments, or 3.1 percent of the departmental total, required complete imputation, and 1,730, or 14.9 percent, had one or more data cells imputed. Technical Table 4 presents the department response rates for earlier years for comparison.

Missing data for partially nonrespondent departments were imputed using the departments' previous year's data, where available, or data from peer institutions in cases where data had not been reported the previous year. Data for nonrespondent departments (departments that did not provide any data) were

imputed using data from the previous year, where available. The number of departments in doctorate-granting and master's-granting institutions that required total or partial imputation and the numbers and proportions of full-time and part-time graduate students and postdoctorates imputed are shown in Technical Tables 5 and 6. Imputation rates by survey data item are provided in Technical Table 7.

## CHANGES IN DATA ITEMS

Although NSF has attempted to maintain consistent trend data, some modifications in the survey questionnaire have been made to respond to changing issues over the past 15 years. As a result some data items are not available for all institutions in all years.

Major changes in the data collected are as follows:

- From 1975 through 1977, data for master's-granting institutions were collected on a short form (i.e., an abbreviated form of the survey) that did not collect data on sex or citizenship of graduate students, nor any data on postdoctoral appointees. In 1978 a similar questionnaire was sent to doctorate-granting institutions, but master's-granting institutions were not surveyed. In addition, the 1978 questionnaire did not collect data on mechanisms of support for full-time students. All mechanisms of support data for that year were combined on one line and appeared as "other types of support" in any data tables. The 1978 figures shown in the tables for master's-granting institutions represent estimates based on 1977 and 1979 data. Beginning in 1979 the long form (i.e., the full-scale survey form) was sent to both doctorate-granting and master's-granting institutions.
- Distribution by sex was originally requested only for full-time graduate students at doctorate-granting institutions. Beginning in 1976 master's-granting institutions were requested to provide data on all graduate students by sex, and in 1977 similar data were requested for all graduate students in all institutions. The short form used in the 1978 survey did not request any information on sex; figures in the tables represent estimates based on 1977 and 1979 data.
- Citizenship data were collected only for graduate students enrolled full-time in doctorate-granting institutions through 1977. No citizenship data were requested on the short form used for master's-granting institutions in 1975 through 1977 and for

doctorate-granting institutions in 1978. Data on citizenship of all full-time graduate students are available beginning in 1979 and on those enrolled part-time since 1983.

- Racial/ethnic data were first requested in 1979 and became a standard item on the questionnaire in 1980.
- “Fellowships and traineeships” were combined on one line until 1979, when separate data on the two mechanisms were first collected.
- “Other nonfaculty research staff with doctorates” were combined with postdoctoral appointees until 1979.
- Separate data on students receiving their primary support from the U.S. Department of Agriculture were first requested in 1985.
- Racial/ethnic data by sex were first requested in 1993 and became a standard item on the questionnaire in 1994.

## DATA REVISIONS

During the fall 1988 survey cycle, the criteria for including departments in the survey universe were tightened, and all departments surveyed were reviewed. Those departments not primarily oriented toward granting research degrees were no longer considered to meet the definition of science and engineering. As a result of this review, it was determined that a number of departments, primarily in the field of “social sci-

ences, n.e.c.” (not elsewhere classified), were engaged in training primarily teachers, practitioners, administrators, or managers rather than researchers; these departments were deleted from the database. This process was continued during the fall 1989–95 survey cycles and expanded to ensure trend consistency for the entire 1975–95 period. As a result, total enrollments and social science enrollments for all years were reduced. The net effect of adjustments over the years is shown in Technical Table 8.

During the same period, the survey methodology changed so that an institution’s highest science and engineering degree in the current year would apply to all previous years that the institution was surveyed. Since a number of master’s-granting institutions have become doctorate-granting institutions, the combined effect has been a smaller decrease in enrollment at doctorate-granting institutions than at master’s-granting institutions, and for the years 1975–76 and 1991–92, an increase in enrollment at doctorate-granting institutions after subsequent-year modifications.

The definition of “medical schools” was revised during the fall 1992 survey cycle to include only those institutional components that are members of the Association of American Medical Colleges. Tables generated after the fall 1992 survey differ from their counterparts in earlier years in that they exclude schools of nursing, public health, dentistry, veterinary medicine, and other health-related disciplines, and should not be compared with tables from earlier years.

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Year	Number of institutions surveyed	Number of reporting units	Number of departments			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
<b>A. Graduate Traineeship Program</b>								
1966	204	204	2,866	441	2,425	169,303	124,255	45,048
1967	209	209	3,014	434	2,580	179,622	133,972	45,650
1968	219	219	3,190	454	2,736	184,759	140,714	44,045
1969	224	224	3,354	460	2,894	196,341	147,515	48,826
1970	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 <sup>1</sup>	224	249	3,397	407	2,990	214,680	164,764	49,916
<b>B. Survey of Graduate Students and Postdoctorates in Science and Engineering<sup>2</sup></b>								
Doctorate institutions:								
1972	260	328	4,593	780	3,813	210,895	161,329	49,566
1973	259	336	6,538	859	5,679	214,459	161,582	52,877
1974	280	370	7,486	1,399	6,087	260,494	190,844	69,650
1975	323	420	7,866	1,686	6,180	295,146	207,417	87,729
1976	332	430	7,960	1,739	6,221	298,939	210,882	88,057
1977	333	436	8,172	1,856	6,316	306,381	212,897	93,484
1978	311	420	8,130	1,739	6,391	298,938	208,588	90,350
1979	349	466	8,414	1,923	6,491	314,736	216,842	97,894
1980	348	465	8,521	1,975	6,546	324,203	222,850	101,353
1981	346	461	8,447	1,972	6,475	331,042	226,607	104,435
1982	343	459	8,304	1,959	6,345	337,142	229,540	107,602
1983	342	458	8,178	1,921	6,257	343,923	235,687	108,236
1984	331	451	8,178	1,888	6,290	346,425	236,747	109,678
1985	331	446	8,286	1,924	6,362	355,818	240,449	115,369
1986	331	448	8,360	1,936	6,424	366,668	249,107	117,561
1987	335	454	8,471	1,936	6,535	372,130	253,689	118,441
1988	347	467	8,717	2,020	6,697	377,612	259,031	118,581
1989	348	468	8,838	2,033	6,805	384,800	266,027	118,773
1990	347	467	8,976	2,072	6,904	398,208	274,596	123,612
1991	347	467	9,168	2,090	7,078	413,570	287,023	126,547
1992	347	467	9,404	2,131	7,273	432,431	300,980	131,451
1993	347	467	9,593	2,140	7,453	440,471	306,942	133,529
1994	346	466	9,809	2,199	7,610	441,164	308,743	132,421
1995	345	465	9,989	2,253	7,736	436,328	305,652	130,676
Master's institutions:								
1975 <sup>3</sup>	263	263	1,140	1,140	N/A	33,563	12,427	21,136
1976	264	264	1,153	1,153	N/A	34,885	12,631	22,254
1977	269	269	1,223	1,223	N/A	39,110	13,948	25,162
1978 <sup>4</sup>	289	289	1,382	1,382	N/A	41,023	14,490	26,533
1979	281	281	1,276	1,276	N/A	42,952	15,026	27,926
1980	279	279	1,281	1,281	N/A	42,955	15,642	27,313
1981	277	277	1,285	1,285	N/A	44,161	15,511	28,650
1982	267	267	1,284	1,284	N/A	45,229	15,290	29,939
1983	267	267	1,293	1,293	N/A	46,599	16,405	30,194
1984 <sup>5</sup>	80	80	616	616	N/A	48,293	17,212	31,081
1985 <sup>5</sup>	80	80	628	628	N/A	48,270	16,902	31,368
1986 <sup>5</sup>	80	80	629	629	N/A	48,889	17,090	31,799
1987 <sup>5</sup>	80	80	637	637	N/A	49,396	17,391	32,005
1988	258	258	1,304	1,304	N/A	47,059	16,173	30,886
1989	260	260	1,355	1,355	N/A	49,837	16,714	33,123
1990	262	262	1,389	1,389	N/A	54,042	18,258	35,784
1991	261	261	1,437	1,437	N/A	57,744	20,026	37,718
1992	260	260	1,478	1,478	N/A	61,395	21,773	39,622
1993	258	258	1,524	1,524	N/A	64,367	22,934	41,433
1994	258	258	1,580	1,580	N/A	64,095	23,710	40,385
1995	257	257	1,609	1,609	N/A	65,182	24,583	40,599

1 The 1972 survey also collected selected data for 1971.

2 The name of the survey was changed in 1981 to specify the inclusion of engineering.

3 The 1976 survey also collected 1975 data from master's-granting institutions.

4 Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

5 Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

KEY: N/A = Not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Technical Table 2. Science, engineering, and health departmental population at doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	8,717	8,838	8,976	9,168	9,404	9,593	9,809	9,989
Total, science and engineering fields .....	6,321	6,398	6,468	6,619	6,772	6,863	7,006	7,128
Sciences, total .....	5,122	5,189	5,238	5,352	5,470	5,539	5,646	5,739
Physical sciences .....	542	545	543	551	556	559	561	568
Astronomy .....	33	33	33	33	33	34	34	35
Chemistry .....	259	261	261	263	264	264	262	263
Physics .....	234	237	235	242	244	246	250	252
Physical sciences, n.e.c. ....	16	14	14	13	15	15	15	18
Earth, atmospheric, & ocean sciences .....	300	303	306	318	320	324	333	347
Atmospheric sciences .....	28	28	28	29	29	31	32	33
Geosciences .....	192	192	192	200	201	201	205	209
Oceanography .....	37	42	42	45	45	45	46	50
Earth, atmos. & ocean sci., n.e.c. ....	43	41	44	44	45	47	50	55
Mathematical sciences .....	348	352	357	363	370	376	385	390
Mathematics & applied mathematics .....	284	287	290	294	295	299	305	309
Statistics .....	64	65	67	69	75	77	80	81
Computer sciences .....	216	219	230	237	248	251	258	268
Agricultural sciences .....	280	284	294	302	314	311	317	324
Biological sciences .....	1,814	1,823	1,825	1,867	1,906	1,950	1,977	1,994
Anatomy .....	113	115	107	106	105	104	104	101
Biochemistry .....	189	189	182	186	189	189	190	191
Biology .....	225	227	232	230	232	231	230	230
Biometry/epidemiology .....	48	49	51	56	61	69	71	72
Biophysics .....	31	32	31	33	33	33	33	34
Botany .....	108	107	104	104	102	103	104	101
Cell biology .....	87	88	92	96	104	110	118	120
Ecology .....	22	25	26	27	28	27	31	31
Entomology/parasitology .....	48	47	48	49	48	49	49	48
Genetics .....	64	65	67	72	76	79	82	84
Microbio., immunology, & virology .....	234	233	237	243	249	260	261	265
Nutrition .....	98	98	103	108	112	114	119	123
Pathology .....	145	143	143	147	145	143	143	144
Pharmacology .....	166	165	162	163	166	167	168	168
Physiology .....	146	150	145	146	146	146	144	146
Zoology .....	52	50	49	49	47	50	50	50
Biosciences, n.e.c. ....	38	40	46	52	63	76	80	86
Psychology .....	431	452	465	487	510	515	532	548
Psychology, general .....	164	189	196	214	234	239	252	260
Clinical psychology .....	186	166	168	167	165	162	164	164
Psychology, n.e.c. ....	81	97	101	106	111	114	116	124
Social sciences .....	1,191	1,211	1,218	1,227	1,246	1,253	1,283	1,300
Agricultural economics .....	51	52	52	52	53	52	53	54
Anthropology (cultural & social) .....	116	117	121	125	127	129	131	134
Economics (except agricultural) .....	193	194	193	195	199	199	202	201
Geography .....	95	93	94	95	97	97	98	99
History and philosophy of science .....	24	23	23	21	19	20	21	21
Linguistics .....	69	70	69	71	70	69	69	70
Political science .....	299	305	302	304	310	315	321	327
Sociology .....	162	168	171	172	172	173	174	175
Sociology/anthropology .....	32	31	30	28	28	25	26	25
Social sciences, n.e.c. ....	150	158	163	164	171	174	188	194
Engineering, total .....	1,199	1,209	1,230	1,267	1,302	1,324	1,360	1,389
Aerospace engineering .....	41	41	42	44	48	50	52	53
Agricultural engineering .....	41	41	41	41	41	40	38	38
Biomedical engineering .....	48	49	50	51	56	56	57	60
Chemical engineering .....	130	133	133	138	139	139	140	140
Civil engineering .....	187	183	186	193	198	200	210	216
Electrical engineering .....	188	194	197	205	212	214	221	227
Engineering science .....	35	35	35	36	37	39	41	39
Industrial eng./manufacturing eng. ....	119	125	126	132	136	145	154	157
Mechanical engineering .....	177	173	174	177	182	182	184	186
Metallurgical/materials eng. ....	80	85	89	96	101	101	104	106
Mining engineering .....	29	26	27	28	28	30	29	26
Nuclear engineering .....	27	27	26	26	25	25	26	26
Petroleum engineering .....	19	19	19	19	19	19	19	20
Engineering, n.e.c. ....	78	78	85	81	80	84	85	95

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 2. Science, engineering, and health departmental population  
at doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, health fields .....	2,396	2,440	2,508	2,549	2,632	2,730	2,803	2,861
Medical fields .....	1,806	1,830	1,881	1,914	1,963	2,031	2,084	2,124
Anesthesiology .....	81	84	85	87	87	87	89	89
Cardiology .....	67	67	67	67	68	69	70	71
Oncology/cancer research .....	32	36	36	38	45	48	51	56
Endocrinology .....	72	73	74	74	73	72	74	74
Gastroenterology .....	64	64	65	65	66	68	71	71
Hematology .....	70	68	67	67	69	71	73	73
Neurology .....	120	125	130	135	137	145	153	154
Obstetrics and gynecology .....	91	91	92	92	95	96	96	96
Ophthalmology .....	77	78	80	80	80	81	81	81
Otorhinolaryngology .....	68	68	70	70	70	71	72	72
Pediatrics .....	106	105	107	107	109	111	115	116
Preventive medicine/community health .....	156	157	164	165	172	177	181	184
Psychiatry .....	92	98	101	100	101	103	107	107
Pulmonary disease .....	62	63	63	62	64	67	68	69
Radiology .....	121	122	128	131	135	137	139	141
Surgery .....	216	216	221	233	238	246	251	257
Clinical medicine, n.e.c. ....	311	315	331	341	354	382	393	413
Other health fields .....	590	610	627	635	669	699	719	737
Dental sciences .....	77	79	78	76	82	87	84	83
Nursing .....	117	119	122	125	131	135	139	145
Pharmaceutical sciences .....	79	81	83	84	89	91	93	95
Speech pathology/audiology .....	121	122	123	124	127	130	132	133
Veterinary sciences .....	36	37	41	41	42	44	45	46
Health related, n.e.c. ....	160	172	180	185	198	212	226	235

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Technical Table 3. Science, engineering, and health departmental population at master's-granting institutions, by field: 1988-95

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	1,304	1,355	1,389	1,437	1,478	1,524	1,580	1,609
Total, science and engineering fields .....	1,155	1,201	1,228	1,263	1,293	1,332	1,375	1,389
Sciences, total .....	1,002	1,035	1,050	1,084	1,113	1,149	1,186	1,197
Physical sciences .....	122	122	124	127	125	130	131	128
Astronomy .....	0	0	0	0	0	0	0	0
Chemistry .....	79	82	83	83	83	83	83	79
Physics .....	36	32	33	34	33	35	35	35
Physical sciences, n.e.c. ....	7	8	8	10	9	12	13	14
Earth, atmospheric, & ocean sciences .....	53	53	53	56	59	58	60	66
Atmospheric sciences .....	1	1	1	1	1	1	1	2
Geosciences .....	31	31	31	32	31	30	31	32
Oceanography .....	5	5	5	5	6	6	6	6
Earth, atmos., & ocean sci., n.e.c. ....	16	16	16	18	21	21	22	26
Mathematical sciences .....	98	102	100	103	106	112	112	112
Mathematics & applied mathematics .....	96	100	97	99	102	106	106	106
Statistics .....	2	2	3	4	4	6	6	6
Computer sciences .....	72	76	80	82	86	91	96	97
Agricultural sciences .....	28	30	25	26	27	27	33	34
Biological sciences .....	178	181	177	181	182	181	180	184
Anatomy .....	0	0	0	0	0	0	0	0
Biochemistry .....	3	3	3	3	3	4	5	5
Biology .....	140	142	140	142	141	137	135	135
Biometry/epidemiology .....	0	0	0	1	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0
Botany .....	3	3	3	3	3	2	2	2
Cell biology .....	0	0	0	0	0	1	1	2
Ecology .....	3	3	3	3	3	3	3	3
Entomology/parasitology .....	0	0	0	0	0	0	0	0
Genetics .....	1	1	1	1	1	1	1	1
Microbio., immunology, & virology .....	3	3	2	2	2	2	2	2
Nutrition .....	10	10	10	10	12	14	15	17
Pathology .....	2	2	2	2	2	2	2	2
Pharmacology .....	1	1	1	1	1	1	0	0
Physiology .....	0	0	0	0	0	0	0	0
Zoology .....	2	2	2	3	3	2	2	2
Biosciences, n.e.c. ....	10	11	10	10	11	12	12	13
Psychology .....	183	197	209	215	227	238	247	245
Psychology, general .....	71	81	91	96	107	114	120	119
Clinical psychology .....	95	95	94	95	91	94	93	92
Psychology, n.e.c. ....	17	21	24	24	29	30	34	34
Social sciences .....	268	274	282	294	301	312	327	331
Agricultural economics .....	2	2	2	2	3	4	4	4
Anthropology (cultural & social) .....	11	11	12	12	12	12	12	12
Economics (except agricultural) .....	33	35	34	35	35	36	36	37
Geography .....	22	22	23	24	25	25	25	25
History and philosophy of science .....	0	0	0	0	0	0	0	0
Linguistics .....	5	5	4	6	7	7	7	7
Political science .....	98	101	102	104	106	108	114	116
Sociology .....	43	43	44	47	48	48	49	50
Sociology/anthropology .....	5	4	3	2	2	2	2	2
Social sciences, n.e.c. ....	49	51	58	62	63	70	78	78
Engineering, total .....	153	166	178	179	180	183	189	192
Aerospace engineering .....	3	3	3	2	2	2	4	4
Agricultural engineering .....	0	0	0	0	0	0	0	0
Biomedical engineering .....	3	3	3	3	3	4	4	4
Chemical engineering .....	7	7	7	8	8	8	8	9
Civil engineering .....	28	31	31	31	31	32	34	37
Electrical engineering .....	31	37	43	42	44	44	44	46
Engineering science .....	3	2	2	2	2	2	2	2
Industrial eng./manufacturing eng. ....	23	26	27	29	30	30	30	32
Mechanical engineering .....	23	24	26	25	24	25	25	26
Metallurgical/materials eng. ....	4	5	6	6	6	6	6	5
Mining engineering .....	4	4	4	4	4	4	4	2
Nuclear engineering .....	0	0	0	0	0	0	0	0
Petroleum engineering .....	2	2	2	2	2	2	2	2
Engineering, n.e.c. ....	22	22	24	25	24	24	26	23

See explanatory information, if any, and SOURCE at end of table.

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**Technical Table 3. Science, engineering, and health departmental population at master's-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, health fields .....	149	154	161	174	185	192	205	220
Medical fields .....	9	9	8	10	12	14	18	19
Anesthesiology .....	1	1	1	1	2	3	3	3
Cardiology .....	0	0	0	0	0	0	0	0
Oncology/cancer research .....	0	0	0	0	0	0	0	0
Endocrinology .....	0	0	0	0	0	0	0	0
Gastroenterology .....	0	0	0	0	0	0	0	0
Hematology .....	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0
Obstetrics and gynecology .....	0	0	0	0	0	0	0	0
Ophthalmology .....	0	0	0	0	0	0	0	0
Otorhinolaryngology .....	0	0	0	0	0	0	0	0
Pediatrics .....	0	0	0	0	0	0	0	0
Preventive medicine/community health .....	5	5	5	7	7	8	10	10
Psychiatry .....	1	1	1	1	1	1	2	2
Pulmonary disease .....	0	0	0	0	0	0	0	0
Radiology .....	0	0	0	0	0	0	0	1
Surgery .....	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c. ....	2	2	1	1	2	2	3	3
Other health fields .....	140	145	153	164	173	178	187	201
Dental sciences .....	0	0	0	0	0	0	0	0
Nursing .....	42	45	46	50	53	56	60	69
Pharmaceutical sciences .....	3	3	3	2	2	2	1	1
Speech pathology/audiology .....	49	51	54	59	60	59	60	62
Veterinary sciences .....	1	1	1	1	1	1	1	1
Health related, n.e.c. ....	45	45	49	52	57	60	65	68

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 4. Original departmental response rates: 1975-95

Year	Total	Complete response	Percent	Partial response	Percent	Non-response	Percent
1975	9,162	8,998	98.2	NA	NA	NA	NA
1976	9,275	9,148	98.6	NA	NA	NA	NA
1977	9,513	9,432	99.1	NA	NA	NA	NA
1978 <sup>1</sup>	8,242	8,077	98.0	NA	NA	NA	NA
1979	9,796	9,446	96.4	NA	NA	NA	NA
1980	9,930	9,593	96.6	NA	NA	NA	NA
1981	9,917	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,070	83.5	816	8.4	777	8.0
1984 <sup>2</sup>	8,748	7,490	85.6	643	7.4	615	7.0
1985 <sup>2</sup>	9,025	7,818	86.6	672	7.4	535	5.9
1986 <sup>2</sup>	9,097	7,817	85.9	779	8.6	501	5.5
1987 <sup>2</sup>	9,254	8,030	86.8	715	7.7	509	5.5
1988	10,295	8,812	85.6	970	9.4	513	5.0
1989	10,318	8,908	86.3	891	8.6	519	5.0
1990	10,483	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	9,514	82.0	1,730	14.9	354	3.1

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

**NOTE:** Departments providing partial responses were tabulated separately from complete nonrespondents beginning in 1981.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 5. Imputation for nonresponse at doctorate-granting institutions, by area of science and engineering and enrollment status: 1995**

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates
Total, all areas .....	9,989	312	305,652	130,676	35,379	13,122	6,301	861	4.3	4.8	2.4
Engineering .....	1,389	55	65,778	34,174	2,628	3,715	1,486	65	5.6	4.3	2.5
Physical sciences .....	568	13	28,209	3,586	5,768	589	98	83	2.1	2.7	1.4
Earth, atmospheric, & ocean sciences .....	347	10	10,711	3,323	841	332	88	45	3.1	2.6	5.4
Mathematical sciences .....	390	15	12,711	3,643	255	336	90	6	2.6	2.5	2.4
Computer sciences .....	268	8	15,186	12,954	212	510	515	5	3.4	4.0	2.4
Agricultural sciences .....	324	7	9,196	2,439	690	149	32	5	1.6	1.3	.7
Biological sciences .....	1,994	60	46,310	7,572	14,658	1,892	293	442	4.1	3.9	3.0
Psychology .....	548	27	28,722	10,643	572	1,860	664	12	6.5	6.2	2.1
Social sciences .....	1,300	55	52,494	24,855	371	1,947	1,287	5	3.7	5.2	1.3
Health fields .....	2,861	62	36,335	27,487	9,384	1,792	1,748	193	4.9	6.4	2.1

**SOURCE:** National Science Foundation/SRS. Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 6. Imputation for nonresponse at master's-granting institutions, by area of science and engineering and enrollment status: 1995**

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates	Full-time	Part-time	Postdoc-torates
Total, all areas .....	1,609	42	24,583	40,599	103	857	1,359	10	3.5	3.3	9.7
Engineering .....	192	5	2,084	5,493	13	24	50	0	1.2	.9	.0
Physical sciences .....	128	3	683	992	37	2	45	6	.3	4.5	16.2
Earth, atmospheric, & ocean sciences .....	66	1	579	1,189	0	2	8	0	.3	.7	.0
Mathematical sciences .....	112	0	711	1,444	3	0	0	0	.0	.0	.0
Computer sciences .....	97	1	1,378	3,991	0	0	4	0	.0	.1	.0
Agricultural sciences .....	34	0	434	357	13	0	0	0	.0	.0	.0
Biological sciences .....	184	3	1,973	2,898	28	11	115	4	.6	4.0	14.3
Psychology .....	245	10	7,040	7,838	6	601	347	0	8.5	4.4	.0
Social sciences .....	331	13	3,817	8,515	0	168	529	0	4.4	6.2	.0
Health fields .....	220	6	5,884	7,882	3	49	261	0	.8	3.3	.0

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 7. Imputation rates for all departments  
at all graduate institutions: fall 1995**

[ Number of imputed departments = 2,084 ]

Items 5 and 6 Enrollment status, mechanism of support, and gender of S&E graduate students	Students receiving financial assistance									Self support (includ. loans & family sources)	Total for all sources (sum of columns A - J)
	Federal sources (excluding loans)						Non-Federal sources				
	DoD	HHS		NSF	Dept. of Agr.	Other Federal sources	Inst. support	Foreign sources	Other U.S. sources		
		NIH	Other HHS								
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	
<b>Item 5</b> Full-time graduate S&E students:											
Graduate fellowships .....	5.7	4.9	18.6	7.0	3.2	9.5	12.2	11.2	9.6	NA	10.5
Graduate traineeships .....	17.1	10.5	13.9	5.1	13.6	14.8	10.6	7.4	21.5	NA	11.9
Graduate research assistants .....	8.5	10.6	5.6	8.3	10.4	8.8	11.7	9.7	7.6	NA	9.1
Graduate teaching assistants .....	NA	26.2	22.4	0.0	12.8	7.4	11.2	NA	20.4	NA	10.2
Other types of support .....	5.8	11.9	13.0	6.2	4.8	19.9	12.9	8.5	7.7	17.8	16.1
Full-time total .....	7.7	10.5	12.4	7.9	10.1	10.5	11.6	9.7	8.7	17.8	4.3
Full-time women .....	12.2	11.6	15.7	7.7	11.2	14.2	14.0	10.6	9.5	20.7	6.5
Full-time first-year total .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9
Full-time first-year women .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4
<b>Item 6</b> Part-time graduate S&E students:											
Total .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8
Women .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1

Item 7 Race/ethnicity of full-time and part-time graduate S&E students, by sex	U.S. citizens and permanent residents								Foreign	Total (sum of columns A - H)
	Black non- Hispanic	American Indian/ Alaskan	Asian/ Pacific Islander	Hispanic	White non- Hispanic	Other	Unknown			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)			
Men enrolled full-time .....	8.1	3.6	10.2	8.3	11.6	4.3	10.1	12.6	6.7	
Women enrolled full-time .....	11.0	11.9	11.0	12.0	10.3	10.6	8.9	10.9	6.5	
Full-time, total .....	8.1	2.8	7.0	8.3	8.4	3.4	9.6	8.7	4.3	
Men enrolled part-time .....	12.1	5.2	9.4	9.5	12.3	6.6	6.4	14.5	7.9	
Women enrolled part-time .....	11.7	6.9	10.2	10.6	12.4	7.2	5.9	12.5	8.1	
Part-time, total .....	11.4	4.3	9.3	9.5	11.8	6.0	6.0	13.1	4.8	

Item 8 S&E postdoctorates and nonfaculty research staff with doctorates	Postdoctorates							Other non- faculty research staff with doc- tor- ates
	Source of support					Total for all sources (A - D)	Foreign postdoc- torates	
	Federal				Non- Federal			
	Fellow- ships	Trainee- ships	Research grants					
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Total .....	10.4	12.8	11.1	11.4	7.5	8.0	8.4	
Women .....	8.7	10.7	11.5	10.1	7.3	9.4	8.3	
With MD, DDS or DVM degrees .....	15.3	14.6	11.9	10.7	8.7	8.8	10.9	

**KEY:** NA = not applicable

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1995 graduate student survey cycle: 1975-95**

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Total graduate enrollment in surveyed fields									
1975 <sup>1</sup>	336,843	328,709	-2.4	290,662	295,146	1.5	46,181	33,563	-27.3
1976	345,979	333,824	-3.5	297,280	298,939	.6	48,699	34,885	-28.4
1977	362,978	345,491	-4.8	306,710	306,381	-.1	56,268	39,110	-30.5
1978 <sup>2</sup>	N/A	339,961	N/A	311,982	298,938	-4.2	N/A	41,023	N/A
1979	375,267	357,688	-4.7	321,770	314,736	-2.2	53,497	42,952	-19.7
1980	383,210	367,158	-4.2	333,658	324,203	-2.8	49,552	42,955	-13.3
1981	392,034	375,203	-4.3	340,203	331,042	-2.7	51,831	44,161	-14.8
1982	399,682	382,371	-4.3	347,414	337,142	-3.0	52,268	45,229	-13.5
1983	413,564	390,522	-5.6	358,276	343,923	-4.0	55,288	46,599	-15.7
1984 <sup>3</sup>	415,064	394,718	-4.9	363,470	346,425	-4.7	51,594	48,293	-6.4
1985 <sup>3</sup>	434,836	404,088	-7.1	371,052	355,818	-4.1	63,784	48,270	-24.3
1986 <sup>3</sup>	446,102	415,557	-6.8	384,203	366,668	-4.6	61,899	48,889	-21.0
1987 <sup>3</sup>	449,585	421,526	-6.2	388,681	372,130	-4.3	60,904	49,396	-18.9
1988	445,595	424,671	-4.7	391,683	377,612	-3.6	53,912	47,059	-12.7
1989	440,983	434,637	-1.4	385,025	384,800	-.1	55,958	49,837	-10.9
1990	458,943	452,250	-1.5	398,405	398,208	.0	60,538	54,042	-10.7
1991	475,691	471,314	-.9	411,296	413,570	.6	64,395	57,744	-10.3
1992	495,397	493,826	-.3	427,792	432,431	1.1	67,605	61,395	-9.2
1993	506,678	504,838	-.4	440,875	440,471	-.1	65,803	64,367	-2.2
1994	506,626	505,259	-.3	441,480	441,164	-.1	65,146	64,095	-1.6
1995	501,510	N/A	N/A	436,328	N/A	N/A	65,182	N/A	N/A
Full-time									
1975 <sup>1</sup>	228,316	219,844	-3.7	210,641	207,417	-1.5	17,675	12,427	-29.7
1976	233,748	223,513	-4.4	215,355	210,882	-2.1	18,393	12,631	-31.3
1977	238,202	226,845	-4.8	218,226	212,897	-2.4	19,976	13,948	-30.2
1978 <sup>2</sup>	N/A	223,078	N/A	217,588	208,588	-4.1	N/A	14,490	N/A
1979	243,331	231,868	-4.7	224,057	216,842	-3.2	19,274	15,026	-22.0
1980	249,111	238,492	-4.3	230,601	222,850	-3.4	18,510	15,642	-15.5
1981	253,428	242,118	-4.5	234,529	226,607	-3.4	18,899	15,511	-17.9
1982	255,959	244,830	-4.3	237,676	229,540	-3.4	18,283	15,290	-16.4
1983	263,800	252,092	-4.4	243,646	235,687	-3.3	20,154	16,405	-18.6
1984 <sup>3</sup>	264,146	253,959	-3.9	246,848	236,747	-4.1	17,298	17,212	-.5
1985 <sup>3</sup>	269,319	257,351	-4.4	249,666	240,449	-3.7	19,653	16,902	-14.0
1986 <sup>3</sup>	279,235	266,197	-4.7	259,980	249,107	-4.2	19,255	17,090	-11.2
1987 <sup>3</sup>	285,200	271,080	-5.0	264,862	253,689	-4.2	20,338	17,391	-14.5
1988	288,619	275,204	-4.6	268,385	259,031	-3.5	20,234	16,173	-20.1
1989	286,619	282,741	-1.4	267,554	266,027	-.6	19,065	16,714	-12.3
1990	295,836	292,854	-1.0	275,262	274,596	-.2	20,574	18,258	-11.3
1991	308,669	307,049	-.5	286,756	287,023	.1	21,913	20,026	-8.6
1992	323,399	322,753	-.2	299,753	300,980	.4	23,646	21,773	-7.9
1993	330,249	329,876	-.1	307,181	306,942	-.1	23,068	22,934	-.6
1994	331,969	332,453	.1	307,964	308,743	.3	24,005	23,710	-1.2
1995	330,235	N/A	N/A	305,652	N/A	N/A	24,583	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.

**Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1995 graduate student survey cycle: 1975-95**

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
Part-time									
1975 <sup>1</sup> .....	108,527	108,865	0.3	80,021	87,729	9.6	28,506	21,136	-25.9
1976 .....	112,231	110,311	-1.7	81,925	88,057	7.5	30,306	22,254	-26.6
1977 .....	124,776	118,646	-4.9	88,484	93,484	5.7	36,292	25,162	-30.7
1978 <sup>2</sup> .....	N/A	116,883	N/A	94,394	90,350	-4.3	N/A	26,533	N/A
1979 .....	131,936	125,820	-4.6	97,713	97,894	.2	34,223	27,926	-18.4
1980 .....	134,099	128,666	-4.1	103,057	101,353	-1.7	31,042	27,313	-12.0
1981 .....	138,606	133,085	-4.0	105,674	104,435	-1.2	32,932	28,650	-13.0
1982 .....	143,723	137,541	-4.3	109,738	107,602	-1.9	33,985	29,939	-11.9
1983 .....	149,764	138,430	-7.6	114,630	108,236	-5.6	35,134	30,194	-14.1
1984 <sup>3</sup> .....	150,918	140,759	-6.7	116,622	109,678	-6.0	34,296	31,081	-9.4
1985 <sup>3</sup> .....	165,517	146,737	-11.3	121,386	115,369	-5.0	44,131	31,368	-28.9
1986 <sup>3</sup> .....	166,867	149,360	-10.5	124,223	117,561	-5.4	42,644	31,799	-25.4
1987 <sup>3</sup> .....	164,385	150,446	-8.5	123,819	118,441	-4.3	40,566	32,005	-21.1
1988 .....	156,976	149,467	-4.8	123,298	118,581	-3.8	33,678	30,886	-8.3
1989 .....	154,364	151,896	-1.6	117,471	118,773	1.1	36,893	33,123	-10.2
1990 .....	163,107	159,396	-2.3	123,143	123,612	.4	39,964	35,784	-10.5
1991 .....	167,022	164,265	-1.7	124,540	126,547	1.6	42,482	37,718	-11.2
1992 .....	171,998	171,073	-.5	128,039	131,451	2.7	43,959	39,622	-9.9
1993 .....	176,429	174,962	-.8	133,694	133,529	-.1	42,735	41,433	-3.0
1994 .....	174,657	172,806	-1.1	133,516	132,421	-.8	41,141	40,385	-1.8
1995 .....	171,275	N/A	N/A	130,676	N/A	N/A	40,599	N/A	N/A

<sup>1</sup> The 1976 survey also collected 1975 data from master's-granting institutions.

<sup>2</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>3</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** N/A = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



# DATA AVAILABILITY

Data published in these reports are also available on the World Wide Web. Single-year or multiyear data files are available with data for fall 1975 through fall 1995. Information on file formats and the years for which they are available, with instructions for downloading, can be found on the World Wide Web at <http://www.nsf.gov/sbe/srs/gss/95pubuse.htm>. The current data user guide, *Guide to the Data Files from the National Science Foundation's Annual Surveys of Academic Science and Engineering* can be found at <http://www.nsf.gov/sbe/srs/gss/95dug/start.htm>. For further information on the graduate student survey contact the Project Monitor Joan Burrelli. Her address and telephone number are—

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Selected data items for individual doctorate-granting institutions are available on computer-generated institutional profiles. These profiles cover data from this survey as well as data collected in NSF's other academic S&E surveys: the Survey of Scientific and Engineering Expenditures at Universities and Colleges (R&D expenditures survey) and the Survey of Federal Support to Universities, Colleges, and Non-profit Institutions (Federal support survey). Institutional profiles for any institution or group of institutions are also available on the World Wide Web, or can be ordered in hard copy form through Mr. Richard Bennof. He can be reached at—

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Institutional researchers can obtain data from several academic S&E resources through the Computer Aided Science Policy Analysis and Research (CASPAR) database system, which is an easy-to-use tool for the retrieval and analysis of statistical data on academic S&E resources. CASPAR provides an extensive and growing data library with multiyear statistics on the state of higher education in general and on academic S&E resources specifically. This data library is based on a set of standard institutional and field-of-science definitions across the multiple sources used to develop the database. The CASPAR program includes built-in help capabilities to facilitate the use and interpretation of the data.

The latest version of CASPAR can now be accessed via the World Wide Web (<http://www.nsf.gov/sbe/srs/srsdata.htm>). A CD-ROM compact disk is available upon special request. For information, contact Joan Burrelli at the previously provided address.

CASPAR data are drawn from a number of sources. All data are available for individual institutions, by State, and at the national level. Longitudinal data from surveys of universities and colleges conducted by the NSF's Division of Science Resources Studies include the R&D expenditures survey, the Federal support survey, and the graduate student survey. Data from the surveys of universities and colleges conducted by NCES include earned degrees, opening fall enrollment, faculty salaries, tenure and fringe benefits, and financial statistics.

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**Table 1. Total enrollment in all institutions of higher education, by level of enrollment and broad field: 1975-95**

Year	Total	Under-graduate enrollment	Graduate enrollment					First professional enrollment
			Total, all fields	Sciences	Engineering	Health fields	All other fields	
Total, all U.S. institutions								
1975	11,290,719	8,727,826	1,267,537	234,919	68,271	25,519	938,828	243,958
1976	11,121,426	9,532,914	1,338,586	238,877	66,657	28,290	1,004,762	245,913
1977	11,415,020	9,898,039	1,264,082	243,131	68,685	33,675	918,591	252,899
1978 <sup>1</sup>	11,391,950	9,867,493	1,265,961	236,653	67,697	35,611	926,000	258,496
1979	11,707,126	10,127,241	1,314,892	247,443	71,728	38,517	957,204	264,993
1980	12,234,644	9,821,513	1,351,268	251,384	74,312	41,462	984,110	279,797
1981	12,517,753	10,083,904	1,349,575	252,531	79,555	43,117	974,372	276,518
1982	12,588,520	10,205,475	1,329,644	255,266	83,687	43,418	947,273	280,469
1983	12,633,930	10,292,495	1,347,973	255,946	91,119	43,457	957,451	280,696
1984 <sup>1</sup>	12,400,392	10,081,336	1,353,554	257,034	92,712	44,972	958,836	280,820
1985 <sup>1</sup>	12,411,945	9,968,345	1,384,862	262,135	95,991	45,962	980,774	277,331
1986 <sup>1</sup>	12,670,109	10,952,167	1,444,369	266,245	101,874	47,438	1,028,812	273,573
1987 <sup>1</sup>	12,923,451	11,191,431	1,461,376	269,402	103,953	48,171	1,039,850	270,644
1988	13,218,786	11,467,209	1,481,509	272,458	102,829	49,384	1,056,838	270,068
1989	13,701,518	11,893,125	1,531,046	278,726	104,043	51,868	1,096,409	277,347
1990	13,983,255	12,110,847	1,596,037	289,534	107,625	55,091	1,143,787	276,371
1991	14,527,724	12,595,335	1,648,952	299,132	113,576	58,606	1,177,638	283,437
1992	14,657,118	12,693,778	1,679,644	312,762	118,035	63,029	1,185,818	283,696
1993	14,477,792	12,482,813	1,699,292	319,352	116,881	68,605	1,194,454	295,687
1994	14,449,476	12,417,701	1,734,371	318,698	113,060	73,501	1,229,112	297,404
1995	NA	NA	NA	316,393	107,529	77,588	NA	NA
Subtotal, 50 States and D.C.								
1975	11,182,557	8,630,996	1,263,033	234,044	68,217	25,173	935,599	241,624
1976	11,011,760	9,430,288	1,333,254	237,948	66,615	27,998	1,000,693	244,205
1977	11,285,787	9,776,273	1,258,157	242,049	68,567	33,358	914,183	251,357
1978 <sup>1</sup>	11,260,092	9,742,190	1,260,998	235,547	67,628	35,303	922,520	256,904
1979	11,569,649	9,997,777	1,308,518	246,317	71,678	38,249	952,274	263,354
1980	12,096,667	9,693,203	1,344,073	249,886	74,264	41,126	978,797	277,715
1981	12,371,440	9,947,524	1,342,555	251,017	79,500	42,819	969,219	274,543
1982	12,409,700	10,046,267	1,315,429	253,677	83,626	43,033	935,093	276,006
1983	12,464,455	10,134,554	1,340,133	254,239	91,057	42,931	951,906	278,472
1984 <sup>1</sup>	12,241,755	9,935,832	1,345,271	255,178	92,627	44,477	952,989	278,547
1985 <sup>1</sup>	12,246,885	9,816,650	1,376,176	260,237	95,889	45,410	974,640	274,148
1986 <sup>1</sup>	12,504,489	10,798,800	1,435,288	264,353	101,764	46,920	1,022,251	270,401
1987 <sup>1</sup>	12,766,642	11,046,235	1,452,075	267,798	103,836	47,594	1,032,847	268,332
1988	13,055,337	11,316,548	1,471,680	270,959	102,708	48,807	1,049,206	267,109
1989	13,538,563	11,742,531	1,521,581	277,146	103,935	51,278	1,089,222	274,451
1990	13,818,637	11,959,106	1,586,165	287,864	107,516	54,495	1,136,290	273,366
1991	14,358,953	12,439,287	1,639,135	297,327	113,408	57,977	1,170,423	280,531
1992	14,487,359	12,537,700	1,668,737	310,948	117,825	62,293	1,177,671	280,922
1993	14,304,803	12,323,959	1,688,413	317,492	116,668	67,866	1,186,367	292,431
1994	14,278,790	12,262,608	1,721,469	316,814	112,863	72,727	1,219,065	294,713
1995	NA	NA	NA	314,369	107,312	76,694	NA	NA
Outlying areas								
1975	108,162	96,830	4,504	875	54	346	3,229	2,334
1976	109,666	102,626	5,332	929	42	292	4,069	1,708
1977	129,233	121,766	5,925	1,082	118	317	4,408	1,542
1978 <sup>1</sup>	131,858	125,303	4,963	1,106	69	308	3,480	1,592
1979	137,477	129,464	6,374	1,126	50	268	4,930	1,639
1980	137,977	128,310	7,195	1,498	48	336	5,313	2,082
1981	146,313	136,380	7,020	1,514	55	298	5,153	1,975
1982	178,820	159,208	14,215	1,589	61	385	12,180	4,463
1983	169,475	157,941	7,840	1,707	62	526	5,545	2,224
1984 <sup>1</sup>	158,637	145,504	8,283	1,856	85	495	5,847	2,273
1985 <sup>1</sup>	165,060	151,695	8,686	1,898	102	552	6,134	3,183
1986 <sup>1</sup>	165,620	153,367	9,081	1,892	110	518	6,561	3,172
1987 <sup>1</sup>	156,809	145,196	9,301	1,604	117	577	7,003	2,312
1988	163,449	150,661	9,829	1,499	121	577	7,632	2,959
1989	162,955	150,594	9,465	1,580	108	590	7,187	2,896
1990	164,618	151,741	9,872	1,670	109	596	7,497	3,005
1991	168,771	156,048	9,817	1,805	168	629	7,215	2,906
1992	169,759	156,078	10,907	1,814	210	736	8,147	2,774
1993	172,989	158,854	10,879	1,860	213	739	8,067	3,256
1994	170,686	155,093	12,902	1,884	197	774	10,047	2,691
1995	NA	NA	NA	2,024	217	894	NA	NA

<sup>1</sup> NSF figures for 1978 and 1984 through 1987 include estimates for master's-granting institutions.

KEY: NA = Not available

SOURCES: U.S. Department of Education/NCES, Survey of Opening Fall Enrollment, and National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

**Table 2. Graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Health fields
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	303,190	234,919	26,310	12,079	16,892	8,415	10,702	46,398	36,191	77,932	
1976	305,534	238,877	26,631	12,819	17,071	8,627	11,285	47,728	37,458	77,258	
1977	311,816	243,131	26,855	13,455	16,052	9,108	11,677	49,234	38,617	78,133	
1978 <sup>1</sup>	304,350	236,653	26,274	13,276	14,812	9,847	11,869	47,923	37,522	75,130	
1979	319,171	247,443	26,695	13,737	15,031	11,690	12,240	48,199	39,766	80,085	
1980	325,696	251,384	26,934	14,051	15,311	13,578	12,452	47,596	40,610	80,852	
1981	332,086	252,531	27,357	14,266	15,881	16,437	12,355	46,639	40,666	78,930	
1982	338,953	255,266	28,186	15,020	17,157	19,812	12,583	45,970	40,073	76,465	
1983	347,065	255,946	29,453	15,453	17,358	23,333	12,429	45,644	40,905	71,371	
1984 <sup>2</sup>	349,746	257,034	30,056	15,505	17,443	25,526	12,226	45,763	40,931	69,584	
1985 <sup>2</sup>	358,126	262,135	30,981	15,420	17,563	29,769	11,561	46,112	40,721	70,008	
1986 <sup>2</sup>	368,119	266,245	32,246	15,066	17,949	31,349	11,458	46,765	41,241	70,171	
1987 <sup>2</sup>	373,355	269,402	32,727	14,371	18,508	32,051	11,118	46,747	42,612	71,268	
1988	375,287	272,458	32,962	13,867	19,077	32,227	11,135	47,565	43,963	71,662	
1989	382,769	278,726	33,616	13,643	19,247	32,482	11,190	48,852	45,528	74,168	
1990	397,159	289,534	34,075	13,984	19,774	34,257	11,316	49,989	48,168	77,971	
1991	412,708	299,132	34,710	14,480	19,952	34,610	11,506	51,778	51,343	80,753	
1992	430,797	312,762	35,348	15,347	20,355	36,320	11,827	54,177	53,599	85,789	
1993	436,233	319,352	35,318	15,805	20,000	36,298	11,914	56,452	54,680	88,885	
1994	431,758	318,698	34,449	16,042	19,579	34,278	12,199	58,143	54,726	89,282	
1995	423,922	316,393	33,470	15,802	18,509	33,509	12,426	58,753	54,243	89,681	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975		68,271	1,670	5,034	12,560	16,320	11,663	8,601	2,352	10,071	25,519
1976		66,657	1,477	5,205	11,995	15,926	10,687	8,313	2,375	10,679	28,290
1977		68,685	1,518	5,201	12,335	17,406	10,438	8,722	2,559	10,506	33,675
1978 <sup>1</sup>		67,697	1,463	5,341	12,358	17,127	9,494	8,638	2,570	10,706	35,611
1979		71,728	1,481	5,605	12,822	17,715	10,729	9,251	2,756	11,369	38,517
1980		74,312	1,737	6,015	13,097	19,132	9,698	9,888	2,910	11,835	41,462
1981		79,555	1,883	6,496	14,089	20,113	9,737	10,618	3,125	13,494	43,117
1982		83,687	1,941	7,189	14,122	21,927	9,577	11,467	3,124	14,340	43,418
1983		91,119	2,305	7,563	14,910	25,295	9,247	12,911	3,447	15,441	43,457
1984 <sup>2</sup>		92,712	2,340	7,373	15,192	26,388	9,282	13,855	3,657	14,625	44,972
1985 <sup>2</sup>		95,991	2,538	7,150	14,902	28,203	10,499	14,157	3,943	14,599	45,962
1986 <sup>2</sup>		101,874	2,804	7,012	14,976	29,969	11,529	15,713	4,208	15,663	47,438
1987 <sup>2</sup>		103,953	3,015	7,111	14,682	31,399	12,220	16,366	4,366	14,794	48,171
1988		102,829	3,223	6,618	14,811	32,035	11,393	16,151	4,337	14,261	49,384
1989		104,043	3,524	6,460	14,909	33,257	11,094	16,265	4,594	13,940	51,868
1990		107,625	3,934	6,735	15,542	33,722	11,248	16,879	4,941	14,624	55,091
1991		113,576	4,120	7,127	17,398	35,182	12,676	17,730	5,160	14,183	58,606
1992		118,035	4,036	7,397	19,572	36,460	13,525	18,637	5,512	12,896	63,029
1993		116,881	3,940	7,516	19,583	35,337	13,596	18,477	5,363	13,069	68,605
1994		113,060	3,715	7,608	19,925	33,052	13,696	17,761	5,191	12,112	73,501
1995		107,529	3,343	7,432	19,218	31,060	13,182	16,360	4,920	12,014	77,588

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 3. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Social sciences
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology		
1975	202,457	164,695	21,916	9,557	10,694	4,473	8,889	36,874	24,105	48,187	
1976	204,928	168,046	22,252	10,091	10,952	4,748	9,436	37,905	25,643	47,019	
1977	206,521	169,365	22,505	10,424	10,365	4,604	9,711	38,415	25,703	47,638	
1978 <sup>1</sup>	201,830	164,325	22,135	10,369	9,769	4,930	9,727	37,788	24,754	44,853	
1979	209,122	169,155	22,535	10,625	9,667	5,853	9,952	37,996	25,848	46,679	
1980	214,509	171,882	22,917	10,871	9,901	6,587	10,168	37,690	26,671	47,077	
1981	218,045	172,320	23,307	10,934	10,152	7,445	10,312	37,277	26,570	46,323	
1982	221,955	172,200	24,038	11,319	10,813	9,171	10,136	36,688	25,667	44,368	
1983	229,493	175,585	25,204	11,968	10,955	10,600	9,976	36,740	26,561	43,581	
1984 <sup>2</sup>	231,052	175,885	25,852	11,734	11,309	11,436	9,908	37,114	25,969	42,563	
1985 <sup>2</sup>	234,056	178,160	26,669	11,334	11,816	13,861	9,250	37,001	25,335	42,894	
1986 <sup>2</sup>	242,841	182,675	27,762	11,249	12,388	15,020	9,341	37,810	26,255	42,850	
1987 <sup>2</sup>	247,219	185,287	28,412	10,435	13,043	15,336	9,094	38,235	27,256	43,476	
1988	250,667	187,660	28,574	10,192	13,512	15,133	9,122	39,209	28,118	43,800	
1989	256,928	192,553	29,207	10,021	13,681	15,606	9,070	40,348	29,348	45,272	
1990	265,423	199,446	29,485	10,244	13,865	16,689	9,100	40,945	30,619	48,499	
1991	277,183	206,149	30,117	10,373	14,256	16,516	9,289	42,700	32,258	50,640	
1992	290,654	216,228	30,673	10,986	14,679	17,506	9,452	44,389	34,277	54,266	
1993	294,227	220,400	30,611	11,367	14,530	17,399	9,468	46,481	34,894	55,650	
1994	293,324	221,756	30,043	11,470	14,226	16,712	9,492	48,017	35,434	56,362	
1995	288,016	220,154	28,892	11,290	13,422	16,564	9,630	48,283	35,762	56,311	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975		37,762	1,245	3,515	7,363	8,278	4,152	4,931	1,787	6,491	17,387
1976		36,882	1,165	3,691	7,025	8,147	3,578	4,919	1,860	6,497	18,585
1977		37,156	1,187	3,873	7,094	8,528	3,343	4,883	1,951	6,297	20,324
1978 <sup>1</sup>		37,505	1,140	3,938	7,335	8,509	3,249	4,950	1,973	6,411	21,248
1979		39,967	1,152	4,218	7,623	9,039	3,743	5,428	2,135	6,629	22,746
1980		42,627	1,327	4,490	7,958	9,963	3,736	5,841	2,254	7,058	23,983
1981		45,725	1,483	4,989	8,799	10,450	3,603	6,422	2,454	7,525	24,073
1982		49,755	1,522	5,608	9,381	11,533	3,807	7,267	2,478	8,159	22,875
1983		53,908	1,840	5,869	9,804	13,265	3,288	8,330	2,704	8,808	22,599
1984 <sup>2</sup>		55,167	1,854	5,734	10,086	13,925	3,393	8,698	2,872	8,605	22,907
1985 <sup>2</sup>		55,896	1,994	5,546	9,749	14,799	3,456	8,875	3,093	8,384	23,295
1986 <sup>2</sup>		60,166	2,154	5,594	9,971	16,290	3,807	9,789	3,370	9,191	23,356
1987 <sup>2</sup>		61,932	2,372	5,674	9,628	17,101	4,156	10,230	3,436	9,335	23,861
1988		63,007	2,533	5,359	9,946	17,706	4,295	10,416	3,466	9,286	24,537
1989		64,375	2,772	5,282	9,964	18,466	4,658	10,492	3,720	9,021	25,813
1990		65,977	3,010	5,443	10,128	18,675	4,770	10,867	3,930	9,154	27,431
1991		71,034	3,325	5,788	11,328	19,904	5,598	11,687	4,058	9,346	29,866
1992		74,426	3,306	5,946	12,454	20,996	6,081	12,383	4,274	8,986	32,099
1993		73,827	3,262	6,041	12,458	20,400	5,902	12,395	4,249	9,120	35,649
1994		71,568	3,000	6,105	12,641	19,414	5,910	11,875	4,108	8,515	39,129
1995		67,862	2,693	5,962	12,248	18,303	5,328	11,119	3,880	8,329	42,219

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 4. Part-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	100,733	70,224	4,394	2,522	6,198	3,942	1,813	9,524	12,086	29,745	
1976	100,606	70,831	4,379	2,728	6,119	3,879	1,849	9,823	11,815	30,239	
1977	105,295	73,766	4,350	3,031	5,687	4,504	1,966	10,819	12,914	30,495	
1978 <sup>1</sup>	102,520	72,328	4,139	2,907	5,043	4,917	2,142	10,135	12,768	30,277	
1979	110,049	78,288	4,160	3,112	5,364	5,837	2,288	10,203	13,918	33,406	
1980	111,187	79,502	4,017	3,180	5,410	6,991	2,284	9,906	13,939	33,775	
1981	114,041	80,211	4,050	3,332	5,729	8,992	2,043	9,362	14,096	32,607	
1982	116,998	83,066	4,148	3,701	6,344	10,641	2,447	9,282	14,406	32,097	
1983	117,572	80,361	4,249	3,485	6,403	12,733	2,453	8,904	14,344	27,790	
1984 <sup>2</sup>	118,694	81,149	4,204	3,771	6,134	14,090	2,318	8,649	14,962	27,021	
1985 <sup>2</sup>	124,070	83,975	4,312	4,086	5,747	15,908	2,311	9,111	15,386	27,114	
1986 <sup>2</sup>	125,278	83,570	4,484	3,817	5,561	16,329	2,117	8,955	14,986	27,321	
1987 <sup>2</sup>	126,136	84,115	4,315	3,936	5,465	16,715	2,024	8,512	15,356	27,792	
1988	124,620	84,798	4,388	3,675	5,565	17,094	2,013	8,356	15,845	27,862	
1989	125,841	86,173	4,409	3,622	5,566	16,876	2,120	8,504	16,180	28,896	
1990	131,736	90,088	4,590	3,740	5,909	17,568	2,216	9,044	17,549	29,472	
1991	135,525	92,983	4,593	4,107	5,696	18,094	2,217	9,078	19,085	30,113	
1992	140,143	96,534	4,675	4,361	5,676	18,814	2,375	9,788	19,322	31,523	
1993	142,006	98,952	4,707	4,438	5,470	18,899	2,446	9,971	19,786	33,235	
1994	138,434	96,942	4,406	4,572	5,353	17,566	2,707	10,126	19,292	32,920	
1995	135,906	96,239	4,578	4,512	5,087	16,945	2,796	10,470	18,481	33,370	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975	30,509	425	1,519	5,197	8,042	7,511	3,670	565	3,580	8,132	
1976	29,775	312	1,514	4,970	7,779	7,109	3,394	515	4,182	9,705	
1977	31,529	331	1,328	5,241	8,878	7,095	3,839	608	4,209	13,351	
1978 <sup>1</sup>	30,192	323	1,403	5,023	8,618	6,245	3,688	597	4,295	14,363	
1979	31,761	329	1,387	5,199	8,676	6,986	3,823	621	4,740	15,771	
1980	31,685	410	1,525	5,139	9,169	5,962	4,047	656	4,777	17,479	
1981	33,830	400	1,507	5,290	9,663	6,134	4,196	671	5,969	19,044	
1982	33,932	419	1,581	4,741	10,394	5,770	4,200	646	6,181	20,543	
1983	37,211	465	1,694	5,106	12,030	5,959	4,581	743	6,633	20,858	
1984 <sup>2</sup>	37,545	486	1,639	5,106	12,463	5,889	5,157	785	6,020	22,065	
1985 <sup>2</sup>	40,095	544	1,604	5,153	13,404	7,043	5,282	850	6,215	22,667	
1986 <sup>2</sup>	41,708	650	1,418	5,005	13,679	7,722	5,924	838	6,472	24,082	
1987 <sup>2</sup>	42,021	643	1,437	5,054	14,298	8,064	6,136	930	5,459	24,310	
1988	39,822	690	1,259	4,865	14,329	7,098	5,735	871	4,975	24,847	
1989	39,668	752	1,178	4,945	14,791	6,436	5,773	874	4,919	26,055	
1990	41,648	924	1,292	5,414	15,047	6,478	6,012	1,011	5,470	27,660	
1991	42,542	795	1,339	6,070	15,278	7,078	6,043	1,102	4,837	28,740	
1992	43,609	730	1,451	7,118	15,464	7,444	6,254	1,238	3,910	30,930	
1993	43,054	678	1,475	7,125	14,937	7,694	6,082	1,114	3,949	32,956	
1994	41,492	715	1,503	7,284	13,638	7,786	5,886	1,083	3,597	34,372	
1995	39,667	650	1,470	6,970	12,757	7,854	5,241	1,040	3,685	35,369	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 5. Male graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977	233,862	168,877	22,816	11,176	11,933	7,549	9,570	32,511	20,518	52,804	
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979	229,860	164,008	22,202	10,850	11,009	9,367	9,575	30,318	19,424	51,263	
1980	231,280	163,307	22,338	10,844	11,247	10,491	9,594	29,295	19,027	50,471	
1981	232,209	160,400	22,348	10,848	11,400	12,228	9,533	27,992	17,900	48,151	
1982	235,361	160,449	22,767	11,297	12,079	14,366	9,498	26,797	16,976	46,669	
1983	240,525	159,213	23,576	11,552	12,158	16,719	9,290	26,293	16,648	42,977	
1984 <sup>2</sup>	242,179	159,764	23,898	11,632	12,275	18,653	9,088	26,246	16,180	41,792	
1985 <sup>2</sup>	247,464	162,553	24,474	11,493	12,209	22,208	8,570	26,208	15,597	41,794	
1986 <sup>2</sup>	253,696	164,187	25,384	11,119	12,470	23,497	8,505	26,294	15,377	41,541	
1987 <sup>2</sup>	256,158	165,168	25,613	10,592	12,912	24,036	8,166	26,314	15,683	41,852	
1988	254,011	164,306	25,465	10,062	13,301	24,033	8,038	26,304	15,502	41,601	
1989	256,861	166,418	25,815	9,785	13,262	24,494	8,045	26,618	15,673	42,726	
1990	263,407	170,454	26,007	9,865	13,575	26,058	7,981	26,947	15,822	44,199	
1991	271,853	173,992	26,146	10,025	13,654	26,340	7,939	27,643	16,556	45,689	
1992	280,465	179,663	26,504	10,489	13,806	27,853	8,059	28,702	16,695	47,555	
1993	279,476	180,287	26,116	10,745	13,362	27,826	7,826	29,399	16,612	48,401	
1994	272,420	177,414	25,290	10,689	13,044	26,126	7,911	29,988	16,486	47,880	
1995	263,058	173,681	24,359	10,323	12,248	25,334	7,975	29,934	16,101	47,407	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977	64,985	1,485	4,827	11,507	16,696	9,683	8,449	2,376	9,962	11,109	
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979	65,852	1,432	4,991	11,503	16,782	9,473	8,782	2,468	10,421	11,028	
1980	67,973	1,663	5,336	11,732	18,149	8,343	9,354	2,607	10,789	11,707	
1981	71,809	1,816	5,718	12,515	18,837	8,194	9,987	2,735	12,007	11,367	
1982	74,912	1,831	6,288	12,373	20,376	7,958	10,748	2,704	12,634	10,958	
1983	81,312	2,182	6,547	13,051	23,227	7,729	12,106	2,999	13,471	10,430	
1984 <sup>2</sup>	82,415	2,208	6,401	13,165	24,175	7,674	12,899	3,189	12,704	10,501	
1985 <sup>2</sup>	84,911	2,375	6,146	12,755	25,768	8,719	13,146	3,340	12,662	10,795	
1986 <sup>2</sup>	89,509	2,604	5,973	12,829	27,061	9,434	14,554	3,533	13,521	11,049	
1987 <sup>2</sup>	90,990	2,791	5,957	12,579	28,301	9,976	15,070	3,637	12,679	11,795	
1988	89,705	2,996	5,543	12,517	28,577	9,300	14,749	3,581	12,262	11,429	
1989	90,443	3,281	5,431	12,474	29,742	8,984	14,867	3,784	11,880	11,906	
1990	92,953	3,645	5,589	12,853	30,007	9,111	15,437	4,048	12,263	12,306	
1991	97,861	3,793	5,870	14,296	31,311	10,321	16,219	4,173	11,878	13,064	
1992	100,802	3,688	6,003	15,918	32,167	10,870	16,939	4,443	10,774	13,848	
1993	99,189	3,583	6,017	15,725	31,015	11,003	16,703	4,336	10,807	15,224	
1994	95,006	3,357	6,082	15,714	28,948	10,896	15,938	4,122	9,949	16,337	
1995	89,377	2,992	5,874	14,986	26,858	10,387	14,690	3,861	9,729	17,251	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 6. Female graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977 .....	77,954	74,254	4,039	2,279	4,119	1,559	2,107	16,723	18,099	25,329	25,329
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979 .....	89,311	83,435	4,493	2,887	4,022	2,323	2,665	17,881	20,342	28,822	28,822
1980 .....	94,416	88,077	4,596	3,207	4,064	3,087	2,858	18,301	21,583	30,381	30,381
1981 .....	99,877	92,131	5,009	3,418	4,481	4,209	2,822	18,647	22,766	30,779	30,779
1982 .....	103,592	94,817	5,419	3,723	5,078	5,446	3,085	19,173	23,097	29,796	29,796
1983 .....	106,540	96,733	5,877	3,901	5,200	6,614	3,139	19,351	24,257	28,394	28,394
1984 <sup>2</sup> .....	107,567	97,270	6,158	3,873	5,168	6,873	3,138	19,517	24,751	27,792	27,792
1985 <sup>2</sup> .....	110,662	99,582	6,507	3,927	5,354	7,561	2,991	19,904	25,124	28,214	28,214
1986 <sup>2</sup> .....	114,423	102,058	6,862	3,947	5,479	7,852	2,953	20,471	25,864	28,630	28,630
1987 <sup>2</sup> .....	117,197	104,234	7,114	3,779	5,596	8,015	2,952	20,433	26,929	29,416	29,416
1988 .....	121,276	108,152	7,497	3,805	5,776	8,194	3,097	21,261	28,461	30,061	30,061
1989 .....	125,908	112,308	7,801	3,858	5,985	7,988	3,145	22,234	29,855	31,442	31,442
1990 .....	133,752	119,080	8,068	4,119	6,199	8,199	3,335	23,042	32,346	33,772	33,772
1991 .....	140,855	125,140	8,564	4,455	6,298	8,270	3,567	24,135	34,787	35,064	35,064
1992 .....	150,332	133,099	8,844	4,858	6,549	8,467	3,768	25,475	36,904	38,234	38,234
1993 .....	156,757	139,065	9,202	5,060	6,638	8,472	4,088	27,053	38,068	40,484	40,484
1994 .....	159,338	141,284	9,159	5,353	6,535	8,152	4,288	28,155	38,240	41,402	41,402
1995 .....	160,864	142,712	9,111	5,479	6,261	8,175	4,451	28,819	38,142	42,274	42,274
		Engineering									
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields	
1975 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 .....	3,700	33	374	828	710	755	273	183	544	22,566	
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 .....	5,876	49	614	1,319	933	1,256	469	288	948	27,489	
1980 .....	6,339	74	679	1,365	983	1,355	534	303	1,046	29,755	
1981 .....	7,746	67	778	1,574	1,276	1,543	631	390	1,487	31,750	
1982 .....	8,775	110	901	1,749	1,551	1,619	719	420	1,706	32,460	
1983 .....	9,807	123	1,016	1,859	2,068	1,518	805	448	1,970	33,027	
1984 <sup>2</sup> .....	10,297	132	972	2,027	2,213	1,608	956	468	1,921	34,471	
1985 <sup>2</sup> .....	11,080	163	1,004	2,147	2,435	1,780	1,011	603	1,937	35,167	
1986 <sup>2</sup> .....	12,365	200	1,039	2,147	2,908	2,095	1,159	675	2,142	36,389	
1987 <sup>2</sup> .....	12,963	224	1,154	2,103	3,098	2,244	1,296	729	2,115	36,376	
1988 .....	13,124	227	1,075	2,294	3,278	2,093	1,402	756	1,999	37,955	
1989 .....	13,600	243	1,029	2,435	3,515	2,110	1,398	810	2,060	39,962	
1990 .....	14,672	289	1,146	2,689	3,715	2,137	1,442	893	2,361	42,785	
1991 .....	15,715	327	1,257	3,102	3,871	2,355	1,511	987	2,305	45,542	
1992 .....	17,233	348	1,394	3,654	4,293	2,655	1,698	1,069	2,122	49,181	
1993 .....	17,692	357	1,499	3,858	4,322	2,593	1,774	1,027	2,262	53,381	
1994 .....	18,054	358	1,526	4,211	4,104	2,800	1,823	1,069	2,163	57,164	
1995 .....	18,152	351	1,558	4,232	4,202	2,795	1,670	1,059	2,285	60,337	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 7. Male full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976	156,207	121,350	19,205	8,457	8,476	4,006	7,945	26,183	14,591	32,487	
1977	154,440	119,541	19,293	8,641	8,083	3,845	7,903	25,866	13,949	31,961	
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979	152,029	115,492	19,044	8,404	7,497	4,803	7,745	24,480	13,277	30,242	
1980	153,163	114,390	19,214	8,388	7,595	5,184	7,778	23,804	12,779	29,648	
1981	154,090	112,978	19,306	8,361	7,612	5,718	7,884	23,189	12,007	28,901	
1982	156,423	111,915	19,641	8,532	8,022	6,860	7,592	22,144	11,223	27,901	
1983	161,556	113,267	20,371	8,995	8,037	7,961	7,448	21,961	11,361	27,133	
1984 <sup>2</sup>	162,418	113,298	20,755	8,876	8,328	8,693	7,328	22,012	10,714	26,592	
1985 <sup>2</sup>	164,239	114,624	21,241	8,500	8,614	10,806	6,853	21,798	10,232	26,580	
1986 <sup>2</sup>	169,881	116,685	22,022	8,336	8,984	11,703	6,955	21,993	10,263	26,429	
1987 <sup>2</sup>	172,149	117,500	22,384	7,759	9,481	12,005	6,716	22,099	10,422	26,634	
1988	172,348	116,960	22,208	7,444	9,794	11,795	6,640	22,404	10,199	26,476	
1989	175,118	118,879	22,547	7,268	9,746	12,355	6,557	22,736	10,467	27,203	
1990	178,708	121,429	22,664	7,317	9,821	13,218	6,454	22,789	10,642	28,524	
1991	185,098	123,747	22,845	7,197	10,035	13,035	6,424	23,498	10,957	29,756	
1992	191,855	128,093	23,173	7,588	10,250	13,947	6,454	24,230	11,216	31,235	
1993	190,972	128,344	22,888	7,815	10,096	13,805	6,281	24,920	11,229	31,310	
1994	186,839	126,848	22,277	7,676	9,810	13,153	6,166	25,493	11,187	31,086	
1995	180,211	123,887	21,232	7,389	9,219	12,899	6,174	25,284	11,116	30,574	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976	34,857	1,142	3,457	6,512	7,850	3,199	4,797	1,751	6,149	7,503	
1977	34,899	1,160	3,595	6,553	8,146	2,967	4,742	1,809	5,927	7,490	
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979	36,537	1,116	3,789	6,729	8,585	3,164	5,170	1,922	6,062	7,595	
1980	38,773	1,273	4,025	7,059	9,405	3,071	5,525	2,023	6,392	7,725	
1981	41,112	1,432	4,456	7,673	9,739	2,915	6,075	2,167	6,655	7,403	
1982	44,508	1,449	4,936	8,140	10,715	3,042	6,834	2,170	7,222	6,869	
1983	48,289	1,760	5,100	8,509	12,302	2,673	7,847	2,380	7,718	6,678	
1984 <sup>2</sup>	49,120	1,768	5,002	8,648	12,775	2,769	8,137	2,518	7,503	6,675	
1985 <sup>2</sup>	49,615	1,868	4,792	8,257	13,591	2,821	8,316	2,654	7,316	6,747	
1986 <sup>2</sup>	53,196	2,006	4,806	8,484	14,823	3,073	9,162	2,849	7,993	6,707	
1987 <sup>2</sup>	54,649	2,205	4,800	8,230	15,552	3,422	9,498	2,867	8,075	7,292	
1988	55,388	2,365	4,567	8,381	16,024	3,559	9,581	2,887	8,024	7,231	
1989	56,239	2,592	4,486	8,315	16,644	3,751	9,637	3,081	7,733	7,685	
1990	57,279	2,811	4,547	8,347	16,719	3,862	10,019	3,238	7,736	8,029	
1991	61,351	3,071	4,803	9,309	17,739	4,556	10,745	3,316	7,812	8,450	
1992	63,762	3,043	4,849	10,126	18,570	4,906	11,297	3,467	7,504	9,033	
1993	62,628	2,971	4,875	9,934	17,956	4,729	11,210	3,447	7,506	9,926	
1994	59,991	2,722	4,912	9,855	17,023	4,612	10,658	3,268	6,941	10,775	
1995	56,324	2,417	4,742	9,431	15,835	4,158	9,988	3,064	6,689	11,484	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 8. Female full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Health fields
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	48,721	46,696	3,047	1,634	2,476	742	1,491	11,722	11,052	14,532	11,082
1977	52,081	49,824	3,212	1,783	2,282	759	1,808	12,549	11,754	15,677	12,834
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	57,093	53,663	3,491	2,221	2,170	1,050	2,207	13,516	12,571	16,437	15,151
1980	61,346	57,492	3,703	2,483	2,306	1,403	2,390	13,886	13,892	17,429	16,258
1981	63,955	59,342	4,001	2,573	2,540	1,727	2,428	14,088	14,563	17,422	16,670
1982	65,532	60,285	4,397	2,787	2,791	2,311	2,544	14,544	14,444	16,467	16,006
1983	67,937	62,318	4,833	2,973	2,918	2,639	2,528	14,779	15,200	16,448	16,232
1984 <sup>2</sup>	68,634	62,587	5,097	2,858	2,981	2,743	2,580	15,102	15,255	15,971	16,548
1985 <sup>2</sup>	69,817	63,536	5,428	2,834	3,202	3,055	2,397	15,203	15,103	16,314	16,649
1986 <sup>2</sup>	72,960	65,990	5,740	2,913	3,404	3,317	2,386	15,817	15,992	16,421	16,569
1987 <sup>2</sup>	75,070	67,787	6,028	2,676	3,562	3,331	2,378	16,136	16,834	16,842	17,306
1988	78,319	70,700	6,366	2,748	3,718	3,338	2,482	16,805	17,919	17,324	18,128
1989	81,810	73,674	6,660	2,753	3,935	3,251	2,513	17,612	18,881	18,069	19,402
1990	86,715	78,017	6,821	2,927	4,044	3,471	2,646	18,156	19,977	19,975	21,416
1991	92,085	82,402	7,272	3,176	4,221	3,481	2,865	19,202	21,301	20,884	23,066
1992	98,799	88,135	7,500	3,398	4,429	3,559	2,998	20,159	23,061	23,031	25,723
1993	103,255	92,056	7,723	3,552	4,434	3,594	3,187	21,561	23,665	24,340	28,354
1994	106,485	94,908	7,766	3,794	4,416	3,559	3,326	22,524	24,247	25,276	28,354
1995	107,805	96,267	7,660	3,901	4,203	3,665	3,456	22,999	24,646	25,737	30,735
Engineering											
Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering			
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976	2,025	23	234	513	297	379	122	109	348	11,082	
1977	2,257	27	278	541	382	376	141	142	370	12,834	
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979	3,430	36	429	894	454	579	258	213	567	15,151	
1980	3,854	54	465	899	558	665	316	231	666	16,258	
1981	4,613	51	533	1,126	711	688	347	287	870	16,670	
1982	5,247	73	672	1,241	818	765	433	308	937	16,006	
1983	5,619	80	769	1,295	963	615	483	324	1,090	15,921	
1984 <sup>2</sup>	6,047	86	732	1,438	1,150	624	561	354	1,102	16,232	
1985 <sup>2</sup>	6,281	126	754	1,492	1,208	635	559	439	1,068	16,548	
1986 <sup>2</sup>	6,970	148	788	1,487	1,467	734	627	521	1,198	16,649	
1987 <sup>2</sup>	7,283	167	874	1,398	1,549	734	732	569	1,260	16,569	
1988	7,619	168	792	1,565	1,682	736	835	579	1,262	17,306	
1989	8,136	180	796	1,649	1,822	907	855	639	1,288	18,128	
1990	8,698	199	896	1,781	1,956	908	848	692	1,418	19,402	
1991	9,683	254	985	2,019	2,165	1,042	942	742	1,534	21,416	
1992	10,664	263	1,097	2,328	2,426	1,175	1,086	807	1,482	23,066	
1993	11,199	291	1,166	2,524	2,444	1,173	1,185	802	1,614	25,723	
1994	11,577	278	1,193	2,786	2,391	1,298	1,217	840	1,574	28,354	
1995	11,538	276	1,220	2,817	2,468	1,170	1,131	816	1,640	30,735	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 9. Male part-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Health fields
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	79,422	49,336	3,523	2,535	3,850	3,704	1,667	6,645	6,569	20,843	NA
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	77,831	48,516	3,158	2,446	3,512	4,564	1,830	5,838	6,147	21,021	NA
1980	78,117	48,917	3,124	2,456	3,652	5,307	1,816	5,491	6,248	20,823	NA
1981	78,119	47,422	3,042	2,487	3,788	6,510	1,649	4,803	5,893	19,250	NA
1982	78,938	48,534	3,126	2,765	4,057	7,506	1,906	4,653	5,753	18,768	NA
1983	78,969	45,946	3,205	2,557	4,121	8,758	1,842	4,332	5,287	15,844	NA
1984 <sup>2</sup>	79,761	46,466	3,143	2,756	3,947	9,960	1,760	4,234	5,466	15,200	NA
1985 <sup>2</sup>	83,225	47,929	3,233	2,993	3,595	11,402	1,717	4,410	5,365	15,214	NA
1986 <sup>2</sup>	83,815	47,502	3,362	2,783	3,486	11,794	1,550	4,301	5,114	15,112	NA
1987 <sup>2</sup>	84,009	47,668	3,229	2,833	3,431	12,031	1,450	4,215	5,261	15,218	NA
1988	81,663	47,346	3,257	2,618	3,507	12,238	1,398	3,900	5,303	15,125	NA
1989	81,743	47,539	3,268	2,517	3,516	12,139	1,488	3,882	5,206	15,523	NA
1990	84,699	49,025	3,343	2,548	3,754	12,840	1,527	4,158	5,180	15,675	NA
1991	86,755	50,245	3,301	2,828	3,619	13,305	1,515	4,145	5,599	15,933	NA
1992	88,610	51,570	3,331	2,901	3,556	13,906	1,605	4,472	5,479	16,320	NA
1993	88,504	51,943	3,228	2,930	3,266	14,021	1,545	4,479	5,383	17,091	NA
1994	85,581	50,566	3,013	3,013	3,234	12,973	1,745	4,495	5,299	16,794	NA
1995	82,847	49,794	3,127	2,934	3,029	12,435	1,801	4,650	4,985	16,833	NA
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	30,086	325	1,232	4,954	8,550	6,716	3,707	567	4,035	3,619	NA
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	29,315	316	1,202	4,774	8,197	6,309	3,612	546	4,359	3,433	NA
1980	29,200	390	1,311	4,673	8,744	5,272	3,829	584	4,397	3,982	NA
1981	30,697	384	1,262	4,842	9,098	5,279	3,912	568	5,352	3,964	NA
1982	30,404	382	1,352	4,233	9,661	4,916	3,914	534	5,412	4,089	NA
1983	33,023	422	1,447	4,542	10,925	5,056	4,259	619	5,753	3,752	NA
1984 <sup>2</sup>	33,295	440	1,399	4,517	11,400	4,905	4,762	671	5,201	3,826	NA
1985 <sup>2</sup>	35,296	507	1,354	4,498	12,177	5,898	4,830	686	5,346	4,048	NA
1986 <sup>2</sup>	36,313	598	1,167	4,345	12,238	6,361	5,392	684	5,528	4,342	NA
1987 <sup>2</sup>	36,341	586	1,157	4,349	12,749	6,554	5,572	770	4,604	4,503	NA
1988	34,317	631	976	4,136	12,733	5,741	5,168	694	4,238	4,198	NA
1989	34,204	689	945	4,159	13,098	5,233	5,230	703	4,147	4,221	NA
1990	35,674	834	1,042	4,506	13,298	5,249	5,418	810	4,527	4,277	NA
1991	36,510	722	1,067	4,987	13,572	5,765	5,474	857	4,066	4,614	NA
1992	37,040	645	1,154	5,792	13,597	5,964	5,642	976	3,270	4,815	NA
1993	36,561	612	1,142	5,791	13,059	6,274	5,493	889	3,301	5,298	NA
1994	35,015	635	1,170	5,859	11,925	6,284	5,280	854	3,008	5,562	NA
1995	33,053	575	1,132	5,555	11,023	6,229	4,702	797	3,040	5,767	NA

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 10. Female part-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Social sciences
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology		
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	25,873	24,430	827	496	1,837	800	299	4,174	6,345	9,652	NA
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	32,218	29,772	1,002	666	1,852	1,273	458	4,365	7,771	12,385	NA
1980	33,070	30,585	893	724	1,758	1,684	468	4,415	7,691	12,952	NA
1981	35,922	32,789	1,008	845	1,941	2,482	394	4,559	8,203	13,357	NA
1982	38,060	34,532	1,022	936	2,287	3,135	541	4,629	8,653	13,329	NA
1983	38,603	34,415	1,044	928	2,282	3,975	611	4,572	9,057	11,946	NA
1984 <sup>2</sup>	38,933	34,683	1,061	1,015	2,187	4,130	558	4,415	9,496	11,821	NA
1985 <sup>2</sup>	40,845	36,046	1,079	1,093	2,152	4,506	594	4,701	10,021	11,900	NA
1986 <sup>2</sup>	41,463	36,068	1,122	1,034	2,075	4,535	567	4,654	9,872	12,209	NA
1987 <sup>2</sup>	42,127	36,447	1,086	1,103	2,034	4,684	574	4,297	10,095	12,574	NA
1988	42,957	37,452	1,131	1,057	2,058	4,856	615	4,456	10,542	12,737	NA
1989	44,098	38,634	1,141	1,105	2,050	4,737	632	4,622	10,974	13,373	NA
1990	47,037	41,063	1,247	1,192	2,155	4,728	689	4,886	12,369	13,797	NA
1991	48,770	42,738	1,292	1,279	2,077	4,789	702	4,933	13,486	14,180	NA
1992	51,533	44,964	1,344	1,460	2,120	4,908	770	5,316	13,843	15,203	NA
1993	53,502	47,009	1,479	1,508	2,204	4,878	901	5,492	14,403	16,144	NA
1994	52,853	46,376	1,393	1,559	2,119	4,593	962	5,631	13,993	16,126	NA
1995	53,059	46,445	1,451	1,578	2,058	4,510	995	5,820	13,496	16,537	NA
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	1,443	6	96	287	328	379	132	41	174	9,732	NA
1978 <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	2,446	13	185	425	479	677	211	75	381	12,338	NA
1980	2,485	20	214	466	425	690	218	72	380	13,497	NA
1981	3,133	16	245	448	565	855	284	103	617	15,080	NA
1982	3,528	37	229	508	733	854	286	112	769	16,454	NA
1983	4,188	43	247	564	1,105	903	322	124	880	17,106	NA
1984 <sup>2</sup>	4,250	46	240	589	1,063	984	395	114	819	18,239	NA
1985 <sup>2</sup>	4,799	37	250	655	1,227	1,145	452	164	869	18,619	NA
1986 <sup>2</sup>	5,395	52	251	660	1,441	1,361	532	154	944	19,740	NA
1987 <sup>2</sup>	5,680	57	280	705	1,549	1,510	564	160	855	19,807	NA
1988	5,505	59	283	729	1,596	1,357	567	177	737	20,649	NA
1989	5,464	63	233	786	1,693	1,203	543	171	772	21,834	NA
1990	5,974	90	250	908	1,759	1,229	594	201	943	23,383	NA
1991	6,032	73	272	1,083	1,706	1,313	569	245	771	24,126	NA
1992	6,569	85	297	1,326	1,867	1,480	612	262	640	26,115	NA
1993	6,493	66	333	1,334	1,878	1,420	589	225	648	27,658	NA
1994	6,477	80	333	1,425	1,713	1,502	606	229	589	28,810	NA
1995	6,614	75	338	1,415	1,734	1,625	539	243	645	29,602	NA

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 11. Graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	424,671	434,637	452,250	471,314	493,826	504,838	505,259	501,510
Total, science and engineering fields .....	375,287	382,769	397,159	412,708	430,797	436,233	431,758	423,922
Sciences, total .....	272,458	278,726	289,534	299,132	312,762	319,352	318,698	316,393
Physical sciences .....	32,962	33,616	34,075	34,710	35,348	35,318	34,449	33,470
Astronomy .....	731	789	810	829	869	880	973	912
Chemistry .....	18,579	18,828	19,118	19,407	19,929	20,131	19,797	19,645
Physics .....	13,308	13,657	13,813	14,081	14,122	13,841	13,162	12,427
Physical sciences, n.e.c. ....	344	342	334	393	428	466	517	486
Earth, atmospheric, & ocean sciences .....	13,867	13,643	13,984	14,480	15,347	15,805	16,042	15,802
Atmospheric sciences .....	940	912	929	968	1,089	1,112	1,109	1,072
Geosciences .....	8,463	8,052	7,692	7,567	7,744	7,785	7,741	7,602
Oceanography .....	2,033	2,207	2,333	2,386	2,530	2,611	2,853	2,703
Earth, atmos., & ocean sci., n.e.c. ....	2,431	2,472	3,030	3,559	3,984	4,297	4,339	4,425
Mathematical sciences .....	19,077	19,247	19,774	19,952	20,355	20,000	19,579	18,509
Mathematics & applied mathematics .....	16,490	16,723	17,096	17,206	17,404	16,945	16,463	15,400
Statistics .....	2,587	2,524	2,678	2,746	2,951	3,055	3,116	3,109
Computer sciences .....	32,227	32,482	34,257	34,610	36,320	36,298	34,278	33,509
Agricultural sciences .....	11,135	11,190	11,316	11,506	11,827	11,914	12,199	12,426
Biological sciences .....	47,565	48,852	49,989	51,778	54,177	56,452	58,143	58,753
Anatomy .....	1,056	1,078	1,000	1,051	1,030	1,027	1,079	1,056
Biochemistry .....	4,921	5,082	5,039	5,201	5,376	5,513	5,632	5,550
Biology .....	12,393	12,761	13,027	13,292	13,874	14,327	14,220	14,211
Biometry/epidemiology .....	1,682	1,722	1,871	2,032	2,365	2,658	2,710	2,812
Biophysics .....	592	655	642	697	751	780	794	855
Botany .....	2,912	2,826	2,733	2,694	2,689	2,714	2,748	2,609
Cell biology .....	2,078	2,234	2,555	2,809	3,093	3,374	3,768	3,859
Ecology .....	999	1,084	1,136	1,180	1,301	1,410	1,566	1,717
Entomology/parasitology .....	1,240	1,181	1,173	1,171	1,193	1,247	1,263	1,241
Genetics .....	1,289	1,365	1,408	1,520	1,639	1,785	1,699	1,700
Microbio., immunology, & virology .....	4,773	4,827	4,873	4,928	4,972	5,068	5,141	5,095
Nutrition .....	4,132	4,164	4,172	4,164	4,159	4,388	4,747	5,012
Pathology .....	1,333	1,369	1,354	1,449	1,456	1,575	1,707	1,670
Pharmacology .....	2,124	2,267	2,353	2,432	2,529	2,645	2,830	2,703
Physiology .....	2,220	2,206	2,236	2,332	2,317	2,372	2,378	2,540
Zoology .....	2,029	2,083	2,104	2,191	2,139	2,120	2,092	2,073
Biosciences, n.e.c. ....	1,792	1,948	2,313	2,635	3,294	3,449	3,769	4,050
Psychology .....	43,963	45,528	48,168	51,343	53,599	54,680	54,726	54,243
Psychology, general .....	15,443	16,822	18,144	20,954	22,707	23,263	23,895	23,915
Clinical psychology .....	20,548	19,408	20,108	19,555	18,819	18,920	18,179	17,675
Psychology, n.e.c. ....	7,972	9,298	9,916	10,834	12,073	12,497	12,652	12,653
Social sciences .....	71,662	74,168	77,971	80,753	85,789	88,885	89,282	89,681
Agricultural economics .....	2,259	2,276	2,273	2,364	2,522	2,415	2,289	2,321
Anthropology (cultural & social) .....	5,945	6,128	6,479	6,731	7,123	7,361	7,665	7,694
Economics (except agricultural) .....	12,036	12,139	12,326	12,707	13,252	13,214	12,978	12,790
Geography .....	3,208	3,479	3,530	3,760	4,102	4,378	4,502	4,402
History and philosophy of science .....	288	304	331	337	360	369	387	401
Linguistics .....	3,243	3,286	3,404	3,425	3,277	3,321	3,279	3,194
Political science .....	27,723	29,194	30,582	31,707	33,797	35,151	34,383	34,374
Sociology .....	7,117	7,405	7,801	8,393	9,011	9,425	9,498	9,575
Sociology/anthropology .....	960	988	1,164	899	979	935	987	941
Social sciences, n.e.c. ....	8,883	8,969	10,081	10,430	11,366	12,316	13,314	13,989
Engineering, total .....	102,829	104,043	107,625	113,576	118,035	116,881	113,060	107,529
Aerospace engineering .....	3,223	3,524	3,934	4,120	4,036	3,940	3,715	3,343
Agricultural engineering .....	1,052	1,043	946	983	1,008	1,018	1,061	1,054
Biomedical engineering .....	1,752	1,916	2,136	2,239	2,537	2,675	2,750	2,687
Chemical engineering .....	6,618	6,460	6,735	7,127	7,397	7,516	7,608	7,432
Civil engineering .....	14,811	14,909	15,542	17,398	19,572	19,583	19,925	19,218
Electrical engineering .....	32,035	33,257	33,722	35,182	36,460	35,337	33,052	31,060
Engineering science .....	2,386	2,077	2,020	2,154	2,218	2,180	2,089	1,955
Industrial eng./manufacturing eng. ....	11,393	11,094	11,248	12,676	13,525	13,596	13,696	13,182
Mechanical engineering .....	16,151	16,265	16,879	17,730	18,637	18,477	17,761	16,360
Metallurgical/materials eng. ....	4,337	4,594	4,941	5,160	5,512	5,363	5,191	4,920
Mining engineering .....	489	418	437	489	437	427	424	373
Nuclear engineering .....	1,303	1,323	1,278	1,282	1,286	1,306	1,246	1,154
Petroleum engineering .....	742	665	670	705	737	725	624	610
Engineering, n.e.c. ....	6,537	6,498	7,137	6,331	4,673	4,738	3,918	4,181

See explanatory information, if any, and SOURCE at end of table.

**Table 11. Graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, health fields .....	49,384	51,868	55,091	58,606	63,029	68,605	73,501	77,588
Medical fields .....	10,101	10,232	10,950	11,707	12,594	14,184	15,065	15,795
Anesthesiology .....	274	355	391	529	708	719	729	749
Cardiology .....	0	0	0	2	8	11	14	19
Oncology/cancer research .....	89	104	113	156	197	209	208	189
Endocrinology .....	70	82	74	66	71	63	63	53
Gastroenterology .....	0	0	1	0	0	1	0	0
Hematology .....	6	4	4	4	5	3	2	1
Neurology .....	612	744	844	1,003	1,149	1,311	1,455	1,554
Obstetrics and gynecology .....	9	7	5	10	3	3	4	6
Ophthalmology .....	51	43	37	32	27	19	32	30
Otorhinolaryngology .....	6	9	4	3	0	1	2	0
Pediatrics .....	227	136	140	153	154	196	261	236
Preventive medicine/community health .....	7,616	7,622	8,167	8,423	8,737	9,976	10,497	11,013
Psychiatry .....	154	111	122	104	147	172	225	256
Pulmonary disease .....	3	2	0	0	0	0	0	0
Radiology .....	208	192	196	233	252	287	320	314
Surgery .....	64	72	65	69	76	82	119	180
Clinical medicine, n.e.c. ....	712	749	787	920	1,060	1,131	1,134	1,195
Other health fields .....	39,283	41,636	44,141	46,899	50,435	54,421	58,436	61,793
Dental sciences .....	1,048	1,004	956	1,016	1,121	1,135	1,199	1,251
Nursing .....	18,862	19,689	21,194	22,012	23,213	24,781	27,042	28,441
Pharmaceutical sciences .....	2,613	2,787	2,889	2,968	2,804	2,871	2,901	2,948
Speech pathology/audiology .....	7,479	7,911	8,354	8,945	9,791	10,740	11,473	12,098
Veterinary sciences .....	752	801	900	894	942	877	875	929
Health related, n.e.c. ....	8,529	9,444	9,848	11,064	12,564	14,017	14,946	16,126

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 12. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	275,204	282,741	292,854	307,049	322,753	329,876	332,453	330,235
Total, science and engineering fields .....	250,667	256,928	265,423	277,183	290,654	294,227	293,324	288,016
Sciences, total .....	187,660	192,553	199,446	206,149	216,228	220,400	221,756	220,154
Physical sciences .....	28,574	29,207	29,485	30,117	30,673	30,611	30,043	28,892
Astronomy .....	705	762	790	810	840	848	953	871
Chemistry .....	16,088	16,278	16,382	16,731	16,999	17,204	17,104	16,750
Physics .....	11,638	12,040	12,191	12,442	12,689	12,397	11,766	11,054
Physical sciences, n.e.c. ....	143	127	122	134	145	162	220	217
Earth, atmospheric, & ocean sciences .....	10,192	10,021	10,244	10,373	10,986	11,367	11,470	11,290
Atmospheric sciences .....	829	810	828	859	959	980	993	959
Geosciences .....	6,310	5,983	5,799	5,688	5,885	5,970	5,946	5,810
Oceanography .....	1,629	1,799	1,934	1,991	2,133	2,177	2,333	2,228
Earth, atmos., & ocean sci., n.e.c. ....	1,424	1,429	1,683	1,835	2,009	2,240	2,198	2,293
Mathematical sciences .....	13,512	13,681	13,865	14,256	14,679	14,530	14,226	13,422
Computer sciences .....	15,133	15,606	16,689	16,516	17,506	17,399	16,712	16,564
Agricultural sciences .....	9,122	9,070	9,100	9,289	9,452	9,468	9,492	9,630
Biological sciences .....	39,209	40,348	40,945	42,700	44,389	46,481	48,017	48,283
Anatomy .....	973	999	911	961	960	977	983	978
Biochemistry .....	4,731	4,810	4,825	4,954	5,045	5,174	5,222	5,203
Biology .....	8,726	9,169	9,149	9,439	9,678	10,028	10,086	9,899
Biometry/epidemiology .....	1,213	1,211	1,231	1,431	1,634	1,990	2,056	2,093
Biophysics .....	544	610	605	679	728	755	770	810
Botany .....	2,540	2,443	2,354	2,304	2,301	2,353	2,349	2,150
Cell biology .....	2,023	2,177	2,485	2,716	2,961	3,189	3,596	3,663
Ecology .....	830	873	884	919	997	1,057	1,203	1,304
Entomology/parasitology .....	1,061	1,009	997	1,014	1,016	1,039	1,066	1,041
Genetics .....	1,187	1,254	1,297	1,412	1,526	1,690	1,602	1,619
Microbio., immunology, & virology .....	4,308	4,329	4,372	4,408	4,460	4,607	4,705	4,696
Nutrition .....	2,797	2,784	2,829	2,878	2,863	3,045	3,221	3,431
Pathology .....	1,067	1,104	1,083	1,113	1,165	1,296	1,389	1,382
Pharmacology .....	1,986	2,135	2,222	2,304	2,397	2,500	2,672	2,534
Physiology .....	2,008	2,057	2,076	2,163	2,160	2,220	2,221	2,376
Zoology .....	1,714	1,768	1,677	1,782	1,789	1,747	1,717	1,751
Biosciences, n.e.c. ....	1,501	1,616	1,948	2,223	2,709	2,814	3,159	3,353
Psychology .....	28,118	29,348	30,619	32,258	34,277	34,894	35,434	35,762
Social sciences .....	43,800	45,272	48,499	50,640	54,266	55,650	56,362	56,311
Agricultural economics .....	1,909	1,912	1,961	2,011	2,105	1,963	1,936	1,964
Anthropology (cultural & social) .....	4,276	4,411	4,809	5,079	5,337	5,429	5,837	5,792
Economics (except agricultural) .....	9,017	9,078	9,293	9,850	10,184	10,107	10,010	9,782
Geography .....	2,215	2,358	2,374	2,539	2,801	3,026	3,119	2,985
Linguistics .....	2,519	2,465	2,586	2,549	2,477	2,538	2,518	2,486
Political science .....	13,206	13,998	15,325	16,083	17,667	18,387	17,928	17,660
Sociology .....	5,115	5,300	5,714	5,949	6,469	6,625	6,720	6,690
Sociology/anthropology .....	541	606	744	624	651	639	693	663
Social sciences, other .....	5,002	5,144	5,693	5,956	6,575	6,936	7,601	8,289
Engineering, total .....	63,007	64,375	65,977	71,034	74,426	73,827	71,568	67,862
Aerospace engineering .....	2,533	2,772	3,010	3,325	3,306	3,262	3,000	2,693
Agricultural engineering .....	888	861	799	823	840	835	879	872
Biomedical engineering .....	1,450	1,610	1,798	1,925	2,167	2,269	2,292	2,290
Chemical engineering .....	5,359	5,282	5,443	5,788	5,946	6,041	6,105	5,962
Civil engineering .....	9,946	9,964	10,128	11,328	12,454	12,458	12,641	12,248
Electrical engineering .....	17,706	18,466	18,675	19,904	20,996	20,400	19,414	18,303
Engineering science .....	1,418	1,259	1,252	1,364	1,415	1,397	1,347	1,243
Industrial eng./manufacturing eng. ....	4,295	4,658	4,770	5,598	6,081	5,902	5,910	5,328
Mechanical engineering .....	10,416	10,492	10,867	11,687	12,383	12,395	11,875	11,119
Metallurgical/materials eng. ....	3,466	3,720	3,930	4,058	4,274	4,249	4,108	3,880
Nuclear engineering .....	1,105	1,112	1,080	1,080	1,084	1,070	997	883
Engineering, other .....	4,425	4,179	4,225	4,154	3,480	3,549	3,000	3,041
Total, health fields .....	24,537	25,813	27,431	29,866	32,099	35,649	39,129	42,219
Clinical fields .....	1,363	1,491	1,557	1,811	2,038	2,217	2,374	2,443
Dental sciences .....	894	856	827	875	988	1,005	1,048	1,096
Nursing .....	6,024	5,987	6,148	6,475	6,422	6,875	7,917	8,600
Pharmaceutical sciences .....	1,907	2,045	2,148	2,198	2,074	2,133	2,188	2,152
Preventive medicine/community health .....	4,231	4,219	4,510	4,419	4,789	5,334	5,432	5,945
Speech pathology/audiology .....	5,212	5,602	5,767	6,499	7,144	8,109	8,707	9,067
Veterinary sciences .....	606	668	709	717	754	693	696	733
Other health fields .....	4,300	4,945	5,765	6,872	7,890	9,283	10,767	12,183

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 13. Part-time graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	149,467	151,896	159,396	164,265	171,073	174,962	172,806	171,275
Total, science and engineering fields .....	124,620	125,841	131,736	135,525	140,143	142,006	138,434	135,906
Sciences, total .....	84,798	86,173	90,088	92,983	96,534	98,952	96,942	96,239
Physical sciences .....	4,388	4,409	4,590	4,593	4,675	4,707	4,406	4,578
Astronomy .....	26	27	20	19	29	32	20	41
Chemistry .....	2,491	2,550	2,736	2,676	2,930	2,927	2,693	2,895
Physics .....	1,670	1,617	1,622	1,639	1,433	1,444	1,396	1,373
Physical sciences, n.e.c. ....	201	215	212	259	283	304	297	269
Earth, atmospheric, & ocean sciences .....	3,675	3,622	3,740	4,107	4,361	4,438	4,572	4,512
Atmospheric sciences .....	111	102	101	109	130	132	116	113
Geosciences .....	2,153	2,069	1,893	1,879	1,859	1,815	1,795	1,792
Oceanography .....	404	408	399	395	397	434	520	475
Earth, atmos., & ocean sci., n.e.c. ....	1,007	1,043	1,347	1,724	1,975	2,057	2,141	2,132
Mathematical sciences .....	5,565	5,566	5,909	5,696	5,676	5,470	5,353	5,087
Computer sciences .....	17,094	16,876	17,568	18,094	18,814	18,899	17,566	16,945
Agricultural sciences .....	2,013	2,120	2,216	2,217	2,375	2,446	2,707	2,796
Biological sciences .....	8,356	8,504	9,044	9,078	9,788	9,971	10,126	10,470
Anatomy .....	83	79	89	90	70	50	96	78
Biochemistry .....	190	272	214	247	331	339	410	347
Biology .....	3,667	3,592	3,878	3,853	4,196	4,299	4,134	4,312
Biometry/epidemiology .....	469	511	640	601	731	668	654	719
Biophysics .....	48	45	37	18	23	25	24	45
Botany .....	372	383	379	390	388	361	399	459
Cell biology .....	55	57	70	93	132	185	172	196
Ecology .....	169	211	252	261	304	353	363	413
Entomology/parasitology .....	179	172	176	157	177	208	197	200
Genetics .....	102	111	111	108	113	95	97	81
Microbio., immunology, & virology .....	465	498	501	520	512	461	436	399
Nutrition .....	1,335	1,380	1,343	1,286	1,296	1,343	1,526	1,581
Pathology .....	266	265	271	336	291	279	318	288
Pharmacology .....	138	132	131	128	132	145	158	169
Physiology .....	212	149	160	169	157	152	157	164
Zoology .....	315	315	427	409	350	373	375	322
Biosciences, n.e.c. ....	291	332	365	412	585	635	610	697
Psychology .....	15,845	16,180	17,549	19,085	19,322	19,786	19,292	18,481
Social sciences .....	27,862	28,896	29,472	30,113	31,523	33,235	32,920	33,370
Agricultural economics .....	350	364	312	353	417	452	353	357
Anthropology (cultural & social) .....	1,669	1,717	1,670	1,652	1,786	1,932	1,828	1,902
Economics (except agricultural) .....	3,019	3,061	3,033	2,857	3,068	3,107	2,968	3,008
Geography .....	993	1,121	1,156	1,221	1,301	1,352	1,383	1,417
Linguistics .....	724	821	818	876	800	783	761	708
Political science .....	14,517	15,196	15,257	15,624	16,130	16,764	16,455	16,714
Sociology .....	2,002	2,105	2,087	2,444	2,542	2,800	2,778	2,885
Sociology/anthropology .....	419	382	420	275	328	296	294	278
Social sciences, other .....	4,169	4,129	4,719	4,811	5,151	5,749	6,100	6,101
Engineering, total .....	39,822	39,668	41,648	42,542	43,609	43,054	41,492	39,667
Aerospace engineering .....	690	752	924	795	730	678	715	650
Agricultural engineering .....	164	182	147	160	168	183	182	182
Biomedical engineering .....	302	306	338	314	370	406	458	397
Chemical engineering .....	1,259	1,178	1,292	1,339	1,451	1,475	1,503	1,470
Civil engineering .....	4,865	4,945	5,414	6,070	7,118	7,125	7,284	6,970
Electrical engineering .....	14,329	14,791	15,047	15,278	15,464	14,937	13,638	12,757
Engineering science .....	968	818	768	790	803	783	742	712
Industrial eng./manufacturing eng. ....	7,098	6,436	6,478	7,078	7,444	7,694	7,786	7,854
Mechanical engineering .....	5,735	5,773	6,012	6,043	6,254	6,082	5,886	5,241
Metallurgical/materials eng. ....	871	874	1,011	1,102	1,238	1,114	1,083	1,040
Nuclear engineering .....	198	211	198	202	202	236	249	271
Engineering, other .....	3,343	3,402	4,019	3,371	2,367	2,341	1,966	2,123
Total, health fields .....	24,847	26,055	27,660	28,740	30,930	32,956	34,372	35,369
Clinical fields .....	510	375	382	470	670	680	739	785
Dental sciences .....	154	148	129	141	133	130	151	155
Nursing .....	12,838	13,702	15,046	15,537	16,791	17,906	19,125	19,841
Pharmaceutical sciences .....	706	742	741	770	730	738	713	796
Preventive medicine/community health .....	3,385	3,403	3,657	4,004	3,948	4,642	5,065	5,068
Speech pathology/audiology .....	2,267	2,309	2,587	2,446	2,647	2,631	2,766	3,031
Veterinary sciences .....	146	133	191	177	188	184	179	196
Other health fields .....	4,841	5,243	4,927	5,195	5,823	6,045	5,634	5,497

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 14. Male graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	265,440	268,767	275,713	284,917	294,313	294,700	288,757	280,309
Total, science and engineering fields .....	254,011	256,861	263,407	271,853	280,465	279,476	272,420	263,058
Sciences, total .....	164,306	166,418	170,454	173,992	179,663	180,287	177,414	173,681
Physical sciences .....	25,465	25,815	26,007	26,146	26,504	26,116	25,290	24,359
Astronomy .....	591	649	645	657	683	682	750	689
Chemistry .....	13,112	13,158	13,250	13,145	13,367	13,279	12,956	12,789
Physics .....	11,557	11,789	11,900	12,101	12,179	11,865	11,254	10,592
Physical sciences, n.e.c. ....	205	219	212	243	275	290	330	289
Earth, atmospheric, & ocean sciences .....	10,062	9,785	9,865	10,025	10,489	10,745	10,689	10,323
Atmospheric sciences .....	777	734	744	778	848	887	867	835
Geosciences .....	6,368	6,089	5,770	5,559	5,667	5,675	5,506	5,300
Oceanography .....	1,388	1,482	1,552	1,540	1,571	1,607	1,746	1,604
Earth, atmos., & ocean sci., n.e.c. ....	1,529	1,480	1,799	2,148	2,403	2,576	2,570	2,584
Mathematical sciences .....	13,301	13,262	13,575	13,654	13,806	13,362	13,044	12,248
Computer sciences .....	24,033	24,494	26,058	26,340	27,853	27,826	26,126	25,334
Agricultural sciences .....	8,038	8,045	7,981	7,939	8,059	7,826	7,911	7,975
Biological sciences .....	26,304	26,618	26,947	27,643	28,702	29,399	29,988	29,934
Anatomy .....	598	598	542	550	537	534	554	549
Biochemistry .....	2,925	3,064	2,974	3,070	3,158	3,182	3,250	3,144
Biology .....	6,939	7,009	7,078	7,080	7,295	7,520	7,476	7,362
Biometry/epidemiology .....	768	738	874	920	1,037	1,132	1,124	1,139
Biophysics .....	443	493	478	515	549	554	576	612
Botany .....	1,796	1,743	1,661	1,627	1,635	1,620	1,584	1,464
Cell biology .....	1,233	1,290	1,435	1,528	1,687	1,802	2,038	2,084
Ecology .....	602	644	667	662	712	746	821	943
Entomology/parasitology .....	881	817	815	830	839	847	846	827
Genetics .....	660	675	681	761	797	853	787	818
Microbio., immunology, & virology .....	2,616	2,588	2,553	2,576	2,606	2,600	2,632	2,604
Nutrition .....	1,191	1,197	1,231	1,244	1,208	1,244	1,267	1,287
Pathology .....	787	793	776	825	809	834	925	890
Pharmacology .....	1,277	1,298	1,329	1,302	1,348	1,404	1,484	1,396
Physiology .....	1,357	1,313	1,303	1,366	1,366	1,389	1,392	1,482
Zoology .....	1,245	1,291	1,269	1,307	1,311	1,260	1,216	1,204
Biosciences, n.e.c. ....	986	1,067	1,281	1,480	1,808	1,878	2,016	2,129
Psychology .....	15,502	15,673	15,822	16,556	16,695	16,612	16,486	16,101
Social sciences .....	41,601	42,726	44,199	45,689	47,555	48,401	47,880	47,407
Agricultural economics .....	1,713	1,694	1,674	1,728	1,810	1,665	1,541	1,543
Anthropology (cultural & social) .....	2,499	2,548	2,688	2,778	2,876	2,969	3,072	3,138
Economics (except agricultural) .....	8,937	8,897	8,952	9,148	9,450	9,358	9,177	8,888
Geography .....	2,153	2,295	2,326	2,442	2,671	2,796	2,904	2,807
Linguistics .....	1,296	1,334	1,398	1,512	1,281	1,301	1,213	1,194
Political science .....	16,330	17,024	17,425	17,971	18,826	19,367	18,778	18,395
Sociology .....	3,265	3,395	3,522	3,781	3,861	3,857	3,758	3,788
Sociology/anthropology .....	425	433	483	410	445	423	396	387
Social sciences, other .....	4,983	5,106	5,731	5,919	6,335	6,665	7,041	7,267
Engineering, total .....	89,705	90,443	92,953	97,861	100,802	99,189	95,006	89,377
Aerospace engineering .....	2,996	3,281	3,645	3,793	3,688	3,583	3,357	2,992
Agricultural engineering .....	966	956	845	858	864	867	861	847
Biomedical engineering .....	1,310	1,442	1,589	1,651	1,920	1,977	2,053	1,965
Chemical engineering .....	5,543	5,431	5,589	5,870	6,003	6,017	6,082	5,874
Civil engineering .....	12,517	12,474	12,853	14,296	15,918	15,725	15,714	14,986
Electrical engineering .....	28,757	29,742	30,007	31,311	32,167	31,015	28,948	26,858
Engineering science .....	2,119	1,829	1,721	1,866	1,913	1,876	1,783	1,658
Industrial eng./manufacturing eng. ....	9,300	8,984	9,111	10,321	10,870	11,003	10,896	10,387
Mechanical engineering .....	14,749	14,867	15,437	16,219	16,939	16,703	15,938	14,690
Metallurgical/materials eng. ....	3,581	3,784	4,048	4,173	4,443	4,336	4,122	3,861
Nuclear engineering .....	1,176	1,182	1,123	1,105	1,100	1,121	1,093	1,009
Engineering, other .....	6,691	6,471	6,985	6,398	4,977	4,966	4,159	4,250
Total, health fields .....	11,429	11,906	12,306	13,064	13,848	15,224	16,337	17,251
Clinical fields .....	922	955	1,017	1,150	1,289	1,353	1,373	1,410
Dental sciences .....	757	713	677	717	772	786	819	819
Nursing .....	873	1,036	1,017	1,128	1,168	1,285	1,509	1,699
Pharmaceutical sciences .....	1,549	1,649	1,748	1,729	1,621	1,592	1,591	1,602
Preventive medicine/community health .....	3,139	2,869	3,174	3,265	3,334	3,892	4,117	4,263
Speech pathology/audiology .....	744	719	736	708	777	856	935	984
Veterinary sciences .....	452	470	512	528	536	470	467	490
Other health fields .....	2,993	3,495	3,425	3,839	4,351	4,990	5,526	5,984

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 15. Female graduate students in science, engineering, and health fields in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	159,231	165,870	176,537	186,397	199,513	210,138	216,502	221,201
Total, science and engineering fields .....	121,276	125,908	133,752	140,855	150,332	156,757	159,338	160,864
Sciences, total .....	108,152	112,308	119,080	125,140	133,099	139,065	141,284	142,712
Physical sciences .....	7,497	7,801	8,068	8,564	8,844	9,202	9,159	9,111
Astronomy .....	140	140	165	172	186	198	223	223
Chemistry .....	5,467	5,670	5,868	6,262	6,562	6,852	6,841	6,856
Physics .....	1,751	1,868	1,913	1,980	1,943	1,976	1,908	1,835
Physical sciences, n.e.c. ....	139	123	122	150	153	176	187	197
Earth, atmospheric, & ocean sciences .....	3,805	3,858	4,119	4,455	4,858	5,060	5,353	5,479
Atmospheric sciences .....	163	178	185	190	241	225	242	237
Geosciences .....	2,095	1,963	1,922	2,008	2,077	2,110	2,235	2,302
Oceanography .....	645	725	781	846	959	1,004	1,107	1,099
Earth, atmos., & ocean sci., n.e.c. ....	902	992	1,231	1,411	1,581	1,721	1,769	1,841
Mathematical sciences .....	5,776	5,985	6,199	6,298	6,549	6,638	6,535	6,261
Computer sciences .....	8,194	7,988	8,199	8,270	8,467	8,472	8,152	8,175
Agricultural sciences .....	3,097	3,145	3,335	3,567	3,768	4,088	4,288	4,451
Biological sciences .....	21,261	22,234	23,042	24,135	25,475	27,053	28,155	28,819
Anatomy .....	458	480	458	501	493	493	525	507
Biochemistry .....	1,996	2,018	2,065	2,131	2,218	2,331	2,382	2,406
Biology .....	5,454	5,752	5,949	6,212	6,579	6,807	6,744	6,849
Biometry/epidemiology .....	914	984	997	1,112	1,328	1,526	1,586	1,673
Biophysics .....	149	162	164	182	202	226	218	243
Botany .....	1,116	1,083	1,072	1,067	1,054	1,094	1,164	1,145
Cell biology .....	845	944	1,120	1,281	1,406	1,572	1,730	1,775
Ecology .....	397	440	469	518	589	664	745	774
Entomology/parasitology .....	359	364	358	341	354	400	417	414
Genetics .....	629	690	727	759	842	932	912	882
Microbio., immunology, & virology .....	2,157	2,239	2,320	2,352	2,366	2,468	2,509	2,491
Nutrition .....	2,941	2,967	2,941	2,920	2,951	3,144	3,480	3,725
Pathology .....	546	576	578	624	647	741	782	780
Pharmacology .....	847	969	1,024	1,130	1,181	1,241	1,346	1,307
Physiology .....	863	893	933	966	951	983	986	1,058
Zoology .....	784	792	835	864	828	860	876	869
Biosciences, n.e.c. ....	806	881	1,032	1,155	1,486	1,571	1,753	1,921
Psychology .....	28,461	29,855	32,346	34,787	36,904	38,068	38,240	38,142
Social sciences .....	30,061	31,442	33,772	35,064	38,234	40,484	41,402	42,274
Agricultural economics .....	546	582	599	636	712	750	748	778
Anthropology (cultural & social) .....	3,446	3,580	3,791	3,953	4,247	4,392	4,593	4,556
Economics (except agricultural) .....	3,099	3,242	3,374	3,559	3,802	3,856	3,801	3,902
Geography .....	1,055	1,184	1,204	1,318	1,431	1,582	1,598	1,595
Linguistics .....	1,947	1,952	2,006	1,913	1,996	2,020	2,066	2,000
Political science .....	11,393	12,170	13,157	13,736	14,971	15,764	15,605	15,979
Sociology .....	3,852	4,010	4,279	4,612	5,150	5,568	5,740	5,787
Sociology/anthropology .....	535	555	681	489	534	512	591	554
Social sciences, other .....	4,188	4,167	4,681	4,848	5,391	6,020	6,660	7,123
Engineering, total .....	13,124	13,600	14,672	15,715	17,233	17,692	18,054	18,152
Aerospace engineering .....	227	243	289	327	348	357	358	351
Agricultural engineering .....	86	87	101	125	144	151	200	207
Biomedical engineering .....	442	474	547	588	617	698	697	722
Chemical engineering .....	1,075	1,029	1,146	1,257	1,394	1,499	1,526	1,558
Civil engineering .....	2,294	2,435	2,689	3,102	3,654	3,858	4,211	4,232
Electrical engineering .....	3,278	3,515	3,715	3,871	4,293	4,322	4,104	4,202
Engineering science .....	267	248	299	288	305	304	306	297
Industrial eng./manufacturing eng. ....	2,093	2,110	2,137	2,355	2,655	2,593	2,800	2,795
Mechanical engineering .....	1,402	1,398	1,442	1,511	1,698	1,774	1,823	1,670
Metallurgical/materials eng. ....	756	810	893	987	1,069	1,027	1,069	1,059
Nuclear engineering .....	127	141	155	177	186	185	153	145
Engineering, other .....	1,077	1,110	1,259	1,127	870	924	807	914
Total, health fields .....	37,955	39,962	42,785	45,542	49,181	53,381	57,164	60,337
Clinical fields .....	951	911	922	1,131	1,419	1,544	1,740	1,818
Dental sciences .....	291	291	279	299	349	349	380	432
Nursing .....	17,989	18,653	20,177	20,884	22,045	23,496	25,533	26,742
Pharmaceutical sciences .....	1,064	1,138	1,141	1,239	1,183	1,279	1,310	1,346
Preventive medicine/community health .....	4,477	4,753	4,993	5,158	5,403	6,084	6,380	6,750
Speech pathology/audiology .....	6,735	7,192	7,618	8,237	9,014	9,884	10,538	11,114
Veterinary sciences .....	300	331	388	366	406	407	408	439
Other health fields .....	6,148	6,693	7,267	8,228	9,362	10,338	10,875	11,696

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 16. Full-time graduate students with U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	166,229	141,493	17,186	9,484	6,647	4,521	7,872	33,171	25,461	37,151	
1981 .....	165,697	139,653	17,049	9,439	6,511	4,887	7,873	32,490	25,566	35,838	
1982 .....	166,772	138,299	17,584	9,693	6,926	5,981	7,676	31,720	24,588	34,131	
1983 .....	169,959	138,804	18,009	10,299	6,714	6,677	7,446	31,283	25,468	32,908	
1984 <sup>2</sup> .....	169,948	138,001	18,292	10,164	6,772	6,982	7,420	31,374	24,924	32,073	
1985 <sup>2</sup> .....	168,339	136,515	18,186	9,669	6,995	8,327	6,854	30,715	24,179	31,590	
1986 <sup>2</sup> .....	170,462	137,232	18,264	9,382	7,243	8,912	6,743	30,664	25,085	30,939	
1987 <sup>2</sup> .....	171,183	137,260	18,384	8,496	7,549	8,863	6,434	30,255	26,044	31,235	
1988 .....	170,246	136,735	18,130	8,040	7,738	8,415	6,443	30,244	26,802	30,923	
1989 .....	173,439	139,370	18,107	7,717	7,697	8,616	6,393	30,367	28,021	32,452	
1990 .....	177,825	143,361	17,836	7,813	7,961	8,742	6,215	30,286	29,134	35,374	
1991 .....	185,496	148,405	18,267	7,802	8,380	8,426	6,405	31,102	30,634	37,389	
1992 .....	197,569	157,671	18,759	8,309	8,939	8,852	6,590	32,558	32,635	41,029	
1993 .....	204,630	163,377	19,231	8,680	9,056	8,993	6,661	34,520	33,280	42,956	
1994 .....	206,916	165,770	19,132	8,608	8,856	8,766	6,680	36,188	33,556	43,984	
1995 .....	204,742	166,058	18,417	8,705	8,293	8,711	6,857	37,097	34,084	43,894	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	24,736	759	2,500	4,670	5,666	2,297	3,211	1,147	4,486	21,950	
1981 .....	26,044	882	2,787	5,162	5,665	2,029	3,363	1,342	4,814	21,938	
1982 .....	28,473	945	3,267	5,428	6,421	2,190	3,767	1,297	5,158	20,586	
1983 .....	31,155	1,088	3,630	5,544	7,398	1,933	4,327	1,530	5,705	20,201	
1984 <sup>2</sup> .....	31,947	1,115	3,603	5,687	7,890	1,934	4,591	1,663	5,464	20,561	
1985 <sup>2</sup> .....	31,824	1,258	3,337	5,282	8,137	1,874	4,858	1,805	5,273	20,762	
1986 <sup>2</sup> .....	33,230	1,343	3,412	5,303	8,572	2,053	5,218	1,854	5,475	20,665	
1987 <sup>2</sup> .....	33,923	1,559	3,353	5,090	9,002	2,145	5,559	1,829	5,386	21,103	
1988 .....	33,511	1,502	2,957	5,208	9,295	2,227	5,299	1,805	5,218	21,485	
1989 .....	34,069	1,757	2,668	5,097	9,723	2,426	5,632	1,890	4,876	22,527	
1990 .....	34,464	1,870	2,668	5,375	9,652	2,374	5,781	1,985	4,759	23,875	
1991 .....	37,091	2,201	2,798	6,140	9,976	2,760	6,120	2,067	5,029	26,105	
1992 .....	39,898	2,246	2,948	7,003	10,577	3,076	6,803	2,247	4,998	28,406	
1993 .....	41,253	2,178	3,107	7,440	10,458	3,209	7,228	2,264	5,369	31,832	
1994 .....	41,146	1,862	3,364	7,850	10,467	3,180	7,073	2,335	5,015	35,490	
1995 .....	38,684	1,611	3,312	7,693	9,446	2,849	6,558	2,152	5,063	38,518	

<sup>1</sup> Distribution by citizenship data were not requested before 1980.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 17. Full-time graduate students without U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	48,280	30,389	5,731	1,387	3,254	2,066	2,296	4,519	1,210	9,926	
1981 .....	52,348	32,667	6,258	1,495	3,641	2,558	2,439	4,787	1,004	10,485	
1982 .....	55,183	33,901	6,454	1,626	3,887	3,190	2,460	4,968	1,079	10,237	
1983 .....	59,534	36,781	7,195	1,669	4,241	3,923	2,530	5,457	1,093	10,673	
1984 <sup>2</sup> .....	61,104	37,884	7,560	1,570	4,537	4,454	2,488	5,740	1,045	10,490	
1985 <sup>2</sup> .....	65,717	41,645	8,483	1,665	4,821	5,534	2,396	6,286	1,156	11,304	
1986 <sup>2</sup> .....	72,379	45,443	9,498	1,867	5,145	6,108	2,598	7,146	1,170	11,911	
1987 <sup>2</sup> .....	76,036	48,027	10,028	1,939	5,494	6,473	2,660	7,980	1,212	12,241	
1988 .....	80,421	50,925	10,444	2,152	5,774	6,718	2,679	8,965	1,316	12,877	
1989 .....	83,489	53,183	11,100	2,304	5,984	6,990	2,677	9,981	1,327	12,820	
1990 .....	87,598	56,085	11,649	2,431	5,904	7,947	2,885	10,559	1,485	13,125	
1991 .....	91,687	57,744	11,850	2,571	5,876	8,090	2,884	11,598	1,624	13,251	
1992 .....	93,085	58,557	11,914	2,677	5,740	8,654	2,862	11,831	1,642	13,237	
1993 .....	89,597	57,023	11,380	2,687	5,474	8,406	2,807	11,961	1,614	12,694	
1994 .....	86,408	55,986	10,911	2,862	5,370	7,946	2,812	11,829	1,878	12,378	
1995 .....	83,274	54,096	10,475	2,585	5,129	7,853	2,773	11,186	1,678	12,417	
		Engineering									
		Engi- neering, total	Aerospace engi- neering	Chemical engi- neering	Civil engi- neering	Electrical engi- neering	Industrial engi- neering	Mechanical engi- neering	Metallur- gical & materials engi- neering	Other engi- neering	Health fields
1975 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1976 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1977 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1978 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1979 <sup>1</sup> .....	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1980 .....	17,891	568	1,990	3,288	4,297	1,439	2,630	1,107	2,572	2,033	
1981 .....	19,681	601	2,202	3,637	4,785	1,574	3,059	1,112	2,711	2,135	
1982 .....	21,282	577	2,341	3,953	5,112	1,617	3,500	1,181	3,001	2,289	
1983 .....	22,753	752	2,239	4,260	5,867	1,355	4,003	1,174	3,103	2,398	
1984 <sup>2</sup> .....	23,220	739	2,131	4,399	6,035	1,459	4,107	1,209	3,141	2,346	
1985 <sup>2</sup> .....	24,072	736	2,209	4,467	6,662	1,582	4,017	1,288	3,111	2,533	
1986 <sup>2</sup> .....	26,936	811	2,182	4,668	7,718	1,754	4,571	1,516	3,716	2,691	
1987 <sup>2</sup> .....	28,009	813	2,321	4,538	8,099	2,011	4,671	1,607	3,949	2,758	
1988 .....	29,496	1,031	2,402	4,738	8,411	2,068	5,117	1,661	4,068	3,052	
1989 .....	30,306	1,015	2,614	4,867	8,743	2,232	4,860	1,830	4,145	3,286	
1990 .....	31,513	1,140	2,775	4,753	9,023	2,396	5,086	1,945	4,395	3,556	
1991 .....	33,943	1,124	2,990	5,188	9,928	2,838	5,567	1,991	4,317	3,761	
1992 .....	34,528	1,060	2,998	5,451	10,419	3,005	5,580	2,027	3,988	3,693	
1993 .....	32,574	1,084	2,934	5,018	9,942	2,693	5,167	1,985	3,751	3,817	
1994 .....	30,422	1,138	2,741	4,791	8,947	2,730	4,802	1,773	3,500	3,639	
1995 .....	29,178	1,082	2,650	4,555	8,857	2,479	4,561	1,728	3,266	3,701	

<sup>1</sup> Distribution by citizenship data were not requested before 1980.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 18. Full-time graduate science, engineering, and health students with U.S. citizenship in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	191,731	195,966	201,700	211,601	225,975	236,462	242,406	243,260
Total, science and engineering fields .....	170,246	173,439	177,825	185,496	197,569	204,630	206,916	204,742
Sciences, total .....	136,735	139,370	143,361	148,405	157,671	163,377	165,770	166,058
Physical sciences .....	18,130	18,107	17,836	18,267	18,759	19,231	19,132	18,417
Astronomy .....	545	604	603	598	621	638	694	646
Chemistry .....	10,764	10,548	10,242	10,393	10,735	11,129	11,189	10,960
Physics .....	6,714	6,854	6,897	7,173	7,294	7,356	7,096	6,652
Physical sciences, n.e.c. ....	107	101	94	103	109	108	153	159
Earth, atmospheric, & ocean sciences .....	8,040	7,717	7,813	7,802	8,309	8,680	8,608	8,705
Atmospheric sciences .....	598	575	564	570	652	708	743	711
Geosciences .....	5,115	4,704	4,438	4,282	4,365	4,450	4,387	4,420
Oceanography .....	1,192	1,277	1,402	1,427	1,570	1,620	1,662	1,645
Earth, atmos., & ocean sci., n.e.c. ....	1,135	1,161	1,409	1,523	1,722	1,902	1,816	1,929
Mathematical sciences .....	7,738	7,697	7,961	8,380	8,939	9,056	8,856	8,293
Computer sciences .....	8,415	8,616	8,742	8,426	8,852	8,993	8,766	8,711
Agricultural sciences .....	6,443	6,393	6,215	6,405	6,590	6,661	6,680	6,857
Biological sciences .....	30,244	30,367	30,286	31,102	32,558	34,520	36,188	37,097
Anatomy .....	793	784	709	720	723	738	761	738
Biochemistry .....	3,401	3,301	3,200	3,237	3,324	3,432	3,493	3,603
Biology .....	7,218	7,469	7,370	7,575	7,787	8,199	8,354	8,219
Biometry/epidemiology .....	912	907	889	983	1,147	1,448	1,523	1,590
Biophysics .....	365	402	407	433	479	541	562	606
Botany .....	1,702	1,625	1,522	1,455	1,494	1,536	1,610	1,509
Cell biology .....	1,618	1,700	1,950	2,097	2,269	2,462	2,748	2,873
Ecology .....	708	740	733	769	864	892	1,042	1,150
Entomology/parasitology .....	775	718	699	679	712	718	743	709
Genetics .....	923	954	1,004	1,104	1,182	1,323	1,254	1,279
Microbio., immunology, & virology .....	3,356	3,259	3,222	3,215	3,319	3,378	3,459	3,564
Nutrition .....	1,855	1,813	1,783	1,761	1,787	1,848	2,122	2,313
Pathology .....	825	825	801	798	843	957	1,054	1,060
Pharmacology .....	1,544	1,626	1,652	1,672	1,717	1,888	2,045	1,982
Physiology .....	1,561	1,507	1,495	1,525	1,528	1,623	1,647	1,867
Zoology .....	1,453	1,499	1,385	1,468	1,494	1,486	1,445	1,523
Biosciences, n.e.c. ....	1,235	1,238	1,465	1,611	1,889	2,051	2,326	2,512
Psychology .....	26,802	28,021	29,134	30,634	32,635	33,280	33,556	34,084
Social sciences .....	30,923	32,452	35,374	37,389	41,029	42,956	43,984	43,894
Agricultural economics .....	1,037	996	1,031	1,057	1,110	1,071	1,104	1,062
Anthropology (cultural & social) .....	3,625	3,756	4,112	4,363	4,620	4,754	5,156	5,203
Economics (except agricultural) .....	4,540	4,583	4,658	5,071	5,339	5,413	5,330	5,010
Geography .....	1,808	1,932	1,942	2,129	2,375	2,594	2,721	2,587
Linguistics .....	1,525	1,453	1,518	1,497	1,525	1,630	1,620	1,612
Political science .....	10,260	11,271	12,572	13,266	14,864	15,617	15,285	14,980
Sociology .....	3,681	3,910	4,322	4,638	5,170	5,473	5,655	5,741
Sociology/anthropology .....	428	485	610	514	553	567	616	586
Social sciences, other .....	4,019	4,066	4,609	4,854	5,473	5,837	6,497	7,113
Engineering, total .....	33,511	34,069	34,464	37,091	39,898	41,253	41,146	38,684
Aerospace engineering .....	1,502	1,757	1,870	2,201	2,246	2,178	1,862	1,611
Agricultural engineering .....	406	362	330	330	377	403	438	425
Biomedical engineering .....	1,028	1,042	1,210	1,263	1,444	1,570	1,562	1,628
Chemical engineering .....	2,957	2,668	2,668	2,798	2,948	3,107	3,364	3,312
Civil engineering .....	5,208	5,097	5,375	6,140	7,003	7,440	7,850	7,693
Electrical engineering .....	9,295	9,723	9,652	9,976	10,577	10,458	10,467	9,446
Engineering science .....	803	702	745	774	802	824	833	825
Industrial eng./manufacturing eng. ....	2,227	2,426	2,374	2,760	3,076	3,209	3,180	2,849
Mechanical engineering .....	5,299	5,632	5,781	6,120	6,803	7,228	7,073	6,558
Metallurgical/materials eng. ....	1,805	1,890	1,985	2,067	2,247	2,264	2,335	2,152
Nuclear engineering .....	644	628	577	590	611	634	618	532
Engineering, other .....	2,337	2,142	1,897	2,072	1,764	1,938	1,564	1,653
Total, health fields .....	21,485	22,527	23,875	26,105	28,406	31,832	35,490	38,518
Clinical fields .....	1,145	1,233	1,261	1,480	1,656	1,825	2,005	2,106
Dental sciences .....	742	689	643	652	760	769	838	863
Nursing .....	5,841	5,817	5,949	6,223	6,207	6,630	7,634	8,303
Pharmaceutical sciences .....	1,093	1,141	1,189	1,214	1,100	1,179	1,317	1,195
Preventive medicine/community health .....	3,357	3,340	3,533	3,457	3,948	4,465	4,704	5,222
Speech pathology/audiology .....	4,948	5,326	5,478	6,184	6,817	7,770	8,372	8,796
Veterinary sciences .....	445	479	508	494	522	470	485	503
Other health fields .....	3,914	4,502	5,314	6,401	7,396	8,724	10,135	11,530

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 19. Full-time graduate science, engineering, and health students without U.S. citizenship in all institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	83,473	86,775	91,154	95,448	96,778	93,414	90,047	86,975
Total, science and engineering fields .....	80,421	83,489	87,598	91,687	93,085	89,597	86,408	83,274
Sciences, total .....	50,925	53,183	56,085	57,744	58,557	57,023	55,986	54,096
Physical sciences .....	10,444	11,100	11,649	11,850	11,914	11,380	10,911	10,475
Astronomy .....	160	158	187	212	219	210	259	225
Chemistry .....	5,324	5,730	6,140	6,338	6,264	6,075	5,915	5,790
Physics .....	4,924	5,186	5,294	5,269	5,395	5,041	4,670	4,402
Physical sciences, n.e.c. ....	36	26	28	31	36	54	67	58
Earth, atmospheric, & ocean sciences .....	2,152	2,304	2,431	2,571	2,677	2,687	2,862	2,585
Atmospheric sciences .....	231	235	264	289	307	272	250	248
Geosciences .....	1,195	1,279	1,361	1,406	1,520	1,520	1,559	1,390
Oceanography .....	437	522	532	564	563	557	671	583
Earth, atmos., & ocean sci., n.e.c. ....	289	268	274	312	287	338	382	364
Mathematical sciences .....	5,774	5,984	5,904	5,876	5,740	5,474	5,370	5,129
Computer sciences .....	6,718	6,990	7,947	8,090	8,654	8,406	7,946	7,853
Agricultural sciences .....	2,679	2,677	2,885	2,884	2,862	2,807	2,812	2,773
Biological sciences .....	8,965	9,981	10,659	11,598	11,831	11,961	11,829	11,186
Anatomy .....	180	215	202	241	237	239	222	240
Biochemistry .....	1,330	1,509	1,625	1,717	1,721	1,742	1,729	1,600
Biology .....	1,508	1,700	1,779	1,864	1,891	1,829	1,732	1,680
Biometry/epidemiology .....	301	304	342	448	487	542	533	503
Biophysics .....	179	208	198	246	249	214	208	204
Botany .....	838	818	832	849	807	817	739	641
Cell biology .....	405	477	535	619	692	727	848	790
Ecology .....	122	133	151	150	133	165	161	154
Entomology/parasitology .....	286	291	298	335	304	321	323	332
Genetics .....	264	300	293	308	344	367	348	340
Microbio., immunology, & virology .....	952	1,070	1,150	1,193	1,141	1,229	1,246	1,132
Nutrition .....	942	971	1,046	1,117	1,076	1,197	1,099	1,118
Pathology .....	242	279	282	315	322	339	335	322
Pharmacology .....	442	509	570	632	680	612	627	552
Physiology .....	447	550	581	638	632	597	574	509
Zoology .....	261	269	292	314	295	261	272	228
Biosciences, n.e.c. ....	266	378	483	612	820	763	833	841
Psychology .....	1,316	1,327	1,485	1,624	1,642	1,614	1,878	1,678
Social sciences .....	12,877	12,820	13,125	13,251	13,237	12,694	12,378	12,417
Agricultural economics .....	872	916	930	954	995	892	832	902
Anthropology (cultural & social) .....	651	655	697	716	717	675	681	589
Economics (except agricultural) .....	4,477	4,495	4,635	4,779	4,845	4,694	4,680	4,772
Geography .....	407	426	432	410	426	432	398	398
Linguistics .....	994	1,012	1,068	1,052	952	908	898	874
Political science .....	2,946	2,727	2,753	2,817	2,803	2,770	2,643	2,680
Sociology .....	1,434	1,390	1,392	1,311	1,299	1,152	1,065	949
Sociology/anthropology .....	113	121	134	110	98	72	77	77
Social sciences, other .....	983	1,078	1,084	1,102	1,102	1,099	1,104	1,176
Engineering, total .....	29,496	30,306	31,513	33,943	34,528	32,574	30,422	29,178
Aerospace engineering .....	1,031	1,015	1,140	1,124	1,060	1,084	1,138	1,082
Agricultural engineering .....	482	499	469	493	463	432	441	447
Biomedical engineering .....	422	568	588	662	723	699	730	662
Chemical engineering .....	2,402	2,614	2,775	2,990	2,998	2,934	2,741	2,650
Civil engineering .....	4,738	4,867	4,753	5,188	5,451	5,018	4,791	4,555
Electrical engineering .....	8,411	8,743	9,023	9,928	10,419	9,942	8,947	8,857
Engineering science .....	615	557	507	590	613	573	514	418
Industrial eng./manufacturing eng. ....	2,068	2,232	2,396	2,838	3,005	2,693	2,730	2,479
Mechanical engineering .....	5,117	4,860	5,086	5,567	5,580	5,167	4,802	4,561
Metallurgical/materials eng. ....	1,661	1,830	1,945	1,991	2,027	1,985	1,773	1,728
Nuclear engineering .....	461	484	503	490	473	436	379	351
Engineering, other .....	2,088	2,037	2,328	2,082	1,716	1,611	1,436	1,388
Total, health fields .....	3,052	3,286	3,556	3,761	3,693	3,817	3,639	3,701
Clinical fields .....	218	258	296	331	382	392	369	337
Dental sciences .....	152	167	184	223	228	236	210	233
Nursing .....	183	170	199	252	215	245	283	297
Pharmaceutical sciences .....	814	904	959	984	974	954	871	957
Preventive medicine/community health .....	874	879	977	962	841	869	728	723
Speech pathology/audiology .....	264	276	289	315	327	339	335	271
Veterinary sciences .....	161	189	201	223	232	223	211	230
Other health fields .....	386	443	451	471	494	559	632	653

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 20. Graduate students in science and engineering fields in all institutions, by enrollment status and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

Enrollment status, citizenship, and racial/ethnic background	1988	1989	1990	1991	1992	1993	1994	1995
Total enrollment .....	375,287	382,769	397,159	412,708	430,797	436,233	431,758	423,922
Total U.S. citizens .....	281,672	284,686	294,339	304,073	321,281	330,447	329,391	325,135
Black, non-Hispanic .....	11,191	11,775	12,774	13,691	15,449	17,147	17,665	18,366
American Indian/Alaskan Native .....	918	860	1,054	1,120	1,244	1,312	1,383	1,524
Asian/Pacific Islander .....	15,188	15,693	17,156	18,139	21,762	24,149	26,457	26,015
Hispanic .....	9,098	9,436	10,159	11,045	12,248	13,386	13,284	14,089
White, non-Hispanic .....	229,037	229,694	238,492	243,608	253,516	257,009	255,976	246,776
Other or unknown .....	16,240	17,228	14,704	16,470	17,062	17,444	14,626	18,365
Non-U.S. citizens .....	93,615	98,083	102,820	108,635	109,516	105,786	102,367	98,787
Full-time enrollment .....	250,667	256,928	265,423	277,183	290,654	294,227	293,324	288,016
Total U.S. citizens .....	170,246	173,439	177,825	185,496	197,569	204,630	206,916	204,742
Black, non-Hispanic .....	6,060	6,594	7,029	7,692	8,908	9,910	10,357	10,672
American Indian/Alaskan Native .....	570	551	655	717	848	899	960	1,064
Asian/Pacific Islander .....	9,470	9,820	10,611	11,270	13,326	15,225	17,111	16,805
Hispanic .....	5,503	5,924	6,389	6,931	7,597	8,202	8,180	9,057
White, non-Hispanic .....	140,947	142,475	146,717	150,945	158,514	161,427	162,903	158,016
Other or unknown .....	7,696	8,075	6,424	7,941	8,376	8,967	7,405	9,128
Non-U.S. citizens .....	80,421	83,489	87,598	91,687	93,085	89,597	86,408	83,274
Part-time enrollment .....	124,620	125,841	131,736	135,525	140,143	142,006	138,434	135,906
Total U.S. citizens .....	111,426	111,247	116,514	118,577	123,712	125,817	122,475	120,393
Black, non-Hispanic .....	5,131	5,181	5,745	5,999	6,541	7,237	7,308	7,694
American Indian/Alaskan Native .....	348	309	399	403	396	413	423	460
Asian/Pacific Islander .....	5,718	5,873	6,545	6,869	8,436	8,924	9,346	9,210
Hispanic .....	3,595	3,512	3,770	4,114	4,651	5,184	5,104	5,032
White, non-Hispanic .....	88,090	87,219	91,775	92,663	95,002	95,582	93,073	88,760
Other or unknown .....	8,544	9,153	8,280	8,529	8,686	8,477	7,221	9,237
Non-U.S. citizens .....	13,194	14,594	15,222	16,948	16,431	16,189	15,959	15,513

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

Field, citizenship, and racial/ethnic background	1988	1989	1990	1991	1992	1993	1994	1995
<b>Total, all surveyed fields</b>	<b>424,671</b>	<b>434,637</b>	<b>452,250</b>	<b>471,314</b>	<b>493,826</b>	<b>504,838</b>	<b>505,259</b>	<b>501,510</b>
Total U.S. citizens	327,423	332,655	345,177	358,124	379,844	394,435	398,481	398,287
Black, non-Hispanic	13,367	14,037	15,219	16,409	18,493	20,470	21,240	22,252
American Indian/Alaskan Native	1,093	1,068	1,270	1,365	1,516	1,609	1,725	1,866
Asian/Pacific Islander	16,449	17,110	18,802	20,062	23,976	26,939	29,605	29,491
Hispanic	10,880	11,210	12,018	13,056	14,630	16,060	15,975	17,214
White, non-Hispanic	267,182	269,811	281,619	288,855	302,286	309,444	312,421	305,564
Other or unknown	18,452	19,419	16,249	18,377	18,943	19,913	17,515	21,900
Non-U.S. citizens	97,248	101,982	107,073	113,190	113,982	110,403	106,778	103,223
<b>Total, science and engineering</b>	<b>375,287</b>	<b>382,769</b>	<b>397,159</b>	<b>412,708</b>	<b>430,797</b>	<b>436,233</b>	<b>431,758</b>	<b>423,922</b>
Total U.S. citizens	281,672	284,686	294,339	304,073	321,281	330,447	329,391	325,135
Black, non-Hispanic	11,191	11,775	12,774	13,691	15,449	17,147	17,665	18,366
American Indian/Alaskan Native	918	860	1,054	1,120	1,244	1,312	1,383	1,524
Asian/Pacific Islander	15,188	15,693	17,156	18,139	21,762	24,149	26,457	26,015
Hispanic	9,098	9,436	10,159	11,045	12,248	13,386	13,284	14,089
White, non-Hispanic	229,037	229,694	238,492	243,608	253,516	257,009	255,976	246,776
Other or unknown	16,240	17,228	14,704	16,470	17,062	17,444	14,626	18,365
Non-U.S. citizens	93,615	98,083	102,820	108,635	109,516	105,786	102,367	98,787
<b>Sciences, total</b>	<b>272,458</b>	<b>278,726</b>	<b>289,534</b>	<b>299,132</b>	<b>312,762</b>	<b>319,352</b>	<b>318,698</b>	<b>316,393</b>
Total U.S. citizens	214,069	217,340	224,913	231,840	244,686	252,833	253,326	253,093
Black, non-Hispanic	9,691	10,159	10,988	11,666	13,075	14,588	14,882	15,494
American Indian/Alaskan Native	775	738	902	935	1,067	1,101	1,141	1,293
Asian/Pacific Islander	9,278	9,682	10,469	11,023	13,270	15,150	16,656	16,897
Hispanic	7,379	7,729	8,273	8,921	9,785	10,692	10,427	11,258
White, non-Hispanic	176,708	178,201	185,285	188,824	196,120	199,558	199,945	194,663
Other or unknown	10,238	10,831	8,996	10,471	11,369	11,744	10,275	13,488
Non-U.S. citizens	58,389	61,386	64,621	67,292	68,076	66,519	65,372	63,300
<b>Physical sciences</b>	<b>32,962</b>	<b>33,616</b>	<b>34,075</b>	<b>34,710</b>	<b>35,348</b>	<b>35,318</b>	<b>34,449</b>	<b>33,470</b>
Total U.S. citizens	21,890	21,843	21,609	21,985	22,543	23,066	22,742	22,028
Black, non-Hispanic	569	633	654	699	807	843	856	894
American Indian/Alaskan Native	52	44	63	62	67	81	67	78
Asian/Pacific Islander	1,253	1,175	1,200	1,429	1,615	1,973	1,925	1,797
Hispanic	624	680	642	649	680	747	675	732
White, non-Hispanic	18,282	18,318	18,433	18,402	18,527	18,582	18,422	17,506
Other or unknown	1,110	993	617	744	847	840	797	1,021
Non-U.S. citizens	11,072	11,773	12,466	12,725	12,805	12,252	11,707	11,442
<b>Earth, atmospheric, &amp; ocean sciences</b>	<b>13,867</b>	<b>13,643</b>	<b>13,984</b>	<b>14,480</b>	<b>15,347</b>	<b>15,805</b>	<b>16,042</b>	<b>15,802</b>
Total U.S. citizens	11,459	11,068	11,309	11,583	12,343	12,795	12,776	12,866
Black, non-Hispanic	107	95	123	141	202	227	203	220
American Indian/Alaskan Native	27	26	30	29	35	46	49	53
Asian/Pacific Islander	209	207	258	267	383	469	454	423
Hispanic	210	209	241	250	308	371	344	369
White, non-Hispanic	10,415	10,137	10,375	10,531	10,893	11,145	11,351	11,324
Other or unknown	491	394	282	365	522	537	375	477
Non-U.S. citizens	2,408	2,575	2,675	2,897	3,004	3,010	3,266	2,936
<b>Mathematical sciences</b>	<b>19,077</b>	<b>19,247</b>	<b>19,774</b>	<b>19,952</b>	<b>20,355</b>	<b>20,000</b>	<b>19,579</b>	<b>18,509</b>
Total U.S. citizens	12,652	12,564	13,210	13,318	13,878	13,866	13,496	12,688
Black, non-Hispanic	422	463	511	524	579	710	672	690
American Indian/Alaskan Native	32	34	20	20	27	32	36	70
Asian/Pacific Islander	756	703	822	866	963	1,020	1,199	1,124
Hispanic	328	305	351	349	376	415	369	400
White, non-Hispanic	10,133	10,064	10,605	10,457	10,851	10,572	10,486	9,630
Other or unknown	981	995	901	1,102	1,082	1,117	734	774
Non-U.S. citizens	6,425	6,683	6,564	6,634	6,477	6,134	6,083	5,821
<b>Computer sciences</b>	<b>32,227</b>	<b>32,482</b>	<b>34,257</b>	<b>34,610</b>	<b>36,320</b>	<b>36,298</b>	<b>34,278</b>	<b>33,509</b>
Total U.S. citizens	23,243	22,788	23,351	22,988	24,165	24,344	23,200	22,796
Black, non-Hispanic	839	848	985	1,093	1,108	1,193	1,216	1,189
American Indian/Alaskan Native	39	40	44	42	72	68	43	55
Asian/Pacific Islander	2,682	2,727	2,888	2,858	3,400	3,572	4,103	4,103
Hispanic	516	542	565	631	706	699	637	660
White, non-Hispanic	17,346	16,496	17,292	16,464	16,894	16,801	15,759	14,795
Other or unknown	1,821	2,135	1,577	1,900	1,985	2,011	1,442	1,994
Non-U.S. citizens	8,984	9,694	10,906	11,622	12,155	11,954	11,078	10,713

See explanatory information, if any, and SOURCE at end of table.

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

Field, citizenship, and racial/ethnic background	1988	1989	1990	1991	1992	1993	1994	1995
Agricultural sciences .....	11,135	11,190	11,316	11,506	11,827	11,914	12,199	12,426
Total U.S. citizens .....	8,206	8,251	8,133	8,298	8,649	8,778	9,060	9,304
Black, non-Hispanic .....	143	153	158	145	209	235	239	293
American Indian/Alaskan Native .....	33	25	20	31	39	34	37	58
Asian/Pacific Islander .....	217	236	242	225	215	264	276	273
Hispanic .....	278	297	272	279	279	308	263	289
White, non-Hispanic .....	7,315	7,294	7,251	7,481	7,679	7,731	7,972	8,013
Other or unknown .....	220	246	190	137	228	206	273	378
Non-U.S. citizens .....	2,929	2,939	3,183	3,208	3,178	3,136	3,139	3,122
Biological sciences .....	47,565	48,852	49,989	51,778	54,177	56,452	58,143	58,753
Total U.S. citizens .....	37,876	38,080	38,470	39,282	41,358	43,525	45,274	46,455
Black, non-Hispanic .....	1,153	1,212	1,249	1,317	1,493	1,737	1,709	1,879
American Indian/Alaskan Native .....	104	85	142	129	141	157	183	214
Asian/Pacific Islander .....	1,799	1,986	2,228	2,346	2,822	3,456	3,913	4,247
Hispanic .....	1,116	1,200	1,220	1,374	1,459	1,649	1,651	1,810
White, non-Hispanic .....	32,725	32,361	32,677	33,058	34,229	35,094	36,389	36,489
Other or unknown .....	979	1,236	954	1,058	1,214	1,432	1,429	1,816
Non-U.S. citizens .....	9,689	10,772	11,519	12,496	12,819	12,927	12,869	12,298
Psychology .....	43,963	45,528	48,168	51,343	53,599	54,680	54,726	54,243
Total U.S. citizens .....	42,316	43,897	46,350	49,355	51,638	52,771	52,363	52,126
Black, non-Hispanic .....	1,945	2,061	2,226	2,455	2,762	3,288	3,545	3,422
American Indian/Alaskan Native .....	177	180	235	252	291	290	317	331
Asian/Pacific Islander .....	747	817	962	1,040	1,284	1,476	1,586	1,596
Hispanic .....	1,722	1,751	2,160	2,365	2,373	2,564	2,488	2,777
White, non-Hispanic .....	35,920	37,227	39,247	40,990	42,500	42,744	42,191	40,679
Other or unknown .....	1,805	1,861	1,520	2,253	2,428	2,409	2,236	3,321
Non-U.S. citizens .....	1,647	1,631	1,818	1,988	1,961	1,909	2,363	2,117
Social sciences .....	71,662	74,168	77,971	80,753	85,789	88,885	89,282	89,681
Total U.S. citizens .....	56,427	58,849	62,481	65,031	70,112	73,688	74,415	74,830
Black, non-Hispanic .....	4,513	4,694	5,082	5,292	5,915	6,355	6,442	6,907
American Indian/Alaskan Native .....	311	304	348	370	395	393	409	434
Asian/Pacific Islander .....	1,615	1,831	1,869	1,992	2,588	2,920	3,200	3,334
Hispanic .....	2,585	2,745	2,822	3,024	3,604	3,939	4,000	4,221
White, non-Hispanic .....	44,572	46,304	49,405	51,441	54,547	56,889	57,375	56,227
Other or unknown .....	2,831	2,971	2,955	2,912	3,063	3,192	2,989	3,707
Non-U.S. citizens .....	15,235	15,319	15,490	15,722	15,677	15,197	14,867	14,851
Engineering, total .....	102,829	104,043	107,625	113,576	118,035	116,881	113,060	107,529
Total U.S. citizens .....	67,603	67,346	69,426	72,233	76,595	77,614	76,065	72,042
Black, non-Hispanic .....	1,500	1,616	1,786	2,025	2,374	2,559	2,783	2,872
American Indian/Alaskan Native .....	143	122	152	185	177	211	242	231
Asian/Pacific Islander .....	5,910	6,011	6,687	7,116	8,492	8,999	9,801	9,118
Hispanic .....	1,719	1,707	1,886	2,124	2,463	2,694	2,857	2,831
White, non-Hispanic .....	52,329	51,493	53,207	54,784	57,396	57,451	56,031	52,113
Other or unknown .....	6,002	6,397	5,708	5,999	5,693	5,700	4,351	4,877
Non-U.S. citizens .....	35,226	36,697	38,199	41,343	41,440	39,267	36,995	35,487
Chemical engineering .....	6,618	6,460	6,735	7,127	7,397	7,516	7,608	7,432
Total U.S. citizens .....	4,071	3,662	3,791	3,939	4,122	4,348	4,595	4,482
Black, non-Hispanic .....	84	79	84	119	144	159	157	174
American Indian/Alaskan Native .....	24	10	5	22	15	14	18	21
Asian/Pacific Islander .....	302	235	316	399	379	461	521	461
Hispanic .....	135	111	143	159	176	180	171	202
White, non-Hispanic .....	3,382	3,097	3,151	3,140	3,236	3,388	3,519	3,418
Other or unknown .....	144	130	92	100	172	146	209	206
Non-U.S. citizens .....	2,547	2,798	2,944	3,188	3,275	3,168	3,013	2,950
Civil engineering .....	14,811	14,909	15,542	17,398	19,572	19,583	19,925	19,218
Total U.S. citizens .....	9,000	9,074	9,628	10,854	12,734	13,299	13,991	13,618
Black, non-Hispanic .....	189	244	232	279	343	393	423	474
American Indian/Alaskan Native .....	22	22	37	34	31	43	38	42
Asian/Pacific Islander .....	601	597	760	837	1,043	1,167	1,374	1,360
Hispanic .....	263	275	302	383	478	550	549	590
White, non-Hispanic .....	7,370	7,337	7,727	8,684	10,196	10,415	11,025	10,460
Other or unknown .....	555	599	570	637	643	731	582	692
Non-U.S. citizens .....	5,811	5,835	5,914	6,544	6,838	6,284	5,934	5,600

See explanatory information, if any, and SOURCE at end of table.

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

Field, citizenship, and racial/ethnic background	1988	1989	1990	1991	1992	1993	1994	1995
Electrical engineering .....	32,035	33,257	33,722	35,182	36,460	35,337	33,052	31,060
Total U.S. citizens .....	21,670	22,109	22,127	22,366	23,627	22,897	21,644	19,752
Black, non-Hispanic .....	514	564	612	669	771	863	861	831
American Indian/Alaskan Native .....	39	37	49	39	38	45	53	52
Asian/Pacific Islander .....	2,587	2,703	3,050	3,026	3,755	3,749	4,088	3,762
Hispanic .....	528	558	576	661	748	841	853	794
White, non-Hispanic .....	15,404	15,818	15,662	15,571	15,996	15,661	14,336	12,751
Other or unknown .....	2,598	2,429	2,178	2,400	2,319	1,738	1,453	1,562
Non-U.S. citizens .....	10,365	11,148	11,595	12,816	12,833	12,440	11,408	11,308
Industrial engineering .....	11,393	11,094	11,248	12,676	13,525	13,596	13,696	13,182
Total U.S. citizens .....	8,710	8,176	8,129	8,902	9,682	10,153	10,120	9,865
Black, non-Hispanic .....	267	253	294	384	444	440	507	525
American Indian/Alaskan Native .....	14	15	23	39	42	36	23	23
Asian/Pacific Islander .....	467	451	450	586	794	863	855	829
Hispanic .....	280	241	231	253	297	332	375	392
White, non-Hispanic .....	7,130	6,537	6,407	7,016	7,375	7,448	7,503	7,084
Other or unknown .....	552	679	724	624	730	1,034	857	1,012
Non-U.S. citizens .....	2,683	2,918	3,119	3,774	3,843	3,443	3,576	3,317
Mechanical engineering .....	16,151	16,265	16,879	17,730	18,637	18,477	17,761	16,360
Total U.S. citizens .....	10,131	10,450	10,799	11,056	11,875	12,199	11,923	10,918
Black, non-Hispanic .....	200	200	247	246	320	336	398	403
American Indian/Alaskan Native .....	12	13	15	21	24	30	54	44
Asian/Pacific Islander .....	769	824	830	985	1,179	1,307	1,410	1,243
Hispanic .....	217	214	282	338	394	382	451	420
White, non-Hispanic .....	7,841	7,633	8,238	8,416	9,035	9,029	8,890	8,059
Other or unknown .....	1,092	1,566	1,187	1,050	923	1,115	720	749
Non-U.S. citizens .....	6,020	5,815	6,080	6,674	6,762	6,278	5,838	5,442
Other engineering .....	21,821	22,058	23,499	23,463	22,444	22,372	21,018	20,277
Total U.S. citizens .....	14,021	13,875	14,952	15,116	14,555	14,718	13,792	13,407
Black, non-Hispanic .....	246	276	317	328	352	368	437	465
American Indian/Alaskan Native .....	32	25	23	30	27	43	56	49
Asian/Pacific Islander .....	1,184	1,201	1,281	1,283	1,342	1,452	1,553	1,463
Hispanic .....	296	308	352	330	370	409	458	433
White, non-Hispanic .....	11,202	11,071	12,022	11,957	11,558	11,510	10,758	10,341
Other or unknown .....	1,061	994	957	1,188	906	936	530	656
Non-U.S. citizens .....	7,800	8,183	8,547	8,347	7,889	7,654	7,226	6,870
Total, health fields .....	49,384	51,868	55,091	58,606	63,029	68,605	73,501	77,588
Total U.S. citizens .....	45,751	47,969	50,838	54,051	58,563	63,988	69,090	73,152
Black, non-Hispanic .....	2,176	2,262	2,445	2,718	3,044	3,323	3,575	3,886
American Indian/Alaskan Native .....	175	208	216	245	272	297	342	342
Asian/Pacific Islander .....	1,261	1,417	1,646	1,923	2,214	2,790	3,148	3,476
Hispanic .....	1,782	1,774	1,859	2,011	2,382	2,674	2,691	3,125
White, non-Hispanic .....	38,145	40,117	43,127	45,247	48,770	52,435	56,445	58,788
Other or unknown .....	2,212	2,191	1,545	1,907	1,881	2,469	2,889	3,535
Non-U.S. citizens .....	3,633	3,899	4,253	4,555	4,466	4,617	4,411	4,436

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total enrollment								
<b>Total, all surveyed fields:</b>								
1994 .....	505,259	21,240	1,725	29,605	15,975	312,421	17,515	106,778
1995 .....	501,510	22,252	1,866	29,491	17,214	305,564	21,900	103,223
<b>Total, science and engineering fields:</b>								
1994 .....	431,758	17,665	1,383	26,457	13,284	255,976	14,626	102,367
1995 .....	423,922	18,366	1,524	26,015	14,089	246,776	18,365	98,787
<b>Sciences, total:</b>								
1994 .....	318,698	14,882	1,141	16,656	10,427	199,945	10,275	65,372
1995 .....	316,393	15,494	1,293	16,897	11,258	194,663	13,488	63,300
<b>Physical sciences:</b>								
1994 .....	34,449	856	67	1,925	675	18,422	797	11,707
1995 .....	33,470	894	78	1,797	732	17,506	1,021	11,442
<b>Earth, atmospheric, &amp; ocean sciences:</b>								
1994 .....	16,042	203	49	454	344	11,351	375	3,266
1995 .....	15,802	220	53	423	369	11,324	477	2,936
<b>Mathematical sciences:</b>								
1994 .....	19,579	672	36	1,199	369	10,486	734	6,083
1995 .....	18,509	690	70	1,124	400	9,630	774	5,821
<b>Computer sciences:</b>								
1994 .....	34,278	1,216	43	4,103	637	15,759	1,442	11,078
1995 .....	33,509	1,189	55	4,103	660	14,795	1,994	10,713
<b>Agricultural sciences:</b>								
1994 .....	12,199	239	37	276	263	7,972	273	3,139
1995 .....	12,426	293	58	273	289	8,013	378	3,122
<b>Biological sciences:</b>								
1994 .....	58,143	1,709	183	3,913	1,651	36,389	1,429	12,869
1995 .....	58,753	1,879	214	4,247	1,810	36,489	1,816	12,298
<b>Psychology:</b>								
1994 .....	54,726	3,545	317	1,586	2,488	42,191	2,236	2,363
1995 .....	54,243	3,422	331	1,596	2,777	40,679	3,321	2,117
<b>Social sciences:</b>								
1994 .....	89,282	6,442	409	3,200	4,000	57,375	2,989	14,867
1995 .....	89,681	6,907	434	3,334	4,221	56,227	3,707	14,851
<b>Engineering:</b>								
1994 .....	113,060	2,783	242	9,801	2,857	56,031	4,351	36,995
1995 .....	107,529	2,872	231	9,118	2,831	52,113	4,877	35,487
<b>Health fields:</b>								
1994 .....	73,501	3,575	342	3,148	2,691	56,445	2,889	4,411
1995 .....	77,588	3,886	342	3,476	3,125	58,788	3,535	4,436

See explanatory information, if any, and SOURCE at end of table.

**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Men								
Total, all surveyed fields:								
1994 .....	288,757	8,679	770	18,178	7,814	164,879	9,851	78,586
1995 .....	280,309	8,944	830	17,576	8,149	158,051	12,035	74,724
Total, science and engineering fields:								
1994 .....	272,420	8,056	692	17,138	7,175	153,794	9,116	76,449
1995 .....	263,058	8,219	750	16,461	7,363	146,523	11,176	72,566
Sciences, total:								
1994 .....	177,414	6,098	514	9,153	4,914	106,986	5,478	44,271
1995 .....	173,681	6,258	570	9,142	5,163	103,362	7,075	42,111
Physical sciences:								
1994 .....	25,290	497	49	1,255	444	13,745	562	8,738
1995 .....	24,359	526	59	1,174	470	13,018	722	8,390
Earth, atmospheric, & ocean sciences:								
1994 .....	10,689	118	26	297	214	7,403	242	2,389
1995 .....	10,323	117	31	261	226	7,234	303	2,151
Mathematical sciences:								
1994 .....	13,044	341	24	728	236	6,817	500	4,398
1995 .....	12,248	384	43	674	243	6,211	523	4,170
Computer sciences:								
1994 .....	26,126	706	36	2,729	476	12,472	1,053	8,654
1995 .....	25,334	663	40	2,747	498	11,697	1,545	8,144
Agricultural sciences:								
1994 .....	7,911	118	20	168	142	5,002	165	2,296
1995 .....	7,975	150	29	149	155	5,005	235	2,252
Biological sciences:								
1994 .....	29,988	671	77	1,992	767	18,472	714	7,295
1995 .....	29,934	689	93	2,130	843	18,395	974	6,810
Psychology:								
1994 .....	16,486	854	97	436	706	12,765	675	953
1995 .....	16,101	833	94	414	747	12,186	950	877
Social sciences:								
1994 .....	47,880	2,793	185	1,548	1,929	30,310	1,567	9,548
1995 .....	47,407	2,896	181	1,593	1,981	29,616	1,823	9,317
Engineering:								
1994 .....	95,006	1,958	178	7,985	2,261	46,808	3,638	32,178
1995 .....	89,377	1,961	180	7,319	2,200	43,161	4,101	30,455
Health fields:								
1994 .....	16,337	623	78	1,040	639	11,085	735	2,137
1995 .....	17,251	725	80	1,115	786	11,528	859	2,158

See explanatory information, if any, and SOURCE at end of table.



**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
<b>Women</b>								
<b>Total, all surveyed fields:</b>								
1994 .....	216,502	12,561	955	11,427	8,161	147,542	7,664	28,192
1995 .....	221,201	13,308	1,036	11,915	9,065	147,513	9,865	28,499
<b>Total, science and engineering fields:</b>								
1994 .....	159,338	9,609	691	9,319	6,109	102,182	5,510	25,918
1995 .....	160,864	10,147	774	9,554	6,726	100,253	7,189	26,221
<b>Sciences, total:</b>								
1994 .....	141,284	8,784	627	7,503	5,513	92,959	4,797	21,101
1995 .....	142,712	9,236	723	7,755	6,095	91,301	6,413	21,189
<b>Physical sciences:</b>								
1994 .....	9,159	359	18	670	231	4,677	235	2,969
1995 .....	9,111	368	19	623	262	4,488	299	3,052
<b>Earth, atmospheric, &amp; ocean sciences:</b>								
1994 .....	5,353	85	23	157	130	3,948	133	877
1995 .....	5,479	103	22	162	143	4,090	174	785
<b>Mathematical sciences:</b>								
1994 .....	6,535	331	12	471	133	3,669	234	1,685
1995 .....	6,261	306	27	450	157	3,419	251	1,651
<b>Computer sciences:</b>								
1994 .....	8,152	510	7	1,374	161	3,287	389	2,424
1995 .....	8,175	526	15	1,356	162	3,098	449	2,569
<b>Agricultural sciences:</b>								
1994 .....	4,288	121	17	108	121	2,970	108	843
1995 .....	4,451	143	29	124	134	3,008	143	870
<b>Biological sciences:</b>								
1994 .....	28,155	1,038	106	1,921	884	17,917	715	5,574
1995 .....	28,819	1,190	121	2,117	967	18,094	842	5,488
<b>Psychology:</b>								
1994 .....	38,240	2,691	220	1,150	1,782	29,426	1,561	1,410
1995 .....	38,142	2,589	237	1,182	2,030	28,493	2,371	1,240
<b>Social sciences:</b>								
1994 .....	41,402	3,649	224	1,652	2,071	27,065	1,422	5,319
1995 .....	42,274	4,011	253	1,741	2,240	26,611	1,884	5,534
<b>Engineering:</b>								
1994 .....	18,054	825	64	1,816	596	9,223	713	4,817
1995 .....	18,152	911	51	1,799	631	8,952	776	5,032
<b>Health fields:</b>								
1994 .....	57,164	2,952	264	2,108	2,052	45,360	2,154	2,274
1995 .....	60,337	3,161	262	2,361	2,339	47,260	2,676	2,278

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 23. Male graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields .....	280,309	8,944	830	17,576	8,149	158,051	12,035	74,724
Total, science and engineering fields .....	263,058	8,219	750	16,461	7,363	146,523	11,176	72,566
Sciences, total .....	173,681	6,258	570	9,142	5,163	103,362	7,075	42,111
Physical sciences .....	24,359	526	59	1,174	470	13,018	722	8,390
Astronomy .....	689	6	2	20	14	436	30	181
Chemistry .....	12,789	323	32	638	264	6,967	366	4,199
Physics .....	10,592	187	25	506	186	5,417	323	3,948
Physical sciences, n.e.c. ....	289	10	0	10	6	198	3	62
Earth, atmospheric, & ocean sciences .....	10,323	117	31	261	226	7,234	303	2,151
Atmospheric sciences .....	835	12	3	50	8	571	11	180
Geosciences .....	5,300	40	12	103	101	3,669	165	1,210
Oceanography .....	1,604	18	6	51	52	997	28	452
Earth, atmos., & ocean sci., n.e.c. ....	2,584	47	10	57	65	1,997	99	309
Mathematical sciences .....	12,248	384	43	674	243	6,211	523	4,170
Computer sciences .....	25,334	663	40	2,747	498	11,697	1,545	8,144
Agricultural sciences .....	7,975	150	29	149	155	5,005	235	2,252
Biological sciences .....	29,934	689	93	2,130	843	18,395	974	6,810
Anatomy .....	549	15	1	48	12	318	14	141
Biochemistry .....	3,144	50	10	308	63	1,677	76	960
Biology .....	7,362	257	23	399	305	4,923	397	1,058
Biometry/epidemiology .....	1,139	42	3	101	45	634	24	290
Biophysics .....	612	15	0	78	10	343	13	153
Botany .....	1,464	11	3	57	17	875	28	473
Cell biology .....	2,084	34	5	194	57	1,259	74	461
Ecology .....	943	7	1	17	23	712	45	138
Entomology/parasitology .....	827	4	0	16	15	508	16	268
Genetics .....	818	10	1	55	21	494	21	216
Microbio., immunology, & virology .....	2,604	50	11	209	65	1,544	54	671
Nutrition .....	1,287	36	2	60	25	620	27	517
Pathology .....	890	7	2	95	24	546	14	202
Pharmacology .....	1,396	37	15	125	32	842	39	306
Physiology .....	1,482	31	3	203	39	863	30	313
Zoology .....	1,204	10	6	36	27	950	19	156
Biosciences, n.e.c. ....	2,129	73	7	129	63	1,287	83	487
Psychology .....	16,101	833	94	414	747	12,186	950	877
Social sciences .....	47,407	2,896	181	1,593	1,981	29,616	1,823	9,317
Agricultural economics .....	1,543	33	3	37	33	706	47	684
Anthropology (cultural & social) .....	3,138	72	37	78	138	2,333	121	359
Economics (except agricultural) .....	8,888	253	8	369	262	3,915	216	3,865
Geography .....	2,807	62	14	60	61	2,177	108	325
Linguistics .....	1,194	13	4	59	30	630	38	420
Political science .....	18,395	1,480	66	599	907	12,432	819	2,092
Sociology .....	3,788	350	12	164	186	2,287	156	633
Sociology/anthropology .....	387	48	4	8	11	247	17	52
Social sciences, other .....	7,267	585	33	219	353	4,889	301	887
Engineering, total .....	89,377	1,961	180	7,319	2,200	43,161	4,101	30,455
Aerospace engineering .....	2,992	42	6	162	54	1,564	73	1,091
Agricultural engineering .....	847	17	0	32	16	379	17	386
Biomedical engineering .....	1,965	30	3	207	46	1,060	48	571
Chemical engineering .....	5,874	85	13	340	133	2,716	154	2,433
Civil engineering .....	14,986	317	32	996	412	8,035	532	4,662
Electrical engineering .....	26,858	639	47	3,094	678	11,264	1,375	9,761
Engineering science .....	1,658	28	4	146	24	936	70	450
Industrial eng./manufacturing eng. ....	10,387	302	17	670	284	5,470	856	2,788
Mechanical engineering .....	14,690	314	35	1,059	363	7,256	664	4,999
Metallurgical/materials eng. ....	3,861	52	7	233	63	1,816	84	1,606
Nuclear engineering .....	1,009	16	1	36	16	598	3	339
Engineering, other .....	4,250	119	15	344	111	2,067	225	1,369

See explanatory information, if any, and SOURCE at end of table.



**Table 23. Male graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**  
-Continued

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields .....	17,251	725	80	1,115	786	11,528	859	2,158
Clinical fields .....	1,410	35	1	148	44	793	173	216
Dental sciences .....	819	12	3	64	42	521	16	161
Nursing .....	1,699	50	15	51	93	1,392	58	40
Pharmaceutical sciences .....	1,602	47	2	116	47	696	67	627
Preventive medicine/community health .....	4,263	276	31	339	247	2,667	242	461
Speech pathology/audiology .....	984	56	11	24	25	731	44	93
Veterinary sciences .....	490	16	0	25	12	285	2	150
Other health fields .....	5,984	233	17	348	276	4,443	257	410

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 24. Female graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields .....	221,201	13,308	1,036	11,915	9,065	147,513	9,865	28,499
Total, science and engineering fields .....	160,864	10,147	774	9,554	6,726	100,253	7,189	26,221
Sciences, total .....	142,712	9,236	723	7,755	6,095	91,301	6,413	21,189
Physical sciences .....	9,111	368	19	623	262	4,488	299	3,052
Astronomy .....	223	5	1	10	2	141	13	51
Chemistry .....	6,856	298	13	483	222	3,356	219	2,265
Physics .....	1,835	61	5	123	33	833	65	715
Physical sciences, n.e.c. ....	197	4	0	7	5	158	2	21
Earth, atmospheric, & ocean sciences .....	5,479	103	22	162	143	4,090	174	785
Atmospheric sciences .....	237	6	1	19	2	120	3	86
Geosciences .....	2,302	27	15	48	53	1,733	93	333
Oceanography .....	1,099	16	2	32	45	814	21	169
Earth, atmos., & ocean sci., n.e.c. ....	1,841	54	4	63	43	1,423	57	197
Mathematical sciences .....	6,261	306	27	450	157	3,419	251	1,651
Computer sciences .....	8,175	526	15	1,356	162	3,098	449	2,569
Agricultural sciences .....	4,451	143	29	124	134	3,008	143	870
Biological sciences .....	28,819	1,190	121	2,117	967	18,094	842	5,488
Anatomy .....	507	26	0	51	16	294	9	111
Biochemistry .....	2,406	61	6	270	59	1,217	45	748
Biology .....	6,849	386	40	438	303	4,424	332	926
Biometry/epidemiology .....	1,673	96	10	151	71	1,012	42	291
Biophysics .....	243	6	2	35	4	134	1	61
Botany .....	1,145	24	3	34	24	725	24	311
Cell biology .....	1,775	38	7	130	53	1,131	48	368
Ecology .....	774	8	6	15	20	637	27	61
Entomology/parasitology .....	414	8	1	19	11	263	7	105
Genetics .....	882	26	0	57	18	629	15	137
Microbio., immunology, & virology .....	2,491	100	5	200	102	1,503	50	531
Nutrition .....	3,725	151	15	210	113	2,415	85	736
Pathology .....	780	21	1	67	15	525	11	140
Pharmacology .....	1,307	64	11	132	41	765	33	261
Physiology .....	1,058	68	3	118	36	598	20	215
Zoology .....	869	15	5	27	21	688	16	97
Biosciences, n.e.c. ....	1,921	92	6	163	60	1,134	77	389
Psychology .....	38,142	2,589	237	1,182	2,030	28,493	2,371	1,240
Social sciences .....	42,274	4,011	253	1,741	2,240	26,611	1,884	5,534
Agricultural economics .....	778	31	2	25	22	362	20	316
Anthropology (cultural & social) .....	4,556	143	66	130	205	3,479	192	341
Economics (except agricultural) .....	3,902	149	13	212	103	1,699	97	1,629
Geography .....	1,595	41	9	67	39	1,202	62	175
Linguistics .....	2,000	38	5	120	108	1,058	94	577
Political science .....	15,979	2,079	71	628	1,019	10,004	879	1,299
Sociology .....	5,787	606	37	248	322	3,788	203	583
Sociology/anthropology .....	554	91	5	13	13	356	40	36
Social sciences, other .....	7,123	833	45	298	409	4,663	297	578
Engineering, total .....	18,152	911	51	1,799	631	8,952	776	5,032
Aerospace engineering .....	351	9	2	15	11	210	9	95
Agricultural engineering .....	207	8	1	12	2	82	1	101
Biomedical engineering .....	722	42	1	74	12	405	25	163
Chemical engineering .....	1,558	89	8	121	69	702	52	517
Civil engineering .....	4,232	157	10	364	178	2,425	160	938
Electrical engineering .....	4,202	192	5	668	116	1,487	187	1,547
Engineering science .....	297	9	1	39	7	166	6	69
Industrial eng./manufacturing eng. ....	2,795	223	6	159	108	1,614	156	529
Mechanical engineering .....	1,670	89	9	184	57	803	85	443
Metallurgical/materials eng. ....	1,059	34	1	74	39	561	23	327
Nuclear engineering .....	145	7	1	10	5	74	3	45
Engineering, other .....	914	52	6	79	27	423	69	258

See explanatory information, if any, and SOURCE at end of table.

**Table 24. Female graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**  
-Continued

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields .....	60,337	3,161	262	2,361	2,339	47,260	2,676	2,278
Clinical fields .....	1,818	80	6	158	47	1,180	186	161
Dental sciences .....	432	18	0	36	30	249	8	91
Nursing .....	26,742	1,488	128	742	800	22,144	1,072	368
Pharmaceutical sciences .....	1,346	79	2	130	53	588	45	449
Preventive medicine/community health .....	6,750	568	31	562	564	4,219	315	491
Speech pathology/audiology .....	11,114	417	46	187	341	9,431	453	239
Veterinary sciences .....	439	21	2	17	15	284	1	99
Other health fields .....	11,696	490	47	529	489	9,165	596	380

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Total, all surveyed fields:</b>								
Total, all sources .....	275,204	282,741	292,854	307,049	322,753	329,876	332,453	330,235
Federal, total .....	55,492	57,444	59,274	63,017	65,634	67,697	68,583	67,469
Dept. of Defense .....	9,546	9,140	8,868	9,128	9,247	9,750	9,449	9,421
Dept. of HHS, total .....	17,901	18,692	19,522	20,493	21,429	22,039	22,690	22,753
NIH .....	13,715	14,357	14,996	16,018	17,094	18,138	18,305	18,115
Other HHS .....	4,186	4,335	4,526	4,475	4,335	3,901	4,385	4,638
NSF .....	11,634	11,900	12,025	12,666	13,368	13,532	13,983	13,665
USDA .....	2,591	2,728	2,722	3,075	3,216	3,324	3,422	3,244
All other Federal .....	13,820	14,984	16,137	17,655	18,374	19,052	19,039	18,386
Institutional support .....	114,768	119,165	123,056	125,387	127,968	129,089	129,419	129,903
Other outside support, total .....	25,741	25,851	26,136	27,070	27,776	26,716	27,295	26,114
All other U.S. ....	18,740	19,141	19,605	20,427	21,312	21,230	21,564	20,564
Foreign .....	7,001	6,710	6,531	6,643	6,464	5,486	5,731	5,550
Self-support .....	79,203	80,281	84,388	91,575	101,375	106,374	107,156	106,749
<b>Total, science and engineering:</b>								
Total, all sources .....	250,667	256,928	265,423	277,183	290,654	294,227	293,324	288,016
Federal, total .....	49,171	50,969	52,503	56,049	58,306	60,402	60,805	59,468
Dept. of Defense .....	9,301	8,773	8,492	8,711	8,848	9,315	9,067	9,039
Dept. of HHS, total .....	13,297	14,078	14,594	15,472	16,275	16,828	17,158	17,069
NIH .....	12,307	12,909	13,367	14,172	15,044	15,872	15,960	15,662
Other HHS .....	990	1,169	1,227	1,300	1,231	956	1,198	1,407
NSF .....	11,585	11,852	11,976	12,610	13,298	13,443	13,866	13,566
USDA .....	2,560	2,682	2,664	3,015	3,147	3,246	3,348	3,189
All other Federal .....	12,428	13,584	14,777	16,241	16,738	17,570	17,366	16,605
Institutional support .....	108,582	112,339	115,885	117,907	120,321	120,969	120,942	120,833
Other outside support, total .....	24,464	24,445	24,766	25,549	26,082	24,973	25,418	24,045
All other U.S. ....	17,859	18,215	18,700	19,367	20,078	19,930	20,145	19,026
Foreign .....	6,605	6,230	6,066	6,182	6,004	5,043	5,273	5,019
Self-support .....	68,450	69,175	72,269	77,678	85,945	87,883	86,159	83,670
<b>Sciences, total:</b>								
Total, all sources .....	187,660	192,553	199,446	206,149	216,228	220,400	221,756	220,154
Federal, total .....	35,183	36,755	37,831	40,067	41,742	43,512	43,954	43,145
Dept. of Defense .....	4,309	3,946	3,779	3,840	3,895	4,176	4,350	4,232
Dept. of HHS, total .....	12,696	13,379	13,834	14,662	15,374	15,904	16,252	16,151
NIH .....	11,776	12,291	12,706	13,448	14,246	15,078	15,178	14,894
Other HHS .....	920	1,088	1,128	1,214	1,128	826	1,074	1,257
NSF .....	7,782	8,087	8,094	8,313	8,693	8,882	9,102	8,955
USDA .....	2,369	2,478	2,433	2,741	2,789	2,940	3,003	2,847
All other Federal .....	8,027	8,865	9,691	10,511	10,991	11,610	11,247	10,960
Institutional support .....	87,000	89,558	92,574	93,291	95,395	95,995	96,375	96,989
Other outside support, total .....	14,376	14,363	14,385	14,923	15,532	15,256	16,040	14,924
All other U.S. ....	9,821	10,205	10,325	10,831	11,559	11,857	12,379	11,549
Foreign .....	4,555	4,158	4,060	4,092	3,973	3,399	3,661	3,375
Self-support .....	51,101	51,877	54,656	57,868	63,559	65,637	65,387	65,096
<b>Physical sciences:</b>								
Total, all sources .....	28,574	29,207	29,485	30,117	30,673	30,611	30,043	28,892
Federal, total .....	9,857	10,247	10,284	10,834	11,007	11,140	11,032	10,353
Dept. of Defense .....	1,475	1,392	1,214	1,226	1,194	1,187	1,316	1,197
Dept. of HHS, total .....	2,152	2,111	2,096	2,042	2,188	2,162	2,209	2,041
NIH .....	2,002	1,981	1,952	1,874	2,056	2,051	2,074	1,861
Other HHS .....	150	130	144	168	132	111	135	180
NSF .....	3,656	3,612	3,567	3,571	3,601	3,623	3,703	3,583
USDA .....	32	43	54	61	68	61	42	38
All other Federal .....	2,542	3,089	3,353	3,934	3,956	4,107	3,762	3,494
Institutional support .....	14,860	15,150	15,272	15,049	15,358	15,148	14,831	14,858
Other outside support, total .....	1,980	2,007	1,974	2,228	2,349	2,234	2,316	2,079
All other U.S. ....	1,662	1,751	1,716	1,927	2,044	1,955	2,008	1,792
Foreign .....	318	256	258	301	305	279	308	287
Self-support .....	1,877	1,803	1,955	2,006	1,959	2,089	1,864	1,602
<b>Earth, atmospheric, &amp; ocean sciences:</b>								
Total, all sources .....	10,192	10,021	10,244	10,373	10,986	11,367	11,470	11,290
Federal, total .....	2,789	2,895	2,991	3,119	3,436	3,652	3,630	3,489
Dept. of Defense .....	461	435	452	452	472	517	494	421
Dept. of HHS, total .....	51	25	34	56	49	48	37	34
NIH .....	19	17	21	23	43	41	36	31
Other HHS .....	32	8	13	33	6	7	1	3
NSF .....	1,236	1,253	1,210	1,223	1,320	1,366	1,409	1,387
USDA .....	40	43	57	69	86	64	61	65
All other Federal .....	1,001	1,139	1,238	1,319	1,509	1,657	1,629	1,582
Institutional support .....	4,285	4,256	4,257	4,314	4,316	4,366	4,343	4,445
Other outside support, total .....	1,025	990	952	974	1,006	928	1,023	991
All other U.S. ....	669	652	679	687	761	735	790	756
Foreign .....	356	338	273	287	245	193	233	235
Self-support .....	2,093	1,880	2,044	1,966	2,228	2,421	2,474	2,365

See explanatory information, if any, and SOURCE at end of table.

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Mathematical sciences:</b>								
Total, all sources	13,512	13,681	13,865	14,256	14,679	14,530	14,226	13,422
Federal, total	1,189	1,219	1,333	1,503	1,497	1,474	1,397	1,291
Dept. of Defense	513	395	367	376	386	399	372	322
Dept. of HHS, total	28	36	49	69	118	80	76	87
NIH	25	28	39	64	111	74	68	63
Other HHS	3	8	10	5	7	6	8	24
NSF	463	475	491	452	457	470	510	474
USDA	20	22	23	21	25	28	16	13
All other Federal	165	291	403	585	511	497	423	395
Institutional support	9,131	9,373	9,489	9,531	9,578	9,394	9,461	9,169
Other outside support, total	616	585	560	590	626	524	552	478
All other U.S.	350	348	317	321	356	303	333	291
Foreign	266	237	243	269	270	221	219	187
Self-support	2,576	2,504	2,483	2,632	2,978	3,138	2,816	2,484
<b>Computer sciences:</b>								
Total, all sources	15,133	15,606	16,689	16,516	17,506	17,399	16,712	16,564
Federal, total	2,219	2,324	2,409	2,533	2,661	2,918	3,070	3,175
Dept. of Defense	1,214	1,164	1,129	1,131	1,210	1,327	1,345	1,443
Dept. of HHS, total	64	60	71	71	104	107	103	111
NIH	64	53	62	65	101	99	95	93
Other HHS	0	7	9	6	3	8	8	18
NSF	632	777	819	896	962	1,004	1,046	1,051
USDA	10	7	14	8	6	7	9	13
All other Federal	299	316	376	427	379	427	567	557
Institutional support	5,131	5,342	5,653	5,474	5,609	5,509	5,437	5,492
Other outside support, total	1,312	1,278	1,281	1,322	1,356	1,391	1,403	1,309
All other U.S.	987	950	935	972	1,031	1,134	1,110	1,065
Foreign	325	328	346	350	325	257	293	244
Self-support	6,471	6,662	7,346	7,187	7,880	7,581	6,802	6,588
<b>Agricultural sciences:</b>								
Total, all sources	9,122	9,070	9,100	9,289	9,452	9,468	9,492	9,630
Federal, total	1,785	1,817	1,812	1,896	1,993	1,965	1,922	2,048
Dept. of Defense	32	13	18	26	18	37	35	32
Dept. of HHS, total	34	37	45	46	41	34	50	27
NIH	33	26	40	38	38	32	47	21
Other HHS	1	11	5	8	3	2	3	6
NSF	50	48	65	61	76	76	87	88
USDA	959	1,064	963	1,117	1,110	1,150	1,114	1,192
All other Federal	710	655	721	646	748	668	636	709
Institutional support	3,481	3,463	3,450	3,535	3,621	3,635	3,810	3,882
Other outside support, total	1,773	1,697	1,770	1,715	1,685	1,681	1,671	1,489
All other U.S.	951	1,026	1,101	1,059	1,099	1,189	1,153	1,090
Foreign	822	671	669	656	586	492	518	399
Self-support	2,083	2,093	2,068	2,143	2,153	2,187	2,089	2,211
<b>Biological sciences:</b>								
Total, all sources	39,209	40,348	40,945	42,700	44,389	46,481	48,017	48,283
Federal, total	12,468	13,259	13,652	14,503	15,148	16,210	16,724	16,593
Dept. of Defense	282	250	222	223	232	273	346	357
Dept. of HHS, total	8,930	9,618	9,951	10,667	11,054	11,632	11,979	12,048
NIH	8,663	9,265	9,584	10,215	10,637	11,314	11,464	11,390
Other HHS	267	353	367	452	417	318	515	658
NSF	1,121	1,253	1,212	1,282	1,347	1,382	1,382	1,406
USDA	986	949	963	1,062	1,083	1,222	1,289	1,083
All other Federal	1,149	1,189	1,304	1,269	1,432	1,701	1,728	1,699
Institutional support	17,921	18,446	18,868	19,267	19,753	20,028	20,712	20,805
Other outside support, total	3,385	3,433	3,536	3,735	3,787	3,864	4,138	3,923
All other U.S.	2,558	2,636	2,809	3,017	3,109	3,280	3,504	3,317
Foreign	827	797	727	718	678	584	634	606
Self-support	5,435	5,210	4,889	5,195	5,701	6,379	6,443	6,962
<b>Psychology:</b>								
Total, all sources	28,118	29,348	30,619	32,258	34,277	34,894	35,434	35,762
Federal, total	2,166	2,207	2,394	2,492	2,587	2,658	2,646	2,576
Dept. of Defense	153	113	156	159	136	163	175	175
Dept. of HHS, total	1,120	1,179	1,274	1,342	1,399	1,424	1,375	1,324
NIH	763	720	798	901	963	1,164	1,108	1,109
Other HHS	357	459	476	441	436	260	267	215
NSF	233	236	262	268	285	316	290	288
USDA	25	29	37	24	19	15	38	16
All other Federal	635	650	665	699	748	740	768	773
Institutional support	11,181	11,631	12,134	12,279	12,721	13,261	13,021	13,091
Other outside support, total	1,051	1,132	1,118	1,071	1,109	1,073	1,202	1,144
All other U.S.	987	1,077	1,060	1,015	1,052	1,026	1,128	1,101
Foreign	64	55	58	56	57	47	74	43
Self-support	13,720	14,378	14,973	16,416	17,860	17,902	18,565	18,951

See explanatory information, if any, and SOURCE at end of table.

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Social sciences:</b>								
Total, all sources .....	43,800	45,272	48,499	50,640	54,266	55,650	56,362	56,311
Federal, total .....	2,710	2,787	2,956	3,187	3,413	3,495	3,533	3,620
Dept. of Defense .....	179	184	221	247	247	273	267	285
Dept. of HHS, total .....	317	313	314	369	421	417	423	479
NIH .....	207	201	210	268	297	303	286	326
Other HHS .....	110	112	104	101	124	114	137	153
NSF .....	391	433	468	560	645	645	675	678
USDA .....	297	321	322	379	392	393	434	427
All other Federal .....	1,526	1,536	1,631	1,632	1,708	1,767	1,734	1,751
Institutional support .....	21,010	21,897	23,451	23,842	24,439	24,654	24,760	25,247
Other outside support, total .....	3,234	3,241	3,194	3,288	3,614	3,561	3,735	3,511
All other U.S. ....	1,657	1,765	1,708	1,833	2,107	2,235	2,353	2,137
Foreign .....	1,577	1,476	1,486	1,455	1,507	1,326	1,382	1,374
Self-support .....	16,846	17,347	18,898	20,323	22,800	23,940	24,334	23,933
<b>Engineering, total:</b>								
Total, all sources .....	63,007	64,375	65,977	71,034	74,426	73,827	71,568	67,862
Federal, total .....	13,988	14,214	14,672	15,982	16,564	16,890	16,851	16,323
Dept. of Defense .....	4,992	4,827	4,713	4,871	4,953	5,139	4,717	4,807
Dept. of HHS, total .....	601	699	760	810	901	924	906	918
NIH .....	531	618	661	724	798	794	782	768
Other HHS .....	70	81	99	86	103	130	124	150
NSF .....	3,805	3,765	3,882	4,297	4,605	4,561	4,764	4,611
USDA .....	191	204	231	274	358	306	345	342
All other Federal .....	4,401	4,719	5,086	5,730	5,747	5,960	6,119	5,645
Institutional support .....	21,582	22,781	23,311	24,616	24,926	24,974	24,567	23,844
Other outside support, total .....	10,088	10,082	10,381	10,626	10,550	9,717	9,378	9,121
All other U.S. ....	8,038	8,010	8,375	8,536	8,519	8,073	7,766	7,477
Foreign .....	2,050	2,072	2,006	2,090	2,031	1,644	1,612	1,644
Self-support .....	17,349	17,298	17,613	19,810	22,386	22,246	20,772	18,574
<b>Chemical engineering:</b>								
Total, all sources .....	5,359	5,282	5,443	5,788	5,946	6,041	6,105	5,962
Federal, total .....	1,452	1,459	1,529	1,598	1,654	1,748	1,716	1,754
Dept. of Defense .....	145	130	98	134	123	139	128	164
Dept. of HHS, total .....	83	87	121	132	166	141	173	163
NIH .....	79	87	119	128	146	119	143	136
Other HHS .....	4	0	2	4	20	22	30	27
NSF .....	683	654	679	664	699	730	749	761
USDA .....	7	13	27	16	38	52	54	66
All other Federal .....	534	575	604	652	628	686	612	600
Institutional support .....	2,021	1,976	2,105	2,282	2,308	2,340	2,420	2,262
Other outside support, total .....	1,279	1,278	1,241	1,228	1,170	1,059	1,145	1,105
All other U.S. ....	1,166	1,184	1,142	1,111	1,072	960	1,041	967
Foreign .....	113	94	99	117	98	99	104	138
Self-support .....	607	569	568	680	814	894	824	841
<b>Civil engineering:</b>								
Total, all sources .....	9,946	9,964	10,128	11,328	12,454	12,458	12,641	12,248
Federal, total .....	1,512	1,403	1,467	1,752	2,028	1,982	2,090	1,970
Dept. of Defense .....	327	280	235	273	349	328	321	290
Dept. of HHS, total .....	5	18	15	35	43	38	45	41
NIH .....	3	16	11	31	38	30	37	31
Other HHS .....	2	2	4	4	5	8	8	10
NSF .....	420	382	428	498	532	522	587	530
USDA .....	37	33	36	51	80	63	65	53
All other Federal .....	723	690	753	895	1,024	1,031	1,072	1,056
Institutional support .....	3,844	3,904	3,913	4,204	4,391	4,579	4,742	4,861
Other outside support, total .....	1,108	1,200	1,256	1,339	1,477	1,267	1,233	1,180
All other U.S. ....	695	723	826	918	1,031	972	942	892
Foreign .....	413	477	430	421	446	295	291	288
Self-support .....	3,482	3,457	3,492	4,033	4,558	4,630	4,576	4,237
<b>Electrical engineering:</b>								
Total, all sources .....	17,706	18,466	18,675	19,904	20,996	20,400	19,414	18,303
Federal, total .....	3,467	3,476	3,571	3,866	4,061	4,106	4,082	4,085
Dept. of Defense .....	1,687	1,675	1,646	1,644	1,700	1,764	1,664	1,706
Dept. of HHS, total .....	97	61	77	85	90	103	100	113
NIH .....	75	45	55	76	81	86	83	84
Other HHS .....	22	16	22	9	9	17	17	29
NSF .....	1,135	1,084	1,133	1,278	1,388	1,285	1,343	1,353
USDA .....	11	14	16	18	24	11	24	34
All other Federal .....	537	642	699	841	859	943	951	879
Institutional support .....	5,724	6,390	6,355	6,640	6,856	6,741	6,409	6,234
Other outside support, total .....	2,832	2,883	2,969	3,024	2,953	2,773	2,620	2,552
All other U.S. ....	2,372	2,389	2,443	2,492	2,450	2,336	2,218	2,134
Foreign .....	460	494	526	532	503	437	402	418
Self-support .....	5,683	5,717	5,780	6,374	7,126	6,780	6,303	5,432

See explanatory information, if any, and SOURCE at end of table.



**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Industrial engineering:</b>								
Total, all sources .....	4,295	4,658	4,770	5,598	6,081	5,902	5,910	5,328
Federal, total .....	562	584	611	705	650	647	637	648
Dept. of Defense .....	284	281	299	281	267	249	178	188
Dept. of HHS, total .....	39	59	60	52	53	78	50	54
NIH .....	22	25	27	16	22	36	28	27
Other HHS .....	17	34	33	36	31	42	22	27
NSF .....	115	126	129	188	165	173	215	175
USDA .....	2	0	1	5	5	3	1	0
All other Federal .....	122	118	122	179	160	144	193	231
Institutional support .....	1,455	1,630	1,686	1,858	1,878	1,949	1,889	1,858
Other outside support, total .....	504	533	571	496	568	493	551	498
All other U.S. ....	392	387	415	362	430	404	458	420
Foreign .....	112	146	156	134	138	89	93	78
Self-support .....	1,774	1,911	1,902	2,539	2,985	2,813	2,833	2,324
<b>Mechanical engineering:</b>								
Total, all sources .....	10,416	10,492	10,867	11,687	12,383	12,395	11,875	11,119
Federal, total .....	2,435	2,485	2,532	2,730	2,790	2,999	2,946	2,773
Dept. of Defense .....	819	840	751	738	730	797	782	821
Dept. of HHS, total .....	70	61	69	71	87	86	80	93
NIH .....	65	54	68	58	77	70	71	82
Other HHS .....	5	7	1	13	10	16	9	11
NSF .....	661	632	639	732	786	812	800	742
USDA .....	16	28	26	29	26	9	10	4
All other Federal .....	869	924	1,047	1,160	1,161	1,295	1,274	1,113
Institutional support .....	3,783	3,854	4,043	4,287	4,400	4,231	4,086	3,896
Other outside support, total .....	1,536	1,542	1,599	1,686	1,618	1,561	1,573	1,606
All other U.S. ....	1,303	1,327	1,383	1,415	1,401	1,391	1,333	1,352
Foreign .....	233	215	216	271	217	170	240	254
Self-support .....	2,662	2,611	2,693	2,984	3,575	3,604	3,270	2,844
<b>Other engineering:</b>								
Total, all sources .....	15,285	15,513	16,094	16,729	16,566	16,631	15,623	14,902
Federal, total .....	4,560	4,807	4,962	5,331	5,381	5,408	5,380	5,093
Dept. of Defense .....	1,730	1,621	1,684	1,801	1,784	1,862	1,644	1,638
Dept. of HHS, total .....	307	413	418	435	462	478	458	454
NIH .....	287	391	381	415	434	453	420	408
Other HHS .....	20	22	37	20	28	25	38	46
NSF .....	789	887	874	937	1,035	1,039	1,070	1,050
USDA .....	118	116	125	155	185	168	191	185
All other Federal .....	1,616	1,770	1,861	2,003	1,915	1,861	2,017	1,766
Institutional support .....	4,755	5,027	5,209	5,345	5,093	5,134	5,021	4,733
Other outside support, total .....	2,829	2,646	2,745	2,853	2,764	2,564	2,256	2,180
All other U.S. ....	2,110	2,000	2,166	2,238	2,135	2,010	1,774	1,712
Foreign .....	719	646	579	615	629	554	482	468
Self-support .....	3,141	3,033	3,178	3,200	3,328	3,525	2,966	2,896
<b>Total, health fields:</b>								
Total, all sources .....	24,537	25,813	27,431	29,866	32,099	35,649	39,129	42,219
Federal, total .....	6,321	6,475	6,771	6,968	7,328	7,295	7,778	8,001
Dept. of Defense .....	245	367	376	417	399	435	382	382
Dept. of HHS, total .....	4,604	4,614	4,928	5,021	5,154	5,211	5,532	5,684
NIH .....	1,408	1,448	1,629	1,846	2,050	2,266	2,345	2,453
Other HHS .....	3,196	3,166	3,299	3,175	3,104	2,945	3,187	3,231
NSF .....	49	48	49	56	70	89	117	99
USDA .....	31	46	58	60	69	78	74	55
All other Federal .....	1,392	1,400	1,360	1,414	1,636	1,482	1,673	1,781
Institutional support .....	6,186	6,826	7,171	7,480	7,647	8,120	8,477	9,070
Other outside support, total .....	1,277	1,406	1,370	1,521	1,694	1,743	1,877	2,069
All other U.S. ....	881	926	905	1,060	1,234	1,300	1,419	1,538
Foreign .....	396	480	465	461	460	443	458	531
Self-support .....	10,753	11,106	12,119	13,897	15,430	18,491	20,997	23,079

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 26. Full-time graduate students in science and engineering fields in all institutions, by type and source of major support: 1988-95

	1988	1989	1990	1991	1992	1993	1994	1995
<b>Total, all types:</b>								
Total, all sources .....	250,667	256,928	265,423	277,183	290,654	294,227	293,324	288,016
Federal, total .....	49,171	50,969	52,503	56,049	58,306	60,402	60,805	59,468
Dept. of Defense .....	9,301	8,773	8,492	8,711	8,848	9,315	9,067	9,039
Dept. of HHS, total .....	13,297	14,078	14,594	15,472	16,275	16,828	17,158	17,069
NIH .....	12,307	12,909	13,367	14,172	15,044	15,872	15,960	15,662
Other HHS .....	990	1,169	1,227	1,300	1,231	956	1,198	1,407
NSF .....	11,585	11,852	11,976	12,610	13,298	13,443	13,866	13,566
USDA .....	2,560	2,682	2,664	3,015	3,147	3,246	3,348	3,189
All other Federal .....	12,428	13,584	14,777	16,241	16,738	17,570	17,366	16,605
Institutional support .....	108,582	112,339	115,885	117,907	120,321	120,969	120,942	120,833
Other outside support, total .....	24,464	24,445	24,766	25,549	26,082	24,973	25,418	24,045
All other U.S. ....	17,859	18,215	18,700	19,367	20,078	19,930	20,145	19,026
Foreign .....	6,605	6,230	6,066	6,182	6,004	5,043	5,273	5,019
Self-support .....	68,450	69,175	72,269	77,678	85,945	87,883	86,159	83,670
<b>Fellowships:</b>								
Total, all sources .....	20,885	21,768	23,537	24,985	26,786	27,180	26,856	26,699
Federal, total .....	4,171	4,678	5,848	6,912	7,226	7,003	6,364	6,352
Dept. of Defense .....	337	392	579	677	648	627	523	471
Dept. of HHS, total .....	593	613	748	818	985	1,033	1,048	1,152
NIH .....	525	516	672	722	868	919	917	969
Other HHS .....	68	97	76	96	117	114	131	183
NSF .....	1,571	1,760	2,079	2,233	2,356	2,269	2,276	2,322
USDA .....	92	103	103	102	113	113	112	124
All other Federal .....	1,578	1,810	2,339	3,082	3,124	2,961	2,405	2,283
Institutional support .....	11,018	11,475	12,082	12,314	13,440	14,012	14,006	14,316
Other outside support, total .....	5,696	5,615	5,607	5,759	6,120	6,165	6,486	6,031
All other U.S. ....	3,245	3,396	3,467	3,550	3,799	3,703	4,069	3,826
Foreign .....	2,451	2,219	2,140	2,209	2,321	2,462	2,417	2,205
Self-support .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Traineeships:</b>								
Total, all sources .....	9,514	9,739	10,064	10,466	10,052	10,290	10,356	10,620
Federal, total .....	4,476	4,600	4,876	5,454	5,552	5,774	5,857	5,670
Dept. of Defense .....	112	92	85	116	94	113	122	104
Dept. of HHS, total .....	3,861	3,789	4,043	4,384	4,388	4,379	4,493	4,362
NIH .....	3,589	3,508	3,732	4,084	4,107	4,195	4,206	4,018
Other HHS .....	272	281	311	300	281	184	287	344
NSF .....	62	82	45	80	104	165	250	334
USDA .....	43	48	53	34	28	42	37	18
All other Federal .....	398	589	650	840	938	1,075	955	852
Institutional support .....	4,158	4,268	4,433	4,275	3,712	3,635	3,606	4,247
Other outside support, total .....	880	871	755	737	788	881	893	703
All other U.S. ....	631	591	516	552	581	587	672	510
Foreign .....	249	280	239	185	207	294	221	193
Self-support .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Research assistantships:</b>								
Total, all sources .....	71,695	75,816	77,343	81,214	84,078	86,204	87,654	85,408
Federal, total .....	35,645	37,372	37,264	39,352	41,077	43,031	43,906	42,843
Dept. of Defense .....	6,002	5,879	5,382	5,452	5,703	6,204	6,177	6,293
Dept. of HHS, total .....	8,506	9,340	9,495	9,958	10,473	10,976	11,243	11,125
NIH .....	7,883	8,574	8,701	9,099	9,700	10,386	10,528	10,327
Other HHS .....	623	766	794	859	773	590	715	798
NSF .....	9,800	9,854	9,692	10,144	10,628	10,769	11,145	10,610
USDA .....	2,275	2,407	2,386	2,761	2,896	2,964	3,073	2,949
All other Federal .....	9,062	9,892	10,309	11,037	11,377	12,118	12,268	11,866
Institutional support .....	25,093	27,121	28,382	29,426	29,953	29,900	30,649	30,263
Other outside support, total .....	10,957	11,323	11,697	12,436	13,048	13,273	13,099	12,302
All other U.S. ....	10,347	10,669	10,984	11,630	12,237	12,415	12,336	11,544
Foreign .....	610	654	713	806	811	858	763	758
Self-support .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Teaching assistantships:</b>								
Total, all sources .....	60,873	62,009	62,605	62,746	63,235	64,821	64,083	63,292
Federal, total .....	435	427	554	428	574	776	677	639
Dept. of Defense .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dept. of HHS, total .....	109	116	95	87	166	162	136	113
NIH .....	106	110	77	74	149	156	127	106
Other HHS .....	3	6	18	13	17	6	9	7
NSF .....	58	66	84	73	112	140	107	157
USDA .....	44	33	44	33	28	46	49	37
All other Federal .....	224	212	331	235	268	428	385	332
Institutional support .....	59,975	61,071	61,542	61,810	62,120	63,461	62,796	62,073
Other outside support, total .....	463	511	509	508	541	584	610	580
All other U.S. ....	463	511	509	508	541	584	610	580
Foreign .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self-support .....	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.



**Table 26. Full-time graduate students in science and engineering fields in all institutions, by type and source of major support: 1988-95**

	1988	1989	1990	1991	1992	1993	1994	1995
<b>Other types of support:</b>								
Total, all sources .....	87,700	87,596	91,874	97,772	106,503	105,732	104,375	101,997
Federal, total .....	4,444	3,892	3,961	3,903	3,877	3,818	4,001	3,964
Dept. of Defense .....	2,850	2,410	2,446	2,466	2,403	2,371	2,245	2,171
Dept. of HHS, total .....	228	220	213	225	263	278	238	317
NIH .....	204	201	185	193	220	216	182	242
Other HHS .....	24	19	28	32	43	62	56	75
NSF .....	94	90	76	80	98	100	88	143
USDA .....	106	91	78	85	82	81	77	61
All other Federal .....	1,166	1,081	1,148	1,047	1,031	988	1,353	1,272
Institutional support .....	8,338	8,404	9,446	10,082	11,096	9,961	9,885	9,934
Other outside support, total .....	6,468	6,125	6,198	6,109	5,585	4,070	4,330	4,429
All other U.S. ....	3,173	3,048	3,224	3,127	2,920	2,641	2,458	2,566
Foreign .....	3,295	3,077	2,974	2,982	2,665	1,429	1,872	1,863
Self-support .....	68,450	69,175	72,269	77,678	85,945	87,883	86,159	83,670

**KEY:** N/A = Not applicable

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Total, all surveyed fields:</b>								
Total, all sources	179,579	182,803	186,737	193,548	200,888	200,898	197,614	191,695
Federal, total	37,978	39,129	39,788	41,950	43,068	44,082	44,248	42,860
Dept. of Defense	8,293	7,777	7,536	7,750	7,796	8,115	7,846	7,799
Dept. of HHS, total	8,891	9,419	9,658	10,003	10,487	10,697	10,926	10,803
NIH	8,013	8,359	8,557	8,892	9,466	9,849	9,880	9,601
Other HHS	878	1,060	1,101	1,111	1,021	848	1,046	1,202
NSF	9,247	9,361	9,336	9,687	10,003	10,050	10,400	9,958
USDA	1,779	1,852	1,807	2,061	2,167	2,128	2,133	2,019
All other Federal	9,768	10,720	11,451	12,449	12,615	13,092	12,943	12,281
Institutional support	75,233	77,742	79,374	80,101	80,749	79,948	79,116	78,667
Other outside support, total	19,724	19,624	19,548	20,086	20,309	19,140	19,230	17,942
All other U.S.	13,953	14,111	14,229	14,764	15,181	14,830	14,799	13,783
Foreign	5,771	5,513	5,319	5,322	5,128	4,310	4,431	4,159
Self-support	46,644	46,308	48,027	51,411	56,762	57,728	55,020	52,226
<b>Total, science and engineering:</b>								
Total, all sources	172,348	175,118	178,708	185,098	191,855	190,972	186,839	180,211
Federal, total	36,399	37,307	37,981	40,062	41,091	42,015	41,970	40,577
Dept. of Defense	8,163	7,566	7,344	7,537	7,612	7,917	7,657	7,604
Dept. of HHS, total	7,797	8,224	8,390	8,675	9,115	9,275	9,401	9,259
NIH	7,291	7,613	7,767	8,035	8,516	8,809	8,788	8,512
Other HHS	506	611	623	640	599	466	613	747
NSF	9,220	9,333	9,309	9,660	9,963	9,997	10,333	9,908
USDA	1,760	1,817	1,773	2,027	2,128	2,088	2,085	1,983
All other Federal	9,459	10,367	11,165	12,163	12,273	12,738	12,494	11,823
Institutional support	72,987	75,261	76,803	77,478	78,055	77,241	76,309	75,640
Other outside support, total	19,086	18,924	18,832	19,346	19,576	18,365	18,459	17,120
All other U.S.	13,582	13,705	13,797	14,277	14,665	14,283	14,243	13,184
Foreign	5,504	5,219	5,035	5,069	4,911	4,082	4,216	3,936
Self-support	43,876	43,626	45,092	48,212	53,133	53,351	50,101	46,874
<b>Sciences, total:</b>								
Total, all sources	116,960	118,879	121,429	123,747	128,093	128,344	126,848	123,887
Federal, total	23,925	24,784	25,245	26,358	27,069	27,741	27,770	26,880
Dept. of Defense	3,550	3,190	3,078	3,150	3,168	3,347	3,445	3,354
Dept. of HHS, total	7,325	7,686	7,794	8,081	8,439	8,587	8,715	8,567
NIH	6,872	7,132	7,243	7,502	7,922	8,221	8,205	7,937
Other HHS	453	554	551	579	517	366	510	630
NSF	5,855	6,027	6,019	6,069	6,232	6,280	6,452	6,174
USDA	1,590	1,635	1,569	1,789	1,823	1,844	1,810	1,703
All other Federal	5,605	6,246	6,785	7,269	7,407	7,683	7,348	7,082
Institutional support	54,184	55,478	56,684	56,258	56,812	56,240	55,914	56,013
Other outside support, total	10,174	10,037	9,790	10,110	10,445	10,024	10,396	9,373
All other U.S.	6,577	6,746	6,600	6,959	7,402	7,433	7,622	6,906
Foreign	3,597	3,291	3,190	3,151	3,043	2,591	2,774	2,467
Self-support	28,677	28,580	29,710	31,021	33,767	34,339	32,768	31,621
<b>Physical sciences:</b>								
Total, all sources	22,208	22,547	22,664	22,845	23,173	22,888	22,277	21,232
Federal, total	7,858	8,118	8,080	8,441	8,521	8,456	8,429	7,842
Dept. of Defense	1,242	1,167	1,025	1,019	1,002	981	1,084	992
Dept. of HHS, total	1,524	1,462	1,438	1,388	1,484	1,424	1,447	1,328
NIH	1,412	1,360	1,333	1,276	1,402	1,352	1,355	1,196
Other HHS	112	102	105	112	82	72	92	132
NSF	2,965	2,896	2,858	2,855	2,829	2,813	2,913	2,770
USDA	21	35	42	45	49	43	34	31
All other Federal	2,106	2,558	2,717	3,134	3,157	3,195	2,951	2,721
Institutional support	11,235	11,395	11,518	11,141	11,361	11,148	10,682	10,709
Other outside support, total	1,635	1,597	1,516	1,706	1,777	1,654	1,767	1,539
All other U.S.	1,354	1,381	1,306	1,448	1,522	1,427	1,512	1,305
Foreign	281	216	210	258	255	227	255	234
Self-support	1,480	1,437	1,550	1,557	1,514	1,630	1,399	1,142
<b>Earth, atmospheric, &amp; ocean sciences:</b>								
Total, all sources	7,444	7,268	7,317	7,197	7,588	7,815	7,676	7,389
Federal, total	2,087	2,142	2,196	2,238	2,400	2,544	2,511	2,377
Dept. of Defense	387	340	357	357	361	392	367	318
Dept. of HHS, total	33	17	18	34	28	30	20	23
NIH	13	11	12	16	23	26	19	21
Other HHS	20	6	6	18	5	4	1	2
NSF	934	943	892	856	925	953	974	928
USDA	23	28	34	48	57	40	41	44
All other Federal	710	814	895	943	1,029	1,129	1,109	1,064
Institutional support	3,076	3,022	3,002	2,976	2,936	2,939	2,835	2,822
Other outside support, total	809	773	725	724	764	706	741	708
All other U.S.	501	477	501	493	561	544	556	515
Foreign	308	296	224	231	203	162	185	193
Self-support	1,472	1,331	1,394	1,259	1,488	1,626	1,589	1,482

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Mathematical sciences:</b>								
Total, all sources	9,794	9,746	9,821	10,035	10,250	10,096	9,810	9,219
Federal, total	971	936	1,035	1,180	1,146	1,121	1,031	975
Dept. of Defense	436	294	284	334	327	344	324	280
Dept. of HHS, total	21	21	28	46	99	63	62	67
NIH	19	19	21	45	95	58	55	50
Other HHS	2	2	7	1	4	5	7	17
NSF	378	393	412	362	347	352	366	331
USDA	12	14	16	16	17	17	9	10
All other Federal	124	214	295	422	356	345	270	287
Institutional support	6,497	6,612	6,611	6,651	6,651	6,560	6,600	6,347
Other outside support, total	502	468	459	436	472	375	387	340
All other U.S.	284	273	249	217	254	196	213	198
Foreign	218	195	210	219	218	179	174	142
Self-support	1,824	1,730	1,716	1,768	1,981	2,040	1,792	1,557
<b>Computer sciences:</b>								
Total, all sources	11,795	12,355	13,218	13,035	13,947	13,805	13,153	12,899
Federal, total	1,909	1,969	2,064	2,192	2,263	2,426	2,553	2,629
Dept. of Defense	1,041	984	980	990	1,041	1,132	1,134	1,238
Dept. of HHS, total	59	48	50	56	83	84	81	86
NIH	59	41	43	53	81	78	75	76
Other HHS	0	7	7	3	2	6	6	10
NSF	552	668	702	782	827	817	866	858
USDA	10	7	12	7	6	5	6	10
All other Federal	247	262	320	357	306	388	466	437
Institutional support	4,063	4,319	4,522	4,414	4,504	4,417	4,316	4,314
Other outside support, total	1,036	1,048	1,044	1,071	1,120	1,113	1,055	1,028
All other U.S.	775	778	760	791	846	905	901	825
Foreign	261	270	284	280	274	208	254	203
Self-support	4,787	5,019	5,588	5,358	6,060	5,849	5,129	4,928
<b>Agricultural sciences:</b>								
Total, all sources	6,640	6,557	6,454	6,424	6,454	6,281	6,166	6,174
Federal, total	1,370	1,380	1,315	1,364	1,416	1,304	1,236	1,312
Dept. of Defense	27	10	12	18	15	27	26	24
Dept. of HHS, total	23	25	34	36	33	22	32	18
NIH	22	21	29	32	30	20	29	15
Other HHS	1	4	5	4	3	2	3	3
NSF	36	35	45	35	43	44	53	54
USDA	726	777	677	792	781	760	695	754
All other Federal	558	533	547	483	544	451	430	462
Institutional support	2,430	2,408	2,409	2,338	2,379	2,345	2,397	2,498
Other outside support, total	1,423	1,339	1,361	1,311	1,233	1,208	1,225	1,048
All other U.S.	713	774	802	767	752	807	771	725
Foreign	710	565	559	544	481	401	454	323
Self-support	1,417	1,430	1,369	1,411	1,426	1,424	1,308	1,316
<b>Biological sciences:</b>								
Total, all sources	22,404	22,736	22,789	23,498	24,230	24,920	25,493	25,284
Federal, total	7,189	7,571	7,742	8,097	8,364	8,861	9,071	8,887
Dept. of Defense	182	163	135	145	141	163	212	195
Dept. of HHS, total	5,097	5,475	5,564	5,872	6,014	6,292	6,427	6,417
NIH	4,967	5,293	5,370	5,621	5,807	6,137	6,169	6,088
Other HHS	130	182	194	251	207	155	258	329
NSF	657	711	717	730	763	771	789	751
USDA	571	543	554	611	632	712	724	591
All other Federal	682	679	772	739	814	923	919	933
Institutional support	10,132	10,271	10,408	10,576	10,691	10,597	11,033	11,034
Other outside support, total	2,090	2,109	2,074	2,236	2,343	2,295	2,372	2,161
All other U.S.	1,513	1,534	1,568	1,744	1,851	1,888	1,960	1,784
Foreign	577	575	506	492	492	407	412	377
Self-support	2,993	2,785	2,565	2,589	2,832	3,167	3,017	3,202
<b>Psychology:</b>								
Total, all sources	10,199	10,467	10,642	10,957	11,216	11,229	11,187	11,116
Federal, total	911	979	1,014	960	978	1,007	966	890
Dept. of Defense	91	70	99	89	75	93	90	83
Dept. of HHS, total	440	502	522	504	532	522	476	445
NIH	301	301	337	351	372	441	389	379
Other HHS	139	201	185	153	160	81	87	66
NSF	107	109	103	107	127	139	124	114
USDA	5	7	11	10	5	8	18	5
All other Federal	268	291	279	250	239	245	258	243
Institutional support	4,263	4,317	4,426	4,323	4,325	4,553	4,432	4,518
Other outside support, total	448	444	438	398	416	377	434	388
All other U.S.	416	421	407	372	389	353	401	374
Foreign	32	23	31	26	27	24	33	14
Self-support	4,577	4,727	4,764	5,276	5,497	5,292	5,355	5,320

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Social sciences:</b>								
Total, all sources .....	26,476	27,203	28,524	29,756	31,235	31,310	31,086	30,574
Federal, total .....	1,630	1,689	1,799	1,886	1,981	2,022	1,973	1,968
Dept. of Defense .....	144	162	186	198	206	215	208	224
Dept. of HHS, total .....	128	136	140	145	166	150	170	183
NIH .....	79	86	98	108	112	109	114	112
Other HHS .....	49	50	42	37	54	41	56	71
NSF .....	226	272	290	342	371	391	367	368
USDA .....	222	224	223	260	276	259	283	258
All other Federal .....	910	895	960	941	962	1,007	945	935
Institutional support .....	12,488	13,134	13,788	13,839	13,965	13,681	13,619	13,771
Other outside support, total .....	2,231	2,259	2,173	2,228	2,320	2,296	2,315	2,161
All other U.S. ....	1,021	1,108	1,007	1,127	1,227	1,313	1,308	1,180
Foreign .....	1,210	1,151	1,166	1,101	1,093	983	1,007	981
Self-support .....	10,127	10,121	10,764	11,803	12,969	13,311	13,179	12,674
<b>Engineering, total:</b>								
Total, all sources .....	55,388	56,239	57,279	61,351	63,762	62,628	59,991	56,324
Federal, total .....	12,474	12,523	12,736	13,704	14,022	14,274	14,200	13,697
Dept. of Defense .....	4,613	4,376	4,266	4,387	4,444	4,570	4,212	4,250
Dept. of HHS, total .....	472	538	596	594	676	688	686	692
NIH .....	419	481	524	533	594	588	583	575
Other HHS .....	53	57	72	61	82	100	103	117
NSF .....	3,365	3,306	3,290	3,591	3,731	3,717	3,881	3,734
USDA .....	170	182	204	238	305	244	275	280
All other Federal .....	3,854	4,121	4,380	4,894	4,866	5,055	5,146	4,741
Institutional support .....	18,803	19,783	20,119	21,220	21,243	21,001	20,395	19,627
Other outside support, total .....	8,912	8,887	9,042	9,236	9,131	8,341	8,063	7,747
All other U.S. ....	7,005	6,959	7,197	7,318	7,263	6,850	6,621	6,278
Foreign .....	1,907	1,928	1,845	1,918	1,868	1,491	1,442	1,469
Self-support .....	15,199	15,046	15,382	17,191	19,366	19,012	17,333	15,253
<b>Chemical engineering:</b>								
Total, all sources .....	4,567	4,486	4,547	4,803	4,849	4,875	4,912	4,742
Federal, total .....	1,250	1,229	1,249	1,287	1,322	1,379	1,352	1,406
Dept. of Defense .....	132	110	90	118	104	108	110	140
Dept. of HHS, total .....	69	67	93	99	123	102	125	125
NIH .....	65	67	93	95	107	83	99	100
Other HHS .....	4	0	0	4	16	19	26	25
NSF .....	581	557	554	531	543	569	573	594
USDA .....	7	13	23	15	35	36	39	54
All other Federal .....	461	482	489	524	517	564	505	493
Institutional support .....	1,696	1,672	1,761	1,932	1,892	1,870	1,960	1,802
Other outside support, total .....	1,107	1,107	1,054	1,010	957	854	935	867
All other U.S. ....	1,006	1,021	964	911	874	771	844	764
Foreign .....	101	86	90	99	83	83	91	103
Self-support .....	514	478	483	574	678	772	665	667
<b>Civil engineering:</b>								
Total, all sources .....	8,381	8,315	8,347	9,309	10,126	9,934	9,855	9,431
Federal, total .....	1,310	1,199	1,223	1,452	1,647	1,613	1,646	1,517
Dept. of Defense .....	296	244	208	243	306	283	261	232
Dept. of HHS, total .....	3	11	10	26	27	32	32	26
NIH .....	1	9	7	22	22	24	24	17
Other HHS .....	2	2	3	4	5	8	8	9
NSF .....	371	336	353	416	432	410	465	399
USDA .....	32	27	30	41	63	50	52	44
All other Federal .....	608	581	622	726	819	838	836	816
Institutional support .....	3,231	3,269	3,228	3,501	3,573	3,602	3,663	3,706
Other outside support, total .....	937	1,022	1,036	1,100	1,217	1,029	1,024	948
All other U.S. ....	560	595	652	719	815	756	764	693
Foreign .....	377	427	384	381	402	273	260	255
Self-support .....	2,903	2,825	2,860	3,256	3,689	3,690	3,522	3,260
<b>Electrical engineering:</b>								
Total, all sources .....	16,024	16,644	16,719	17,739	18,570	17,956	17,023	15,835
Federal, total .....	3,184	3,127	3,173	3,415	3,509	3,589	3,591	3,578
Dept. of Defense .....	1,590	1,523	1,506	1,490	1,528	1,576	1,513	1,528
Dept. of HHS, total .....	86	54	66	67	71	86	83	95
NIH .....	66	41	46	60	65	73	68	72
Other HHS .....	20	13	20	7	6	13	15	23
NSF .....	1,011	967	979	1,103	1,162	1,095	1,142	1,149
USDA .....	11	13	14	18	24	9	19	30
All other Federal .....	486	570	608	737	724	823	834	776
Institutional support .....	5,143	5,742	5,653	5,934	6,082	5,929	5,583	5,421
Other outside support, total .....	2,556	2,599	2,646	2,675	2,630	2,467	2,350	2,263
All other U.S. ....	2,126	2,137	2,166	2,178	2,158	2,056	1,973	1,873
Foreign .....	430	462	480	497	472	411	377	390
Self-support .....	5,141	5,176	5,247	5,715	6,349	5,971	5,499	4,573

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Industrial engineering:</b>								
Total, all sources .....	3,559	3,751	3,862	4,556	4,906	4,729	4,612	4,158
Federal, total .....	468	492	509	568	500	499	508	511
Dept. of Defense .....	246	236	252	245	224	211	154	157
Dept. of HHS, total .....	27	46	43	36	33	50	39	31
NIH .....	18	23	21	11	10	22	24	19
Other HHS .....	9	23	22	25	23	28	15	12
NSF .....	95	109	115	147	120	136	176	139
USDA .....	2	0	1	4	4	2	1	0
All other Federal .....	98	101	98	136	119	100	138	184
Institutional support .....	1,195	1,287	1,340	1,471	1,475	1,572	1,473	1,420
Other outside support, total .....	418	448	486	426	480	403	436	420
All other U.S. ....	319	318	341	303	351	329	366	345
Foreign .....	99	130	145	123	129	74	70	75
Self-support .....	1,478	1,524	1,527	2,091	2,451	2,255	2,195	1,807
<b>Mechanical engineering:</b>								
Total, all sources .....	9,581	9,637	10,019	10,745	11,297	11,210	10,658	9,988
Federal, total .....	2,267	2,297	2,330	2,472	2,529	2,684	2,620	2,476
Dept. of Defense .....	765	786	703	681	678	735	714	758
Dept. of HHS, total .....	56	45	59	58	76	72	70	80
NIH .....	53	41	58	50	66	57	63	71
Other HHS .....	3	4	1	8	10	15	7	9
NSF .....	629	585	578	636	676	701	691	646
USDA .....	16	27	25	26	22	8	8	3
All other Federal .....	801	854	965	1,071	1,077	1,168	1,137	989
Institutional support .....	3,464	3,510	3,703	3,926	3,974	3,786	3,617	3,455
Other outside support, total .....	1,401	1,421	1,477	1,551	1,482	1,424	1,441	1,467
All other U.S. ....	1,181	1,213	1,277	1,293	1,276	1,270	1,213	1,226
Foreign .....	220	208	200	258	206	154	228	241
Self-support .....	2,449	2,409	2,509	2,796	3,312	3,316	2,980	2,590
<b>Other engineering:</b>								
Total, all sources .....	13,276	13,406	13,785	14,199	14,014	13,924	12,931	12,170
Federal, total .....	3,995	4,179	4,252	4,510	4,515	4,510	4,483	4,209
Dept. of Defense .....	1,584	1,477	1,507	1,610	1,604	1,657	1,460	1,435
Dept. of HHS, total .....	231	315	325	308	346	346	337	335
NIH .....	216	300	299	295	324	329	305	296
Other HHS .....	15	15	26	13	22	17	32	39
NSF .....	678	752	711	758	798	806	834	807
USDA .....	102	102	111	134	157	139	156	149
All other Federal .....	1,400	1,533	1,598	1,700	1,610	1,562	1,696	1,483
Institutional support .....	4,074	4,303	4,434	4,456	4,247	4,242	4,099	3,823
Other outside support, total .....	2,493	2,290	2,343	2,474	2,365	2,164	1,877	1,782
All other U.S. ....	1,813	1,675	1,797	1,914	1,789	1,668	1,461	1,377
Foreign .....	680	615	546	560	576	496	416	405
Self-support .....	2,714	2,634	2,756	2,759	2,887	3,008	2,472	2,356
<b>Total, health fields:</b>								
Total, all sources .....	7,231	7,685	8,029	8,450	9,033	9,926	10,775	11,484
Federal, total .....	1,579	1,822	1,807	1,888	1,977	2,067	2,278	2,283
Dept. of Defense .....	130	211	192	213	184	198	189	195
Dept. of HHS, total .....	1,094	1,195	1,268	1,328	1,372	1,422	1,525	1,544
NIH .....	722	746	790	857	950	1,040	1,092	1,089
Other HHS .....	372	449	478	471	422	382	433	455
NSF .....	27	28	27	27	40	53	67	50
USDA .....	19	35	34	34	39	40	48	36
All other Federal .....	309	353	286	286	342	354	449	458
Institutional support .....	2,246	2,481	2,571	2,623	2,694	2,707	2,807	3,027
Other outside support, total .....	638	700	716	740	733	775	771	822
All other U.S. ....	371	406	432	487	516	547	556	599
Foreign .....	267	294	284	253	217	228	215	223
Self-support .....	2,768	2,682	2,935	3,199	3,629	4,377	4,919	5,352

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Total, all surveyed fields:</b>								
Total, all sources	95,625	99,938	106,117	113,501	121,865	128,978	134,839	138,540
Federal, total	17,514	18,315	19,486	21,067	22,566	23,615	24,335	24,609
Dept. of Defense	1,253	1,363	1,332	1,378	1,451	1,635	1,603	1,622
Dept. of HHS, total	9,010	9,273	9,864	10,490	10,942	11,342	11,764	11,950
NIH	5,702	5,998	6,439	7,126	7,628	8,289	8,425	8,514
Other HHS	3,308	3,275	3,425	3,364	3,314	3,053	3,339	3,436
NSF	2,387	2,539	2,689	2,979	3,365	3,482	3,583	3,707
USDA	812	876	915	1,014	1,049	1,196	1,289	1,225
All other Federal	4,052	4,264	4,686	5,206	5,759	5,960	6,096	6,105
Institutional support	39,535	41,423	43,682	45,286	47,219	49,141	50,303	51,236
Other outside support, total	6,017	6,227	6,588	6,984	7,467	7,576	8,065	8,172
All other U.S.	4,787	5,030	5,376	5,663	6,131	6,400	6,765	6,781
Foreign	1,230	1,197	1,212	1,321	1,336	1,176	1,300	1,391
Self-support	32,559	33,973	36,361	40,164	44,613	48,646	52,136	54,523
<b>Total, science and engineering:</b>								
Total, all sources	78,319	81,810	86,715	92,085	98,799	103,255	106,485	107,805
Federal, total	12,772	13,662	14,522	15,987	17,215	18,387	18,835	18,891
Dept. of Defense	1,138	1,207	1,148	1,174	1,236	1,398	1,410	1,435
Dept. of HHS, total	5,500	5,854	6,204	6,797	7,160	7,553	7,757	7,810
NIH	5,016	5,296	5,600	6,137	6,528	7,063	7,172	7,150
Other HHS	484	558	604	660	632	490	585	660
NSF	2,365	2,519	2,667	2,950	3,335	3,446	3,533	3,658
USDA	800	865	891	988	1,019	1,158	1,263	1,206
All other Federal	2,969	3,217	3,612	4,078	4,465	4,832	4,872	4,782
Institutional support	35,595	37,078	39,082	40,429	42,266	43,728	44,633	45,193
Other outside support, total	5,378	5,521	5,934	6,203	6,506	6,608	6,959	6,925
All other U.S.	4,277	4,510	4,903	5,090	5,413	5,647	5,902	5,842
Foreign	1,101	1,011	1,031	1,113	1,093	961	1,057	1,083
Self-support	24,574	25,549	27,177	29,466	32,812	34,532	36,058	36,796
<b>Sciences, total:</b>								
Total, all sources	70,700	73,674	78,017	82,402	88,135	92,056	94,908	96,267
Federal, total	11,258	11,971	12,586	13,709	14,673	15,771	16,184	16,265
Dept. of Defense	759	756	701	690	727	829	905	878
Dept. of HHS, total	5,371	5,693	6,040	6,581	6,935	7,317	7,537	7,584
NIH	4,904	5,159	5,463	5,946	6,324	6,857	6,973	6,957
Other HHS	467	534	577	635	611	460	564	627
NSF	1,927	2,060	2,075	2,244	2,461	2,602	2,650	2,781
USDA	779	843	864	952	966	1,096	1,193	1,144
All other Federal	2,422	2,619	2,906	3,242	3,584	3,927	3,899	3,878
Institutional support	32,816	34,080	35,890	37,033	38,583	39,755	40,461	40,976
Other outside support, total	4,202	4,326	4,595	4,813	5,087	5,232	5,644	5,551
All other U.S.	3,244	3,459	3,725	3,872	4,157	4,424	4,757	4,643
Foreign	958	867	870	941	930	808	887	908
Self-support	22,424	23,297	24,946	26,847	29,792	31,298	32,619	33,475
<b>Physical sciences:</b>								
Total, all sources	6,366	6,660	6,821	7,272	7,500	7,723	7,766	7,660
Federal, total	1,999	2,129	2,204	2,393	2,486	2,684	2,603	2,511
Dept. of Defense	233	225	189	207	192	206	232	205
Dept. of HHS, total	628	649	658	654	704	738	762	713
NIH	590	621	619	598	654	699	719	665
Other HHS	38	28	39	56	50	39	43	48
NSF	691	716	709	716	772	810	790	813
USDA	11	8	12	16	19	18	8	7
All other Federal	436	531	636	800	799	912	811	773
Institutional support	3,625	3,755	3,754	3,908	3,997	4,000	4,149	4,149
Other outside support, total	345	410	458	522	572	580	549	540
All other U.S.	308	370	410	479	522	528	496	487
Foreign	37	40	48	43	50	52	53	53
Self-support	397	366	405	449	445	459	465	460
<b>Earth, atmospheric, &amp; ocean sciences:</b>								
Total, all sources	2,748	2,753	2,927	3,176	3,398	3,552	3,794	3,901
Federal, total	702	753	795	881	1,036	1,108	1,119	1,112
Dept. of Defense	74	95	95	95	111	125	127	103
Dept. of HHS, total	18	8	16	22	21	18	17	11
NIH	6	6	9	7	20	15	17	10
Other HHS	12	2	7	15	1	3	0	1
NSF	302	310	318	367	395	413	435	459
USDA	17	15	23	21	29	24	20	21
All other Federal	291	325	343	376	480	528	520	518
Institutional support	1,209	1,234	1,255	1,338	1,380	1,427	1,508	1,623
Other outside support, total	216	217	227	250	242	222	282	283
All other U.S.	168	175	178	194	200	191	234	241
Foreign	48	42	49	56	42	31	48	42
Self-support	621	549	650	707	740	795	885	883

See explanatory information, if any, and SOURCE at end of table.

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Mathematical sciences:</b>								
Total, all sources .....	3,718	3,935	4,044	4,221	4,429	4,434	4,416	4,203
Federal, total .....	218	283	298	323	351	353	366	316
Dept. of Defense .....	77	101	83	42	59	55	48	42
Dept. of HHS, total .....	7	15	21	23	19	17	14	20
NIH .....	6	9	18	19	16	16	13	13
Other HHS .....	1	6	3	4	3	1	1	7
NSF .....	85	82	79	90	110	118	144	143
USDA .....	8	8	7	5	8	11	7	3
All other Federal .....	41	77	108	163	155	152	153	108
Institutional support .....	2,634	2,761	2,878	2,880	2,927	2,834	2,861	2,822
Other outside support, total .....	114	117	101	154	154	149	165	138
All other U.S. ....	66	75	68	104	102	107	120	93
Foreign .....	48	42	33	50	52	42	45	45
Self-support .....	752	774	767	864	997	1,098	1,024	927
<b>Computer sciences:</b>								
Total, all sources .....	3,338	3,251	3,471	3,481	3,559	3,594	3,559	3,665
Federal, total .....	310	355	345	341	398	492	517	546
Dept. of Defense .....	173	180	149	141	169	195	211	205
Dept. of HHS, total .....	5	12	21	15	21	23	22	25
NIH .....	5	12	19	12	20	21	20	17
Other HHS .....	0	0	2	3	1	2	2	8
NSF .....	80	109	117	114	135	187	180	193
USDA .....	0	0	2	1	0	2	3	3
All other Federal .....	52	54	56	70	73	85	101	120
Institutional support .....	1,068	1,023	1,131	1,060	1,105	1,092	1,121	1,178
Other outside support, total .....	276	230	237	251	236	278	248	281
All other U.S. ....	212	172	175	181	185	229	209	240
Foreign .....	64	58	62	70	51	49	39	41
Self-support .....	1,684	1,643	1,758	1,829	1,820	1,732	1,673	1,660
<b>Agricultural sciences:</b>								
Total, all sources .....	2,482	2,513	2,646	2,865	2,998	3,187	3,326	3,456
Federal, total .....	415	437	497	532	577	661	686	736
Dept. of Defense .....	5	3	6	8	3	10	9	8
Dept. of HHS, total .....	11	12	11	10	8	12	18	9
NIH .....	11	5	11	6	8	12	18	6
Other HHS .....	0	7	0	4	0	0	0	3
NSF .....	14	13	20	26	33	32	34	34
USDA .....	233	287	286	325	329	390	419	438
All other Federal .....	152	122	174	163	204	217	206	247
Institutional support .....	1,051	1,055	1,041	1,197	1,242	1,290	1,413	1,384
Other outside support, total .....	350	358	409	404	452	473	446	441
All other U.S. ....	238	252	299	292	347	382	382	365
Foreign .....	112	106	110	112	105	91	64	76
Self-support .....	666	663	699	732	727	763	781	895
<b>Biological sciences:</b>								
Total, all sources .....	16,805	17,612	18,156	19,202	20,159	21,561	22,524	22,999
Federal, total .....	5,279	5,688	5,910	6,406	6,784	7,349	7,653	7,706
Dept. of Defense .....	100	87	87	78	91	110	134	162
Dept. of HHS, total .....	3,833	4,143	4,387	4,795	5,040	5,340	5,552	5,631
NIH .....	3,696	3,972	4,214	4,594	4,830	5,177	5,295	5,302
Other HHS .....	137	171	173	201	210	163	257	329
NSF .....	464	542	495	552	584	611	593	655
USDA .....	415	406	409	451	451	510	565	492
All other Federal .....	467	510	532	530	618	778	809	766
Institutional support .....	7,789	8,175	8,460	8,691	9,062	9,431	9,679	9,771
Other outside support, total .....	1,295	1,324	1,462	1,499	1,444	1,569	1,766	1,762
All other U.S. ....	1,045	1,102	1,241	1,273	1,258	1,392	1,544	1,533
Foreign .....	250	222	221	226	186	177	222	229
Self-support .....	2,442	2,425	2,324	2,606	2,869	3,212	3,426	3,760
<b>Psychology:</b>								
Total, all sources .....	17,919	18,881	19,977	21,301	23,061	23,665	24,247	24,646
Federal, total .....	1,255	1,228	1,380	1,532	1,609	1,651	1,680	1,686
Dept. of Defense .....	62	43	57	70	61	70	85	92
Dept. of HHS, total .....	680	677	752	838	867	902	899	879
NIH .....	462	419	461	550	591	723	719	730
Other HHS .....	218	258	291	288	276	179	180	149
NSF .....	126	127	159	161	158	177	166	174
USDA .....	20	22	26	14	14	7	20	11
All other Federal .....	367	359	386	449	509	495	510	530
Institutional support .....	6,918	7,314	7,708	7,956	8,396	8,708	8,589	8,573
Other outside support, total .....	603	688	680	673	693	696	768	756
All other U.S. ....	571	656	653	643	663	673	727	727
Foreign .....	32	32	27	30	30	23	41	29
Self-support .....	9,143	9,651	10,209	11,140	12,363	12,610	13,210	13,631

See explanatory information, if any, and SOURCE at end of table.

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Social sciences:</b>								
Total, all sources	17,324	18,069	19,975	20,884	23,031	24,340	25,276	25,737
Federal, total	1,080	1,098	1,157	1,301	1,432	1,473	1,560	1,652
Dept. of Defense	35	22	35	49	41	58	59	61
Dept. of HHS, total	189	177	174	224	255	267	253	296
NIH	128	115	112	160	185	194	172	214
Other HHS	61	62	62	64	70	73	81	82
NSF	165	161	178	218	274	254	308	310
USDA	75	97	99	119	116	134	151	169
All other Federal	616	641	671	691	746	760	789	816
Institutional support	8,522	8,763	9,663	10,003	10,474	10,973	11,141	11,476
Other outside support, total	1,003	982	1,021	1,060	1,294	1,265	1,420	1,350
All other U.S.	636	657	701	706	880	922	1,045	957
Foreign	367	325	320	354	414	343	375	393
Self-support	6,719	7,226	8,134	8,520	9,831	10,629	11,155	11,259
<b>Engineering, total:</b>								
Total, all sources	7,619	8,136	8,698	9,683	10,664	11,199	11,577	11,538
Federal, total	1,514	1,691	1,936	2,278	2,542	2,616	2,651	2,626
Dept. of Defense	379	451	447	484	509	569	505	557
Dept. of HHS, total	129	161	164	216	225	236	220	226
NIH	112	137	137	191	204	206	199	193
Other HHS	17	24	27	25	21	30	21	33
NSF	438	459	592	706	874	844	883	877
USDA	21	22	27	36	53	62	70	62
All other Federal	547	598	706	836	881	905	973	904
Institutional support	2,779	2,998	3,192	3,396	3,683	3,973	4,172	4,217
Other outside support, total	1,176	1,195	1,339	1,390	1,419	1,376	1,315	1,374
All other U.S.	1,033	1,051	1,178	1,218	1,256	1,223	1,145	1,199
Foreign	143	144	161	172	163	153	170	175
Self-support	2,150	2,252	2,231	2,619	3,020	3,234	3,439	3,321
<b>Chemical engineering:</b>								
Total, all sources	792	796	896	985	1,097	1,166	1,193	1,220
Federal, total	202	230	280	311	332	369	364	348
Dept. of Defense	13	20	8	16	19	31	18	24
Dept. of HHS, total	14	20	28	33	43	39	48	38
NIH	14	20	26	33	39	36	44	36
Other HHS	0	0	2	0	4	3	4	2
NSF	102	97	125	133	156	161	176	167
USDA	0	0	4	1	3	16	15	12
All other Federal	73	93	115	128	111	122	107	107
Institutional support	325	304	344	350	416	470	460	460
Other outside support, total	172	171	187	218	213	205	210	238
All other U.S.	160	163	178	200	198	189	197	203
Foreign	12	8	9	18	15	16	13	35
Self-support	93	91	85	106	136	122	159	174
<b>Civil engineering:</b>								
Total, all sources	1,565	1,649	1,781	2,019	2,328	2,524	2,786	2,817
Federal, total	202	204	244	300	381	369	444	453
Dept. of Defense	31	36	27	30	43	45	60	58
Dept. of HHS, total	2	7	5	9	16	6	13	15
NIH	2	7	4	9	16	6	13	14
Other HHS	0	0	1	0	0	0	0	1
NSF	49	46	75	82	100	112	122	131
USDA	5	6	6	10	17	13	13	9
All other Federal	115	109	131	169	205	193	236	240
Institutional support	613	635	685	703	818	977	1,079	1,155
Other outside support, total	171	178	220	239	260	238	209	232
All other U.S.	135	128	174	199	216	216	178	199
Foreign	36	50	46	40	44	22	31	33
Self-support	579	632	632	777	869	940	1,054	977
<b>Electrical engineering:</b>								
Total, all sources	1,682	1,822	1,956	2,165	2,426	2,444	2,391	2,468
Federal, total	283	349	398	451	552	517	491	507
Dept. of Defense	97	152	140	154	172	188	151	178
Dept. of HHS, total	11	7	11	18	19	17	17	18
NIH	9	4	9	16	16	13	15	12
Other HHS	2	3	2	2	3	4	2	6
NSF	124	117	154	175	226	190	201	204
USDA	0	1	2	0	0	2	5	4
All other Federal	51	72	91	104	135	120	117	103
Institutional support	581	648	702	706	774	812	826	813
Other outside support, total	276	284	323	349	323	306	270	289
All other U.S.	246	252	277	314	292	280	245	261
Foreign	30	32	46	35	31	26	25	28
Self-support	542	541	533	659	777	809	804	859

See explanatory information, if any, and SOURCE at end of table.



**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

Field and source of major support	1988	1989	1990	1991	1992	1993	1994	1995
<b>Industrial engineering:</b>								
Total, all sources .....	736	907	908	1,042	1,175	1,173	1,298	1,170
Federal, total .....	94	92	102	137	150	148	129	137
Dept. of Defense .....	38	45	47	36	43	38	24	31
Dept. of HHS, total .....	12	13	17	16	20	28	11	23
NIH .....	4	2	6	5	12	14	4	8
Other HHS .....	8	11	11	11	8	14	7	15
NSF .....	20	17	14	41	45	37	39	36
USDA .....	0	0	0	1	1	1	0	0
All other Federal .....	24	17	24	43	41	44	55	47
Institutional support .....	260	343	346	387	403	377	416	438
Other outside support, total .....	86	85	85	70	88	90	115	78
All other U.S. ....	73	69	74	59	79	75	92	75
Foreign .....	13	16	11	11	9	15	23	3
Self-support .....	296	387	375	448	534	558	638	517
<b>Mechanical engineering:</b>								
Total, all sources .....	835	855	848	942	1,086	1,185	1,217	1,131
Federal, total .....	168	188	202	258	261	315	326	297
Dept. of Defense .....	54	54	48	57	52	62	68	63
Dept. of HHS, total .....	14	16	10	13	11	14	10	13
NIH .....	12	13	10	8	11	13	8	11
Other HHS .....	2	3	0	5	0	1	2	2
NSF .....	32	47	61	96	110	111	109	96
USDA .....	0	1	1	3	4	1	2	1
All other Federal .....	68	70	82	89	84	127	137	124
Institutional support .....	319	344	340	361	426	445	469	441
Other outside support, total .....	135	121	122	135	136	137	132	139
All other U.S. ....	122	114	106	122	125	121	120	126
Foreign .....	13	7	16	13	11	16	12	13
Self-support .....	213	202	184	188	263	288	290	254
<b>Other engineering:</b>								
Total, all sources .....	2,009	2,107	2,309	2,530	2,552	2,707	2,692	2,732
Federal, total .....	565	628	710	821	866	898	897	884
Dept. of Defense .....	146	144	177	191	180	205	184	203
Dept. of HHS, total .....	76	98	93	127	116	132	121	119
NIH .....	71	91	82	120	110	124	115	112
Other HHS .....	5	7	11	7	6	8	6	7
NSF .....	111	135	163	179	237	233	236	243
USDA .....	16	14	14	21	28	29	35	36
All other Federal .....	216	237	263	303	305	299	321	283
Institutional support .....	681	724	775	889	846	892	922	910
Other outside support, total .....	336	356	402	379	399	400	379	398
All other U.S. ....	297	325	369	324	346	342	313	335
Foreign .....	39	31	33	55	53	58	66	63
Self-support .....	427	399	422	441	441	517	494	540
<b>Total, health fields:</b>								
Total, all sources .....	17,306	18,128	19,402	21,416	23,066	25,723	28,354	30,735
Federal, total .....	4,742	4,653	4,964	5,080	5,351	5,228	5,500	5,718
Dept. of Defense .....	115	156	184	204	215	237	193	187
Dept. of HHS, total .....	3,510	3,419	3,660	3,693	3,782	3,789	4,007	4,140
NIH .....	686	702	839	989	1,100	1,226	1,253	1,364
Other HHS .....	2,824	2,717	2,821	2,704	2,682	2,563	2,754	2,776
NSF .....	22	20	22	29	30	36	50	49
USDA .....	12	11	24	26	30	38	26	19
All other Federal .....	1,083	1,047	1,074	1,128	1,294	1,128	1,224	1,323
Institutional support .....	3,940	4,345	4,600	4,857	4,953	5,413	5,670	6,043
Other outside support, total .....	639	706	654	781	961	968	1,106	1,247
All other U.S. ....	510	520	473	573	718	753	863	939
Foreign .....	129	186	181	208	243	215	243	308
Self-support .....	7,985	8,424	9,184	10,698	11,801	14,114	16,078	17,727

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 29. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975 .....	272,123	206,445	24,965	10,840	14,850	7,454	10,206	41,851	28,718	67,561
1976 .....	273,748	209,870	25,249	11,634	15,252	7,652	10,741	42,917	29,769	66,656
1977 .....	276,386	211,235	25,299	12,231	14,331	7,979	11,106	44,323	29,617	66,349
1978 <sup>1</sup> .....	267,507	203,746	24,714	12,066	13,194	8,329	11,225	42,919	27,892	63,407
1979 .....	280,891	213,527	25,139	12,546	13,504	9,787	11,524	43,121	29,495	68,411
1980 .....	287,911	218,269	25,495	12,678	13,801	11,528	11,803	42,795	30,756	69,413
1981 .....	293,318	219,190	25,941	12,997	14,180	13,361	11,656	42,017	30,713	68,325
1982 .....	299,922	221,993	26,670	13,703	14,920	15,642	11,893	41,787	30,767	66,611
1983 .....	306,908	221,577	27,917	14,276	15,040	18,212	11,707	41,347	30,942	62,136
1984 .....	308,470	221,483	28,532	14,252	15,175	20,653	11,550	41,674	30,703	58,944
1985 .....	317,150	226,938	29,443	14,148	15,398	24,181	10,874	42,203	30,760	59,931
1986 .....	326,556	231,109	30,600	13,936	15,832	25,449	10,815	43,050	31,281	60,146
1987 .....	331,616	234,561	31,142	13,257	16,382	26,239	10,470	43,172	32,313	61,586
1988 .....	335,602	239,007	31,425	12,784	17,110	26,671	10,453	44,167	33,639	62,758
1989 .....	340,612	243,249	31,974	12,594	17,106	26,760	10,524	45,243	34,360	64,688
1990 .....	351,146	251,347	32,464	12,852	17,516	27,985	10,607	46,377	35,820	67,726
1991 .....	364,071	258,810	32,941	13,158	17,855	28,223	10,796	48,103	37,766	69,968
1992 .....	379,403	270,245	33,636	13,767	18,165	29,718	11,129	50,204	39,258	74,368
1993 .....	383,514	275,069	33,523	14,044	17,695	30,127	11,168	52,043	39,481	76,988
1994 .....	380,350	275,116	32,709	14,220	17,380	28,818	11,458	53,605	39,688	77,238
1995 .....	372,506	272,554	31,795	14,034	16,354	28,140	11,635	53,882	39,365	77,349
		Engineering								
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	Health fields
1975 .....	65,678	1,636	4,916	12,028	15,956	11,172	8,273	2,313	9,384	23,023
1976 .....	63,878	1,449	5,070	11,414	15,542	10,238	8,017	2,333	9,815	25,191
1977 .....	65,151	1,496	5,071	11,570	16,690	9,914	8,315	2,491	9,604	29,995
1978 <sup>1</sup> .....	63,761	1,450	5,184	11,565	16,379	8,967	8,122	2,487	9,607	31,431
1979 .....	67,364	1,476	5,420	11,992	16,942	10,177	8,629	2,656	10,072	33,845
1980 .....	69,642	1,730	5,768	12,196	18,183	8,981	9,234	2,839	10,711	36,292
1981 .....	74,128	1,876	6,223	12,958	19,059	8,959	9,987	3,064	12,002	37,724
1982 .....	77,929	1,933	6,894	13,192	20,709	8,779	10,835	3,056	12,531	37,220
1983 .....	85,331	2,273	7,311	14,054	23,958	8,546	12,204	3,373	13,612	37,015
1984 .....	86,987	2,308	7,162	14,426	25,007	8,655	13,050	3,593	12,786	37,955
1985 .....	90,212	2,506	6,987	14,168	26,748	9,811	13,341	3,859	12,792	38,668
1986 .....	95,447	2,771	6,834	14,117	28,162	10,791	14,687	4,107	13,978	40,112
1987 .....	97,055	2,980	6,934	13,550	29,418	11,413	15,293	4,272	13,195	40,514
1988 .....	96,595	3,186	6,484	13,836	30,100	10,656	15,108	4,257	12,968	42,010
1989 .....	97,363	3,457	6,356	14,016	30,665	10,162	15,175	4,510	13,022	44,188
1990 .....	99,799	3,843	6,599	14,515	30,645	10,091	15,669	4,836	13,601	47,062
1991 .....	105,261	4,053	6,975	16,115	32,003	11,463	16,615	5,035	13,002	49,499
1992 .....	109,158	3,999	7,226	17,967	33,024	12,319	17,459	5,353	11,811	53,028
1993 .....	108,445	3,905	7,358	17,945	32,201	12,425	17,404	5,216	11,991	56,957
1994 .....	105,234	3,653	7,469	18,344	30,178	12,566	16,842	5,071	11,111	60,814
1995 .....	99,952	3,287	7,291	17,744	28,228	11,964	15,585	4,821	11,032	63,822

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 30. Graduate students in science, engineering, and health fields in master's-granting institutions, by field: 1975-95**

Year	Total, science and engineering	Sciences									Health fields
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	
1975	31,067	28,474	1,345	1,239	2,042	961	496	4,547	7,473	10,371	
1976	31,786	29,007	1,382	1,185	1,819	975	544	4,811	7,689	10,602	
1977	35,430	31,896	1,556	1,224	1,721	1,129	571	4,911	9,000	11,784	
1978 <sup>1</sup>	36,843	32,907	1,560	1,210	1,618	1,518	644	5,004	9,630	11,723	
1979	38,280	33,916	1,556	1,191	1,527	1,903	716	5,078	10,271	11,674	
1980	37,785	33,115	1,439	1,373	1,510	2,050	649	4,801	9,854	11,439	
1981	38,768	33,341	1,416	1,269	1,701	3,076	699	4,622	9,953	10,605	
1982	39,031	33,273	1,516	1,317	2,237	4,170	690	4,183	9,306	9,854	
1983	40,157	34,369	1,536	1,177	2,318	5,121	722	4,297	9,963	9,235	
1984 <sup>2</sup>	41,276	35,551	1,524	1,253	2,268	4,873	676	4,089	10,228	10,640	
1985 <sup>2</sup>	40,976	35,197	1,538	1,272	2,165	5,588	687	3,909	9,961	10,077	
1986 <sup>2</sup>	41,563	35,136	1,646	1,130	2,117	5,900	643	3,715	9,960	10,025	
1987 <sup>2</sup>	41,739	34,841	1,585	1,114	2,126	5,812	648	3,575	10,299	9,682	
1988	39,685	33,451	1,537	1,083	1,967	5,556	682	3,398	10,324	8,904	
1989	42,157	35,477	1,642	1,049	2,141	5,722	666	3,609	11,168	9,480	
1990	46,013	38,187	1,611	1,132	2,258	6,272	709	3,612	12,348	10,245	
1991	48,637	40,322	1,769	1,322	2,097	6,387	710	3,675	13,577	10,785	
1992	51,394	42,517	1,712	1,580	2,190	6,602	698	3,973	14,341	11,421	
1993	52,719	44,283	1,795	1,761	2,305	6,171	746	4,409	15,199	11,897	
1994	51,408	43,582	1,740	1,822	2,199	5,460	741	4,538	15,038	12,044	
1995	51,416	43,839	1,675	1,768	2,155	5,369	791	4,871	14,878	12,332	
		Engineering									
		Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	2,593	34	118	532	364	491	328	39	687	2,496	
1976	2,779	28	135	581	384	449	296	42	864	3,099	
1977	3,534	22	130	765	716	524	407	68	902	3,680	
1978 <sup>1</sup>	3,936	13	157	793	748	527	516	83	1,099	4,180	
1979	4,364	5	185	830	773	552	622	100	1,297	4,672	
1980	4,670	7	247	901	949	717	654	71	1,124	5,170	
1981	5,427	7	273	1,131	1,054	778	631	61	1,492	5,393	
1982	5,758	8	295	930	1,218	798	632	68	1,809	6,198	
1983	5,788	32	252	856	1,337	701	707	74	1,829	6,442	
1984 <sup>2</sup>	5,725	32	211	766	1,381	627	805	64	1,839	7,017	
1985 <sup>2</sup>	5,779	32	163	734	1,455	688	816	84	1,807	7,294	
1986 <sup>2</sup>	6,427	33	178	859	1,807	738	1,026	101	1,685	7,326	
1987 <sup>2</sup>	6,898	35	177	1,132	1,981	807	1,073	94	1,599	7,657	
1988	6,234	37	134	975	1,935	737	1,043	80	1,293	7,374	
1989	6,680	67	104	893	2,592	932	1,090	84	918	7,680	
1990	7,826	91	136	1,027	3,077	1,157	1,210	105	1,023	8,029	
1991	8,315	67	152	1,283	3,179	1,213	1,115	125	1,181	9,107	
1992	8,877	37	171	1,605	3,436	1,206	1,178	159	1,085	10,001	
1993	8,436	35	158	1,638	3,136	1,171	1,073	147	1,078	11,648	
1994	7,826	62	139	1,581	2,874	1,130	919	120	1,001	12,687	
1995	7,577	56	141	1,474	2,832	1,218	775	99	982	13,766	

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 31. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	377,612	384,800	398,208	413,570	432,431	440,471	441,164	436,328
Total, science and engineering fields .....	335,502	340,612	351,146	364,071	379,403	383,514	380,350	372,506
Sciences, total .....	239,007	243,249	251,347	258,810	270,245	275,069	275,116	272,554
Physical sciences .....	31,425	31,974	32,464	32,941	33,636	33,523	32,709	31,795
Astronomy .....	731	789	810	829	869	880	973	912
Chemistry .....	17,574	17,792	18,114	18,363	18,896	19,050	18,742	18,569
Physics .....	12,893	13,193	13,331	13,555	13,657	13,385	12,711	12,048
Physical sciences, n.e.c. ....	227	200	209	194	214	208	283	266
Earth, atmospheric, & ocean sciences .....	12,784	12,594	12,852	13,158	13,767	14,044	14,220	14,034
Atmospheric sciences .....	929	900	925	956	1,076	1,095	1,090	1,062
Geosciences .....	7,950	7,610	7,234	7,105	7,269	7,325	7,260	7,108
Oceanography .....	1,926	2,090	2,216	2,274	2,402	2,473	2,678	2,549
Earth, atmos., & ocean sci., n.e.c. ....	1,979	1,994	2,477	2,823	3,020	3,151	3,192	3,315
Mathematical sciences .....	17,110	17,106	17,516	17,855	18,165	17,695	17,380	16,354
Mathematics & applied mathematics .....	14,564	14,626	14,885	15,157	15,279	14,718	14,342	13,326
Statistics .....	2,546	2,480	2,631	2,698	2,886	2,977	3,038	3,028
Computer sciences .....	26,671	26,760	27,985	28,223	29,718	30,127	28,818	28,140
Agricultural sciences .....	10,453	10,524	10,607	10,796	11,129	11,168	11,458	11,635
Biological sciences .....	44,167	45,243	46,377	48,103	50,204	52,043	53,605	53,882
Anatomy .....	1,056	1,078	1,000	1,051	1,030	1,027	1,079	1,056
Biochemistry .....	4,887	5,041	5,003	5,160	5,332	5,451	5,565	5,491
Biology .....	9,759	10,014	10,227	10,508	10,954	11,176	11,054	10,788
Biometry/epidemiology .....	1,682	1,722	1,871	2,031	2,365	2,658	2,710	2,812
Biophysics .....	592	655	642	697	751	780	794	855
Botany .....	2,887	2,810	2,712	2,673	2,665	2,705	2,741	2,605
Cell biology .....	2,078	2,234	2,555	2,809	3,093	3,362	3,753	3,843
Ecology .....	934	1,012	1,042	1,079	1,155	1,251	1,420	1,545
Entomology/parasitology .....	1,240	1,181	1,173	1,171	1,193	1,247	1,263	1,241
Genetics .....	1,247	1,321	1,364	1,478	1,599	1,733	1,649	1,651
Microbio., immunology, & virology .....	4,725	4,786	4,830	4,890	4,932	5,037	5,114	5,068
Nutrition .....	3,839	3,829	3,897	3,875	3,810	3,938	4,152	4,346
Pathology .....	1,276	1,303	1,287	1,378	1,379	1,485	1,603	1,575
Pharmacology .....	2,123	2,265	2,353	2,432	2,529	2,643	2,830	2,703
Physiology .....	2,220	2,206	2,236	2,332	2,317	2,372	2,378	2,540
Zoology .....	2,017	2,069	2,091	2,168	2,117	2,115	2,085	2,068
Biosciences, n.e.c. ....	1,605	1,717	2,094	2,371	2,983	3,063	3,415	3,695
Psychology .....	33,639	34,360	35,820	37,766	39,258	39,481	39,688	39,365
Psychology, general .....	11,333	12,290	12,965	14,809	15,415	15,867	16,319	16,338
Clinical psychology .....	15,337	13,836	14,161	13,445	13,370	12,840	12,595	12,100
Psychology, n.e.c. ....	6,969	8,234	8,694	9,512	10,473	10,774	10,774	10,927
Social sciences .....	62,758	64,688	67,726	69,968	74,368	76,988	77,238	77,349
Agricultural economics .....	2,209	2,227	2,232	2,311	2,454	2,334	2,222	2,275
Anthropology (cultural & social) .....	5,682	5,880	6,210	6,437	6,815	7,064	7,414	7,420
Economics (except agricultural) .....	11,241	11,337	11,564	11,885	12,346	12,365	12,217	12,002
Geography .....	2,624	2,831	2,924	3,140	3,450	3,672	3,785	3,777
History and philosophy of science .....	288	304	331	337	360	369	387	401
Linguistics .....	2,916	2,976	3,114	3,135	2,930	2,947	2,937	2,857
Political science .....	23,061	24,079	25,121	26,101	28,013	29,214	28,437	28,217
Sociology .....	6,466	6,709	6,993	7,396	7,912	8,263	8,255	8,301
Sociology/anthropology .....	881	912	1,077	824	902	841	877	840
Social sciences, n.e.c. ....	7,390	7,433	8,160	8,402	9,186	9,919	10,707	11,259
Engineering, total .....	96,595	97,363	99,799	105,261	109,158	108,445	105,234	99,952
Aerospace engineering .....	3,186	3,457	3,843	4,053	3,999	3,905	3,653	3,287
Agricultural engineering .....	1,052	1,043	946	983	1,008	1,018	1,061	1,054
Biomedical engineering .....	1,673	1,850	2,073	2,191	2,485	2,613	2,674	2,617
Chemical engineering .....	6,484	6,356	6,599	6,975	7,226	7,358	7,469	7,291
Civil engineering .....	13,836	14,016	14,515	16,115	17,967	17,945	18,344	17,744
Electrical engineering .....	30,100	30,665	30,645	32,003	33,024	32,201	30,178	28,228
Engineering science .....	2,167	2,058	2,002	2,124	2,185	2,148	2,069	1,945
Industrial eng./manufacturing eng. ....	10,656	10,162	10,091	11,463	12,319	12,425	12,566	11,964
Mechanical engineering .....	15,108	15,175	15,669	16,615	17,459	17,404	16,842	15,585
Metallurgical/materials eng. ....	4,257	4,510	4,836	5,035	5,353	5,216	5,071	4,821
Mining engineering .....	450	388	409	475	426	411	399	362
Nuclear engineering .....	1,303	1,323	1,278	1,282	1,286	1,306	1,246	1,154
Petroleum engineering .....	711	651	656	694	721	711	605	568
Engineering, n.e.c. ....	5,612	5,709	6,237	5,253	3,700	3,784	3,057	3,332

See explanatory information, if any, and SOURCE at end of table.

**Table 31. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, health fields .....	42,010	44,188	47,062	49,499	53,028	56,957	60,814	63,822
Medical fields .....	9,644	9,780	10,478	11,097	11,861	13,224	14,046	14,677
Anesthesiology .....	197	276	329	443	511	494	516	529
Cardiology .....	0	0	0	2	8	11	14	19
Oncology/cancer research .....	89	104	113	156	197	209	208	189
Endocrinology .....	70	82	74	66	71	63	63	53
Gastroenterology .....	0	0	1	0	0	1	0	0
Hematology .....	6	4	4	4	5	3	2	1
Neurology .....	612	744	844	1,003	1,149	1,311	1,455	1,554
Obstetrics and gynecology .....	9	7	5	10	3	3	4	6
Ophthalmology .....	51	43	37	32	27	19	32	30
Otorhinolaryngology .....	6	9	4	3	0	1	2	0
Pediatrics .....	227	136	140	153	154	196	261	236
Preventive medicine/community health .....	7,390	7,408	7,911	8,062	8,416	9,470	9,942	10,408
Psychiatry .....	106	67	71	46	96	103	144	165
Pulmonary disease .....	3	2	0	0	0	0	0	0
Radiology .....	208	192	196	233	252	287	320	268
Surgery .....	64	72	65	69	76	82	119	180
Clinical medicine, n.e.c. ....	606	634	684	815	896	971	964	1,039
Other health fields .....	32,366	34,408	36,584	38,402	41,167	43,733	46,768	49,145
Dental sciences .....	1,048	1,004	956	1,016	1,121	1,135	1,199	1,251
Nursing .....	16,343	17,074	18,468	18,781	19,755	20,608	22,441	23,271
Pharmaceutical sciences .....	2,609	2,779	2,887	2,967	2,788	2,851	2,890	2,926
Speech pathology/audiology .....	5,754	5,989	6,251	6,576	7,361	7,839	8,253	8,511
Veterinary sciences .....	735	782	881	875	923	853	858	915
Health related, n.e.c. ....	5,877	6,780	7,141	8,187	9,219	10,447	11,127	12,271

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 32. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	259,031	266,027	274,596	287,023	300,980	306,942	308,743	305,652
Total, science and engineering fields .....	236,871	242,698	249,831	260,519	272,488	275,726	274,897	269,317
Sciences, total .....	175,746	180,201	185,885	191,528	200,474	204,185	205,517	203,539
Physical sciences .....	27,867	28,461	28,815	29,405	30,033	29,905	29,319	28,209
Astronomy .....	705	762	790	810	840	848	953	871
Chemistry .....	15,614	15,816	15,979	16,318	16,636	16,786	16,690	16,328
Physics .....	11,426	11,784	11,945	12,169	12,429	12,153	11,512	10,836
Physical sciences, n.e.c. ....	122	99	101	108	128	118	164	174
Earth, atmospheric, & ocean sciences .....	9,746	9,625	9,836	9,900	10,452	10,766	10,853	10,711
Atmospheric sciences .....	825	803	828	857	958	978	981	956
Geosciences .....	6,069	5,796	5,600	5,522	5,693	5,789	5,764	5,606
Oceanography .....	1,576	1,752	1,887	1,931	2,061	2,130	2,263	2,183
Earth, atmos., & ocean sci., n.e.c. ....	1,276	1,274	1,521	1,590	1,740	1,869	1,845	1,966
Mathematical sciences .....	12,831	13,048	13,234	13,594	13,974	13,790	13,454	12,711
Computer sciences .....	13,648	14,119	14,784	14,752	15,677	15,761	15,334	15,186
Agricultural sciences .....	8,731	8,690	8,713	8,850	9,086	9,049	9,124	9,196
Biological sciences .....	37,798	38,889	39,514	41,217	42,772	44,597	46,148	46,310
Anatomy .....	973	999	911	961	960	977	983	978
Biochemistry .....	4,720	4,793	4,808	4,940	5,030	5,137	5,200	5,164
Biology .....	7,559	7,971	7,961	8,230	8,387	8,576	8,636	8,415
Biometry/epidemiology .....	1,213	1,211	1,231	1,431	1,634	1,990	2,056	2,093
Biophysics .....	544	610	605	679	728	755	770	810
Botany .....	2,520	2,431	2,341	2,286	2,279	2,351	2,345	2,147
Cell biology .....	2,023	2,177	2,485	2,716	2,961	3,186	3,592	3,661
Ecology .....	816	866	878	908	976	1,040	1,187	1,276
Entomology/parasitology .....	1,061	1,009	997	1,014	1,016	1,039	1,066	1,041
Genetics .....	1,146	1,211	1,255	1,371	1,488	1,640	1,553	1,572
Microbio., immunology, & virology .....	4,301	4,321	4,361	4,401	4,445	4,600	4,698	4,689
Nutrition .....	2,716	2,687	2,770	2,820	2,771	2,907	3,069	3,268
Pathology .....	1,058	1,089	1,055	1,085	1,138	1,264	1,359	1,350
Pharmacology .....	1,986	2,135	2,222	2,304	2,397	2,499	2,672	2,534
Physiology .....	2,008	2,057	2,076	2,163	2,160	2,220	2,221	2,376
Zoology .....	1,703	1,760	1,671	1,760	1,768	1,743	1,712	1,746
Biosciences, n.e.c. ....	1,451	1,562	1,887	2,148	2,634	2,673	3,029	3,190
Psychology .....	23,878	24,775	25,457	26,467	27,778	28,258	28,590	28,722
Social sciences .....	41,247	42,594	45,532	47,343	50,702	52,059	52,695	52,494
Agricultural economics .....	1,878	1,885	1,934	1,976	2,069	1,910	1,892	1,935
Anthropology (cultural & social) .....	4,197	4,320	4,719	4,977	5,219	5,319	5,718	5,662
Economics (except agricultural) .....	8,745	8,807	9,011	9,519	9,795	9,757	9,700	9,421
Geography .....	1,968	2,106	2,151	2,298	2,547	2,734	2,800	2,728
Linguistics .....	2,457	2,406	2,552	2,510	2,401	2,447	2,420	2,382
Political science .....	12,045	12,756	13,885	14,506	16,058	16,822	16,369	16,021
Sociology .....	4,853	5,021	5,408	5,585	6,051	6,156	6,275	6,262
Sociology/anthropology .....	513	580	706	583	612	613	644	617
Social sciences, other .....	4,591	4,713	5,166	5,389	5,950	6,301	6,877	7,466
Engineering, total .....	61,125	62,497	63,946	68,991	72,014	71,541	69,380	65,778
Aerospace engineering .....	2,517	2,742	2,946	3,258	3,269	3,227	2,967	2,668
Agricultural engineering .....	888	861	799	823	840	835	879	872
Biomedical engineering .....	1,397	1,571	1,761	1,900	2,138	2,234	2,246	2,252
Chemical engineering .....	5,291	5,248	5,405	5,733	5,873	5,970	6,027	5,894
Civil engineering .....	9,617	9,671	9,872	10,988	11,985	11,952	12,155	11,762
Electrical engineering .....	17,048	17,727	17,918	19,172	20,169	19,653	18,691	17,639
Engineering science .....	1,405	1,249	1,241	1,357	1,408	1,395	1,343	1,241
Industrial eng./manufacturing eng. ....	4,150	4,464	4,480	5,395	5,823	5,665	5,666	5,062
Mechanical engineering .....	10,163	10,243	10,567	11,396	12,020	12,102	11,624	10,906
Metallurgical/materials eng. ....	3,448	3,696	3,910	4,038	4,255	4,226	4,084	3,864
Nuclear engineering .....	1,105	1,112	1,080	1,080	1,084	1,070	997	883
Engineering, other .....	4,096	3,913	3,967	3,851	3,150	3,212	2,701	2,735
Total, health fields .....	22,160	23,329	24,765	26,504	28,492	31,216	33,846	36,335
Clinical fields .....	1,249	1,364	1,448	1,682	1,873	2,048	2,190	2,267
Dental sciences .....	894	856	827	875	988	1,005	1,048	1,096
Nursing .....	5,401	5,381	5,553	5,661	5,616	5,964	6,758	7,245
Pharmaceutical sciences .....	1,906	2,045	2,148	2,198	2,074	2,130	2,188	2,152
Preventive medicine/community health .....	4,179	4,176	4,445	4,357	4,735	5,225	5,326	5,816
Speech pathology/audiology .....	4,289	4,515	4,568	4,995	5,563	6,126	6,472	6,533
Veterinary sciences .....	589	649	698	706	743	673	679	719
Other health fields .....	3,653	4,343	5,078	6,030	6,900	8,045	9,185	10,507

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 33. Part-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	118,581	118,773	123,612	126,547	131,451	133,529	132,421	130,676
Total, science and engineering fields .....	98,731	97,914	101,315	103,552	106,915	107,788	105,453	103,189
Sciences, total .....	63,261	63,048	65,462	67,282	69,771	70,884	69,599	69,015
Physical sciences .....	3,558	3,513	3,649	3,536	3,603	3,618	3,390	3,586
Astronomy .....	26	27	20	19	29	32	20	41
Chemistry .....	1,960	1,976	2,135	2,045	2,260	2,264	2,052	2,241
Physics .....	1,467	1,409	1,386	1,386	1,228	1,232	1,199	1,212
Physical sciences, n.e.c. ....	105	101	108	86	86	90	119	92
Earth, atmospheric, & ocean sciences .....	3,038	2,969	3,016	3,258	3,315	3,278	3,367	3,323
Atmospheric sciences .....	104	97	97	99	118	117	109	106
Geosciences .....	1,881	1,814	1,634	1,583	1,576	1,536	1,496	1,502
Oceanography .....	350	338	329	343	341	343	415	366
Earth, atmos., & ocean sci., n.e.c. ....	703	720	956	1,233	1,280	1,282	1,347	1,349
Mathematical sciences .....	4,279	4,058	4,282	4,261	4,191	3,905	3,926	3,643
Computer sciences .....	13,023	12,641	13,201	13,471	14,041	14,366	13,484	12,954
Agricultural sciences .....	1,722	1,834	1,894	1,946	2,043	2,119	2,334	2,439
Biological sciences .....	6,369	6,354	6,863	6,886	7,432	7,446	7,457	7,572
Anatomy .....	83	79	89	90	70	50	96	78
Biochemistry .....	167	248	195	220	302	314	365	327
Biology .....	2,200	2,043	2,266	2,278	2,567	2,600	2,418	2,373
Biometry/epidemiology .....	469	511	640	600	731	668	654	719
Biophysics .....	48	45	37	18	23	25	24	45
Botany .....	367	379	371	387	386	354	396	458
Cell biology .....	55	57	70	93	132	176	161	182
Ecology .....	118	146	164	171	179	211	233	269
Entomology/parasitology .....	179	172	176	157	177	208	197	200
Genetics .....	101	110	109	107	111	93	96	79
Microbio., immunology, & virology .....	424	465	469	489	487	437	416	379
Nutrition .....	1,123	1,142	1,127	1,055	1,039	1,031	1,083	1,078
Pathology .....	218	214	232	293	241	221	244	225
Pharmacology .....	137	130	131	128	132	144	158	169
Physiology .....	212	149	160	169	157	152	157	164
Zoology .....	314	309	420	408	349	372	373	322
Biosciences, n.e.c. ....	154	155	207	223	349	390	386	505
Psychology .....	9,761	9,585	10,363	11,299	11,480	11,223	11,098	10,643
Social sciences .....	21,511	22,094	22,194	22,625	23,666	24,929	24,543	24,855
Agricultural economics .....	331	342	298	335	385	424	330	340
Anthropology (cultural & social) .....	1,485	1,560	1,491	1,460	1,596	1,745	1,696	1,758
Economics (except agricultural) .....	2,496	2,530	2,553	2,366	2,551	2,608	2,517	2,581
Geography .....	656	725	773	842	903	938	985	1,049
Linguistics .....	459	570	562	625	529	500	517	475
Political science .....	11,016	11,323	11,236	11,595	11,955	12,392	12,068	12,196
Sociology .....	1,613	1,688	1,585	1,811	1,861	2,107	1,980	2,039
Sociology/anthropology .....	368	332	371	241	290	228	233	223
Social sciences, other .....	3,087	3,024	3,325	3,350	3,596	3,987	4,217	4,194
Engineering, total .....	35,470	34,866	35,853	36,270	37,144	36,904	35,854	34,174
Aerospace engineering .....	669	715	897	795	730	678	686	619
Agricultural engineering .....	164	182	147	160	168	183	182	182
Biomedical engineering .....	276	279	312	291	347	379	428	365
Chemical engineering .....	1,193	1,108	1,194	1,242	1,353	1,388	1,442	1,397
Civil engineering .....	4,219	4,345	4,643	5,127	5,982	5,993	6,189	5,982
Electrical engineering .....	13,052	12,938	12,727	12,831	12,855	12,548	11,487	10,589
Engineering science .....	762	809	761	767	777	753	726	704
Industrial eng./manufacturing eng. ....	6,506	5,698	5,611	6,068	6,496	6,760	6,900	6,902
Mechanical engineering .....	4,945	4,932	5,102	5,219	5,439	5,302	5,218	4,679
Metallurgical/materials eng. ....	809	814	926	997	1,098	990	987	957
Nuclear engineering .....	198	211	198	202	202	236	249	271
Engineering, other .....	2,677	2,835	3,335	2,571	1,697	1,694	1,360	1,527
Total, health fields .....	19,850	20,859	22,297	22,995	24,536	25,741	26,968	27,487
Clinical fields .....	393	264	275	350	423	395	459	448
Dental sciences .....	154	148	129	141	133	130	151	155
Nursing .....	10,942	11,693	12,915	13,120	14,139	14,644	15,683	16,026
Pharmaceutical sciences .....	703	734	739	769	714	721	702	774
Preventive medicine/community health .....	3,211	3,232	3,466	3,705	3,681	4,245	4,616	4,592
Speech pathology/audiology .....	1,465	1,474	1,683	1,581	1,798	1,713	1,781	1,978
Veterinary sciences .....	146	133	183	169	180	180	179	196
Other health fields .....	2,836	3,181	2,907	3,160	3,468	3,713	3,397	3,318

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
Total, all institutions	335,602	340,612	351,146	364,071	379,403	383,514	380,350	372,506
1 University of Wisconsin - Madison	4,735	4,902	5,073	5,257	5,412	5,466	5,294	5,044
2 University of Michigan	4,474	4,575	4,765	4,783	5,080	5,111	5,084	4,907
3 University of Minnesota	4,950	5,048	5,019	5,148	5,168	5,316	5,072	4,836
4 Univ of Illinois at Urbana-Champaign	4,681	4,722	4,814	4,825	4,929	4,998	4,885	4,802
5 Stanford University	4,076	4,099	4,209	4,294	4,490	4,661	4,495	4,526
6 Texas A & M University	4,371	4,597	4,871	4,962	5,250	5,117	4,788	4,526
7 University of Calif at Berkeley	4,624	4,578	4,715	4,516	4,559	4,481	4,430	4,460
8 Ohio State University, The	4,407	4,319	4,371	4,596	4,607	4,671	4,420	4,332
9 George Washington University	4,095	3,910	4,138	4,207	4,584	4,517	4,532	4,305
10 University of Southern California	6,735	5,987	5,266	5,171	5,399	5,260	4,546	4,272
Total, 1st 10 institutions	47,148	46,737	47,241	47,759	49,478	49,598	47,546	46,010
11 Pennsylvania State University	4,053	4,176	4,128	4,244	4,250	4,261	4,223	4,271
12 Massachusetts Institute of Technology	4,013	4,237	4,280	4,308	4,342	4,382	4,343	4,206
13 University of Texas at Austin	4,188	4,204	4,306	4,559	4,715	4,722	4,550	4,199
14 University of Colorado	3,174	3,373	3,636	3,834	4,175	4,220	4,009	4,067
15 University of Maryland - College Park	3,638	3,794	3,856	3,812	3,899	3,972	4,008	4,024
16 Rutgers the State Univ of New Jersey	3,798	3,848	3,938	3,991	3,975	3,920	3,867	3,800
17 University of Washington	3,613	3,573	3,737	3,876	3,783	3,748	3,764	3,757
18 Purdue University	3,753	3,751	3,645	3,739	3,871	3,871	3,854	3,718
19 Cornell University	3,314	3,326	3,323	3,376	3,700	3,717	3,683	3,640
20 University of California, Los Angeles	3,108	3,106	3,140	3,211	3,271	3,448	3,832	3,626
Total, 1st 20 institutions	83,800	84,125	85,230	86,709	89,459	89,849	87,679	85,318
21 Georgia Institute of Technology	2,677	2,766	2,972	3,326	3,548	3,649	3,688	3,540
22 Virginia Polytechnic Inst and State Univ	2,961	3,155	3,194	3,158	3,326	3,381	3,298	3,506
23 Indiana University	1,973	2,405	3,034	3,255	3,458	3,597	3,530	3,485
24 University of Florida	2,895	2,938	3,052	3,224	3,471	3,583	3,502	3,427
25 North Carolina State Univ at Raleigh	2,982	3,050	3,004	3,035	3,230	3,034	3,342	3,405
26 Harvard University	2,787	2,725	2,839	3,032	3,253	3,244	3,231	3,185
27 Louisiana State University	2,303	2,229	2,467	2,738	2,916	3,036	3,127	3,184
28 George Mason University	1,728	1,869	2,051	2,102	2,218	2,566	2,682	3,101
29 Arizona State University	2,534	2,694	2,750	2,893	3,156	3,154	3,077	3,080
30 Michigan State University	2,688	2,874	2,828	2,906	3,093	3,171	3,064	3,005
Total, 1st 30 institutions	109,328	110,830	113,421	116,378	121,128	122,264	120,220	118,236
31 University of Arizona	3,346	3,216	3,126	3,146	3,203	3,248	3,227	3,004
32 University of Pittsburgh	2,401	2,471	2,696	2,749	3,081	3,067	3,119	2,946
33 University of Massachusetts	2,664	2,565	2,617	2,629	2,626	2,675	2,758	2,757
34 Wayne State University	2,096	2,431	2,592	2,653	2,786	2,925	2,910	2,694
35 SUNY - Buffalo	2,608	2,571	2,747	2,871	2,882	2,911	2,784	2,679
36 Iowa State University	2,669	2,634	2,707	2,768	2,817	2,876	2,799	2,676
37 New York University	2,523	2,547	2,567	2,702	2,847	2,833	2,668	2,606
38 University of Kansas	1,636	1,736	1,781	1,919	2,015	2,027	2,551	2,459
39 Boston University	1,730	1,748	2,086	2,162	2,220	2,376	2,496	2,442
40 University of Calif at Davis	2,578	2,655	2,699	2,563	2,584	2,554	2,495	2,425
Total, 1st 40 institutions	133,579	135,404	139,039	142,540	148,189	149,756	148,027	144,924
41 University of Pennsylvania	2,374	2,468	2,465	2,477	2,472	2,456	2,360	2,386
42 Columbia Univ in the City of New York	2,436	2,480	2,382	2,413	2,448	2,397	2,411	2,309
43 University of Tennessee at Knoxville	2,259	2,392	2,312	2,358	2,458	2,489	2,489	2,283
44 University of Cincinnati	1,956	1,940	2,084	2,223	2,161	2,175	2,233	2,267
45 Univ of North Carolina at Chapel Hill	2,022	2,135	2,236	2,180	2,350	2,375	2,344	2,264
46 University of Chicago	1,745	1,960	1,999	1,859	2,190	2,165	2,267	2,178
47 American University, The	1,371	1,476	1,559	1,656	2,042	2,305	2,280	2,166
48 SUNY - Stony Brook	1,865	1,837	1,843	1,955	2,128	2,131	2,142	2,108
49 University of Illinois at Chicago	2,098	2,268	2,296	2,341	2,404	2,307	2,160	2,088
50 University of Connecticut	1,835	1,832	1,980	2,024	2,186	2,218	2,102	2,081
Total, 1st 50 institutions	153,540	156,192	160,195	164,026	171,028	172,774	170,815	167,054
51 Colorado State University	1,687	1,668	1,649	1,793	1,882	1,973	1,956	1,927
52 Oregon State University	1,705	1,663	1,715	1,759	1,761	1,904	1,887	1,911
53 University of Houston	1,602	1,927	2,278	2,947	2,997	2,804	2,032	1,878
54 Auburn University	1,320	1,436	1,595	1,732	1,772	1,887	1,854	1,849
55 University of Georgia	1,467	1,447	1,501	1,598	1,702	1,781	1,855	1,837
56 University of Nebraska - Lincoln	1,399	1,433	1,532	1,721	1,879	1,979	1,982	1,833
57 University of New Mexico	1,490	1,533	1,591	1,625	1,674	1,862	1,817	1,819
58 Northeastern University	2,109	1,872	1,951	2,058	2,094	2,036	1,973	1,815
59 University of Calif at San Diego	1,435	1,528	1,680	1,804	1,795	1,798	1,781	1,814
60 University of Utah	1,436	1,515	1,602	1,627	1,701	1,695	1,684	1,814
Total, 1st 60 institutions	169,190	172,214	177,289	182,690	190,285	192,493	189,636	185,551

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
61 University of Virginia .....	1,630	1,615	1,830	1,874	1,915	1,923	1,878	1,810
62 Nova Southeastern University .....	1,136	1,069	1,034	1,140	1,237	1,503	1,778	1,808
63 University of Kentucky .....	1,411	1,514	1,572	1,626	1,754	1,731	1,800	1,791
64 Kansas State University .....	1,481	1,502	1,495	1,540	1,618	1,732	1,781	1,786
65 Oklahoma State University .....	1,528	1,685	1,704	1,794	1,823	1,773	1,747	1,785
66 University of Massachusetts Lowell .....	1,868	1,420	1,841	1,796	1,764	1,552	1,679	1,783
67 University of Hawaii at Manoa .....	1,514	1,525	1,626	1,719	1,667	1,747	1,843	1,772
68 University of Missouri - Columbia .....	1,698	1,689	1,742	1,811	1,821	1,842	1,789	1,754
69 University of South Florida .....	1,322	1,418	1,490	1,526	1,710	1,844	1,743	1,744
70 Teachers College, Columbia University .....	1,555	1,491	1,441	1,528	1,533	1,629	1,661	1,741
Total, 1st 70 institutions .....	184,333	187,142	193,064	199,044	207,127	209,769	207,335	203,325
71 Carnegie-Mellon University .....	1,574	1,621	1,671	1,668	1,684	1,664	1,693	1,718
72 New Jersey Institute of Technology .....	2,658	2,647	2,283	1,848	1,820	1,742	1,664	1,711
73 Rensselaer Polytechnic Institute .....	1,668	1,795	1,852	2,036	2,040	2,024	1,933	1,694
74 University of Oklahoma .....	1,617	1,659	1,786	1,846	2,015	1,953	1,774	1,690
75 University of Iowa .....	1,652	1,634	1,721	1,795	1,726	1,746	1,714	1,687
76 Clemson University .....	1,354	1,402	1,449	1,729	1,910	1,830	1,757	1,686
77 SUNY - Albany .....	1,077	1,088	1,229	1,328	1,791	1,884	1,760	1,665
78 Johns Hopkins University .....	1,132	1,147	1,167	1,249	1,377	1,389	1,610	1,653
79 Northwestern University .....	1,688	1,740	1,738	1,800	1,843	1,799	1,719	1,645
80 Univ of Texas at Arlington .....	1,690	1,710	1,743	1,865	1,936	1,945	1,810	1,609
Total, 1st 80 institutions .....	200,443	203,585	209,703	216,208	225,269	227,745	224,769	220,083
81 University of South Carolina .....	1,308	1,422	1,453	1,466	1,590	1,660	1,649	1,604
82 CUNY Graduate School and Univ Center .....	1,986	1,982	1,991	1,776	1,795	1,664	1,699	1,573
83 Illinois Institute of Technology .....	1,654	1,510	1,776	1,818	1,916	2,079	1,913	1,542
84 Yale University .....	1,709	1,690	1,693	1,620	1,581	1,561	1,549	1,539
85 Polytechnic University .....	2,028	2,050	1,903	1,600	1,649	1,559	1,438	1,525
86 Syracuse University .....	2,049	1,959	1,913	1,928	2,042	1,823	1,817	1,518
87 Florida State University .....	1,115	1,324	1,381	1,360	1,335	1,377	1,402	1,506
88 University of Delaware .....	1,116	1,179	1,291	1,396	1,429	1,497	1,505	1,493
89 Antioch University .....	1,133	1,019	1,146	1,531	1,617	1,532	1,590	1,474
90 De Paul University .....	1,153	1,261	1,315	1,381	1,359	1,435	1,460	1,453
Total, 1st 90 institutions .....	215,694	218,981	225,565	232,084	241,582	243,932	240,791	235,310
91 Washington State University .....	1,174	1,097	1,159	1,255	1,306	1,359	1,421	1,450
92 University of Calif at Santa Barbara .....	1,272	1,382	1,475	1,482	1,526	1,394	1,439	1,444
93 Case Western Reserve University .....	1,753	1,482	1,477	1,398	1,439	1,423	1,447	1,432
94 Calif State Univ at Long Beach .....	1,397	1,772	1,860	1,940	1,883	1,682	1,486	1,428
95 University of Wisconsin - Milwaukee .....	1,478	1,499	1,544	1,625	1,586	1,538	1,484	1,427
96 Utah State University .....	1,168	1,189	1,170	1,187	1,272	1,363	1,370	1,413
97 Drexel University .....	1,318	1,276	1,410	1,534	1,431	1,400	1,534	1,405
98 University of California, Irvine .....	1,127	1,175	1,239	1,306	1,445	1,493	1,442	1,392
99 Southern Illinois Univ at Carbondale .....	1,307	1,314	1,326	1,365	1,305	1,326	1,304	1,368
100 Texas Tech University .....	1,022	1,146	1,254	1,371	1,541	1,487	1,432	1,343
Total, 1st 100 institutions .....	228,710	232,313	239,479	246,547	256,316	258,397	255,150	249,412
101 Duke University .....	1,216	1,229	1,322	1,333	1,335	1,363	1,361	1,337
102 Western Michigan University .....	1,262	1,214	1,352	1,536	1,543	1,566	1,548	1,326
103 West Virginia University .....	1,028	1,022	1,154	1,234	1,320	1,443	1,409	1,324
104 University of Arkansas .....	858	857	911	943	1,027	1,202	1,225	1,321
105 Washington University .....	1,277	1,347	1,456	1,353	1,390	1,361	1,339	1,308
106 Princeton University .....	1,248	1,327	1,334	1,374	1,379	1,367	1,298	1,307
107 Stevens Institute of Technology .....	1,666	1,435	1,333	1,313	1,335	1,416	1,360	1,305
108 University of Akron .....	1,291	1,304	1,315	1,314	1,348	1,321	1,320	1,299
109 Old Dominion University .....	930	978	1,036	1,100	1,077	1,244	1,232	1,237
110 University of Miami .....	1,071	1,016	1,062	1,150	1,189	1,196	1,287	1,231
Total, 1st 110 institutions .....	240,557	244,042	251,754	259,197	269,259	271,876	268,529	262,407
111 University of North Texas .....	1,103	1,117	1,109	1,043	1,329	1,308	1,287	1,230
112 University of Rochester .....	1,259	1,302	1,325	1,349	1,361	1,372	1,305	1,226
113 Virginia Commonwealth University .....	992	963	1,173	1,144	1,160	1,157	1,139	1,213
114 New Mexico State University .....	903	856	883	956	1,271	1,295	1,239	1,208
115 San Diego State University .....	1,330	1,417	1,316	1,371	1,499	1,544	1,473	1,185
116 Temple University .....	1,080	1,105	1,078	1,189	1,164	1,241	1,163	1,181
117 Brigham Young University .....	724	614	586	927	1,016	1,069	1,193	1,154
118 Long Island University .....	750	623	745	862	1,112	1,142	1,041	1,137
119 Vanderbilt University .....	801	960	950	965	970	1,026	1,117	1,137
120 Southern Methodist University .....	974	952	901	815	950	997	1,031	1,131
Total, 1st 120 institutions .....	250,473	253,951	261,820	269,818	281,091	284,027	280,517	274,209

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
121 Cleveland State University .....	972	989	1,044	1,142	1,141	1,160	1,151	1,122
122 Mississippi State University .....	1,063	1,079	1,074	1,151	1,150	1,210	1,165	1,119
123 Georgia State University .....	852	930	943	950	1,025	999	1,097	1,102
124 Northern Illinois University .....	759	747	933	1,023	1,025	1,065	1,097	1,100
125 University of Louisville .....	1,081	1,082	1,049	1,084	1,132	1,122	1,125	1,099
126 University of Rhode Island .....	1,064	1,081	1,100	1,095	1,149	1,148	1,129	1,096
127 SUNY - Binghamton .....	1,087	1,120	1,099	1,142	1,141	1,129	1,132	1,093
128 Florida International University .....	523	577	644	740	783	856	1,036	1,083
129 Univ of Puerto Rico Rio Piedras Campus .....	928	998	1,100	1,008	1,096	1,138	1,129	1,083
130 University of Idaho .....	885	960	1,048	1,068	1,063	1,115	1,145	1,081
Total, 1st 130 institutions .....	259,687	263,514	271,854	280,221	291,796	294,969	291,723	285,187
131 California Institute of Technology .....	1,010	1,065	1,088	1,125	1,152	1,131	1,087	1,073
132 US Naval Postgraduate School .....	1,331	1,341	1,377	1,329	1,305	1,280	1,195	1,049
133 Univ of Maryland - Baltimore County .....	819	822	895	1,015	1,040	1,052	1,035	1,027
134 University of Missouri - Rolla .....	1,239	1,231	1,224	1,261	1,216	1,144	1,021	1,016
135 New York Institute of Technology .....	948	961	939	887	1,025	997	961	1,013
136 Portland State University .....	692	724	832	968	1,032	1,026	1,061	1,009
137 Tufts University .....	916	906	888	927	999	1,044	1,061	1,008
138 Lehigh University .....	974	1,018	764	1,022	1,114	1,099	1,085	999
139 Memphis State University .....	787	832	819	851	832	912	987	994
140 New School for Social Research .....	1,080	1,066	984	908	1,164	1,029	1,032	992
Total, 1st 140 institutions .....	269,483	273,480	281,664	290,514	302,675	305,683	302,248	295,367
141 University of Alabama, The .....	704	753	794	882	934	974	963	985
142 University of Nevada at Reno .....	600	690	766	825	922	911	956	963
143 Santa Clara University .....	1,642	1,494	1,293	1,222	1,226	1,144	952	945
144 University of Texas at Dallas .....	977	1,042	1,058	980	1,002	1,017	946	944
145 Pepperdine University .....	664	693	731	935	1,040	1,084	1,039	943
146 Florida Atlantic University .....	512	490	695	822	940	1,006	980	929
147 Ohio University .....	949	929	940	959	970	942	927	921
148 Fielding Institute, The .....	434	470	473	478	475	513	484	899
149 University of Notre Dame .....	745	752	799	804	872	868	855	859
150 Kent State University .....	665	725	778	807	830	806	811	849
Total, 1st 150 institutions .....	277,375	281,518	289,991	299,228	311,886	314,948	311,161	304,604
151 Wright State University .....	717	732	760	893	909	864	815	845
152 Fairleigh Dickinson University .....	956	839	912	1,005	1,070	1,020	849	841
153 Tulane University .....	505	533	636	751	824	860	897	834
154 University of Alabama in Huntsville, The .....	774	899	934	1,018	939	1,012	926	819
155 University of Alabama at Birmingham, The .....	597	646	722	759	792	827	815	818
156 University of Toledo .....	563	633	668	695	742	754	750	818
157 University of Wyoming .....	682	750	734	820	835	877	877	818
158 University of Denver .....	615	596	937	944	809	831	858	808
159 Colorado School of Mines .....	700	679	679	781	889	869	851	806
160 Oakland University .....	622	639	616	678	665	700	706	803
Total, 1st 160 institutions .....	284,106	288,464	297,589	307,572	320,360	323,562	319,505	312,814
161 University of Calif at Riverside .....	701	672	711	733	757	763	729	795
162 University of Oregon .....	794	776	776	822	845	787	778	771
163 University of Detroit Mercy .....	495	559	529	599	847	705	776	770
164 Wichita State University .....	637	615	645	643	742	712	705	761
165 Brown University .....	801	785	769	781	847	797	766	760
166 Villanova University .....	958	902	844	959	938	884	857	758
167 Loyola University of Chicago .....	462	480	570	610	633	645	701	754
168 Rice University .....	750	789	800	825	852	844	811	752
169 Georgetown University .....	822	793	609	633	690	693	744	746
170 Howard University .....	868	808	832	739	657	677	761	741
Total, 1st 170 institutions .....	291,394	295,643	304,674	314,916	327,968	331,069	327,133	320,422
171 University of Maine .....	649	667	660	706	811	783	757	737
172 University of Calif at Santa Cruz .....	455	555	608	628	671	690	717	732
173 University of Dayton .....	808	706	804	788	739	804	788	727
174 Emory University .....	418	466	595	549	595	649	685	719
175 Bowling Green State University .....	537	556	538	556	591	659	667	708
176 University of Mississippi .....	604	629	620	661	661	659	714	700
177 Florida Institute of Technology .....	999	1,024	725	882	904	828	801	694
178 University of Vermont .....	612	578	594	623	648	632	629	680
179 Pace University .....	881	920	885	855	791	845	808	673
180 Claremont Graduate School .....	517	502	511	552	573	613	683	659
Total, 1st 180 institutions .....	297,874	302,246	311,214	321,716	334,952	338,231	334,382	327,451

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
181 University of New Hampshire .....	580	577	611	634	669	687	660	658
182 University of Montana .....	387	435	493	520	588	601	588	654
183 University of Southern Mississippi .....	467	518	480	442	444	462	548	634
184 Worcester Polytechnic Institute .....	711	680	725	865	704	712	711	634
185 Rochester Institute of Technology .....	683	747	857	952	1,006	896	776	623
186 Seton Hall University .....	151	164	154	396	413	430	394	610
187 Catholic University of America .....	752	709	736	684	736	739	672	602
188 University of Alaska at Fairbanks .....	404	444	487	480	571	603	627	600
189 Montana State University .....	493	482	451	482	559	626	605	594
190 North Dakota State University .....	614	608	549	599	616	590	606	589
Total, 1st 190 institutions .....	303,116	307,610	316,757	327,770	341,258	344,577	340,569	333,649
191 Yeshiva University .....	580	642	565	607	609	561	571	585
192 Michigan Technological University .....	417	442	464	483	510	554	573	584
193 Univ of Puerto Rico Mayaguez Campus .....	374	364	358	439	495	524	520	582
194 University of Texas at El Paso .....	591	583	624	656	755	667	660	578
195 Calif Sch of Prof Psych - San Diego .....	434	480	519	617	592	643	582	573
196 Northern Arizona University .....	689	726	817	783	763	572	587	572
197 University of Nevada at Las Vegas .....	218	252	266	357	421	495	531	567
198 Univ of Texas Hlth Sci Ctr at Houston .....	344	364	400	428	495	499	541	560
199 Marquette University .....	590	599	620	620	596	578	600	556
200 Illinois State University .....	472	482	453	505	550	544	514	549
Total, 1st 200 institutions .....	307,825	312,544	321,843	333,265	347,044	350,214	346,248	339,355
201 Louisiana Tech University .....	206	248	213	284	364	386	345	537
202 Middle Tennessee State University .....	322	338	508	529	580	596	557	535
203 University of Nebraska - Omaha .....	520	451	474	559	630	631	595	535
204 Saint John's University .....	358	366	429	457	533	558	556	530
205 Brandeis University .....	375	392	416	428	432	465	473	524
206 University of Central Florida .....	936	914	1,066	1,218	1,352	1,457	1,615	524
207 Air Force Institute of Technology .....	596	548	653	589	588	550	481	514
208 Hahnemann University .....	366	269	340	387	396	409	422	513
209 Union Institute .....	423	438	446	523	381	724	673	512
210 University of Missouri - Kansas City .....	566	583	590	552	543	490	431	512
Total, 1st 210 institutions .....	312,493	317,091	326,978	338,791	352,843	356,480	352,396	344,591
211 Texas Woman's University .....	588	614	591	510	518	498	508	503
212 South Dakota State University .....	344	320	352	482	485	521	498	499
213 Fordham University .....	461	470	566	598	584	633	559	491
214 Miami University .....	448	428	441	458	460	507	518	483
215 Boston College .....	406	440	429	464	472	475	493	480
216 St. Louis University .....	360	392	381	395	438	453	478	479
217 Golden Gate University .....	754	618	354	192	215	157	331	476
218 University of Missouri - St Louis .....	309	313	316	281	323	310	425	455
219 California Institute of Integral Studies .....	247	300	250	362	362	447	416	450
220 College of William and Mary .....	310	302	334	371	431	432	436	450
Total, 1st 220 institutions .....	316,720	321,288	330,992	342,904	357,131	360,913	357,058	349,357
221 Ball State University .....	277	276	349	335	395	412	436	442
222 University of Southwestern Louisiana .....	457	490	495	562	583	483	466	429
223 Cal Schl of Prof Psych Berkeley/Alameda .....	455	501	512	519	528	508	455	428
224 Fuller Theological Seminary .....	280	295	338	343	352	373	381	416
225 SUNY - Coll of Env Science and Forestry .....	377	420	455	427	457	428	415	410
226 Calif Sch of Prof Psych - Fresno .....	207	235	251	366	385	393	370	399
227 Tennessee State University .....	282	217	249	226	242	216	327	388
228 Clark Atlanta University .....	0	312	279	323	387	386	418	382
229 Univ of Texas SW Medical Ctr at Dallas .....	255	265	268	284	349	361	385	381
230 US International University .....	547	497	519	492	468	473	419	378
Total, 1st 230 institutions .....	319,857	324,796	334,707	346,781	361,277	364,946	361,130	353,410
231 Idaho State University .....	224	296	291	264	291	364	374	377
232 Sam Houston State University .....	373	328	343	362	355	375	386	374
233 Central Michigan University .....	260	265	257	292	341	324	353	363
234 Dartmouth College .....	339	352	339	362	381	384	371	363
235 Calif Sch of Prof Psych - Los Angeles .....	452	501	585	534	495	537	541	361
236 Clark University .....	237	238	253	275	273	266	261	351
237 University of Tulsa .....	300	257	260	280	321	339	346	350
238 Hofstra University .....	511	507	451	402	349	342	356	346
239 Indiana State University .....	257	312	252	319	307	330	343	345
240 Baylor University .....	258	243	267	284	337	352	363	337
Total, 1st 240 institutions .....	323,068	328,095	338,005	350,155	364,727	368,559	364,824	356,977

See explanatory information, if any, and SOURCE at end of table.



**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
241 Duquesne University .....	193	192	227	222	261	280	382	335
242 East Carolina University .....	269	276	249	259	343	375	313	333
243 Indiana University of Pennsylvania .....	63	103	123	140	158	203	301	333
244 University of North Dakota .....	295	298	292	281	324	339	335	333
245 University of Calif at San Francisco .....	273	277	288	299	299	315	352	330
246 Jackson State University .....	257	277	283	251	263	304	332	328
247 University of South Alabama .....	257	283	311	342	362	318	328	326
248 Caribbean Center for Advanced Studies .....	237	213	216	386	299	181	203	325
249 Tennessee Technological University .....	264	285	284	323	336	314	319	323
250 East Tennessee State University .....	274	244	253	265	267	311	304	321
Total, 1st 250 institutions .....	325,450	330,543	340,531	352,923	367,639	371,499	367,993	360,264
251 Pacific Graduate School of Psychology .....	0	347	368	341	373	348	351	314
252 Univ of North Carolina at Greensboro .....	291	282	308	303	351	355	370	305
253 Thomas Jefferson University .....	80	90	99	183	212	224	249	297
254 Lamar University-Beaumont .....	257	275	287	401	457	397	349	295
255 Oregon Grad Inst of Science & Technology .....	178	148	188	213	291	320	318	287
256 Baylor College of Medicine .....	179	213	239	246	262	279	273	285
257 University of Maryland at Baltimore .....	288	317	330	355	360	320	324	285
258 University of Hartford .....	181	172	207	235	239	288	271	272
259 Wake Forest University .....	178	206	215	229	231	245	290	272
260 Finch U of Hlth Sci/The Chicago Med Sch .....	148	113	115	124	130	137	133	269
Total, 1st 260 institutions .....	327,230	332,706	342,887	355,553	370,545	374,412	370,921	363,145
261 Florida A & M University .....	113	107	102	133	130	177	229	268
262 Wright Institute, The .....	161	174	207	199	208	221	242	253
263 Marshall University .....	180	163	177	204	198	204	224	250
264 Adelphi University .....	391	434	407	380	387	317	271	248
265 East Texas State University .....	348	377	363	346	340	303	245	244
266 Stephen F. Austin State University .....	206	205	200	201	231	230	260	243
267 Clarksons University .....	320	308	312	286	279	287	254	239
268 New York Medical College .....	127	114	107	160	179	199	241	239
269 Medical University of South Carolina .....	82	105	146	154	173	192	193	237
270 New Mexico Institute of Mining and Tech .....	234	217	245	253	260	255	232	222
Total, 1st 270 institutions .....	329,392	334,910	345,153	357,869	372,930	376,797	373,312	365,588
271 University of South Dakota .....	153	167	221	202	219	207	207	221
272 South Dakota School of Mines and Tech .....	236	274	259	274	248	219	194	208
273 Univ of Med and Dentistry of New Jersey .....	205	225	217	239	188	204	225	206
274 Alabama A & M University .....	196	206	240	254	268	312	272	202
275 Medical College of Ohio at Toledo .....	0	0	0	0	0	52	227	196
276 Loma Linda University .....	115	111	92	105	150	138	169	194
277 CUNY Mt. Sinai School of Medicine .....	130	135	146	164	156	170	169	174
278 University of Northern Iowa .....	54	51	63	77	74	92	154	173
279 Chicago School of Prof Psych .....	176	144	158	134	139	148	159	169
280 Univ of Texas Hlth Sci Ctr San Antonio .....	101	124	130	133	157	163	168	169
Total, 1st 280 institutions .....	330,758	336,347	346,679	359,451	374,529	378,502	375,256	367,500
281 University of Northern Colorado .....	308	147	190	182	224	231	216	166
282 University of Tennessee, Memphis .....	93	106	110	112	131	150	157	156
283 Medical College of Hampton Roads .....	78	70	111	118	126	138	156	155
284 Alfred University .....	124	143	139	115	124	144	174	154
285 Mercer University .....	135	141	84	113	154	147	147	154
286 University of La Verne .....	168	181	141	125	176	202	118	154
287 Texas Christian University .....	120	126	131	124	140	149	146	153
288 Univ of Texas Med Branch at Galveston .....	92	102	97	128	139	145	158	152
289 Forest Institute of Professional Psych .....	254	260	256	206	185	169	162	148
290 Biola University .....	166	173	190	188	156	155	149	146
Total, 1st 290 institutions .....	332,296	337,796	348,128	360,862	376,084	380,132	376,839	369,038
291 Widener University .....	149	178	150	133	143	148	152	145
292 University of Puerto Rico Med Sci Campus .....	60	81	77	113	89	132	128	144
293 Oregon Health Sciences University .....	90	88	102	118	120	126	138	143
294 Meharry Medical College .....	27	35	47	54	60	69	144	140
295 Mayo Graduate School of Medicine .....	40	57	84	104	116	120	114	136
296 Andrews University .....	58	59	124	131	163	157	139	133
297 Medical College of Wisconsin .....	60	84	91	107	120	119	126	125
298 Rockefeller University .....	117	121	128	128	134	136	132	125
299 American International College .....	159	155	170	164	169	123	123	124
300 University of Arkansas - Med Sci Campus .....	56	52	49	61	75	104	113	124
Total, 1st 300 institutions .....	333,112	338,706	349,150	361,975	377,273	381,366	378,148	370,377

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

Institutional ranking	1988	1989	1990	1991	1992	1993	1994	1995
301 Hampton University .....	76	59	58	64	83	90	129	123
302 Creighton University .....	132	82	76	71	77	93	53	120
303 Wesleyan University .....	121	115	121	128	132	139	143	120
304 Northeast Louisiana University .....	145	141	104	101	108	118	147	119
305 Spalding University .....	138	119	112	107	112	91	115	117
306 Bryn Mawr College .....	127	116	114	154	123	120	111	115
307 Woods Hole Oceanographic Institution .....	113	0	92	102	113	112	120	115
308 Albany Medical College .....	95	84	70	70	88	96	95	102
309 Rush University .....	93	92	95	90	98	103	100	100
310 SUNY - Health Sci Ctr at Brooklyn .....	83	87	94	98	119	104	94	95
Total, 1st 310 institutions .....	334,235	339,601	350,086	362,960	378,326	382,432	379,255	371,503
311 Medical College of Georgia .....	71	67	78	82	84	88	96	93
312 University of Maryland Eastern Shore .....	39	62	82	104	115	90	104	89
313 Philadelphia Col of Osteopathic Med .....	0	0	0	0	0	0	0	85
314 University of Nebraska Medical Center .....	63	72	67	60	69	76	81	84
315 Institute of Paper Science & Technology .....	69	45	57	70	73	77	79	83
316 Union College .....	151	119	135	144	137	124	98	73
317 SUNY - Health Sci Ctr at Syracuse .....	51	58	50	68	64	72	71	65
318 Unifomed Serv Univ of the Hlth Sciences .....	92	92	92	88	71	66	57	58
319 RAND Graduate School of Policy Studies .....	60	60	48	60	55	61	55	56
320 University of San Diego .....	38	50	52	42	38	47	58	56
Total, 1st 320 institutions .....	334,869	340,226	350,747	363,678	379,032	383,133	379,954	372,245
321 University of the Pacific .....	63	59	46	59	51	48	54	51
322 CUNY Herbert H. Lehman College .....	75	75	78	61	53	65	72	41
323 Maharishi University of Management .....	28	68	77	76	64	51	48	33
324 Philadelphia Coll of Pharmacy and Sci .....	25	24	31	29	31	33	29	30
325 Institute of Textile Technology .....	35	30	30	30	28	34	29	25
326 Catholic University of Puerto Rico .....	0	0	0	0	0	15	20	20
327 Mass College of Pharmacy/Allied Health .....	15	17	25	24	24	20	20	20
328 Ponce School of Medicine .....	21	22	19	15	13	14	12	16
329 Morehouse School of Medicine .....	0	0	0	0	4	9	21	12
330 Baylor College of Dentistry .....	2	0	3	6	7	9	7	9
Total, 1st 330 institutions .....	335,133	340,521	351,056	363,978	379,307	383,431	380,266	372,502
331 Smith College .....	5	6	5	6	8	7	4	4
332 Atlanta University .....	389	0	0	0	0	0	0	0
333 Charles R. Drew Univ of Medicine & Sci .....	0	0	0	0	0	0	0	0
334 Emerson College .....	0	0	0	0	0	0	0	0
335 Kirksville College of Osteopathic Med .....	0	0	0	0	0	0	0	0
336 Medical College of Pennsylvania, The .....	69	72	72	78	85	73	80	0
337 Midwestern University .....	0	0	0	0	0	0	0	0
338 Oral Roberts University .....	6	13	0	0	0	0	0	0
339 Pacific University .....	0	0	0	0	0	0	0	0
340 SUNY College of Optometry .....	0	0	0	0	0	0	0	0
Total, 1st 340 institutions .....	335,602	340,612	351,133	364,062	379,400	383,511	380,350	372,506
341 U of North TX Hlth Sci Ctr at Ft Worth .....	0	0	0	0	0	0	0	0
342 Univ of Osteopathic Med & Health Sci .....	0	0	0	0	0	0	0	0
343 Univ of Texas M.D. Anderson Cancer Ctr .....	0	0	0	0	0	0	0	0
344 University of New England .....	0	0	13	9	3	3	0	0
345 Xavier University of Louisiana .....	0	0	0	0	0	0	0	0
Total, 1st 345 institutions .....	335,602	340,612	351,146	364,071	379,403	383,514	380,350	372,506

**NOTE:** Includes medical schools

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 35. Graduate students in science, engineering, and health fields in master's-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	47,059	49,837	54,042	57,744	61,395	64,367	64,095	65,182
Total, science and engineering fields .....	39,685	42,157	46,013	48,637	51,394	52,719	51,408	51,416
Sciences, total .....	33,451	35,477	38,187	40,322	42,517	44,283	43,582	43,839
Physical sciences .....	1,537	1,642	1,611	1,769	1,712	1,795	1,740	1,675
Astronomy .....	0	0	0	0	0	0	0	0
Chemistry .....	1,005	1,036	1,004	1,044	1,033	1,081	1,055	1,076
Physics .....	415	464	482	526	465	456	451	379
Physical sciences, n.e.c. ....	117	142	125	199	214	258	234	220
Earth, atmospheric, & ocean sciences .....	1,083	1,049	1,132	1,322	1,580	1,761	1,822	1,768
Atmospheric sciences .....	11	12	4	12	13	17	19	10
Geosciences .....	513	442	458	462	475	460	481	494
Oceanography .....	107	117	117	112	128	138	175	154
Earth, atmos., & ocean sci., n.e.c. ....	452	478	553	736	964	1,146	1,147	1,110
Mathematical sciences .....	1,967	2,141	2,258	2,097	2,190	2,305	2,199	2,155
Mathematics & applied mathematics .....	1,926	2,097	2,211	2,049	2,125	2,227	2,121	2,074
Statistics .....	41	44	47	48	65	78	78	81
Computer sciences .....	5,556	5,722	6,272	6,387	6,602	6,171	5,460	5,369
Agricultural sciences .....	682	666	709	710	698	746	741	791
Biological sciences .....	3,398	3,609	3,612	3,675	3,973	4,409	4,538	4,871
Anatomy .....	0	0	0	0	0	0	0	0
Biochemistry .....	34	41	36	41	44	62	67	59
Biology .....	2,634	2,747	2,800	2,784	2,920	3,151	3,166	3,423
Biometry/epidemiology .....	0	0	0	1	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0
Botany .....	25	16	21	21	24	9	7	4
Cell biology .....	0	0	0	0	0	12	15	16
Ecology .....	65	72	94	101	146	159	146	172
Entomology/parasitology .....	0	0	0	0	0	0	0	0
Genetics .....	42	44	44	42	40	52	50	49
Microbio., immunology, & virology .....	48	41	43	38	40	31	27	27
Nutrition .....	293	335	275	289	349	450	595	666
Pathology .....	57	66	67	71	77	90	104	95
Pharmacology .....	1	2	0	0	0	2	0	0
Physiology .....	0	0	0	0	0	0	0	0
Zoology .....	12	14	13	23	22	5	7	5
Biosciences, n.e.c. ....	187	231	219	264	311	386	354	355
Psychology .....	10,324	11,168	12,348	13,577	14,341	15,199	15,038	14,878
Psychology, general .....	4,110	4,532	5,179	6,145	7,292	7,396	7,576	7,577
Clinical psychology .....	5,211	5,572	5,947	6,110	5,449	6,080	5,584	5,575
Psychology, n.e.c. ....	1,003	1,064	1,222	1,322	1,600	1,723	1,878	1,726
Social sciences .....	8,904	9,480	10,245	10,785	11,421	11,897	12,044	12,332
Agricultural economics .....	50	49	41	53	68	81	67	46
Anthropology (cultural & social) .....	263	248	269	294	308	297	251	274
Economics (except agricultural) .....	795	802	762	822	906	849	761	788
Geography .....	584	648	606	620	652	706	717	625
History and philosophy of science .....	0	0	0	0	0	0	0	0
Linguistics .....	327	310	290	290	347	374	342	337
Political science .....	4,662	5,115	5,461	5,606	5,784	5,937	5,946	6,157
Sociology .....	651	696	808	997	1,099	1,162	1,243	1,274
Sociology/anthropology .....	79	76	87	75	77	94	110	101
Social sciences, n.e.c. ....	1,493	1,536	1,921	2,028	2,180	2,397	2,607	2,730
Engineering, total .....	6,234	6,680	7,826	8,315	8,877	8,436	7,826	7,577
Aerospace engineering .....	37	67	91	67	37	35	62	56
Agricultural engineering .....	0	0	0	0	0	0	0	0
Biomedical engineering .....	79	66	63	48	52	62	76	70
Chemical engineering .....	134	104	136	152	171	158	139	141
Civil engineering .....	975	893	1,027	1,283	1,605	1,638	1,581	1,474
Electrical engineering .....	1,935	2,592	3,077	3,179	3,436	3,136	2,874	2,832
Engineering science .....	219	19	18	30	33	32	20	10
Industrial eng./manufacturing eng. ....	737	932	1,157	1,213	1,206	1,171	1,130	1,218
Mechanical engineering .....	1,043	1,090	1,210	1,115	1,178	1,073	919	775
Metallurgical/materials eng. ....	80	84	105	125	159	147	120	99
Mining engineering .....	39	30	28	14	11	16	25	11
Nuclear engineering .....	0	0	0	0	0	0	0	0
Petroleum engineering .....	31	14	14	11	16	14	19	42
Engineering, n.e.c. ....	925	789	900	1,078	973	954	861	849

See explanatory information, if any, and SOURCE at end of table.



**Table 35. Graduate students in science, engineering, and health fields in master's-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, health fields .....	7,374	7,680	8,029	9,107	10,001	11,648	12,687	13,766
Medical fields .....	457	452	472	610	733	960	1,019	1,118
Anesthesiology .....	77	79	62	86	197	225	213	220
Cardiology .....	0	0	0	0	0	0	0	0
Oncology/cancer research .....	0	0	0	0	0	0	0	0
Endocrinology .....	0	0	0	0	0	0	0	0
Gastroenterology .....	0	0	0	0	0	0	0	0
Hematology .....	0	0	0	0	0	0	0	0
Neurology .....	0	0	0	0	0	0	0	0
Obstetrics and gynecology .....	0	0	0	0	0	0	0	0
Ophthalmology .....	0	0	0	0	0	0	0	0
Otorhinolaryngology .....	0	0	0	0	0	0	0	0
Pediatrics .....	0	0	0	0	0	0	0	0
Preventive medicine/community health .....	226	214	256	361	321	506	555	605
Psychiatry .....	48	44	51	58	51	69	81	91
Pulmonary disease .....	0	0	0	0	0	0	0	0
Radiology .....	0	0	0	0	0	0	0	46
Surgery .....	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c. ....	106	115	103	105	164	160	170	156
Other health fields .....	6,917	7,228	7,557	8,497	9,268	10,688	11,668	12,648
Dental sciences .....	0	0	0	0	0	0	0	0
Nursing .....	2,519	2,615	2,726	3,231	3,458	4,173	4,601	5,170
Pharmaceutical sciences .....	4	8	2	1	16	20	11	22
Speech pathology/audiology .....	1,725	1,922	2,103	2,369	2,430	2,901	3,220	3,587
Veterinary sciences .....	17	19	19	19	19	24	17	14
Health related, n.e.c. ....	2,652	2,664	2,707	2,877	3,345	3,570	3,819	3,855

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 36. Full-time graduate students in science, engineering, and health fields in master's-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	16,173	16,714	18,258	20,026	21,773	22,934	23,710	24,583
Total, science and engineering fields .....	13,796	14,230	15,592	16,664	18,166	18,501	18,427	18,699
Sciences, total .....	11,914	12,352	13,561	14,621	15,754	16,215	16,239	16,615
Physical sciences .....	707	746	670	712	640	706	724	683
Astronomy .....	0	0	0	0	0	0	0	0
Chemistry .....	474	462	403	413	363	418	414	422
Physics .....	212	256	246	273	260	244	254	218
Physical sciences, n.e.c. ....	21	28	21	26	17	44	56	43
Earth, atmospheric, & ocean sciences .....	446	396	408	473	534	601	617	579
Atmospheric sciences .....	4	7	0	2	1	2	12	3
Geosciences .....	241	187	199	166	192	181	182	204
Oceanography .....	53	47	47	60	72	47	70	45
Earth, atmos., & ocean sci., n.e.c. ....	148	155	162	245	269	371	353	327
Mathematical sciences .....	681	633	631	662	705	740	772	711
Computer sciences .....	1,485	1,487	1,905	1,764	1,829	1,638	1,378	1,378
Agricultural sciences .....	391	380	387	439	366	419	368	434
Biological sciences .....	1,411	1,459	1,431	1,483	1,617	1,884	1,869	1,973
Anatomy .....	0	0	0	0	0	0	0	0
Biochemistry .....	11	17	17	14	15	37	22	39
Biology .....	1,167	1,198	1,188	1,209	1,291	1,452	1,450	1,484
Biometry/epidemiology .....	0	0	0	0	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0
Botany .....	20	12	13	18	22	2	4	3
Cell biology .....	0	0	0	0	0	3	4	2
Ecology .....	14	7	6	11	21	17	16	28
Entomology/parasitology .....	0	0	0	0	0	0	0	0
Genetics .....	41	43	42	41	38	50	49	47
Microbio., immunology, & virology .....	7	8	11	7	15	7	7	7
Nutrition .....	81	97	59	58	92	138	152	163
Pathology .....	9	15	28	28	27	32	30	32
Pharmacology .....	0	0	0	0	0	1	0	0
Physiology .....	0	0	0	0	0	0	0	0
Zoology .....	11	8	6	22	21	4	5	5
Biosciences, n.e.c. ....	50	54	61	75	75	141	130	163
Psychology .....	4,240	4,573	5,162	5,791	6,499	6,636	6,844	7,040
Social sciences .....	2,553	2,678	2,967	3,297	3,564	3,591	3,667	3,817
Agricultural economics .....	31	27	27	35	36	53	44	29
Anthropology (cultural & social) .....	79	91	90	102	118	110	119	130
Economics (except agricultural) .....	272	271	282	331	389	350	310	361
Geography .....	247	252	223	241	254	292	319	257
Linguistics .....	62	59	34	39	76	91	98	104
Political science .....	1,161	1,242	1,440	1,577	1,609	1,565	1,559	1,639
Sociology .....	262	279	306	364	418	469	445	428
Sociology/anthropology .....	28	26	38	41	39	26	49	46
Social sciences, other .....	411	431	527	567	625	635	724	823
Engineering, total .....	1,882	1,878	2,031	2,043	2,412	2,286	2,188	2,084
Aerospace engineering .....	16	30	64	67	37	35	33	25
Agricultural engineering .....	0	0	0	0	0	0	0	0
Biomedical engineering .....	53	39	37	25	29	35	46	38
Chemical engineering .....	68	34	38	55	73	71	78	68
Civil engineering .....	329	293	256	340	469	506	486	486
Electrical engineering .....	658	739	757	732	827	747	723	664
Engineering science .....	13	10	11	7	7	2	4	2
Industrial eng./manufacturing eng. ....	145	194	290	203	258	237	244	266
Mechanical engineering .....	253	249	300	291	363	293	251	213
Metallurgical/materials eng. ....	18	24	20	20	19	23	24	16
Nuclear engineering .....	0	0	0	0	0	0	0	0
Engineering, other .....	329	266	258	303	330	337	299	306
Total, health fields .....	2,377	2,484	2,666	3,362	3,607	4,433	5,283	5,884
Clinical fields .....	114	127	109	129	165	169	184	176
Dental sciences .....	0	0	0	0	0	0	0	0
Nursing .....	623	606	595	814	806	911	1,159	1,355
Pharmaceutical sciences .....	1	0	0	0	0	3	0	0
Preventive medicine/community health .....	52	43	65	62	54	109	106	129
Speech pathology/audiology .....	923	1,087	1,199	1,504	1,581	1,983	2,235	2,534
Veterinary sciences .....	17	19	11	11	11	20	17	14
Other health fields .....	647	602	687	842	990	1,238	1,582	1,676

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 37. Part-time graduate students in science, engineering, and health fields in master's-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	30,886	33,123	35,784	37,718	39,622	41,433	40,385	40,599
Total, science and engineering fields .....	25,889	27,927	30,421	31,973	33,228	34,218	32,981	32,717
Sciences, total .....	21,537	23,125	24,626	25,701	26,763	28,068	27,343	27,224
Physical sciences .....	830	896	941	1,057	1,072	1,089	1,016	992
Astronomy .....	0	0	0	0	0	0	0	0
Chemistry .....	531	574	601	631	670	663	641	654
Physics .....	203	208	236	253	205	212	197	161
Physical sciences, n.e.c. ....	96	114	104	173	197	214	178	177
Earth, atmospheric, & ocean sciences .....	637	653	724	849	1,046	1,160	1,205	1,189
Atmospheric sciences .....	7	5	4	10	12	15	7	7
Geosciences .....	272	255	259	296	283	279	299	290
Oceanography .....	54	70	70	52	56	91	105	109
Earth, atmos., & ocean sci., n.e.c. ....	304	323	391	491	695	775	794	783
Mathematical sciences .....	1,286	1,508	1,627	1,435	1,485	1,565	1,427	1,444
Computer sciences .....	4,071	4,235	4,367	4,623	4,773	4,533	4,082	3,991
Agricultural sciences .....	291	286	322	271	332	327	373	357
Biological sciences .....	1,987	2,150	2,181	2,192	2,356	2,525	2,669	2,898
Anatomy .....	0	0	0	0	0	0	0	0
Biochemistry .....	23	24	19	27	29	25	45	20
Biology .....	1,467	1,549	1,612	1,575	1,629	1,699	1,716	1,939
Biometry/epidemiology .....	0	0	0	1	0	0	0	0
Biophysics .....	0	0	0	0	0	0	0	0
Botany .....	5	4	8	3	2	7	3	1
Cell biology .....	0	0	0	0	0	9	11	14
Ecology .....	51	65	88	90	125	142	130	144
Entomology/parasitology .....	0	0	0	0	0	0	0	0
Genetics .....	1	1	2	1	2	2	1	2
Microbio., immunology, & virology .....	41	33	32	31	25	24	20	20
Nutrition .....	212	238	216	231	257	312	443	503
Pathology .....	48	51	39	43	50	58	74	63
Pharmacology .....	1	2	0	0	0	1	0	0
Physiology .....	0	0	0	0	0	0	0	0
Zoology .....	1	6	7	1	1	1	2	0
Biosciences, n.e.c. ....	137	177	158	189	236	245	224	192
Psychology .....	6,084	6,595	7,186	7,786	7,842	8,563	8,194	7,838
Social sciences .....	6,351	6,802	7,278	7,488	7,857	8,306	8,377	8,515
Agricultural economics .....	19	22	14	18	32	28	23	17
Anthropology (cultural & social) .....	184	157	179	192	190	187	132	144
Economics (except agricultural) .....	523	531	480	491	517	499	451	427
Geography .....	337	396	383	379	398	414	398	368
Linguistics .....	265	251	256	251	271	283	244	233
Political science .....	3,501	3,873	4,021	4,029	4,175	4,372	4,387	4,518
Sociology .....	389	417	502	633	681	693	798	846
Sociology/anthropology .....	51	50	49	34	38	68	61	55
Social sciences, other .....	1,082	1,105	1,394	1,461	1,555	1,762	1,883	1,907
Engineering, total .....	4,352	4,802	5,795	6,272	6,465	6,150	5,638	5,493
Aerospace engineering .....	21	37	27	0	0	0	29	31
Agricultural engineering .....	0	0	0	0	0	0	0	0
Biomedical engineering .....	26	27	26	23	23	27	30	32
Chemical engineering .....	66	70	98	97	98	87	61	73
Civil engineering .....	646	600	771	943	1,136	1,132	1,095	988
Electrical engineering .....	1,277	1,853	2,320	2,447	2,609	2,389	2,151	2,168
Engineering science .....	206	9	7	23	26	30	16	8
Industrial eng./manufacturing eng. ....	592	738	867	1,010	948	934	886	952
Mechanical engineering .....	790	841	910	824	815	780	668	562
Metallurgical/materials eng. ....	62	60	85	105	140	124	96	83
Nuclear engineering .....	0	0	0	0	0	0	0	0
Engineering, other .....	666	567	684	800	670	647	606	596
Total, health fields .....	4,997	5,196	5,363	5,745	6,394	7,215	7,404	7,882
Clinical fields .....	117	111	107	120	247	285	280	337
Dental sciences .....	0	0	0	0	0	0	0	0
Nursing .....	1,896	2,009	2,131	2,417	2,652	3,262	3,442	3,815
Pharmaceutical sciences .....	3	8	2	1	16	17	11	22
Preventive medicine/community health .....	174	171	191	299	267	397	449	476
Speech pathology/audiology .....	802	835	904	865	849	918	985	1,053
Veterinary sciences .....	0	0	8	8	8	4	0	0
Other health fields .....	2,005	2,062	2,020	2,035	2,355	2,332	2,237	2,179

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 38. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field: 1988-95**

Field	1988	1989	1990	1991	1992	1993	1994	1995
Total, all surveyed fields .....	26,083	27,878	29,515	30,800	32,682	34,263	36,301	35,379
Total, science and engineering fields .....	19,687	20,864	21,770	22,808	23,825	24,599	25,727	25,995
Sciences, total .....	18,002	18,952	19,831	20,565	21,474	22,165	23,137	23,367
Physical sciences .....	5,185	5,355	5,565	5,690	5,757	5,636	5,844	5,768
Astronomy .....	147	186	184	210	206	219	246	263
Chemistry .....	3,421	3,457	3,630	3,647	3,564	3,555	3,710	3,581
Physics .....	1,584	1,683	1,723	1,813	1,948	1,823	1,844	1,821
Physical sciences, n.e.c. ....	33	29	28	20	39	39	44	103
Earth, atmospheric, & ocean sciences .....	493	450	591	623	690	762	815	841
Atmospheric sciences .....	71	58	57	59	64	81	89	88
Geosciences .....	273	265	343	369	399	423	435	434
Oceanography .....	116	107	170	161	186	204	237	258
Earth, atmos., & ocean sci., n.e.c. ....	33	20	21	34	41	54	54	61
Mathematical sciences .....	284	224	248	206	201	224	239	255
Computer sciences .....	91	78	71	120	144	164	183	212
Agricultural sciences .....	464	517	524	565	630	698	705	690
Biological sciences .....	10,667	11,425	11,930	12,478	13,172	13,785	14,417	14,658
Anatomy .....	377	460	463	509	496	462	503	528
Biochemistry .....	2,078	2,216	2,174	2,120	2,157	2,368	2,379	2,410
Biology .....	1,225	1,278	1,358	1,397	1,475	1,460	1,576	1,601
Biometry/epidemiology .....	70	100	97	100	122	131	128	143
Biophysics .....	124	138	118	156	176	176	184	230
Botany .....	445	447	449	488	492	511	590	654
Cell biology .....	884	966	1,258	1,264	1,308	1,441	1,649	1,725
Ecology .....	33	52	57	49	60	65	88	96
Entomology/parasitology .....	176	219	212	236	223	223	190	179
Genetics .....	504	535	614	625	671	665	661	731
Microbio., immunology, & virology .....	1,392	1,519	1,469	1,715	1,784	1,881	1,924	1,952
Nutrition .....	138	127	131	171	196	210	192	186
Pathology .....	803	880	1,018	1,075	1,170	1,202	1,256	1,180
Pharmacology .....	991	1,033	1,104	1,153	1,286	1,327	1,375	1,408
Physiology .....	1,034	1,067	1,043	1,060	1,139	1,150	1,109	1,026
Zoology .....	181	195	162	161	165	174	171	164
Biosciences, n.e.c. ....	212	193	203	199	252	339	442	445
Psychology .....	498	536	464	504	520	518	544	572
Social sciences .....	320	367	438	379	360	378	390	371
Agricultural economics .....	20	28	57	39	49	46	45	39
Anthropology (cultural & social) .....	56	74	64	51	59	52	57	67
Economics (except agricultural) .....	9	33	37	40	22	38	46	26
Geography .....	22	22	19	15	22	28	26	20
Linguistics .....	36	30	38	14	26	29	20	16
Political science .....	49	41	66	78	49	35	44	36
Sociology .....	73	75	94	90	72	72	78	85
Sociology/anthropology .....	1	0	2	1	3	5	4	0
Social sciences, other .....	54	64	61	51	58	73	70	82
Engineering, total .....	1,685	1,912	1,939	2,243	2,351	2,434	2,590	2,628
Aerospace engineering .....	48	38	67	77	92	116	100	101
Agricultural engineering .....	31	39	33	35	37	39	45	46
Biomedical engineering .....	47	69	72	61	81	85	141	134
Chemical engineering .....	423	466	550	568	535	526	521	569
Civil engineering .....	203	182	168	185	187	181	210	200
Electrical engineering .....	186	193	241	339	313	383	407	378
Engineering science .....	38	74	76	117	71	78	95	101
Industrial eng./manufacturing eng. ....	32	32	6	27	38	63	53	29
Mechanical engineering .....	216	302	220	324	349	355	383	402
Metallurgical/materials eng. ....	325	323	363	392	450	403	441	490
Nuclear engineering .....	17	36	30	29	34	40	39	28
Engineering, other .....	119	158	113	89	164	165	155	150
Total, health fields .....	6,396	7,014	7,745	7,992	8,857	9,664	10,574	9,384
Clinical fields .....	4,905	5,505	6,184	6,366	7,072	7,629	8,348	7,085
Dental sciences .....	94	45	53	77	75	102	195	227
Nursing .....	30	36	23	28	28	40	48	43
Pharmaceutical sciences .....	484	533	487	475	486	534	575	504
Preventive medicine/community health .....	163	192	218	204	231	248	264	291
Speech pathology/audiology .....	26	28	27	40	46	49	40	52
Veterinary sciences .....	132	111	102	119	117	133	138	159
Other health fields .....	562	564	651	683	802	929	966	1,023

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 39. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field, source of support, and number of postdoctoral appointees who were non-U.S. citizens: 1995**

Field	Total	Source of support					Number of post-doctoral appointees who were non-U.S. citizens
		Federal				Non-Federal	
		Total	Fellowships	Traineeships	Research grants		
Total, all surveyed fields .....	35,379	24,330	3,136	2,721	18,473	11,049	17,377
Total, science and engineering fields .....	25,995	18,884	1,929	1,315	15,640	7,111	13,217
Sciences, total .....	23,367	17,091	1,869	1,289	13,933	6,276	11,576
Physical sciences .....	5,768	4,593	311	73	4,209	1,175	3,223
Astronomy .....	263	233	32	0	201	30	86
Chemistry .....	3,581	2,764	206	68	2,490	817	2,106
Physics .....	1,821	1,514	66	5	1,443	307	983
Physical sciences, n.e.c. ....	103	82	7	0	75	21	48
Earth, atmospheric, & ocean sciences .....	841	687	41	5	641	154	341
Atmospheric sciences .....	88	83	0	0	83	5	34
Geosciences .....	434	353	13	1	339	81	200
Oceanography .....	258	215	26	3	186	43	84
Earth, atmos., & ocean sci., n.e.c. ....	61	36	2	1	33	25	23
Mathematical sciences .....	255	168	35	5	128	87	144
Computer sciences .....	212	155	5	3	147	57	100
Agricultural sciences .....	690	408	15	1	392	282	307
Biological sciences .....	14,658	10,472	1,326	1,061	8,085	4,186	7,232
Anatomy .....	528	403	40	51	312	125	216
Biochemistry .....	2,410	1,893	202	119	1,572	517	1,247
Biology .....	1,601	1,201	191	41	969	400	750
Biometry/epidemiology .....	143	114	19	62	33	29	63
Biophysics .....	230	177	25	5	147	53	124
Botany .....	654	485	41	0	444	169	277
Cell biology .....	1,725	1,105	227	67	811	620	837
Ecology .....	96	65	7	0	58	31	30
Entomology/parasitology .....	179	125	9	1	115	54	58
Genetics .....	731	452	70	53	329	279	349
Microbio., immunology, & virology .....	1,952	1,432	145	190	1,097	520	1,010
Nutrition .....	186	108	6	14	88	78	103
Pathology .....	1,180	736	59	158	519	444	639
Pharmacology .....	1,408	1,079	151	155	773	329	719
Physiology .....	1,026	753	92	110	551	273	541
Zoology .....	164	102	16	10	76	62	62
Biosciences, n.e.c. ....	445	242	26	25	191	203	207
Psychology .....	572	419	82	114	223	153	115
Social sciences .....	371	189	54	27	108	182	114
Agricultural economics .....	39	26	1	0	25	13	18
Anthropology (cultural & social) .....	67	18	7	0	11	49	11
Economics (except agricultural) .....	26	11	0	2	9	15	9
Geography .....	20	13	0	0	13	7	10
Linguistics .....	16	3	0	1	2	13	5
Political science .....	36	6	1	2	3	30	11
Sociology .....	85	67	20	17	30	18	19
Sociology/anthropology .....	0	0	0	0	0	0	0
Social sciences, other .....	82	45	25	5	15	37	31
Engineering, total .....	2,628	1,793	60	26	1,707	835	1,641
Aerospace engineering .....	101	81	0	0	81	20	65
Agricultural engineering .....	46	21	0	0	21	25	33
Biomedical engineering .....	134	104	13	19	72	30	59
Chemical engineering .....	569	375	8	6	361	194	355
Civil engineering .....	200	113	4	0	109	87	125
Electrical engineering .....	378	282	4	0	278	96	240
Engineering science .....	101	79	8	1	70	22	58
Industrial eng./manufacturing eng. ....	29	11	0	0	11	18	10
Mechanical engineering .....	402	293	11	0	282	109	267
Metallurgical/materials eng. ....	490	306	9	0	297	184	328
Nuclear engineering .....	28	15	0	0	15	13	19
Engineering, other .....	150	113	3	0	110	37	82

See explanatory information, if any, and SOURCE at end of table.

**Table 39. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field, source of support, and number of postdoctoral appointees who were non-U.S. citizens: 1995**  
**-Continued**

Field	Total	Source of support					Number of post-doctoral appointees who were non-U.S. citizens
		Federal				Non-Federal	
		Total	Fellowships	Traineeships	Research grants		
Total, health fields .....	9,384	5,446	1,207	1,406	2,833	3,938	4,160
Clinical fields .....	7,085	4,012	997	1,127	1,888	3,073	3,212
Dental sciences .....	227	104	15	55	34	123	60
Nursing .....	43	35	14	11	10	8	0
Pharmaceutical sciences .....	504	328	25	9	294	176	299
Preventive medicine/community health .....	291	225	48	52	125	66	84
Speech pathology/audiology .....	52	44	7	11	26	8	14
Veterinary sciences .....	159	82	4	9	69	77	64
Other health fields .....	1,023	616	97	132	387	407	427

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering



Doctorate-granting institutions in the fall 1995 NSF-NIH Survey of  
Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school	FICE code	State, institution, and school
Alabama		California, continued	
001002 H	L Alabama A & M University		School of Medicine
008695 L	L Auburn University	001319	L University of Calif at San Francisco
	Graduate School (Main Campus)	001320	L University of Calif at Santa Barbara
	Graduate School at Montgomery	001321	L University of Calif at Santa Cruz
001052	University of Alabama at Birmingham, The	001314	L University of California, Irvine
	Graduate School		College of Medicine
	School of Medicine		Graduate School
001055	University of Alabama in Huntsville, The	001315	L University of California, Los Angeles
001051	University of Alabama, The		Graduate School
001057	University of South Alabama		School of Medicine
	College of Medicine	001216	University of La Verne
	Graduate School	010395	University of San Diego
		001328	University of Southern California
Alaska			Graduate School
029094 L	L University of Alaska at Fairbanks	001329	School of Medicine
		008846	University of the Pacific
			Wright Institute, The
Arizona		Colorado	
001081	Arizona State University	001348	Colorado School of Mines
001082	Northern Arizona University	001350	L Colorado State University
001083 L	L University of Arizona	008717	University of Colorado
	College of Medicine		Graduate School at Boulder
	Graduate School		Graduate School at Colorado Springs
			Graduate School at Denver
			Health Sciences Center
Arkansas		001371	University of Denver
001108 L	L University of Arkansas	001349	University of Northern Colorado
001109	University of Arkansas - Med Sci Campus		
California		Connecticut	
001122	Biola University	008718	University of Connecticut
009844	Cal Schl of Prof Psych Berkeley/Alameda		Graduate School
011881	Calif Sch of Prof Psych - Fresno		School of Medicine
010013	Calif Sch of Prof Psych - Los Angeles	001422	University of Hartford
011117	Calif Sch of Prof Psych - San Diego	001424	Wesleyan University
001139	Calif State Univ at Long Beach	001426	Yale University
012154	California Institute of Integral Studies		Graduate School
001131	California Institute of Technology		School of Medicine
000166	Charles R. Drew Univ of Medicine & Sci		School of Nursing
001169	Claremont Graduate School		
029092	Fielding Institute, The		
001200	Fuller Theological Seminary		
001205	Golden Gate University	001431	L University of Delaware
001218	Loma Linda University		
	Graduate School		
	School of Medicine		
029225	Pacific Graduate School of Psychology	001434	American University, The
001264	Pepperdine University	001437	Catholic University of America
010441	RAND Graduate School of Policy Studies	001444	George Washington University
001151	San Diego State University		Graduate School
001326	Santa Clara University		School of Medicine and Health Sciences
001305	Stanford University	001445	Georgetown University
	Graduate School		Graduate School
	School of Medicine		School of Medicine
001158	US International University	001448 H	Howard University
001310	US Naval Postgraduate School		College of Medicine
001312	L University of Calif at Berkeley		Graduate School
001313	L University of Calif at Davis		
001316	L University of Calif at Riverside		
001317	L University of Calif at San Diego		
	Graduate School		
			Florida
		001480 H L	Florida A & M University

KEY: H = Historically black college or university  
L = Land grant institution



Doctorate-granting institutions in the fall 1995 NSF-NIH Survey of  
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FICE code	State, institution, and school	FICE code	State, institution, and school
Florida, continued		Illinois, continued	
001481	Florida Atlantic University	009800	Rush University
001469	Florida Institute of Technology	001758	Southern Illinois Univ at Carbondale
009635	Florida International University	001775	L Univ of Illinois at Urbana-Champaign
001489	L Florida State University	001774	University of Chicago
001509	Nova Southeastern University		Graduate School
003954	University of Central Florida		Pritzker School of Medicine
001535	University of Florida	001776	L University of Illinois at Chicago
	College of Medicine		
	College of Nursing		
	Graduate School		
001536	University of Miami	001786	Ball State University
	Graduate School	001807	Indiana State University
	School of Medicine	008731	Indiana University
001537	University of South Florida		Fort Wayne Campus
	College of Medicine		Graduate School-Bloomington
	Graduate School		Indiana University-Purdue University
			School of Dentistry
			School of Medicine
		008732	L Purdue University
			Graduate School
			Purdue University Calumet
		001840	University of Notre Dame
			Iowa
		001869	L Iowa State University
		011113	Maharishi University of Management
		001855	Univ of Osteopathic Med & Health Sci
		001892	University of Iowa
			College of Medicine
			Graduate School
029297 H	Morehouse School of Medicine	001890	University of Northern Iowa
001598	L University of Georgia		
			Kansas
		001928	L Kansas State University
		029001	University of Kansas
			Graduate School
			Medical Center
		001950	Wichita State University
			Kentucky
001620	Idaho State University	001960	Spalding University
001626	L University of Idaho	008744	L University of Kentucky
			College of Medicine
			Graduate School
		001999	University of Louisville
			Graduate School
			School of Medicine
			Louisiana
029230	Chicago School of Prof Psych	008745	L Louisiana State University
001671	De Paul University		Graduate School - Univ of New Orleans
001659	Finch U of Hlth Sci/The Chicago Med Sch		Medical Center at New Orleans
029239	Forest Institute of Professional Psych		School of Medicine in Shreveport
001691	Illinois Institute of Technology		The Graduate School in Baton Rouge
001692	Illinois State University		
001710	Loyola University of Chicago	002008	Louisiana Tech University
	Graduate School	002020	Northeast Louisiana University
	Graduate School at the Medical Center	002029	Tulane University
	Stitch School of Medicine		Graduate School
001657	Midwestern University		
001737	Northern Illinois University		
001739	Northwestern University		
	Graduate School		
	Medical School		

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FICE code	State, institution, and school	FICE code	State, institution, and school
Louisiana, continued		Michigan, continued	
	School of Medicine	002292	Michigan Technological University
	School of Public Health & Tropical Med	002307	Oakland University
002031	University of Southwestern Louisiana	002323	University of Detroit Mercy
002032 H	Xavier University of Louisiana	009091	University of Michigan Graduate School at Ann Arbor Graduate School at Dearborn Medical School at Ann Arbor
Maine		002329	Wayne State University Graduate School School of Medicine
002053	L University of Maine	002330	Western Michigan University
002050	University of New England Col of Professional & Continuing Studies College of Osteopathic Medicine		
Maryland		Minnesota	
002077	Johns Hopkins University Graduate School School of Hygiene and Public Health School of Medicine	010337	Mayo Graduate School of Medicine
029169	Uniformed Serv Univ of the Hlth Sciences	008761	L University of Minnesota Duluth School of Medicine Graduate School at Duluth Graduate School at Minneapolis Minneapolis Medical School
002105	L Univ of Maryland - Baltimore County		
002103	L University of Maryland - College Park		
002106 H	University of Maryland Eastern Shore		
002104	L University of Maryland at Baltimore		
Massachusetts		Mississippi	
002114	American International College	002410 H	Jackson State University
002128	Boston College	002423	L Mississippi State University
002130	Boston University Graduate School School of Dentistry School of Medicine School of Public Health	008764	University of Mississippi Graduate School School of Medicine
002133	Brandeis University	002441	University of Southern Mississippi
002139	Clark University		
002146	Emerson College		
002155	Harvard University Graduate School of Arts & Sciences Harvard Medical School School of Public Health	Missouri	
002165	Mass College of Pharmacy/Allied Health	002477	Kirksville College of Osteopathic Med
002178	L Massachusetts Institute of Technology	008766	St. Louis University Graduate School School of Medicine
002199	Northeastern University	002474	University of Health Sciences, The
002209	Smith College	002516	L University of Missouri - Columbia Graduate School School of Medicine
002219	Tufts University Graduate School Sackler Sch of Grad Biomedical Sciences School of Medicine School of Nutrition	002518	L University of Missouri - Kansas City
008755	L University of Massachusetts Univ of Massachusetts at Amherst Univ of Massachusetts at Worcester University of Massachusetts Boston	002517	L University of Missouri - Rolla
002161	University of Massachusetts Lowell	002519	L University of Missouri - St Louis
002230	Woods Hole Oceanographic Institution	002520	Washington University Graduate School School of Medicine
002233	Worcester Polytechnic Institute		
Michigan		Montana	
002238	Andrews University	002532	L Montana State University
002243	Central Michigan University	002536	University of Montana
002290	L Michigan State University		
		Nebraska	
		002542	Creighton University Graduate School School of Medicine
		002565	University of Nebraska - Lincoln
		002554	L University of Nebraska - Omaha
		006895	University of Nebraska Medical Center

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FICE code	State, institution, and school	FICE code	State, institution, and school
Nevada		New York, continued	
002569	University of Nevada at Las Vegas	002780	New School for Social Research
002568	L University of Nevada at Reno Graduate School School of Medical Sciences	008782	New York Institute of Technology Graduate School New York College of Osteopathic Med
New Hampshire		002784	New York Medical College
002573	Dartmouth College Graduate School School of Medicine	002785	New York University Graduate School School of Medicine Wagner Graduate School of Public Service
002589	L University of New Hampshire	008784	Pace University
New Jersey		002796	Polytechnic University
008770	Fairleigh Dickinson University	002803	Rensselaer Polytechnic Institute
002621	New Jersey Institute of Technology	002806	Rochester Institute of Technology
002627	Princeton University	002807	Rockefeller University
008771	L Rutgers the State Univ of New Jersey Graduate School at Camden Graduate School at New Brunswick Graduate School at Newark School of Criminal Justice	002835	SUNY - Albany
002632	Seton Hall University	002836	SUNY - Binghamton
002639	Stevens Institute of Technology	009554	SUNY - Buffalo Graduate School School of Medicine
002620	Univ of Med and Dentistry of New Jersey Grad Sch of Biomed Sci/NJ Med School New Jersey Medical School at Newark New Jersey School of Osteopathic Med Robert Wood Johnson Medical School	002851	SUNY - Coll of Env Science and Forestry
New Mexico		002839	SUNY - Health Sci Ctr at Brooklyn
002654	New Mexico Institute of Mining and Tech	002840	SUNY - Health Sci Ctr at Syracuse
008773	L New Mexico State University	009555	SUNY - Stony Brook Graduate School School of Medicine
002663	University of New Mexico Graduate School School of Medicine	009929	SUNY College of Optometry
New York		002823	Saint John's University
002666	Adelphi University	008789	Syracuse University
002887	Albany Medical College	003979	Teachers College, Columbia University
008775	Alfred University	002889	Union College
004063	CUNY Graduate School and Univ Center	002894	University of Rochester Graduate School School of Medicine and Dentistry
007022	CUNY Herbert H. Lehman College	002903	Yeshiva University Albert Einstein College of Medicine Graduate School
007026	CUNY Mt. Sinai School of Medicine	North Carolina	
002699	Clarkson University	002920	Duke University Graduate School School of Medicine
002707	Columbia Univ in the City of New York College of Physicians and Surgeons Graduate School	002923	East Carolina University Graduate School School of Medicine
008779	L Cornell University Graduate School Graduate School of Medical Sciences Medical College	002972	L North Carolina State Univ at Raleigh
002722	Fordham University	002974	Univ of North Carolina at Chapel Hill Graduate School School of Medicine
002732	Hofstra University	002976	Univ of North Carolina at Greensboro
008780	Long Island University Brentwood Center Brooklyn Center C. W. Post Center Rockland Campus Westchester Center	002978	Wake Forest University Bowman Gray School of Medicine Graduate School
		North Dakota	
		009266	L North Dakota State University
		008794	University of North Dakota
		Ohio	
		003009	Air Force Institute of Technology

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FICE code	State, institution, and school	FICE code	State, institution, and school
Ohio, continued		Pennsylvania, continued	
008795	Antioch University		School of Medicine
008796	Bowling Green State University	008815	University of Pittsburgh
003024	Case Western Reserve University		Graduate School
	Graduate School		School of Medicine
	School of Medicine	003388	Villanova University
003032	Cleveland State University	029291	Widener University
008799	Kent State University		
007737	Medical College of Ohio at Toledo		Rhode Island
008800	Miami University		
029045	NE Ohio Universities College of Medicine	003401	Brown University
008802	L Ohio State University, The	003414	L University of Rhode Island
	College of Medicine		
	Graduate School		South Carolina
008803	Ohio University		
	College of Osteopathic Medicine	003425	L Clemson University
	Graduate College	003438	Medical University of South Carolina
010923	Union Institute	008819	University of South Carolina
012310	University of Akron		Graduate School
008805	University of Cincinnati		Medical School
	College of Medicine		
	Graduate School		South Dakota
003127	University of Dayton		
003131	University of Toledo	003470	South Dakota School of Mines and Tech
009167	Wright State University	003471	L South Dakota State University
		003474	University of South Dakota
			Graduate School
			School of Medicine
	Oklahoma		
008806	L Oklahoma State University		Tennessee
008807	University of Oklahoma		
	Graduate College	003487	East Tennessee State University
	Health Sciences Center	003506	H Meharry Medical College
003185	University of Tulsa	003509	Memphis State University
		003510	Middle Tennessee State University
	Oregon	003522	H L Tennessee State University
008856	Oregon Grad Inst of Science & Technology	003523	Tennessee Technological University
004882	Oregon Health Sciences University	003530	L University of Tennessee at Knoxville
003210	L Oregon State University	006725	L University of Tennessee, Memphis
003212	Pacific University	003535	Vanderbilt University
003216	Portland State University		Graduate School
003223	University of Oregon		School of Medicine
	Pennsylvania		Texas
003237	Bryn Mawr College	004948	Baylor College of Dentistry
003242	Carnegie-Mellon University	004949	Baylor College of Medicine
003256	Drexel University	003545	Baylor University
003258	Duquesne University	003565	East Texas State University
003271	Hahnemann University	003581	Lamar University-Beaumont
008810	Indiana University of Pennsylvania	003604	Rice University
003289	Lehigh University	003606	Sam Houston State University
008813	L Pennsylvania State University	003613	Southern Methodist University
	College of Medicine	003624	Stephen F. Austin State University
	Graduate School	003632	L Texas A & M University
003352	Philadelphia Col of Osteopathic Med	003636	Texas Christian University
003353	Philadelphia Coll of Pharmacy and Sci	003644	Texas Tech University
003371	Temple University		Graduate School
	Graduate School		School of Medicine
	School of Medicine	003646	Texas Woman's University
	School of Pharmacy	009768	U of North TX Hlth Sci Ctr at Ft Worth
003278	Thomas Jefferson University	003659	Univ of Texas Hlth Sci Ctr San Antonio
003378	University of Pennsylvania	011618	Univ of Texas Hlth Sci Ctr at Houston
	Graduate School		

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FICE code	State, institution, and school	FICE code	State, institution, and school
Texas, continued		Wisconsin, continued	
003657	Univ of Texas M.D. Anderson Cancer Ctr	008296	Medical College of Wisconsin
004952	Univ of Texas Med Branch at Galveston	003895	L University of Wisconsin - Madison Graduate School
003660	Univ of Texas SW Medical Ctr at Dallas		Medical School
003656	Univ of Texas at Arlington	003896	University of Wisconsin - Milwaukee
003652	University of Houston Graduate School Victoria Campus		Wyoming
003594	University of North Texas	003932	L University of Wyoming
003658	University of Texas at Austin		Puerto Rico
009741	University of Texas at Dallas	010724	Caribbean Center for Advanced Studies
003661	University of Texas at El Paso	003936	Catholic University of Puerto Rico
	Utah	029268	Ponce School of Medicine
012305	Brigham Young University	003944	L Univ of Puerto Rico Mayaguez Campus
003675	University of Utah Graduate School School of Medicine	007108	L Univ of Puerto Rico Rio Piedras Campus
003677	L Utah State University	003945	L University of Puerto Rico Med Sci Campus
	Vermont		
003696	L University of Vermont College of Medicine Graduate School		
	Virginia		
008828	College of William and Mary		
003749	George Mason University		
003714 H	Hampton University		
003717	Institute of Textile Technology		
010338	Medical College of Hampton Roads		
003728	Old Dominion University		
003745	University of Virginia Graduate School School of Medicine		
003735	Virginia Commonwealth University Graduate School		
003754	L Virginia Polytechnic Inst and State Univ		
	Washington		
003798	University of Washington Graduate School School of Medicine		
003800	L Washington State University		
	West Virginia		
003815	Marshall University Graduate School School of Medicine		
011245	West Virginia School of Osteopathic Med		
003827	L West Virginia University Graduate School School of Medicine		
	Wisconsin		
003863	Marquette University		

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Graduate Students and Postdoctorates in Science and Engineering

FIGE code	State, institution, and school	FIGE code	State, institution, and school
Alabama		Connecticut, continued	
001005 H	Alabama State University	001416	University of Bridgeport
001020	Jacksonville State University	001397	University of New Haven
001049	Troy State University in Montgomery	001380	Western Connecticut State University
001050 H	Tuskegee University		
001004	University of Montevallo		Delaware
	Alaska	001428 H L	Delaware State University
029095	University of Alaska Anchorage		District of Columbia
029096	University of Alaska Southeast	001443	Gallaudet University
	Arkansas	029100 H L	University of the District of Columbia
008701	Arkansas State University		Florida
001101	University of Arkansas at Little Rock	003955	University of West Florida
001092	University of Central Arkansas		Georgia
	California	001552	Augusta College
001117	Azusa Pacific University	001602	Georgia College
001143	Calif Poly State Univ - San Luis Obispo	001572	Georgia Southern University
001144	Calif State Polytechnic Univ at Pomona	001599	Valdosta State University
001141	Calif State Univ at Dominguez Hills	001601	West Georgia College
001137	Calif State Univ at Fullerton		Illinois
001138	Calif State Univ at Hayward	001641	Bradley University
001140	Calif State Univ at Los Angeles	001694	Chicago State University
001142	Calif State Univ at San Bernardino	001674	Eastern Illinois University
001146	Calif State University at Chico	009145	Governors State University
001147	Calif State University at Fresno	001693	Northeastern Illinois University
001153	Calif State University at Northridge	001749	Roosevelt University
001150	Calif State University at Sacramento	001759	Southern Illinois Univ at Edwardsville
001157	Calif State University, Stanislaus	009333	University of Illinois at Springfield
007993	California State Univ - Bakersfield	001780	Western Illinois University
001164	Chapman University		Indiana
001196	Dominican College of San Rafael	001788	Butler University
001171	Harvey Mudd College	001822	Indiana Wesleyan University
001149	Humboldt State University	001830	Rose-Hulman Institute of Technology
004484	John F Kennedy University	001832	Saint Francis College
011649	Loyola Marymount University	001795	University of Evansville
011460	National University	001842	Valparaiso University
001249	Occidental College		Iowa
001257	Pacific States University	001860	Drake University
001154	San Francisco State University	001873	Loras College
001155	San Jose State University	001876	Teikyo Marycrest University
001156	Sonoma State University		Kansas
001322	University of Redlands	001927	Emporia State University
001325	University of San Francisco	001915	Fort Hays State University
008716	West Coast University	001926	Pittsburg State University
	Colorado	001949	Washburn University of Topeka
023562	National Technological University		Kentucky
	Connecticut	001963	Eastern Kentucky University
001378	Central Connecticut State University		
001379	Connecticut College		
002804	Hartford Graduate Center, The		
001402	Quinnipiac College		
001406	Southern Connecticut State University		
001409	St. Joseph College		
001414	Trinity College		

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FI CE code	State, institution, and school	FI CE code	State, institution, and school
Kentucky, continued		Missouri, continued	
001976	Morehead State University	002501	Southeast Missouri State University
001977	Murray State University	002503	Southwest Missouri State University
002002	Western Kentucky University	002495	Truman State University
Louisiana		Montana	
002006 H	Grambling State University	002531	Montana Tech of the Univ of Montana
002016	Loyola University in New Orleans		
002017	McNeese State University		
002005	Nicholls State University		
002021	Northwestern State University	002551	University of Nebraska at Kearney
002024	Southeastern Louisiana University		
002025 H L	Southern University A & M, All Campuses		
Maryland		002586	Rivier College
002068 H	Coppin State College		
002072	Frostburg State University		
002076	Hood College		
002078	Loyola College		
002083 H	Morgan State University	002622	Kean College of New Jersey
002099	Towson State University	002616	Monmouth University
002102	University of Baltimore	002617	Montclair State University
002108	Washington College	002642	Trenton State College
		002625	William Paterson College
Massachusetts			
002117	Anna Maria College		
002118	Assumption College		
002183	Bridgewater State College		
002185	Framingham State College		
029365	MGH Institute of Health Professions		
002192	Mount Holyoke College		
002188	Salem State College		
002210	University of Massachusetts Dartmouth		
002226	Western New England College		
002229	Williams College		
002190	Worcester State College		
Michigan		008772	Eastern New Mexico University
002259	Eastern Michigan University	002653	New Mexico Highlands University
002268	Grand Valley State University		
002301	Northern Michigan University		
Minnesota			
002336	Bemidji State University		
002360	Mankato State University		
002367	Moorhead State University		
002380	Saint Mary's University of Minnesota		
002377	St. Cloud State University		
Mississippi			
002422	Mississippi University for Women		
Missouri			
002454	Central Missouri State University		
002479 H L	Lincoln University		
002496	Northwest Missouri State University		
		004766	CUNY Bernard Baruch College
		002687	CUNY Brooklyn College
		002688	CUNY City College
		029040	CUNY College of Staten Island
		002689	CUNY Hunter College
		002693	CUNY John Jay College of Crim Justice
		002690	CUNY Queens College
		002704	College of New Rochelle
		002705	College of St Rose
		002710	Cooper Union
		002737	Iona College
		002739	Ithaca College
		002758	Manhattan College
		002765	Marist College
		002788	Niagara University
		008786	Russell Sage College
		002841	SUNY College at Brockport
		002842	SUNY College at Buffalo
		002843	SUNY College at Cortland
		002844	SUNY College at Fredonia
		002845	SUNY College at Geneseo
		002846	SUNY College at New Paltz
		002847	SUNY College at Oneonta
		002848	SUNY College at Oswego
		002849	SUNY College at Plattsburgh
		002850	SUNY College at Potsdam
		006792	SUNY Inst of Technology at Utica/Rome
		002813	Sarah Lawrence College
		002817	St. Bonaventure University
		002895	Vassar College
		002899	Wagner College

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FIGE code	State, institution, and school	FIGE code	State, institution, and school
North Carolina		Texas	
002906	Appalachian State University	003537	Abilene Christian University
002905 H L	North Carolina A & T State University	003541	Angelo State University
002950 H	North Carolina Central University	003578	Incarnate Word College
002975	Univ of North Carolina at Charlotte	003592	Midwestern State University
002984	University of North Carolina/Wilmington	003630 H L	Prairie View A & M University
002981	Western Carolina University	003615	Southwest Texas State University
Ohio		003623	St. Mary's University
003050	John Carroll University	003625	Sul Ross State University
003144	Xavier University	003631	Tarleton State University
003145	Youngstown State University	011161	Texas A & M University - Corpus Christi
Oklahoma		003639	Texas A & M University-Kingsville
003154	East Central University	003642 H	Texas Southern University
003161	Northeastern State University	003647	Trinity University
003181	Southwestern Oklahoma State University	011854	University of Central Texas
Oregon		011711	University of Houston at Clear Lake City
003219	Southern Oregon State College	003599	University of Texas - Pan American, The
003224	University of Portland	010115	University of Texas at San Antonio
Pennsylvania		029164	University of Texas at Tyler
003315	Bloomsburg University of Pennsylvania	009930	University of Texas of the Permian Basin
003238	Bucknell University	003665	West Texas A&M University
003316	California University of Pennsylvania	Vermont	
009234	Clarion University of Pennsylvania	003686	Goddard College
003320	East Stroudsburg Univ of Pennsylvania	003690	Marlboro College
003321	Edinboro University of Pennsylvania	003691	Middlebury College
003266	Gannon University	Virginia	
003322	Kutztown University of Pennsylvania	003715	Hollins College
003324	Mansfield University of Pennsylvania	003721	James Madison University
003296	Marywood College	003732	Radford University
003325	Millersville University of Pennsylvania	003744	University of Richmond
003326	Shippensburg University of Pennsylvania	003764 H L	Virginia State University
003327	Slippery Rock University of Pennsylvania	Washington	
003367	St Joseph's University	003771	Central Washington University
003370	Swarthmore College	003775	Eastern Washington University
003384	University of Scranton	003778	Gonzaga University
003328	West Chester University of Pennsylvania	003785	Pacific Lutheran University
003394	Wilkes University	003794	Saint Martin's College
Rhode Island		003790	Seattle University
003407	Rhode Island College	003799	Walla Walla College
South Carolina		003802	Western Washington University
003428	College of Charleston	003804	Whitworth College
003434	Furman University	West Virginia	
003456	Winthrop University	003818	University of Charleston
Tennessee		006869	West Virginia Graduate College
003478	Austin Peay State University	003825	West Virginia Institute of Technology
003490 H	Fisk University	Wisconsin	
003529 L	University of Tennessee at Chattanooga	003868	Milwaukee School of Engineering
		003917	University of Wisconsin - Eau Claire
		003899	University of Wisconsin - Green Bay
		003919	University of Wisconsin - La Crosse
		009630	University of Wisconsin - Oshkosh
		003921	University of Wisconsin - Platteville
		003923	University of Wisconsin - River Falls

KEY: H = Historically black college or university  
L = Land grant institution

Master's-granting institutions in the fall 1995 NSF-NIH Survey of  
Graduate Students and Postdoctorates in Science and Engineering

FICE  
code

State, institution, and school

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Wisconsin, continued

003924 University of Wisconsin - Stevens Point  
003915 University of Wisconsin - Stout  
003926 University of Wisconsin - Whitewater

Guam

003935 University of Guam

KEY: H = Historically black college or university  
L = Land grant institution

# SURVEY MATERIALS

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## INSTRUCTIONS

### FOR THE NSF-NIH SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1995

#### PURPOSE OF THE SURVEY

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

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

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Herman Fleming of NSF at (703) 306-1243.

#### Students Included in This Survey

Count as graduate students persons enrolled for credit in any S&E master's or Ph.D. degree program in fall 1995. Report M.D., D.O., D.V.M., or D.D.S. candidates, interns, and residents in items 5 through 7 only if they are concurrently working for an S&E master's or Ph.D. degree or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (items 5 through 7), not postdoctorates (item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government- and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program. All data should be reported in terms of headcounts, not full-time equivalents (FTEs).

#### Students Excluded From This Survey

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

#### Students Enrolled in Multiple Departments/Institutions

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

#### INCOMPLETE DATA

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

#### ITEM 5: FULL-TIME STUDENTS

Report the total number of full-time degree-seeking students in line (6), column (K). Then, in lines (1) through (6), count each full-time student only once by largest source of support so that all columns and rows in item 5 sum to the full-time total in line (6), column (K). In item 5, count only graduate students pursuing an S&E degree according to a full-time schedule; this may include any combination of study, teaching, and research, depending on your institution's policy and definition of full-time status. For example, many institutions base full-time status on the number of credit hours taken; others calculate full-time according to the amount of fees paid by the student.

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

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

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

**Department of Defense (DoD)—Column (A):** Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (F), "Other Federal sources."

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

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

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

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

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

**Foreign sources—Column (H):** Report students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.  
**Other U.S. sources—Column (I):** Report students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (G) or (J).

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

#### Women—Line (7)

Report all full-time female students by the source of their primary support. The total number of full-time women should be reported in line (7), column (K).

In each column, data on line (7) should not exceed the total on line (6).

#### First-Time Full-Time Students—Lines (8) and (9)

A first-time student has enrolled in the program in which he or she is pursuing a degree as of the beginning of the fall term in 1995. All other students should be considered to be beyond their first time of enrollment.

**ITEM 6: PART-TIME STUDENTS**

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

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

Report all U.S. citizens and permanent residents in columns (A) through (G), and count each student only once according to his or her racial/ethnic category as defined by the Bureau of the Census, listed under "Definitions."

Count foreign students, i.e., those holding temporary visas, only once in column (H), regardless of race/ethnicity. Native residents of a U.S. possession and applicants for U.S. citizenship holding green cards, however, should be reported as U.S. citizens.

Total full-time and part-time enrollments reported in item 7 should match those reported in items 5 and 6, respectively.

**ITEM 8: POSTDOCTORATES AND NONFACULTY RESEARCH STAFF WITH DOCTORATES**

Postdoctorates—Columns (A) through (F): Include individuals with science and engineering Ph.D.'s, M.D.'s, D.D.S.'s, or D.V.M.'s (including foreign degrees equivalent to U.S. doctorates) who devote their primary effort to their own research training through research activities or study in the department under temporary appointments carrying no academic rank. These individuals may contribute to the academic program through seminars, lectures, or working with graduate students. Such postdoctorates may have different titles at different institutions, e.g., "Postdoctoral Scholar," "Research Associate," "Postdoctoral Fellow," or "Postgraduate Researcher." Exclude, however, clinical fellows and those with appointments in residency training programs in medical and health professions, unless research training under the supervision of a senior mentor is the primary purpose of the appointment.

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

**Other non-faculty research staff with doctorates—**Column (G): Include all doctoral scientists and engineers who are involved principally in research activities but are not considered either postdoctoral appointees or members of the regular faculty.

On line (2), report the number of women in each category. On line (3), report those postdoctorates and nonfaculty research staff who hold first professional medical degrees (M.D., D.O., D.D.S., D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

**DEFINITIONS**

**(1) NATIONAL INSTITUTES OF HEALTH ORGANIZATIONAL ROSTER—Item 5, column (B)**

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

**FOR FURTHER INFORMATION . . .**

If you have any questions about this survey, please contact Ms. Karen Gliwa or Ms. Pamela Krone of Quantum Research Corporation by telephone at (301) 657-3070, or by e-mail at [gss@qrc.com](mailto:gss@qrc.com).

UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 1996.

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

**(2) OTHER HHS ADMINISTRATIVE UNITS**  
—Item 5, column (C)

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

**(3) RACIAL/ETHNIC CATEGORIES FOR U.S. CITIZENS AND PERMANENT RESIDENTS DEFINED BY THE BUREAU OF THE CENSUS**  
—Item 7

- Black, non-Hispanic:** Persons having origins in any of the black racial groups (except those of Hispanic origin).
- American Indian or Alaskan native:** Persons having origins in any of the original peoples of North America.
- Asian or Pacific Islander:** Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. These areas include China, Japan, Korea, the Philippine Islands, and Samoa.
- Hispanic:** Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- White, non-Hispanic:** Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East, except those of Hispanic origin.



NATIONAL SCIENCE FOUNDATION and NATIONAL INSTITUTES OF HEALTH  
Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1995

DEPARTMENT OR PROGRAM DATA SHEET

Due date: January 31, 1996

ITEMS 1-4. IDENTIFYING INFORMATION

3. Person in department or program preparing this form:

Name: \_\_\_\_\_ Institution and department code (LEAVE BLANK)

Title: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_

E-mail address: \_\_\_\_\_

1. Institution name: \_\_\_\_\_

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

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

4. Highest graduate degree available in this department or program (CHECK ONE): (1) Ph.D.  (2) Master's  (3) No Ph.D.<sup>1</sup> or master's degree offered

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

ITEM 5. NUMBER OF FULL-TIME GRADUATE STUDENTS enrolled for advanced degrees (master's and doctoral) in fall 1995. Report each student only once according to the source and mechanism of the largest amount of support received in fall 1995.

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

MECHANISMS OF SUPPORT	STUDENTS RECEIVING FINANCIAL ASSISTANCE						TOTAL FULL-TIME GRADUATE ENROLLMENT (Sum of (A) through (J)) (K)			
	FEDERAL SOURCES (excluding loans)			NON-FEDERAL SOURCES						
	Department	National Institutes of Health	Other	Department of Agriculture (E)	Other Federal sources (F)	Institutional Support (including State & local government) (G)		Foreign sources (H)	Other U.S. sources (I)	SELF-SUPPORTED STUDENTS (including loans and family sources) (J)
Graduate Fellowsh										
Graduate Trainees										
Graduate Research										
Graduate Teaching										
Other Types of S										
<b>FULL-TIME TOT</b>										
Of the students i many in each da										

how many are FIRST-TIME? (Should not exceed total in line (6), column (K))

are WOMEN?

<sup>1</sup> Or Ph.D. equivalent  
<sup>2</sup> The total from line  
<sup>3</sup> The total from line (7) should be inserted in Item 7, line (2), column (J).

ITEM 8. NUMBER OF PART-TIME GRADUATE STUDENTS enrolled for advanced degrees (master's and Ph.D.) in fall 1995.

PART-TIME TOTAL (The total from line (1) should be inserted below in item 7, line (6), column (I).)	(1)
Of the part-time students on line (1), how many are WOMEN? (The total from line (2) should be inserted below in item 7, line (5), column (I).)	(2)

ITEM 7. RACE/ETHNICITY of FULL-TIME (item 5) and PART-TIME (item 6) graduate students in fall 1995, by sex.	Of the student totals in items 5 and 6, how many belong to the following RACIAL/ETHNIC categories? in each line, count each student only once.	U.S. CITIZENS AND PERMANENT RESIDENTS						FOREIGN: temporary visa holders (H)	TOTAL (Sum of (A) through (H)) (I)
		Black non- Hispanic (A)	Amer. Indian/ Alaskan Native (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non- Hispanic (E)	Other (F)		
MEN ENROLLED FULL TIME	(1)								
WOMEN ENROLLED FULL TIME (column (I) should equal item 5, line (7), column (K))	(2)								
FULL TIME, TOTAL (column (I) should equal item 5, line (6), column (K))	(3)								
MEN ENROLLED PART TIME	(4)								
WOMEN ENROLLED PART TIME (column (I) should equal item 6, line (2))	(5)								
PART TIME, TOTAL (column (I) should equal item 6, line (1))	(6)								

ITEM 8. NUMBER OF POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES in fall 1995.	POSTDOCTORATES					Of the total in (E), how many are FOREIGN? (F)	TOTAL for all sources (A) through (D) (E)	OTHER NON- FACULTY RESEARCH STAFF WITH DOCTORATES (G)
	SOURCE OF SUPPORT			NON- FEDERAL (D)				
	Fellowships (A)	Traineeships (B)	Research grants (C)					
TOTAL	(1)							
Of the total in each cell of line (1), how many are WOMEN?	(2)							
Of the total in each cell of line (1), how many hold an M.D., D.O., D.D.S., or D.V.M. degree?	(3)							

Approximately how many personhours were required to complete this form?

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

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

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

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

<p><b>ENGINEERING</b></p> <p><b>101 AEROSPACE ENGINEERING</b> 14.02 AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGR.</p> <p><b>102 AGRICULTURAL ENGINEERING</b> 14.03 AGRICULTURAL ENGINEERING</p> <p><b>103 BIOMEDICAL ENGINEERING</b> 14.05 BIOENGINEERING AND BIOMEDICAL ENGINEERING</p> <p><b>104 CHEMICAL ENGINEERING</b> 03.0509 WOOD SCIENCE 14.07 CHEMICAL ENGINEERING 14.32 POLYMER/PLASTICS ENGINEERING</p> <p><b>105 CIVIL ENGINEERING</b> 04.02 ARCHITECTURE 14.04 ARCHITECTURAL ENGINEERING 14.08 CIVIL ENGINEERING 14.0803 STRUCTURAL ENGINEERING 14.0805 WATER RESOURCES ENGINEERING 14.14 ENVIRONMENTAL/ENVIRONMENTAL HEALTH ENGINEERING</p> <p><b>106 ELECTRICAL ENGINEERING</b> 14.09 COMPUTER ENGINEERING 14.10 ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGR.</p> <p><b>107 ENGINEERING SCIENCE AND ENGINEERING PHYSICS</b> 14.12 ENGINEERING PHYSICS 14.13 ENGINEERING SCIENCE</p> <p><b>108 INDUSTRIAL/MANUFACTURING ENGINEERING</b> 14.17 INDUSTRIAL/MANUFACTURING ENGINEERING 14.27 SYSTEMS ENGINEERING 14.30 ENGINEERING/INDUSTRIAL MANAGEMENT 30.06 SYSTEMS SCIENCE</p> <p><b>109 MECHANICAL ENGINEERING</b> 14.11 ENGINEERING MECHANICS 14.19 MECHANICAL ENGINEERING</p> <p><b>110 METALLURGICAL AND MATERIALS ENGINEERING</b> 14.06 CERAMIC SCIENCES AND ENGINEERING 14.18 MATERIALS ENGINEERING 14.20 METALLURGICAL ENGINEERING 14.28 TEXTILE SCIENCES AND ENGINEERING 14.31 MATERIALS SCIENCE 40.0701 METALLURGY</p> <p><b>111 MINING ENGINEERING</b> 14.15 GEOLOGICAL ENGINEERING 14.16 GEOPHYSICAL ENGINEERING 14.21 MINING AND MINERAL ENGINEERING</p> <p><b>112 NUCLEAR ENGINEERING</b> 14.23 NUCLEAR ENGINEERING</p> <p><b>113 PETROLEUM ENGINEERING</b> 14.25 PETROLEUM ENGINEERING</p> <p><b>114 ENGINEERING, N.E.C.</b> 14.01 ENGINEERING, GENERAL 14.22 NAVAL ARCHITECTURE AND MARINE ENGINEERING 14.24 OCEAN ENGINEERING 14.29 ENGINEERING DESIGN 14.99 ENGINEERING, OTHER</p> <p><b>PHYSICAL SCIENCES</b></p> <p><b>201 ASTRONOMY</b> 40.02 ASTRONOMY 40.03 ASTROPHYSICS</p> <p><b>202 CHEMISTRY</b> 40.05 CHEMISTRY (SEE ALSO 602) 40.0507 POLYMER CHEMISTRY</p> <p><b>203 PHYSICS</b> 40.08 PHYSICS (SEE ALSO 605) 40.0807 OPTICS 40.0809 ACOUSTICS</p> <p><b>204 PHYSICAL SCIENCES, N.E.C.</b> 40.01 PHYSICAL SCIENCES, GENERAL 40.0799 MISCELLANEOUS PHYSICAL SCIENCES, OTHER 40.99 PHYSICAL SCIENCES, OTHER</p>	<p><b>EARTH, ATMOSPHERIC, AND OCEAN SCIENCES</b></p> <p><b>301 ATMOSPHERIC SCIENCES</b> 40.04 ATMOSPHERIC SCIENCES AND METEOROLOGY</p> <p><b>302 GEOSCIENCES</b> 40.06 GEOLOGICAL AND RELATED SCIENCES 40.0703 EARTH AND PLANETARY SCIENCES</p> <p><b>303 OCEAN SCIENCES</b> 26.0607 MARINE/AQUATIC BIOLOGY 40.0702 OCEANOGRAPHY</p> <p><b>304 EARTH, ATMOSPHERIC, AND OCEAN SCIENCES, N.E.C.</b></p> <p><b>MATHEMATICAL SCIENCES</b></p> <p><b>402 MATHEMATICS AND APPLIED MATHEMATICS</b> 27.01 MATHEMATICS 27.03 APPLIED MATHEMATICS 27.0302 OPERATIONS RESEARCH 27.99 MATHEMATICS, OTHER 30.08 MATHEMATICS AND COMPUTER SCIENCE</p> <p><b>403 STATISTICS</b> 27.05 MATHEMATICAL STATISTICS 52.0802 ACTUARIAL SCIENCE</p> <p><b>COMPUTER SCIENCE</b></p> <p><b>401 COMPUTER SCIENCE</b> 11.01 COMPUTER AND INFORMATION SCIENCES, GENERAL 11.04 INFORMATION SCIENCES AND SYSTEMS 11.07 COMPUTER SCIENCE 52.1201 MANAGEMENT INFORMATION SYSTEMS 52.1301 MANAGEMENT SCIENCE</p> <p><b>AGRICULTURAL SCIENCES (SEE ALSO 102 AND 901)</b></p> <p><b>501 AGRICULTURAL SCIENCES</b> 02.01 AGRICULTURE/AGRICULTURAL SCIENCES 02.02 ANIMAL SCIENCES 02.03 FOOD SCIENCES 02.04 PLANT SCIENCES 02.05 SOIL SCIENCES 02.99 AGRICULTURAL SCIENCES, OTHER 03.01 NATURAL RESOURCES CONSERVATION 03.02 CONSERVATION AND REGULATION 03.03 FISHING AND FISHERIES SCIENCES AND MANAGEMENT 03.05 FORESTRY AND RELATED SCIENCES 03.06 WILDLIFE AND WILDLANDS MANAGEMENT 03.99 CONSERVATION AND RENEWABLE NATURAL RESOURCES, OTHER</p> <p><b>BIOLOGICAL SCIENCES</b></p> <p><b>601 ANATOMY</b> 26.0601 ANATOMY 51.1301 MEDICAL ANATOMY</p> <p><b>602 BIOCHEMISTRY</b> 26.0202 BIOCHEMISTRY 51.1302 MEDICAL BIOCHEMISTRY</p> <p><b>603 BIOLOGY</b> 26.01 BIOLOGY, GENERAL</p> <p><b>604 BIOMETRY AND EPIDEMIOLOGY</b> 26.0614 BIOMETRICS 26.0615 BIostatISTICS 51.1303 MEDICAL BIOMATHEMATICS AND BIOMETRICS 51.2203 EPIDEMIOLOGY</p> <p><b>605 BIOPHYSICS</b> 26.0203 BIOPHYSICS 51.1304 MEDICAL BIOPHYSICS/PHYSICS</p> <p><b>606 BOTANY</b> 26.03 BOTANY (EXCLUDING 26.05 MICROBIOLOGY/BACTERIOLOGY—SEE 611) 26.0305 PLANT PATHOLOGY 26.0307 PLANT PHYSIOLOGY</p> <p><b>607 CELL AND MOLECULAR BIOLOGY</b> 26.04 CELL AND MOLECULAR BIOLOGY 26.0401 CELL BIOLOGY 26.0402 MOLECULAR BIOLOGY 51.1305 MEDICAL CELL BIOLOGY 51.1309 MEDICAL MOLECULAR BIOLOGY</p>
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- 608 ECOLOGY  
26.0603 ECOLOGY
- 609 ENTOMOLOGY AND PARASITOLOGY  
26.0610 PARASITOLOGY  
26.0702 ENTOMOLOGY
- 610 GENETICS  
26.0613 GENETICS, PLANT AND ANIMAL  
26.0617 EVOLUTIONARY BIOLOGY  
51.1306 MEDICAL GENETICS
- 611 MICROBIOLOGY, IMMUNOLOGY, AND VIROLOGY  
26.05 MICROBIOLOGY/BACTERIOLOGY  
26.0618 BIOLOGICAL IMMUNOLOGY  
26.0619 VIROLOGY  
51.1308 MEDICAL MICROBIOLOGY
- 612 NUTRITION  
19.05 FOODS AND NUTRITION STUDIES  
26.0609 NUTRITIONAL SCIENCES  
51.1311 MEDICAL NUTRITION
- 613 PATHOLOGY  
26.0704 PATHOLOGY, HUMAN AND ANIMAL  
51.1312 MEDICAL PATHOLOGY
- 614 PHARMACOLOGY  
26.0612 TOXICOLOGY  
26.0705 PHARMACOLOGY, HUMAN AND ANIMAL  
51.1314 MEDICAL TOXICOLOGY
- 615 PHYSIOLOGY  
26.0706 PHYSIOLOGY, HUMAN AND ANIMAL  
51.1313 MEDICAL PHYSIOLOGY
- 616 ZOOLOGY  
26.07 ZOOLOGY
- 617 BIOSCIENCES, N.E.C.  
26.0616 BIOTECHNOLOGY RESEARCH  
26.0699 MISCELLANEOUS BIOLOGICAL SPECIALIZATIONS, OTHER  
26.99 BIOLOGICAL SCIENCES/LIFE SCIENCES, OTHER  
30.01 BIOLOGICAL AND PHYSICAL SCIENCES  
30.10 BIOPSYCHOLOGY

#### PSYCHOLOGY

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

#### SOCIAL SCIENCES

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

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

#### HEALTH FIELDS (SEE ALSO 103)

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

N.E.C. = not elsewhere classified

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