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HIGHLIGHTS

Characteristics of 1997 and 1998 Bachelor's and Master's Degree Recipients

- In 1997 and 1998, about 743,000 persons earned bachelor's degrees in the sciences and engineering (S&E) from U.S. colleges and universities, and about 157,000 persons earned S&E master's degrees (tables A-1 and A-2).
- Among 1997 and 1998 bachelor's S&E degree recipients, slightly more than half were females. Almost three-fourths of computer and information science baccalaureates were male, and about four-fifths of engineering baccalaureates were male. Over three-fourths of psychology baccalaureates were female (table A-1).
- About 58 percent of S&E master's degree recipients were male and 42 percent were female (table A-2). Again, males earned a much higher proportion of the master's degrees in computer and information sciences and engineering, while females earned a much higher proportion of the master's degrees in psychology.
- Black and Hispanic graduates each represented about 7 percent of 1997 and 1998 S&E baccalaureates, and Asians and Pacific Islanders represented 10 percent. About 1 percent of S&E baccalaureates were American Indian or Alaskan Native (table A-1).
- Underrepresented minorities, including Black, Hispanic, and American Indian or Alaskan Native graduates represented 11 percent of 1997 and 1998 master's degree recipients. Asians and Pacific Islanders represented 23 percent (over twice their representation among baccalaureates). (table A-2).
- In 1999, about 59 percent of recent S&E bachelor's degree recipients were less than 25 years old, and 28 percent were age 25 to age 29. Only 13 percent were age 30 or over (table A-5). Among master's graduates, the modal age group was age 25–29, representing 47 percent of 1997 and 1998 master's degree recipients. About 23 percent were age 30–34, and another 25 percent were age 35 or over (table A-6).
- About 95 percent of 1997 and 1998 S&E baccalaureates were U.S. citizens (table A-7). However, among master's degree recipients, a smaller percentage, 77 percent, were U.S. citizens (table A-8).

Educational Characteristics of 1997 and 1998 Bachelor's and Master's Degree Recipients

- About half of recent S&E bachelor's degree recipients (52 percent) and two-thirds of master's degree recipients (66 percent) reported undergraduate GPAs of 3.25 or higher (tables B-1 and B-2).
- About 316,000, or 43 percent, of the 743,000 recent baccalaureates in S&E reported that they had attended community colleges, and about 104,000, or 14 percent, had earned associate's degrees (table B-3). Among master's degree recipients, 35 percent (55,000) reported attending community colleges, and about 10 percent (16,000) had associate's degrees (table B-4).
- Sources of financial support for 1997 and 1998 bachelor's degrees in S&E were quite varied (table B-5). More than half of graduates reported using earnings from employment; gifts from parents or relatives; scholarships, grants, or fellowships; and loans from colleges, banks, or government. About 28 percent of baccalaureates reported assistantships or work study as sources of college funds. About 8 percent reported employer assistance, 8 percent reported loans from parents or relatives, and 2 percent reported other sources of support.
- More than half of master's degree recipients reported earnings from employment and from scholarships, grants, or fellowships as sources of support, and nearly half reported assistantships or work study (table B-6). About 35 percent reported loans from colleges, banks, or government. Gifts from parents or relatives were another important source of support, reported by about 34 percent of master's graduates. Compared to baccalaureates, a much larger percentage of master's degree recipients reported employer support (27 percent).
- Nearly half of all bachelor's degree recipients (48 percent) borrowed $10,000 or more for their undergraduate educations, and 37 percent of all bachelor's degree recipients owed $10,000 or more as of April 15, 1999 (tables B-7 and B-9).

- Among master's graduates, 43 percent borrowed $10,000 or more for their under-graduate and graduate degrees, and 29 percent owed $10,000 or more as of April 15, 1999 (tables B-8 and B-10).

- About 45 percent of 1997 and 1998 S&E bachelor's degree recipients reported that they had taken additional courses since earning their most recent degree (that is, the most recent degree as of the survey reference week of April 15, 1999). About 22 percent of all bachelor's degree recipients were full-time students during the survey reference week (table B-11).

- About 39 percent of 1997 and 1998 master's degree recipients had taken courses since their most recent degree; 20 percent of master's degree recipients were full-time students during the survey reference week (table B-12).

- Among those baccalaureates who had not taken additional courses since their most recent degrees, 68 percent reported that it was very likely that they would do so in the future (table B-13). About 52 percent of master's graduates who had not taken courses reported that it was very likely that they would do so (table B-14).

- Only 7 percent of recent S&E bachelor's degree recipients reported that they expected a bachelor's degree to be their highest degree (table B-17). About 54 percent reported that they expected their highest degree to be a master's degree, 26 percent expected their highest degree to be a doctorate, and about 12 percent expected to earn a professional degree.

- More than half of recent S&E master's graduates (56 percent) expected to earn a doctorate as their highest degree, and a small percentage (about 4 percent) expected to earn a professional degree as their highest degree (table B-18).

Employment Status of 1997 and 1998 Bachelor's and Master's Degree Recipients

- About 626,000 (84 percent) recent S&E bachelor's degree recipients were employed in April 1999. Of these, 537,000 were employed full time when all jobs are considered, and 527,000 were employed full time when only the principal job is considered (table C-1). About 4 percent of bachelor's graduates were unemployed (that is, not working and looking for work or on layoff from a job). About 12 percent of recent bachelor's degree recipients were not in the labor force (that is, neither working nor looking for work) (table C-3).

- About 139,000 master's degree recipients (89 percent) were employed. When counting all jobs, 123,000 were employed full time; 121,000 were employed full time when only the principal job was considered (table C-2). About 2 percent of master's graduates were unemployed, and about 9 percent were not in the labor force (table C-4).

Occupational Characteristics of 1997 and 1998 Bachelor's and Master's Degree Recipients

- About 68 percent of employed 1997 and 1998 S&E bachelor's degree recipients had non-S&E jobs in April 1999 (table D-1). Those with degrees in the sciences were far more likely than those with degrees in engineering to be employed in non-S&E fields (79 percent versus 18 percent). In contrast, only 36 percent of employed master's degree recipients were in non-S&E jobs; 46 percent of those with degrees in the sciences, and 13 percent of those with degrees in engineering (table D-2).

- Female recipients of S&E baccalaureates were more likely than males to hold non-S&E jobs (79 percent of employed females and 58 percent of employed males) (table D-7). Similarly, higher percentages of employed female master's degree recipients held non-S&E jobs than did their male counterparts (50 percent versus 26 percent) (table D-8). This may reflect the fact that women are more likely to earn social science degrees where the proportion of non-S&E jobs is very high (90 percent; table D-1) and men are more likely to earn engineering degrees where the proportion of non-S&E jobs is low (18 percent).

- About half of the S&E bachelor's degree recipients reported that they had career path jobs. One-third of those without career path jobs reported that they were seeking such positions (table D-3). About two-thirds of S&E master's degree recipients reported holding career path jobs; of those who did not, 30 percent reported that they were seeking career path jobs (table D-4).

- About 43 percent of employed S&E bachelor's graduates reported that their jobs were closely related

to the field of their degrees, and another 30 percent reported that they were somewhat related (table D-5). A greater proportion of master's degree recipients, 69 percent, reported holding jobs closely related to their degree fields, and another 22 percent reported jobs somewhat related to their degrees (table D-6).

- Among employed S&E bachelor's degree graduates, the most commonly reported primary work activity was management, sales, and administration, reported by 34 percent of baccalaureates (table D-11). Research and development (R&D) was reported by 20 percent of graduates and computer applications by 15 percent. About 12 percent of baccalaureate graduates reported teaching as their primary activity.

- The pattern of primary work activities was rather different for master's degree recipients (table D-12). R&D was the most commonly reported primary work activity (32 percent of employed master's graduates), followed by computer applications (21 percent) and management, sales, and administration (20 percent). About 10 percent of master's graduates reported teaching as their primary activity.

- Large percentages of employed bachelor's and master's degree recipients reported participating in work-related training in the past year. The most common form of training for both degree levels was technical training in their occupational fields, reported by 55 percent of employed bachelor's graduates and 62 percent of employed master's graduates. Fewer graduates received management training, general professional training, or other training (tables D-13 and D-14).

Employer Characteristics of 1997 and 1998 Bachelor's and Master's Degree Recipients

- About 67 percent of employed recent S&E bachelor's degree recipients worked in the private sector (excluding educational institutions) in April 1999 (table E-1). About 22 percent of the employed graduates worked in the education sector and 10 percent in government.

- Among employed recent S&E master's degree recipients, the distribution across sectors was somewhat different—specifically, a greater proportion (27 percent) were employed in the education sector (table E-2). About 61 percent of recent master's degree graduates who were employed worked in the private sector (excluding educational institutions), and 12 percent worked in government.

Salaries of 1997 and 1998 Bachelor's and Master's Degree Recipients

- Recent bachelor's degree recipients in S&E fields who were employed full time and were not full-time students had a median annual salary of about $30,000 as of April 1999 (table F-1). The median salary was higher for those with engineering degrees ($42,500) than for those with degrees in the sciences ($27,900).

- The median annual salary for recent master's degree recipients who were employed full time and were not full-time students was $46,000 in April 1999 (table F-2). Again, the median annual salary for those with engineering degrees was higher than for those in the sciences ($55,000 versus $40,000).

- At both the bachelor's and master's levels, male graduates had higher median salaries than female graduates—$35,000 versus $26,600 at the bachelor's level and $50,200 versus $38,000 at the master's level. This overall difference primarily reflects two factors: (1) disparities in salaries between males and females with degrees in the sciences and (2) a much higher proportion of males majoring in engineering, where the median salary was higher. Within engineering, males and females had more similar salaries, especially at the bachelor's degree level.

- Comparisons by occupational field reveal that, among bachelor's graduates, those with S&E jobs had higher salaries than those with non-S&E jobs (table F-3). The median salary was $38,000 for scientists, $42,000 for engineers, and $26,500 for other occupations. In the sciences and in non-S&E occupations, males earned higher salaries than females, on average; this was not observed among engineers. Differences by occupational field were similar for master's degree recipients, although salaries were higher (table F-4).

- Baccalaureate graduates employed in private industry earned more, on average ($33,000), than those in the education sector ($24,000) or those in government ($27,000) (table F-5). This was also true for master's degree recipients, with those employed in private industry earning a median salary of $50,000, those in the education sector earning $33,000, and those in government earning $40,000 (table F-6).

TABLES

Table S-1. Primary education and employment status, and median salary of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	743,400	165,500	161,900	377,300	38,800	$30,000
Total science	628,800	150,800	83,100	359,300	35,500	27,900
Computer and information sciences	46,000	S	27,000	15,100	S	44,000
Life and related sciences, total	164,000	54,300	20,900	79,100	9,800	25,000
Agricultural and food sciences	15,700	3,200	S	10,000	S	26,500
Biological sciences	134,900	48,800	16,200	62,000	7,800	25,000
Environmental life sciences including forestry science	13,500	2,300	3,000	7,100	S	26,000
Mathematical and related sciences	23,700	4,800	3,900	13,900	S	30,000
Physical and related sciences, total	36,500	12,600	11,100	11,900	1,000	28,500
Chemistry, except biochemistry	20,100	7,900	6,300	5,500	S	28,500
Earth sciences, geology, and oceanography	8,700	1,900	2,500	4,000	S	26,000
Physics and astronomy	7,200	2,600	2,200	2,200	S	35,400
Other physical sciences	600	S	S	S	S	S
Psychology	146,700	34,400	7,300	95,200	9,800	25,000
Social and related sciences, total	211,800	42,400	13,000	144,100	12,300	27,900
Economics	32,700	4,900	3,300	22,600	S	35,000
Political science and related sciences	71,700	20,500	4,100	42,300	4,700	29,000
Sociology and anthropology	69,500	11,700	S	51,600	S	24,500
Other social sciences	37,900	5,300	S	27,600	2,800	26,000
Total engineering	114,600	14,600	78,700	18,000	3,300	42,500
Aerospace and related engineering	2,400	500	1,300	500	S	41,000
Chemical engineering	12,400	1,900	8,500	1,600	S	45,000
Civil and architectural engineering	20,200	2,500	14,200	2,800	S	37,000
Electrical, electronic, computer and communications engineering	34,200	4,000	25,500	4,200	S	46,000
Industrial engineering	6,000	400	3,700	1,500	S	41,000
Mechanical engineering	26,300	2,600	18,500	4,600	S	43,000
Other engineering	13,200	2,700	7,200	2,800	S	40,000

[1] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[2] Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table S-2. Primary education and employment status, and median salary of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	157,000	32,100	71,800	46,300	6,800	$46,000
Total science	110,400	24,300	39,400	41,200	5,500	40,000
Computer and information sciences	20,000	1,600	14,200	3,700	S	58,000
Life and related sciences, total	16,600	4,900	5,000	6,000	S	34,000
Agricultural and food sciences	2,300	S	S	S	S	34,500
Biological sciences	11,600	4,300	3,400	3,600	S	34,000
Environmental life sciences including forestry science	2,600	S	S	1,400	S	36,000
Mathematical and related sciences	7,200	1,800	3,200	1,700	S	44,000
Physical and related sciences, total	9,100	2,900	4,100	1,600	S	41,600
Chemistry, except biochemistry	3,700	1,200	1,700	S	S	43,000
Earth sciences, geology, and oceanography	3,000	600	1,600	600	S	37,000
Physics and astronomy	2,300	1,100	800	S	S	40,000
Other physical sciences	S	S	S	S	S	S
Psychology	30,000	6,900	7,700	13,200	2,200	32,000
Social and related sciences, total	27,500	6,200	5,100	14,900	1,300	40,000
Economics	4,300	1,300	S	1,600	S	45,000
Political science and related sciences	9,400	1,900	1,600	5,600	S	40,000
Sociology and anthropology	4,300	1,400	S	1,700	S	31,200
Other social sciences	9,500	1,500	S	6,100	S	38,000
Total engineering	46,700	7,900	32,500	5,100	1,300	55,000
Aerospace and related engineering	1,500	400	800	S	S	50,000
Chemical engineering	2,300	500	1,400	S	S	55,000
Civil and architectural engineering	6,600	S	4,700	S	S	45,000
Electrical, electronic, computer and communications engineering	16,300	2,400	12,500	1,000	S	60,000
Industrial engineering	3,600	S	2,400	S	S	55,000
Mechanical engineering	6,800	1,100	4,900	S	S	51,000
Other engineering	9,600	2,000	5,700	1,600	S	52,000

[1] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[2] Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table S-3. Primary education and employment status, and median salary of science and engineering bachelor's degree recipients in 1997 and 1998, by sex and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	743,400	165,500	161,900	377,300	38,800	$30,000
Total science	628,800	150,800	83,100	359,300	35,500	27,900
Male	274,800	66,900	48,500	147,900	11,400	30,000
Female	354,000	83,900	34,600	211,400	24,200	26,000
Computer and information sciences	46,000	S	27,000	15,100	S	44,000
Male	34,200	S	20,600	10,400	S	45,000
Female	11,800	S	6,500	4,600	S	41,000
Life and related sciences	164,000	54,300	20,900	79,100	9,800	25,000
Male	73,000	25,000	9,000	36,000	2,900	26,500
Female	91,100	29,300	11,800	43,100	6,900	25,000
Mathematical and related sciences	23,700	4,800	3,900	13,900	S	30,000
Male	12,600	2,800	2,000	7,400	S	29,000
Female	11,100	2,000	1,900	6,500	S	30,000
Physical and related sciences	36,500	12,600	11,100	11,900	1,000	28,500
Male	22,500	7,500	7,400	7,000	S	30,000
Female	14,100	5,100	3,600	4,900	S	27,500
Psychology	146,700	34,400	7,300	95,200	9,800	25,000
Male	34,200	10,300	S	20,100	S	27,000
Female	112,500	24,100	4,900	75,100	8,400	25,000
Social and related sciences	211,800	42,400	13,000	144,100	12,300	27,900
Male	98,300	19,100	7,100	67,000	5,100	30,000
Female	113,400	23,300	5,900	77,100	7,200	26,000
Total engineering	114,600	14,600	78,700	18,000	3,300	42,500
Male	92,000	10,900	64,400	14,400	2,300	43,000
Female	22,600	3,700	14,400	3,600	900	42,000
Aerospace and related engineering	2,400	500	1,300	500	S	41,000
Male	2,100	400	1,100	400	S	40,200
Female	300	S	200	S	S	42,000
Chemical engineering	12,400	1,900	8,500	1,600	S	45,000
Male	7,300	900	5,300	800	S	45,000
Female	5,100	900	3,200	700	S	46,000
Civil and architectural engineering	20,200	2,500	14,200	2,800	S	37,000
Male	15,100	1,800	10,600	2,200	S	37,000
Female	5,100	S	3,500	S	S	37,000
Electrical, electronic, computer and communications engineering	34,200	4,000	25,500	4,200	S	46,000
Male	30,500	3,100	23,100	3,800	S	46,000
Female	3,700	S	2,400	S	S	47,000
Industrial engineering	6,000	400	3,700	1,500	S	41,000
Male	4,000	S	2,300	1,200	S	41,000
Female	2,000	S	1,400	S	S	42,000
Mechanical engineering	26,300	2,600	18,500	4,600	S	43,000
Male	23,000	2,300	16,600	3,700	S	43,000
Female	3,300	S	1,900	S	S	44,000
Other engineering	13,200	2,700	7,200	2,800	S	40,000
Male	10,100	2,200	5,400	2,300	S	40,000
Female	3,100	S	1,800	S	S	40,000

[1] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

Table S-4. Primary education and employment status, and median salary of science and engineering master's degree recipients in 1997 and 1998, by sex and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	157,000	32,100	71,800	46,300	6,800	$46,000
Total science	110,400	24,300	39,400	41,200	5,500	40,000
Male	53,600	13,900	22,700	15,000	2,000	46,000
Female	56,800	10,400	16,700	26,200	3,500	36,000
Computer and information sciences	20,000	1,600	14,200	3,700	S	58,000
Male	14,300	1,300	10,300	2,500	S	60,000
Female	5,600	S	3,900	1,300	S	55,000
Life and related sciences	16,600	4,900	5,000	6,000	S	34,000
Male	9,100	3,600	2,500	2,700	S	36,000
Female	7,500	1,400	2,500	3,300	S	33,000
Mathematical and related sciences	7,200	1,800	3,200	1,700	S	44,000
Male	4,200	1,200	1,700	S	S	44,000
Female	3,100	S	1,500	S	S	44,000
Physical and related sciences	9,100	2,900	4,100	1,600	S	41,600
Male	5,800	2,100	2,900	700	S	42,000
Female	3,200	800	1,200	900	S	40,000
Psychology	30,000	6,900	7,700	13,200	2,200	32,000
Male	7,700	2,500	2,100	2,500	S	33,000
Female	22,300	4,300	5,600	10,700	1,700	31,000
Social and related sciences	27,500	6,200	5,100	14,900	1,300	40,000
Male	12,400	3,300	3,200	5,700	S	41,000
Female	15,100	3,000	1,900	9,200	S	37,000
Total engineering	46,700	7,900	32,500	5,100	1,300	55,000
Male	38,100	6,500	27,100	3,900	700	55,000
Female	8,500	1,400	5,400	1,200	S	50,000
Aerospace and related engineering	1,500	400	800	S	S	50,000
Male	1,300	S	700	S	S	50,000
Female	S	S	S	S	S	S
Chemical engineering	2,300	500	1,400	S	S	55,000
Male	1,600	S	1,000	S	S	55,200
Female	600	S	S	S	S	50,000
Civil and architectural engineering	6,600	S	4,700	S	S	45,000
Male	5,000	S	3,800	S	S	45,000
Female	1,600	S	900	S	S	43,000
Electrical, electronic, computer and communications engineering	16,300	2,400	12,500	1,000	S	60,000
Male	14,000	2,200	10,700	S	S	60,000
Female	2,400	S	1,800	S	S	60,000
Industrial engineering	3,600	S	2,400	S	S	55,000
Male	3,000	S	2,100	S	S	56,000
Female	600	S	S	S	S	48,000
Mechanical engineering	6,800	1,100	4,900	S	S	51,000
Male	6,100	1,000	4,400	S	S	51,000
Female	700	S	S	S	S	S
Other engineering	9,600	2,000	5,700	1,600	S	52,000
Male	7,200	1,500	4,500	1,200	S	53,500

Table S-5. Primary education and employment status, and median salary of science and engineering bachelor's degree recipients in 1997 and 1998, by race/ethnicity and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	743,400	165,500	161,900	377,300	38,800	$30,000
Total science	628,800	150,800	83,100	359,300	35,500	27,900
White, non-Hispanic	478,100	112,600	60,200	280,600	24,800	27,000
Asian or Pacific Islander	54,300	15,500	11,400	23,600	3,700	32,500
Underrepresented minority	96,400	22,800	11,500	55,100	7,100	27,900
Computer and information sciences	46,000	S	27,000	15,100	S	44,000
White, non-Hispanic	30,400	S	18,400	9,500	S	44,000
Asian or Pacific Islander	6,900	S	3,800	S	S	44,000
Underrepresented minority	8,700	S	4,900	2,900	S	42,000
Life and related sciences	164,000	54,300	20,900	79,100	9,800	25,000
White, non-Hispanic	123,300	37,900	15,500	63,700	6,200	25,000
Asian or Pacific Islander	21,200	9,700	S	6,400	S	28,000
Underrepresented minority	19,600	6,700	2,200	9,100	1,600	25,000
Mathematical and related sciences	23,700	4,800	3,900	13,900	S	30,000
White, non-Hispanic	18,800	3,800	3,000	11,300	S	29,000
Asian or Pacific Islander	2,300	S	S	S	S	S
Underrepresented minority	2,600	S	S	1,600	S	30,000
Physical and related sciences	36,500	12,600	11,100	11,900	1,000	28,500
White, non-Hispanic	29,800	10,000	9,100	9,900	800	28,000
Asian or Pacific Islander	2,900	1,400	S	S	S	31,000
Underrepresented minority	3,900	1,200	1,000	1,600	S	28,900
Psychology	146,700	34,400	7,300	95,200	9,800	25,000
White, non-Hispanic	115,600	26,700	5,300	76,900	6,800	25,000
Asian or Pacific Islander	6,000	S	S	S	S	S
Underrepresented minority	25,000	6,400	S	15,100	2,500	25,000
Social and related sciences	211,800	42,400	13,000	144,100	12,300	27,900
White, non-Hispanic	160,200	33,100	9,000	109,400	8,800	27,000
Asian or Pacific Islander	15,000	S	S	9,900	S	33,000
Underrepresented minority	36,600	7,400	1,800	24,800	2,600	27,600
Total engineering	114,600	14,600	78,700	18,000	3,300	42,500
White, non-Hispanic	83,100	9,400	59,700	12,000	2,100	42,000
Asian or Pacific Islander	17,300	3,900	10,300	2,500	S	45,000
Underrepresented minority	14,200	1,300	8,800	3,600	500	41,000

[1] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[2] Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
The underrepresented minority category includes Black, Hispanic, and American Indian or Alaskan Native.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table S-6. Primary education and employment status, and median salary of science and engineering master's degree recipients in 1997 and 1998, by race/ethnicity and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[2]
		Full-time student	Not full-time student			
			Employed in science and engineering[1]	Employed in other occupation	Not employed & not full-time student	
All science and engineering fields	157,000	32,100	71,800	46,300	6,800	$46,000
Total science	110,400	24,300	39,400	41,200	5,500	40,000
White, non-Hispanic	77,200	17,300	24,800	30,700	4,300	38,000
Asian or Pacific Islander	20,000	4,400	10,900	4,100	S	54,000
Underrepresented minority	13,200	2,600	3,600	6,400	S	38,000
Computer and information sciences	20,000	1,600	14,200	3,700	S	58,000
White, non-Hispanic	8,300	S	5,500	1,600	S	60,000
Asian or Pacific Islander	10,400	S	7,900	2,000	S	57,000
Underrepresented minority	1,300	S	800	S	S	60,000
Life and related sciences	16,600	4,900	5,000	6,000	S	34,000
White, non-Hispanic	12,200	3,000	4,000	4,800	S	35,000
Asian or Pacific Islander	3,000	1,700	S	S	S	S
Underrepresented minority	1,300	S	S	600	S	33,500
Mathematical and related sciences	7,200	1,800	3,200	1,700	S	44,000
White, non-Hispanic	4,900	1,200	1,800	1,500	S	40,000
Asian or Pacific Islander	1,600	S	S	S	S	S
Underrepresented minority	700	S	S	S	S	39,000
Physical and related sciences	9,100	2,900	4,100	1,600	S	41,600
White, non-Hispanic	6,500	2,000	3,000	1,300	S	40,000
Asian or Pacific Islander	1,800	800	S	S	S	47,000
Underrepresented minority	700	S	300	S	S	34,000
Psychology	30,000	6,900	7,700	13,200	2,200	32,000
White, non-Hispanic	24,300	5,500	6,500	10,500	S	32,000
Asian or Pacific Islander	S	S	S	S	S	S
Underrepresented minority	4,800	S	900	2,600	S	34,000
Social and related sciences	27,500	6,200	5,100	14,900	1,300	40,000
White, non-Hispanic	20,900	4,700	4,000	11,100	S	40,000
Asian or Pacific Islander	2,200	S	S	S	S	S
Underrepresented minority	4,400	1,000	S	2,600	S	38,000
Total engineering	46,700	7,900	32,500	5,100	1,300	55,000
White, non-Hispanic	27,200	4,000	19,600	3,200	S	54,000
Asian or Pacific Islander	15,800	3,100	10,400	1,400	S	57,000
Underrepresented minority	3,700	700	2,400	500	S	50,000

[1] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[2] Salary data are for principal jobs only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
The underrepresented minority category includes Black, Hispanic, and American Indian or Alaskan Native.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-1. Science and engineering bachelor's degree recipients in 1997 and 1998, by sex, race/ethnicity, and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	743,400	366,800	376,600	561,300	51,600	54,100	71,600	4,800
Total science	628,800	274,800	354,000	478,100	45,800	46,200	54,300	4,300
Computer and information sciences	46,000	34,200	11,800	30,400	4,900	3,700	6,900	S
Life and related sciences, total	164,000	73,000	91,100	123,300	9,000	9,700	21,200	S
Agricultural and food sciences	15,700	8,200	7,500	14,400	S	S	S	S
Biological sciences	134,900	57,300	77,600	96,700	8,500	8,300	20,700	S
Environmental life sciences including forestry science	13,500	7,500	6,000	12,200	S	S	S	S
Mathematical and related sciences	23,700	12,600	11,100	18,800	1,600	900	2,300	S
Physical and related sciences, total	36,500	22,500	14,100	29,800	2,100	1,600	2,900	S
Chemistry, except biochemistry	20,100	10,600	9,500	15,100	1,700	1,000	2,200	S
Earth sciences, geology, and oceanography	8,700	5,800	3,000	8,100	S	S	S	S
Physics and astronomy	7,200	5,800	1,300	6,200	300	300	S	S
Other physical sciences	600	S	S	S	S	S	S	S
Psychology	146,700	34,200	112,500	115,600	11,200	11,800	6,000	S
Social and related sciences, total	211,800	98,300	113,400	160,200	17,100	18,500	15,000	S
Economics	32,700	21,400	11,300	23,200	1,400	2,300	5,800	S
Political science and related sciences	71,700	39,200	32,400	54,600	5,700	6,500	4,500	S
Sociology and anthropology	69,500	23,500	46,000	53,300	7,300	6,100	S	S
Other social sciences	37,900	14,200	23,800	29,100	2,700	3,500	S	S
Total engineering	114,600	92,000	22,600	83,100	5,800	7,900	17,300	400
Aerospace and related engineering	2,400	2,100	300	1,800	100	200	300	S
Chemical engineering	12,400	7,300	5,100	8,900	800	600	2,000	S
Civil and architectural engineering	20,200	15,100	5,100	16,000	700	1,300	2,000	S
Electrical, electronic, computer and communications engineering	34,200	30,500	3,700	21,600	2,100	2,800	7,600	S
Industrial engineering	6,000	4,000	2,000	3,900	600	600	800	S
Mechanical engineering	26,300	23,000	3,300	20,400	1,100	1,800	3,100	S
Other engineering	13,200	10,100	3,100	10,700	S	600	1,500	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-2. Science and engineering master's degree recipients in 1997 and 1998, by sex, race/ethnicity, and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Sex		Race/ethnicity		
		Male	Female	White, non-Hispanic	Asian or Pacific Islander	Under-represented minority[1]
All science and engineering fields	157,000	91,700	65,300	104,400	35,800	16,900
Total science	110,400	53,600	56,800	77,200	20,000	13,200
Computer and information sciences	20,000	14,300	5,600	8,300	10,400	1,300
Life and related sciences, total	16,600	9,100	7,500	12,200	3,000	1,300
Agricultural and food sciences	2,300	1,500	S	1,800	S	S
Biological sciences	11,600	6,000	5,600	8,300	2,300	1,000
Environmental life sciences including forestry science	2,600	1,600	S	2,100	S	S
Mathematical and related sciences	7,200	4,200	3,100	4,900	1,600	700
Physical and related sciences, total	9,100	5,800	3,200	6,500	1,800	700
Chemistry, except biochemistry	3,700	2,000	1,700	2,300	1,000	300
Earth sciences, geology, and oceanography	3,000	2,000	900	2,500	S	S
Physics and astronomy	2,300	1,800	S	1,600	S	S
Other physical sciences	S	S	S	S	S	S
Psychology	30,000	7,700	22,300	24,300	S	4,800
Social and related sciences, total	27,500	12,400	15,100	20,900	2,200	4,400
Economics	4,300	2,900	1,400	2,700	S	S
Political science and related sciences	9,400	4,500	4,900	7,300	S	1,600
Sociology and anthropology	4,300	1,100	3,100	3,600	S	S
Other social sciences	9,500	3,900	5,700	7,200	S	1,700
Total engineering	46,700	38,100	8,500	27,200	15,800	3,700
Aerospace and related engineering	1,500	1,300	S	1,100	S	S
Chemical engineering	2,300	1,600	600	1,300	700	S
Civil and architectural engineering	6,600	5,000	1,600	4,600	1,400	600
Electrical, electronic, computer and communications engineering	16,300	14,000	2,400	7,300	7,600	1,400
Industrial engineering	3,600	3,000	600	2,300	S	400
Mechanical engineering	6,800	6,100	700	4,300	2,200	S
Other engineering	9,600	7,200	2,500	6,300	2,700	600

[1] The underrepresented minority category includes Black, Hispanic, and American Indian or Alaskan Native.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-3. Race/ethnicity of science and engineering bachelor's degree recipients in 1997 and 1998, by sex and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Race/ethnicity					
		White, non-Hispanic		Asian or Pacific Islander		Underrepresented minority[1]	
		Male	Female	Male	Female	Male	Female
All science and engineering fields	743,400	282,600	278,700	38,500	33,100	45,600	64,900
Total science	628,800	215,000	263,200	24,900	29,400	34,900	61,400
Computer and information sciences	46,000	23,700	6,600	5,500	S	5,000	3,700
Life and related sciences, total	164,000	57,400	65,900	8,900	12,300	6,700	12,900
Agricultural and food sciences	15,700	7,700	6,700	S	S	S	S
Biological sciences	134,900	42,800	53,900	8,700	12,100	5,900	11,600
Environmental life sciences including forestry science	13,500	6,900	5,300	S	S	S	S
Mathematical and related sciences	23,700	10,700	8,200	S	S	1,100	1,500
Physical and related sciences, total	36,500	19,200	10,600	1,200	1,700	2,100	1,800
Chemistry, except biochemistry	20,100	8,400	6,600	S	S	1,400	1,300
Earth sciences, geology, and oceanography	8,700	5,500	2,600	S	S	S	S
Physics and astronomy	7,200	5,100	1,100	S	S	500	S
Other physical sciences	600	S	S	S	S	S	S
Psychology	146,700	26,800	88,800	S	S	5,500	19,500
Social and related sciences, total	211,800	77,200	83,000	6,600	8,400	14,600	22,000
Economics	32,700	15,900	7,300	3,100	S	2,400	S
Political science and related sciences	71,700	31,500	23,100	S	S	5,700	6,900
Sociology and anthropology	69,500	18,800	34,600	S	S	4,500	9,500
Other social sciences	37,900	11,000	18,100	S	S	2,000	4,300
Total engineering	114,600	67,700	15,500	13,600	3,700	10,700	3,500
Aerospace and related engineering	2,400	1,500	200	300	S	300	S
Chemical engineering	12,400	5,400	3,500	1,100	S	700	800
Civil and architectural engineering	20,200	12,200	3,800	S	S	1,700	S
Electrical, electronic, computer and communications engineering	34,200	19,600	S	6,800	S	4,100	900
Industrial engineering	6,000	2,600	1,300	600	S	800	500
Mechanical engineering	26,300	17,800	2,600	2,800	S	2,400	S
Other engineering	13,200	8,400	2,300	900	S	800	S

[1] The underrepresented minority category includes Black, Hispanic, and American Indian or Alaskan Native.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-4. Race/ethnicity of science and engineering master's degree recipients in 1997 and 1998, by sex and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Race/ethnicity					
		White, non-Hispanic		Asian or Pacific Islander		Underrepresented minority[1]	
		Male	Female	Male	Female	Male	Female
All science and engineering fields	157,000	59,300	45,100	24,100	11,700	8,300	8,600
Total science	110,400	36,700	40,400	11,400	8,600	5,500	7,700
Computer and information sciences	20,000	6,500	1,800	6,900	3,500	1,000	S
Life and related sciences, total	16,600	6,900	5,300	1,500	1,500	700	700
Agricultural and food sciences	2,300	S	S	S	S	S	S
Biological sciences	11,600	4,500	3,800	S	S	S	S
Environmental life sciences including forestry science	2,600	1,300	S	S	S	S	S
Mathematical and related sciences	7,200	2,700	2,200	S	S	S	S
Physical and related sciences, total	9,100	4,200	2,300	1,200	S	500	S
Chemistry, except biochemistry	3,700	1,200	1,100	S	S	S	S
Earth sciences, geology, and oceanography	3,000	1,700	800	S	S	S	S
Physics and astronomy	2,300	1,200	S	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	30,000	6,500	17,800	S	S	1,000	3,800
Social and related sciences, total	27,500	9,900	11,000	S	1,500	1,900	2,600
Economics	4,300	2,000	S	S	S	S	S
Political science and related sciences	9,400	3,600	3,800	S	S	800	S
Sociology and anthropology	4,300	S	2,600	S	S	S	S
Other social sciences	9,500	3,300	4,000	S	S	S	1,200
Total engineering	46,700	22,600	4,600	12,700	3,100	2,800	800
Aerospace and related engineering	1,500	1,000	S	S	S	S	S
Chemical engineering	2,300	1,000	S	600	S	S	S
Civil and architectural engineering	6,600	3,600	S	S	S	S	S
Electrical, electronic, computer and communications engineering	16,300	6,400	S	6,300	1,300	1,300	S
Industrial engineering	3,600	2,000	S	S	S	S	S
Mechanical engineering	6,800	3,900	S	2,000	S	S	S
Other engineering	9,600	4,700	1,600	2,000	S	S	S

[1] The underrepresented minority category includes Black, Hispanic, and American Indian or Alaskan Native.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-5. Age of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Age			
		Less than 25	25–29	30–34	35 or more
All science and engineering fields	743,400	437,500	208,200	39,500	58,200
Total science	628,800	377,300	168,700	31,100	51,800
Computer and information sciences	46,000	20,600	13,300	4,000	8,200
Life and related sciences, total	164,000	107,700	42,800	6,800	6,800
Agricultural and food sciences	15,700	9,300	4,600	S	S
Biological sciences	134,900	91,000	33,800	5,700	4,400
Environmental life sciences including forestry sciences	13,500	7,400	4,400	S	S
Mathematical and related sciences	23,700	15,100	5,500	1,900	S
Physical and related sciences, total	36,500	22,700	9,500	2,000	2,300
Chemistry, except biochemistry	20,100	12,600	5,000	1,300	S
Earth sciences, geology, and oceanography	8,700	5,000	2,700	S	S
Physics and astronomy	7,200	4,700	1,700	S	S
Other physical sciences	600	S	S	S	S
Psychology	146,700	81,300	41,200	6,400	17,700
Social and related sciences, total	211,800	129,900	56,400	10,000	15,500
Economics	32,700	23,600	7,600	S	S
Political science and related sciences	71,700	50,200	15,400	3,500	2,600
Sociology and anthropology	69,500	37,400	21,300	3,900	6,900
Other social sciences	37,900	18,800	12,100	S	5,200
Total engineering	114,600	60,200	39,500	8,400	6,400
Aerospace and related engineering	2,400	1,500	800	S	S
Chemical engineering	12,400	8,400	3,300	S	S
Civil and architectural engineering	20,200	9,200	8,200	1,400	1,300
Electrical, electronic, computer and communications engineering	34,200	16,000	12,000	3,100	3,200
Industrial engineering	6,000	3,000	2,400	S	S
Mechanical engineering	26,300	14,000	8,800	2,300	S
Other engineering	13,200	8,100	4,100	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degrees in science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-6. Age of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Age			
		Less than 25	25–29	30–34	35 or more
All science and engineering fields	157,000	7,500	73,800	36,300	39,400
Total science	110,400	4,300	50,100	24,900	31,000
Computer and information sciences	20,000	S	7,900	5,300	6,100
Life and related sciences, total	16,600	1,000	8,400	3,700	3,400
Agricultural and food sciences	2,300	S	1,100	S	S
Biological sciences	11,600	S	6,400	2,300	2,000
Environmental life sciences including forestry science	2,600	S	S	S	S
Mathematical and related sciences	7,200	S	3,300	1,900	1,600
Physical and related sciences, total	9,100	S	5,100	2,000	1,600
Chemistry, except biochemistry	3,700	S	2,100	900	S
Earth sciences, geology, and oceanography	3,000	S	1,600	500	700
Physics and astronomy	2,300	S	1,300	600	S
Other physical sciences	S	S	S	S	S
Psychology	30,000	S	11,900	5,200	12,400
Social and related sciences, total	27,500	1,200	13,600	6,800	6,000
Economics	4,300	S	2,600	S	S
Political science and related sciences	9,400	S	4,600	2,500	1,600
Sociology and anthropology	4,300	S	2,400	S	S
Other social sciences	9,500	S	3,900	2,500	3,000
Total engineering	46,700	3,200	23,700	11,400	8,400
Aerospace and related engineering	1,500	S	900	S	S
Chemical engineering	2,300	S	1,400	S	S
Civil and architectural engineering	6,600	S	3,700	1,700	S
Electrical, electronic, computer and communications engineering	16,300	1,100	7,900	4,200	3,100
Industrial engineering	3,600	S	1,300	1,100	1,000
Mechanical engineering	6,800	S	3,900	1,600	S
Other engineering	9,600	S	4,700	2,100	2,200

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-7. Citizenship of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	U.S. citizen			Non-U.S. citizen
		Total	From birth	Naturalized	
All science and engineering fields	743,400	708,800	660,000	48,800	34,700
Total science	628,800	603,800	564,600	39,200	25,000
Computer and information sciences	46,000	42,200	37,700	4,400	3,800
Life and related sciences, total	164,000	157,600	145,200	12,400	6,400
Agricultural and food sciences	15,700	15,300	15,100	S	S
Biological sciences	134,900	128,900	116,900	12,000	6,000
Environmental life sciences including forestry science	13,500	13,400	13,300	S	S
Mathematical and related sciences	23,700	22,300	20,900	S	S
Physical and related sciences, total	36,500	34,400	32,800	1,600	2,100
Chemistry, except biochemistry	20,100	18,400	17,200	1,200	1,600
Earth sciences, geology, and oceanography	8,700	8,600	8,500	S	S
Physics and astronomy	7,200	6,800	6,600	S	S
Other physical sciences	600	S	S	S	S
Psychology	146,700	142,300	134,100	8,100	4,400
Social and related sciences, total	211,800	205,000	193,800	11,200	6,700
Economics	32,700	29,700	26,800	3,000	2,900
Political science and related sciences	71,700	69,800	66,400	3,400	1,900
Sociology and anthropology	69,500	68,300	65,000	3,300	S
Other social sciences	37,900	37,100	35,600	S	S
Total engineering	114,600	105,000	95,400	9,600	9,600
Aerospace and related engineering	2,400	2,100	2,000	S	200
Chemical engineering	12,400	11,400	10,800	S	1,000
Civil and architectural engineering	20,200	19,000	18,000	S	S
Electrical, electronic, computer and communications engineering	34,200	29,600	24,600	5,000	4,600
Industrial engineering	6,000	5,500	5,100	400	500
Mechanical engineering	26,300	24,800	23,000	1,800	S
Other engineering	13,200	12,600	11,900	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.
Degree recipients who did not live in the United States during April 1999 were excluded from the survey.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table A-8. Citizenship of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	U.S. citizen			Non-U.S. citizen
		Total	From birth	Naturalized	
All science and engineering fields	157,000	120,400	108,700	11,700	36,600
Total science	110,400	89,400	82,200	7,200	20,900
Computer and information sciences	20,000	9,600	7,700	1,800	10,400
Life and related sciences, total	16,600	14,700	13,400	1,400	1,800
Agricultural and food sciences	2,300	1,900	1,800	S	S
Biological sciences	11,600	10,400	9,200	S	S
Environmental life sciences including forestry science	2,600	2,500	2,300	S	S
Mathematical and related sciences	7,200	5,100	4,400	S	2,200
Physical and related sciences, total	9,100	7,000	6,500	S	2,100
Chemistry, except biochemistry	3,700	2,300	2,200	S	1,300
Earth sciences, geology, and oceanography	3,000	2,700	2,600	S	S
Physics and astronomy	2,300	1,800	1,600	S	S
Other physical sciences	S	S	S	S	S
Psychology	30,000	29,100	27,400	1,700	S
Social and related sciences, total	27,500	24,000	22,700	1,200	3,600
Economics	4,300	2,600	2,500	S	1,700
Political science and related sciences	9,400	8,600	8,300	S	S
Sociology and anthropology	4,300	4,100	3,800	S	S
Other social sciences	9,500	8,700	8,200	S	S
Total engineering	46,700	31,000	26,500	4,500	15,700
Aerospace and related engineering	1,500	1,100	1,000	S	400
Chemical engineering	2,300	1,600	1,400	S	600
Civil and architectural engineering	6,600	5,200	4,600	S	1,400
Electrical, electronic, computer and communications engineering	16,300	8,700	6,600	2,100	7,600
Industrial engineering	3,600	2,500	2,300	S	1,000
Mechanical engineering	6,800	5,000	4,300	S	1,900
Other engineering	9,600	7,000	6,200	S	2,700

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.
Degree recipients who did not live in the United States during April 1999 were excluded from the survey.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-1. Undergraduate grade point average of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Undergraduate GPA		
		3.25 or higher	2.75 to 3.24	Below 2.75
All science and engineering fields	743,400	383,900	280,700	77,800
Total science	628,800	331,200	233,000	63,600
Computer and information sciences	46,000	22,400	18,800	4,800
Life and related sciences, total	164,000	89,800	59,700	14,500
Agricultural and food sciences	15,700	6,000	7,000	2,700
Biological sciences	134,900	77,500	47,100	10,200
Environmental life sciences including forestry science	13,500	6,300	5,600	S
Mathematical and related sciences	23,700	14,900	6,500	2,300
Physical and related sciences, total	36,500	20,000	13,000	3,500
Chemistry, except biochemistry	20,100	11,500	6,600	2,000
Earth sciences, geology, and oceanography	8,700	3,900	3,800	900
Physics and astronomy	7,200	4,400	2,300	500
Other physical sciences	600	S	S	S
Psychology	146,700	81,700	52,500	12,300
Social and related sciences, total	211,800	102,500	82,400	26,300
Economics	32,700	14,700	13,200	4,600
Political science and related sciences	71,700	37,800	25,100	8,700
Sociology and anthropology	69,500	29,800	31,000	8,500
Other social sciences	37,900	20,100	13,100	4,500
Total engineering	114,600	52,700	47,700	14,200
Aerospace and related engineering	2,400	1,100	900	400
Chemical engineering	12,400	7,200	4,400	800
Civil and architectural engineering	20,200	8,300	9,200	2,800
Electrical, electronic, computer and communications engineering	34,200	17,100	13,300	3,800
Industrial engineering	6,000	1,900	3,000	1,200
Mechanical engineering	26,300	11,600	11,600	3,200
Other engineering	13,200	5,700	5,400	2,100

KEY: GPA=Grade point average.
S=Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and because a small number of graduates reported that their undergraduate courses were ungraded are excluded.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-2. Undergraduate grade point average of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Undergraduate GPA		
		3.25 or higher	2.75 to 3.24	Below 2.75
All science and engineering fields	157,000	102,900	43,700	9,900
Total science	110,400	73,000	30,200	6,900
Computer and information sciences	20,000	14,100	4,700	S
Life and related sciences, total	16,600	9,800	5,600	1,100
Agricultural and food sciences	2,300	S	S	S
Biological sciences	11,600	7,800	3,500	S
Environmental life sciences including forestry science	2,600	S	1,400	S
Mathematical and related sciences	7,200	5,800	1,300	S
Physical and related sciences, total	9,100	6,000	2,600	S
Chemistry, except biochemistry	3,700	2,300	1,200	S
Earth sciences, geology, and oceanography	3,000	1,900	900	S
Physics and astronomy	2,300	1,800	S	S
Other physical sciences	S	S	S	S
Psychology	30,000	19,700	7,800	2,500
Social and related sciences, total	27,500	17,600	8,200	1,600
Economics	4,300	3,400	S	S
Political science and related sciences	9,400	6,300	3,000	S
Sociology and anthropology	4,300	2,700	1,300	S
Other social sciences	9,500	5,200	3,100	S
Total engineering	46,700	29,900	13,400	3,000
Aerospace and related engineering	1,500	1,000	400	S
Chemical engineering	2,300	1,500	700	S
Civil and architectural engineering	6,600	3,700	2,400	S
Electrical, electronic, computer and communications engineering	16,300	11,400	3,900	S
Industrial engineering	3,600	1,800	1,400	S
Mechanical engineering	6,800	4,900	1,600	S
Other engineering	9,600	5,700	2,900	1,100

KEY: S =GPA=Grade point average.
Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and because a small number of graduates reported that their undergraduate courses were ungraded are excluded.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-3. Science and engineering bachelor's degree recipients in 1997 and 1998 who attended community colleges and earned associate's degrees, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Community college		Associate's degree	
		Number attended community college	Percent attended community college	Number with associate's degree	Percent with associate's degree
All science and engineering fields	743,400	316,300	43	104,100	14
Total science	628,800	269,000	43	91,900	15
Computer and information sciences	46,000	20,100	44	8,200	18
Life and related sciences, total	164,000	70,000	43	18,700	11
Agricultural and food sciences	15,700	8,200	52	2,600	17
Biological sciences	134,900	56,700	42	14,100	10
Environmental life sciences including forestry science	13,500	5,100	38	S	S
Mathematical and related sciences	23,700	8,800	37	2,400	10
Physical and related sciences, total	36,500	13,100	36	3,800	10
Chemistry, except biochemistry	20,100	7,500	37	2,300	11
Earth sciences, geology, and oceanography	8,700	3,200	37	900	10
Physics and astronomy	7,200	2,300	32	500	7
Other physical sciences	600	S	S	S	S
Psychology	146,700	72,700	50	30,200	21
Social and related sciences, total	211,800	84,300	40	28,600	14
Economics	32,700	10,600	32	2,600	8
Political science and related sciences	71,700	23,300	32	5,900	8
Sociology and anthropology	69,500	34,500	50	13,200	19
Other social sciences	37,900	15,900	42	6,900	18
Total engineering	114,600	47,400	41	12,200	11
Aerospace and related engineering	2,400	800	33	S	S
Chemical engineering	12,400	3,900	31	S	S
Civil and architectural engineering	20,200	8,300	41	1,800	9
Electrical, electronic, computer and communications engineering	34,200	16,500	48	5,400	16
Industrial engineering	6,000	2,300	38	600	10
Mechanical engineering	26,300	10,800	41	2,700	10
Other engineering	13,200	4,800	36	900	7

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-4. Science and engineering master's degree recipients in 1997 and 1998 who attended community colleges and earned associate's degrees, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Community college		Associate's degree	
		Number attended community college	Percent attended community college	Number with associate's degree	Percent with associate's degree
All science and engineering fields	157,000	54,600	35	16,400	10
Total science	110,400	41,800	38	12,400	11
Computer and information sciences	20,000	5,300	27	1,700	9
Life and related sciences, total	16,600	7,300	44	S	S
Agricultural and food sciences	2,300	S	S	S	S
Biological sciences	11,600	5,300	46	S	S
Environmental life sciences including forestry science	2,600	1,200	46	S	S
Mathematical and related sciences	7,200	2,300	32	S	S
Physical and related sciences, total	9,100	2,900	32	800	9
Chemistry, except biochemistry	3,700	1,100	30	S	S
Earth sciences, geology, and oceanography	3,000	1,100	37	S	S
Physics and astronomy	2,300	S	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	30,000	13,700	46	5,500	18
Social and related sciences, total	27,500	10,300	37	2,800	10
Economics	4,300	1,600	37	S	S
Political science and related sciences	9,400	2,500	27	S	S
Sociology and anthropology	4,300	1,900	44	S	S
Other social sciences	9,500	4,300	45	S	S
Total engineering	46,700	12,800	27	4,000	9
Aerospace and related engineering	1,500	300	20	S	S
Chemical engineering	2,300	S	S	S	S
Civil and architectural engineering	6,600	2,000	30	S	S
Electrical, electronic, computer and communications engineering	16,300	4,600	28	1,400	9
Industrial engineering	3,600	1,200	33	S	S
Mechanical engineering	6,800	1,600	24	S	S
Other engineering	9,600	2,600	27	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-5. Sources of financial support for science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Sources of support							
		Earnings from employ-ment	Gifts from parents/ relatives	Scholar-ships, grants, fellowships	Loans from college, bank, govern-ment	Assistant-ships, work study	Employer assistance	Loans from parents or relatives	Other sources
All science and engineering fields	743,400	462,800	516,000	445,900	421,200	205,200	61,400	58,300	13,900
Total science	628,800	384,100	437,200	371,700	357,700	173,800	49,200	47,400	11,800
Computer and information sciences	46,000	29,300	26,100	26,600	25,500	15,100	7,400	S	S
Life and related sciences, total	164,000	98,900	123,100	106,100	85,800	45,400	8,900	11,800	3,600
Agricultural and food sciences	15,700	11,400	10,500	10,700	8,600	3,300	S	S	S
Biological sciences	134,900	78,900	102,400	87,900	70,000	37,800	6,500	10,300	S
Environmental life sciences including forestry science	13,500	8,600	10,200	7,500	7,100	4,300	S	S	S
Mathematical and related sciences	23,700	15,000	15,700	15,500	13,700	6,600	2,200	1,700	S
Physical and related sciences, total	36,500	23,600	26,600	24,600	21,500	12,100	3,000	2,400	S
Chemistry, except biochemistry	20,100	12,200	14,700	13,800	12,000	6,500	1,300	S	S
Earth sciences, geology, and oceanography	8,700	6,200	6,700	5,000	5,100	2,800	800	600	S
Physics and astronomy	7,200	4,800	4,900	5,400	4,100	2,600	800	600	S
Other physical sciences	600	S	S	S	S	S	S	S	S
Psychology	146,700	86,900	96,700	80,400	87,100	34,800	12,200	9,900	S
Social and related sciences, total	211,800	130,400	149,000	118,500	124,100	59,800	15,500	18,800	3,300
Economics	32,700	18,000	25,200	18,600	17,000	9,100	S	3,100	S
Political science and related sciences	71,700	44,300	54,200	43,700	39,800	20,900	5,100	6,400	S
Sociology and anthropology	69,500	44,300	44,300	35,200	44,200	20,500	5,200	5,700	S
Other social sciences	37,900	23,900	25,400	21,100	23,100	9,300	3,500	3,500	S
Total engineering	114,600	78,700	78,800	74,100	63,600	31,400	12,300	10,900	2,100
Aerospace and related engineering	2,400	1,500	1,700	1,700	1,200	500	300	200	S
Chemical engineering	12,400	8,600	8,600	10,000	6,700	4,000	S	800	S
Civil and architectural engineering	20,200	14,500	13,900	12,100	10,500	4,500	1,600	1,500	S
Electrical, electronic, computer and communications engineering	34,200	22,700	22,300	22,700	19,800	10,600	5,100	3,500	S
Industrial engineering	6,000	4,200	4,500	3,300	3,500	1,400	S	600	S
Mechanical engineering	26,300	18,500	18,100	15,200	14,800	6,600	3,100	3,300	S
Other engineering	13,200	8,700	9,700	9,200	7,100	3,800	1,200	1,100	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: For the columns, details may not add to totals because of rounding.
Respondents may have multiple sources of support. Therefore, details in the rows may sum to more than "Total recipients."
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-6. Sources of financial support for science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Sources of support							
		Earnings from employ-ment	Gifts from parents/ relatives	Scholar-ships, grants, fellowships	Loans from college, bank, govern-ment	Assistant-ships, work study	Employer assistance	Loans from parents or relatives	Other sources
All science and engineering fields	157,000	83,900	52,900	86,000	54,800	74,200	41,800	7,400	3,800
Total science	110,400	62,200	38,800	60,000	45,700	52,000	24,100	5,100	3,100
Computer and information sciences	20,000	9,900	6,600	9,000	3,000	9,600	7,000	S	S
Life and related sciences, total	16,600	9,000	6,600	9,000	6,700	7,900	3,300	S	S
Agricultural and food sciences	2,300	1,400	1,200	1,700	S	1,600	S	S	S
Biological sciences	11,600	5,800	4,700	6,300	4,900	5,400	2,300	S	S
Environmental life sciences including forestry science	2,600	1,800	S	S	1,200	S	S	S	S
Mathematical and related sciences	7,200	3,100	1,900	4,900	1,900	4,700	1,700	S	S
Physical and related sciences, total	9,100	4,000	2,200	6,800	2,500	6,000	2,400	S	S
Chemistry, except biochemistry	3,700	1,300	900	2,800	800	2,300	1,100	S	S
Earth sciences, geology, and oceanography	3,000	1,600	900	2,200	1,000	2,000	600	S	S
Physics and astronomy	2,300	1,100	S	1,800	600	1,600	600	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S
Psychology	30,000	19,000	11,700	12,700	17,200	10,700	5,500	S	S
Social and related sciences, total	27,500	17,200	9,700	17,500	14,300	13,200	4,100	1,800	S
Economics	4,300	2,200	1,600	2,900	1,500	2,200	S	S	S
Political science and related sciences	9,400	5,800	3,400	6,200	4,800	4,000	1,400	S	S
Sociology and anthropology	4,300	3,200	1,700	2,900	3,000	2,800	S	S	S
Other social sciences	9,500	6,000	3,100	5,500	5,000	4,100	S	S	S
Total engineering	46,700	21,700	14,100	26,000	9,100	22,200	17,700	2,300	800
Aerospace and related engineering	1,500	600	400	700	300	600	700	S	S
Chemical engineering	2,300	1,000	600	1,500	600	1,300	600	S	S
Civil and architectural engineering	6,600	3,900	2,200	4,100	2,100	3,300	2,000	S	S
Electrical, electronic, computer and communications engineering	16,300	6,900	4,900	8,700	3,400	7,800	6,000	1,200	S
Industrial engineering	3,600	1,800	1,100	1,200	S	1,300	1,500	S	S
Mechanical engineering	6,800	3,000	2,200	4,500	1,000	3,800	2,600	S	S
Other engineering	9,600	4,500	2,700	5,400	1,200	4,100	4,400	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: For the columns, details may not add to totals because of rounding.
Respondents may have multiple sources of support. Therefore, details in the rows may sum to more than "Total recipients."
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-7. Amount borrowed for undergraduate education among science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Undergraduate loan amount[1]			
		Did not borrow	$1-$9,999	$10,000-$24,999	$25,000 or more
All science and engineering fields	743,400	296,000	92,000	224,400	131,100
Total science	628,800	250,200	79,300	190,400	108,900
Computer and information sciences	46,000	18,600	7,700	12,200	7,600
Life and related sciences, total	164,000	72,100	16,700	48,500	26,800
Agricultural and food sciences	15,700	6,600	2,100	5,000	2,000
Biological sciences	134,900	59,400	13,300	39,300	22,900
Environmental life sciences including forestry science	13,500	6,100	S	4,200	S
Mathematical and related sciences	23,700	9,200	3,400	6,700	4,300
Physical and related sciences, total	36,500	14,000	5,200	11,000	6,300
Chemistry, except biochemistry	20,100	7,600	2,900	6,100	3,400
Earth sciences, geology, and oceanography	8,700	3,300	1,400	2,600	1,400
Physics and astronomy	7,200	2,800	900	2,000	1,400
Other physical sciences	600	S	S	S	S
Psychology	146,700	55,200	18,600	46,300	26,500
Social and related sciences, total	211,800	81,000	27,700	65,700	37,400
Economics	32,700	14,300	3,800	9,000	5,600
Political science and related sciences	71,700	29,200	8,900	21,200	12,300
Sociology and anthropology	69,500	23,700	9,100	23,800	12,900
Other social sciences	37,900	13,800	5,900	11,700	6,600
Total engineering	114,600	45,800	12,700	34,000	22,200
Aerospace and related engineering	2,400	1,100	300	600	400
Chemical engineering	12,400	5,200	1,200	3,800	2,100
Civil and architectural engineering	20,200	9,100	2,200	5,600	3,300
Electrical, electronic, computer and communications engineering	34,200	12,500	3,900	10,900	6,900
Industrial engineering	6,000	2,200	500	2,200	1,000
Mechanical engineering	26,300	10,100	3,100	7,400	5,700
Other engineering	13,200	5,500	1,600	3,400	2,700

[1] Undergraduate loan amount represents the entire amount borrowed during their undergraduate education.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-8. Amount borrowed for undergraduate and graduate education among science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Undergraduate and graduate loan amount[1]			
		Did not borrow	$1-$9,999	$10,000-$24,999	$25,000 or more
All science and engineering fields	157,000	69,200	20,100	30,800	36,900
Total science	110,400	43,400	14,200	22,500	30,300
Computer and information sciences	20,000	12,400	2,800	2,800	2,000
Life and related sciences, total	16,600	6,900	2,600	2,700	4,400
Agricultural and food sciences	2,300	S	S	S	S
Biological sciences	11,600	4,700	1,800	1,700	3,400
Environmental life sciences including forestry science	2,600	S	S	S	S
Mathematical and related sciences	7,200	3,500	1,000	1,900	800
Physical and related sciences, total	9,100	4,200	1,300	1,900	1,700
Chemistry, except biochemistry	3,700	2,000	S	S	S
Earth sciences, geology, and oceanography	3,000	1,100	S	900	S
Physics and astronomy	2,300	1,100	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	30,000	8,700	2,900	6,400	12,100
Social and related sciences, total	27,500	7,700	3,600	6,900	9,400
Economics	4,300	2,100	S	S	S
Political science and related sciences	9,400	2,200	1,400	2,000	3,800
Sociology and anthropology	4,300	S	S	1,800	1,600
Other social sciences	9,500	2,800	1,400	2,400	2,900
Total engineering	46,700	25,800	6,000	8,300	6,600
Aerospace and related engineering	1,500	900	S	S	300
Chemical engineering	2,300	1,200	S	500	S
Civil and architectural engineering	6,600	2,800	1,200	1,300	1,300
Electrical, electronic, computer and communications engineering	16,300	8,900	2,200	2,700	2,400
Industrial engineering	3,600	2,100	S	800	S
Mechanical engineering	6,800	4,100	S	1,400	S
Other engineering	9,600	5,800	1,200	1,500	1,200

[1] Undergraduate and graduate loan amount represents the entire amount borrowed for undergraduate and graduate degrees completed as of the reference date of the survey.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-9. Amount owed for undergraduate loans among science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Amount owed[1]			
		Did not owe	$1-$9,999	$10,000-$24,999	$25,000 or more
All science and engineering fields	743,400	352,000	119,200	207,600	64,700
Total science	628,800	297,200	100,900	175,400	55,300
Computer and information sciences	46,000	23,600	9,500	10,300	2,600
Life and related sciences, total	164,000	83,200	22,100	45,500	13,200
Agricultural and food sciences	15,700	7,700	3,100	3,800	S
Biological sciences	134,900	68,800	17,500	37,200	11,400
Environmental life sciences including forestry science	13,500	6,700	S	4,600	S
Mathematical and related sciences	23,700	11,000	3,800	6,300	2,700
Physical and related sciences, total	36,500	16,600	6,600	10,200	3,100
Chemistry, except biochemistry	20,100	9,000	3,800	5,600	1,600
Earth sciences, geology, and oceanography	8,700	4,100	1,600	2,400	700
Physics and astronomy	7,200	3,100	1,100	2,100	800
Other physical sciences	600	S	S	S	S
Psychology	146,700	65,600	24,100	43,100	14,000
Social and related sciences, total	211,800	97,200	34,900	59,900	19,700
Economics	32,700	17,700	4,500	7,100	3,500
Political science and related sciences	71,700	33,300	10,600	20,900	6,900
Sociology and anthropology	69,500	28,500	13,300	21,500	6,200
Other social sciences	37,900	17,800	6,500	10,500	3,100
Total engineering	114,600	54,800	18,300	32,200	9,300
Aerospace and related engineering	2,400	1,200	400	600	200
Chemical engineering	12,400	5,900	2,100	3,200	1,100
Civil and architectural engineering	20,200	10,300	2,800	5,300	1,800
Electrical, electronic, computer and communications engineering	34,200	15,300	5,800	10,800	2,200
Industrial engineering	6,000	2,600	900	2,000	500
Mechanical engineering	26,300	12,800	4,400	6,800	2,300
Other engineering	13,200	6,600	1,800	3,400	1,300

[1] The amount owed represents the amount of outstanding undergraduate debt the respondent reported on the reference date of the survey.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-10. Amount owed for undergraduate and graduate loans among science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Amount owed[1]			
		Did not owe	$1-$9,999	$10,000-$24,999	$25,000 or more
All science and engineering fields	157,000	94,500	17,300	21,200	24,100
Total science	110,400	59,700	12,800	16,900	21,000
Computer and information sciences	20,000	16,200	1,500	1,600	S
Life and related sciences, total	16,600	9,500	2,300	1,800	3,000
Agricultural and food sciences	2,300	1,600	S	S	S
Biological sciences	11,600	6,500	1,500	1,400	2,300
Environmental life sciences including forestry science	2,600	1,400	S	S	S
Mathematical and related sciences	7,200	4,700	S	1,000	S
Physical and related sciences, total	9,100	5,400	1,300	1,300	1,100
Chemistry, except biochemistry	3,700	2,400	S	S	S
Earth sciences, geology, and oceanography	3,000	1,600	600	S	S
Physics and astronomy	2,300	1,400	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	30,000	12,300	3,000	6,000	8,700
Social and related sciences, total	27,500	11,700	3,700	5,200	7,000
Economics	4,300	2,700	S	S	S
Political science and related sciences	9,400	3,800	S	1,700	3,000
Sociology and anthropology	4,300	1,000	S	1,300	1,100
Other social sciences	9,500	4,200	1,600	1,700	2,100
Total engineering	46,700	34,800	4,500	4,300	3,000
Aerospace and related engineering	1,500	1,000	S	S	S
Chemical engineering	2,300	1,600	S	S	S
Civil and architectural engineering	6,600	4,400	1,000	S	S
Electrical, electronic, computer and communications engineering	16,300	12,200	1,500	1,800	S
Industrial engineering	3,600	2,800	S	S	S
Mechanical engineering	6,800	5,100	S	S	S
Other engineering	9,600	7,700	S	800	S

[1] The amount owed represents the amount of outstanding debt for undergraduate and graduate degrees as of the reference date of the survey.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-11. Science and engineering bachelor's degree recipients in 1997 and 1998 who have taken college courses since most recent degree and enrollment status, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Have taken additional college courses since most recent degree[1]	Enrollment status[2]		
			Full-time student	Part-time student	Not student
All science and engineering fields	743,400	332,100	165,500	59,500	518,500
Total science	628,800	292,500	150,800	50,600	427,400
Computer and information sciences	46,000	10,100	S	S	41,300
Life and related sciences, total	164,000	90,600	54,300	10,600	99,200
Agricultural and food sciences	15,700	5,200	3,200	S	12,000
Biological sciences	134,900	80,000	48,800	9,500	76,600
Environmental life sciences including forestry sciences	13,500	5,500	2,300	S	10,600
Mathematical and related sciences	23,700	11,200	4,800	1,800	17,100
Physical and related sciences, total	36,500	20,000	12,600	2,500	21,500
Chemistry, except biochemistry	20,100	12,000	7,900	S	10,900
Earth sciences, geology, and oceanography	8,700	3,400	1,900	S	6,300
Physics and astronomy	7,200	4,400	2,600	600	3,900
Other physical sciences	600	S	S	S	S
Psychology	146,700	76,700	34,400	18,000	94,200
Social and related sciences, total	211,800	83,800	42,400	15,200	154,200
Economics	32,700	8,900	4,900	S	26,500
Political science and related sciences	71,700	33,400	20,500	4,800	46,400
Sociology and anthropology	69,500	26,500	11,700	5,500	52,300
Other social sciences	37,900	15,000	5,300	3,600	29,000
Total engineering	114,600	39,600	14,600	8,900	91,100
Aerospace and related engineering	2,400	900	500	300	1,600
Chemical engineering	12,400	4,400	1,900	S	9,800
Civil and architectural engineering	20,200	6,000	2,500	S	16,800
Electrical, electronic, computer and communications engineering	34,200	13,000	4,000	3,600	26,700
Industrial engineering	6,000	1,600	400	S	5,300
Mechanical engineering	26,300	8,800	2,600	2,400	21,300
Other engineering	13,200	4,900	2,700	1,000	9,500

[1] Most recent degree as of the survey reference period, April 1999.

[2] Enrollment status on April 15, 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-12. Science and engineering master's degree recipients in 1997 and 1998 who have taken college courses since most recent degree and enrollment status, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Have taken additional college courses since most recent degree[1]	Enrollment status[2]		
			Full-time student	Part-time student	Not student
All science and engineering fields	157,000	61,000	32,100	8,800	116,100
Total science	110,400	44,000	24,300	5,800	80,300
Computer and information sciences	20,000	4,800	1,600	S	17,800
Life and related sciences, total	16,600	7,500	4,900	S	10,600
Agricultural and food sciences	2,300	S	S	S	1,700
Biological sciences	11,600	6,000	4,300	S	6,700
Environmental life sciences including forestry sciences	2,600	S	S	S	2,200
Mathematical and related sciences	7,200	3,400	1,800	S	5,000
Physical and related sciences, total	9,100	4,400	2,900	S	5,800
Chemistry, except biochemistry	3,700	1,900	1,200	S	2,300
Earth sciences, geology, and oceanography	3,000	1,100	600	S	2,300
Physics and astronomy	2,300	1,400	1,100	S	1,100
Other physical sciences	S	S	S	S	S
Psychology	30,000	12,000	6,900	1,700	21,400
Social and related sciences, total	27,500	12,000	6,200	1,700	19,600
Economics	4,300	2,400	1,300	S	2,900
Political science and related sciences	9,400	3,300	1,900	S	6,900
Sociology and anthropology	4,300	2,500	1,400	S	2,300
Other social sciences	9,500	3,800	1,500	S	7,500
Total engineering	46,700	17,000	7,900	3,000	35,800
Aerospace and related engineering	1,500	600	400	S	1,000
Chemical engineering	2,300	900	500	S	1,600
Civil and architectural engineering	6,600	1,600	S	S	5,600
Electrical, electronic, computer and communications engineering	16,300	6,300	2,400	1,200	12,700
Industrial engineering	3,600	900	S	S	2,900
Mechanical engineering	6,800	3,000	1,100	800	4,900
Other engineering	9,600	3,700	2,000	S	7,000

[1] Most recent degree as of the survey reference period, April 1999.

[2] Enrollment status on April 15, 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-13. Science and engineering bachelor's degree recipients in 1997 and 1998 who have not taken college courses since most recent degree and likelihood of taking additional courses, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total number not taking college courses since most recent degree[1]	Likelihood will take college courses		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	411,400	279,400	99,000	33,000
Total science	336,300	232,000	77,500	26,900
Computer and information sciences	35,900	21,400	10,600	3,900
Life and related sciences, total	73,400	50,700	16,800	6,000
Agricultural and food sciences	10,500	4,500	3,800	2,200
Biological sciences	54,900	40,600	10,900	3,400
Environmental life sciences including forestry sciences	8,000	5,600	S	S
Mathematical and related sciences	12,500	8,300	3,400	S
Physical and related sciences, total	16,500	10,900	4,500	1,100
Chemistry, except biochemistry	8,100	5,500	2,200	S
Earth sciences, geology, and oceanography	5,300	3,200	1,600	S
Physics and astronomy	2,800	1,900	800	S
Other physical sciences	S	S	S	S
Psychology	70,000	50,200	14,900	4,900
Social and related sciences, total	127,900	90,500	27,300	10,100
Economics	23,800	16,200	6,200	S
Political science and related sciences	38,300	30,000	6,500	S
Sociology and anthropology	43,000	27,600	9,800	5,500
Other social sciences	22,900	16,700	4,800	S
Total engineering	75,000	47,500	21,400	6,100
Aerospace and related engineering	1,400	1,100	300	S
Chemical engineering	8,000	5,700	1,800	S
Civil and architectural engineering	14,200	7,300	5,100	1,800
Electrical, electronic, computer and communications engineering	21,200	13,700	5,900	S
Industrial engineering	4,400	2,900	1,300	S
Mechanical engineering	17,500	11,800	4,800	S
Other engineering	8,200	4,900	2,300	1,000

[1] Most recent degree as of the survey reference period, April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-14. Science and engineering master's degree recipients in 1997 and 1998 who have not taken college courses since most recent degree and likelihood of taking additional courses, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total number not taking college courses since most recent degree[1]	Likelihood will take college courses		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	96,000	49,800	32,000	14,300
Total science	66,300	35,300	21,300	9,800
Computer and information sciences	15,200	6,500	5,800	2,800
Life and related sciences, total	9,100	4,500	2,700	1,900
Agricultural and food sciences	1,500	S	S	S
Biological sciences	5,600	3,100	1,500	S
Environmental life sciences including forestry sciences	1,900	S	S	S
Mathematical and related sciences	3,900	1,900	1,200	S
Physical and related sciences, total	4,700	2,500	1,300	800
Chemistry, except biochemistry	1,800	1,000	S	S
Earth sciences, geology, and oceanography	1,900	1,000	600	S
Physics and astronomy	900	S	S	S
Other physical sciences	S	S	S	S
Psychology	18,000	11,100	5,200	1,800
Social and related sciences, total	15,500	8,700	5,200	1,600
Economics	2,000	S	S	S
Political science and related sciences	6,100	3,000	2,300	S
Sociology and anthropology	1,700	1,100	S	S
Other social sciences	5,700	3,600	1,600	S
Total engineering	29,700	14,500	10,700	4,500
Aerospace and related engineering	900	600	S	S
Chemical engineering	1,300	500	500	S
Civil and architectural engineering	5,000	1,600	2,300	S
Electrical, electronic, computer and communications engineering	10,000	5,400	3,100	1,500
Industrial engineering	2,700	1,500	800	S
Mechanical engineering	3,900	1,800	1,700	S
Other engineering	5,900	3,200	2,000	S

[1] Most recent degree as of the survey reference period, April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-15. Science and engineering bachelor's degree recipients in 1997 and 1998 who have taken college courses since most recent degree, by type of degree or certificate sought and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Took college courses between completing most recent degree and week of April 15, 1999[1]				
		Total number	Type of degree or certificate sought			
			Ph.D. or prof. degree	Master's degree	Other degree or certificate	No degree or certificate
All science and engineering fields	743,400	300,300	78,000	142,800	39,900	39,600
Total science	628,800	266,500	73,900	118,900	38,700	35,000
Computer and information sciences	46,000	8,700	S	5,200	S	S
Life and related sciences, total	164,000	84,500	32,000	26,900	11,600	14,000
Agricultural and food sciences	15,700	4,700	S	2,200	S	S
Biological sciences	134,900	74,600	29,800	22,400	10,500	11,900
Environmental life sciences including forestry science	13,500	5,100	S	2,300	S	S
Mathematical and related sciences	23,700	9,600	1,400	5,300	S	S
Physical and related sciences, total	36,500	18,400	7,600	7,100	2,300	1,500
Chemistry, except biochemistry	20,100	11,000	5,900	3,000	1,400	S
Earth sciences, geology, and oceanography	8,700	3,100	S	2,000	S	S
Physics and astronomy	7,200	4,100	1,300	2,000	S	S
Other physical sciences	600	S	S	S	S	S
Psychology	146,700	68,500	7,800	40,900	11,800	8,000
Social and related sciences, total	211,800	76,700	24,500	33,400	11,200	7,700
Economics	32,700	8,600	2,600	4,200	S	S
Political science and related sciences	71,700	30,400	15,500	9,300	3,700	S
Sociology and anthropology	69,500	24,400	4,600	13,600	3,800	S
Other social sciences	37,900	13,300	S	6,400	3,000	S
Total engineering	114,600	33,800	4,100	23,900	1,200	4,600
Aerospace and related engineering	2,400	900	S	700	S	S
Chemical engineering	12,400	3,600	1,400	1,500	S	S
Civil and architectural engineering	20,200	5,300	S	3,900	S	S
Electrical, electronic, computer and communications engineering	34,200	11,200	S	9,000	S	S
Industrial engineering	6,000	1,200	S	900	S	S
Mechanical engineering	26,300	7,100	S	5,200	S	S
Other engineering	13,200	4,500	1,000	2,700	S	S

[1] Most recent degree as of the survey reference period, April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-16. Science and engineering master's degree recipients in 1997 and 1998 who have taken college courses since most recent degree, by type of degree or certificate sought and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Took college courses between completing most recent degree and week of April 15, 1999[1]				
		Total number	Type of degree or certificate sought			
			Ph.D. or prof. degree	Master's degree	Other degree or certificate	No degree or certificate
All science and engineering fields	157,000	56,800	36,300	5,800	5,400	9,400
Total science	110,400	41,300	27,200	3,400	4,900	5,700
Computer and information sciences	20,000	4,200	2,400	S	S	S
Life and related sciences, total	16,600	7,200	4,900	S	S	S
Agricultural and food sciences	2,300	S	S	S	S	S
Biological sciences	11,600	5,700	4,100	S	S	S
Environmental life sciences including forestry science	2,600	S	S	S	S	S
Mathematical and related sciences	7,200	3,100	2,300	S	S	S
Physical and related sciences, total	9,100	4,300	3,200	S	S	S
Chemistry, except biochemistry	3,700	1,900	1,300	S	S	S
Earth sciences, geology, and oceanography	3,000	1,100	700	S	S	S
Physics and astronomy	2,300	1,300	1,200	S	S	S
Other physical sciences	S	S	S	S	S	S
Psychology	30,000	11,600	7,600	S	2,200	S
Social and related sciences, total	27,500	11,000	6,800	S	S	1,900
Economics	4,300	2,100	1,400	S	S	S
Political science and related sciences	9,400	3,000	2,000	S	S	S
Sociology and anthropology	4,300	2,500	1,800	S	S	S
Other social sciences	9,500	3,300	1,600	S	S	S
Total engineering	46,700	15,500	9,000	2,400	S	3,700
Aerospace and related engineering	1,500	600	400	S	S	S
Chemical engineering	2,300	900	600	S	S	S
Civil and architectural engineering	6,600	1,400	S	S	S	S
Electrical, electronic, computer and communications engineering	16,300	5,700	3,100	S	S	1,700
Industrial engineering	3,600	900	S	S	S	S
Mechanical engineering	6,800	2,700	1,500	S	S	S
Other engineering	9,600	3,400	2,100	S	S	S

[1] Most recent degree as of the survey reference period, April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-17. Future plans for highest degree expected among science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Future plans for highest degree expected			
		Bachelor's degree	Master's degree	Doctorate	Professional
All science and engineering fields	743,400	55,700	401,900	191,200	91,500
Total science	628,800	46,000	319,900	171,400	88,800
Computer and information sciences	46,000	6,000	29,700	9,700	S
Life and related sciences, total	164,000	11,400	66,600	45,700	39,000
Agricultural and food sciences	15,700	3,700	7,700	2,800	S
Biological sciences	134,900	6,300	51,000	40,000	36,400
Environmental life sciences including forestry science	13,500	S	7,900	2,800	S
Mathematical and related sciences	23,700	2,100	14,400	6,400	S
Physical and related sciences, total	36,500	2,200	16,300	14,200	3,800
Chemistry, except biochemistry	20,100	S	8,000	7,600	3,400
Earth sciences, geology, and oceanography	8,700	900	5,100	2,500	S
Physics and astronomy	7,200	S	2,900	3,900	S
Other physical sciences	600	S	S	S	S
Psychology	146,700	7,400	77,500	50,900	10,600
Social and related sciences, total	211,800	16,900	115,300	44,500	34,400
Economics	32,700	S	22,900	4,400	3,000
Political science and related sciences	71,700	3,300	30,800	15,100	22,000
Sociology and anthropology	69,500	8,400	38,300	16,500	6,300
Other social sciences	37,900	2,900	23,300	8,600	3,100
Total engineering	114,600	9,800	82,100	19,800	2,700
Aerospace and related engineering	2,400	S	1,600	700	S
Chemical engineering	12,400	1,000	7,700	2,900	800
Civil and architectural engineering	20,200	2,800	14,700	2,300	S
Electrical, electronic, computer and communications engineering	34,200	2,300	24,600	6,900	S
Industrial engineering	6,000	S	4,800	900	S
Mechanical engineering	26,300	2,200	20,100	3,400	S
Other engineering	13,200	1,100	8,700	2,700	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and because a small number of graduates who reported their highest expected degree as "other" are excluded.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table B-18. Future plans for highest degree expected among science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Future plans by highest degree expected		
		Master's degree	Doctorate	Professional
All science and engineering fields	157,000	61,600	88,000	6,700
Total science	110,400	38,700	64,900	6,100
Computer and information sciences	20,000	10,100	9,800	S
Life and related sciences, total	16,600	6,300	7,200	3,100
Agricultural and food sciences	2,300	1,300	S	S
Biological sciences	11,600	3,800	5,000	2,800
Environmental life sciences including forestry science	2,600	1,200	1,200	S
Mathematical and related sciences	7,200	2,600	4,500	S
Physical and related sciences, total	9,100	2,700	5,800	S
Chemistry, except biochemistry	3,700	900	2,400	S
Earth sciences, geology, and oceanography	3,000	1,200	1,700	S
Physics and astronomy	2,300	S	1,700	S
Other physical sciences	S	S	S	S
Psychology	30,000	8,400	20,700	S
Social and related sciences, total	27,500	8,600	16,900	2,000
Economics	4,300	1,500	2,700	S
Political science and related sciences	9,400	3,600	4,600	1,200
Sociology and anthropology	4,300	S	3,500	S
Other social sciences	9,500	2,900	6,100	S
Total engineering	46,700	22,800	23,100	S
Aerospace and related engineering	1,500	500	1,000	S
Chemical engineering	2,300	1,300	1,000	S
Civil and architectural engineering	6,600	4,100	2,400	S
Electrical, electronic, computer and communications engineering	16,300	7,500	8,500	S
Industrial engineering	3,600	1,700	1,800	S
Mechanical engineering	6,800	3,200	3,500	S
Other engineering	9,600	4,600	4,800	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and because a small number of graduates who reported their highest expected degree as "other" are excluded.

These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-1. Selected employment characteristics of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Employed					
		Total employed	Counting all jobs[1]		Principal job only[2]		Have a second job
			Full time	Part time	Full time	Part time	
All science and engineering fields	743,400	625,600	536,700	88,900	527,400	98,200	69,800
Total science	628,800	519,000	437,900	81,100	429,000	90,000	65,300
Computer and information sciences	46,000	43,300	41,900	S	41,600	S	2,900
Life and related sciences, total	164,000	121,300	101,700	19,600	99,400	21,900	16,700
Agricultural and food sciences	15,700	13,300	12,100	S	11,900	S	2,600
Biological sciences	134,900	96,200	79,600	16,600	77,700	18,500	13,100
Environmental life sciences including forestry science	13,500	11,800	9,900	S	9,800	1,900	S
Mathematical and related sciences	23,700	21,300	17,900	3,300	17,300	4,000	2,300
Physical and related sciences, total	36,500	30,900	25,200	5,700	24,800	6,100	3,600
Chemistry, except biochemistry	20,100	15,800	13,600	2,300	13,400	2,400	1,800
Earth sciences, geology, and oceanography	8,700	8,200	6,700	1,400	6,600	1,600	800
Physics and astronomy	7,200	6,400	4,600	1,800	4,500	1,900	800
Other physical sciences	600	S	S	S	S	S	S
Psychology	146,700	123,800	96,000	27,800	92,800	31,000	18,700
Social and related sciences, total	211,800	178,400	155,300	23,100	153,200	25,200	21,000
Economics	32,700	28,700	25,700	2,900	25,400	3,300	S
Political science and related sciences	71,700	55,300	46,900	8,500	46,500	8,800	5,100
Sociology and anthropology	69,500	61,300	53,600	7,700	53,100	8,200	9,000
Other social sciences	37,900	33,100	29,100	4,000	28,200	5,000	4,900
Total engineering	114,600	106,600	98,700	7,900	98,400	8,200	4,500
Aerospace and related engineering	2,400	2,100	1,900	300	1,800	300	S
Chemical engineering	12,400	11,100	10,600	S	10,600	S	S
Civil and architectural engineering	20,200	18,900	17,400	1,500	17,200	1,700	S
Electrical, electronic, computer and communications engineering	34,200	32,400	30,100	2,200	30,100	2,200	S
Industrial engineering	6,000	5,400	5,200	S	5,200	S	S
Mechanical engineering	26,300	24,700	23,000	1,700	22,900	1,800	S
Other engineering	13,200	12,000	10,600	1,400	10,600	1,500	S

[1] The "counting all jobs" category is based on whether the graduate's typical work week was 35 or more hours counting all jobs held during the reference week. Employed graduates who worked 35 or more hours per week counting all jobs are classified as full time and all other employed graduates are classified as part time.

[2] The "principal job only" category is based on the number of hours usually worked during a typical week on the principal job. Employed graduates who worked 35 or more hours per week on the principal job are classified as full time and all other employed graduates are classified as part time.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-2. Selected employment characteristics of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Employed					
		Total employed	Counting all jobs[1]		Principal job only[2]		Have a second job
			Full time	Part time	Full time	Part time	
All science and engineering fields	157,000	139,200	123,300	15,800	120,600	18,600	15,700
Total science	110,400	96,800	83,700	13,100	81,100	15,700	13,700
Computer and information sciences	20,000	19,200	18,400	S	18,400	S	S
Life and related sciences, total	16,600	13,000	11,900	S	11,500	1,500	1,900
Agricultural and food sciences	2,300	2,100	1,900	S	1,700	S	S
Biological sciences	11,600	8,400	7,700	S	7,500	S	1,300
Environmental life sciences including forestry science	2,600	2,500	2,400	S	2,300	S	S
Mathematical and related sciences	7,200	6,200	4,900	1,300	4,800	1,400	S
Physical and related sciences, total	9,100	7,700	6,900	900	6,700	1,100	1,000
Chemistry, except biochemistry	3,700	3,000	2,700	S	2,600	S	S
Earth sciences, geology, and oceanography	3,000	2,700	2,500	S	2,500	S	S
Physics and astronomy	2,300	1,900	1,600	S	1,500	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	30,000	25,900	21,100	4,800	20,500	5,400	5,200
Social and related sciences, total	27,500	24,800	20,400	4,300	19,300	5,500	4,200
Economics	4,300	3,800	3,000	S	2,900	S	S
Political science and related sciences	9,400	8,800	7,600	S	7,400	S	1,300
Sociology and anthropology	4,300	3,900	2,800	1,200	2,200	1,700	S
Other social sciences	9,500	8,300	7,100	S	6,800	1,500	1,600
Total engineering	46,700	42,400	39,700	2,700	39,500	2,800	2,000
Aerospace and related engineering	1,500	1,300	1,300	S	1,300	S	S
Chemical engineering	2,300	1,900	1,800	S	1,800	S	S
Civil and architectural engineering	6,600	6,100	5,700	S	5,700	S	S
Electrical, electronic, computer and communications engineering	16,300	15,000	14,200	S	14,200	S	S
Industrial engineering	3,600	3,400	3,200	S	3,200	S	S
Mechanical engineering	6,800	6,200	5,800	S	5,800	S	S
Other engineering	9,600	8,300	7,700	S	7,600	S	S

[1] The "counting all jobs" category is based on whether the graduate's typical work week was 35 or more hours counting all jobs held during the reference week. Employed graduates who worked 35 or more hours per week counting all jobs are classified as full time and all other employed graduates are classified as part time.

[2] The "principal job only" category is based on the number of hours usually worked during a typical week on the principal job. Employed graduates who worked 35 or more hours per week on the principal job are classified as full time and all other employed graduates are classified as part time.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-3. Employment status of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Not in labor force	In labor force		
			Total	Employed	Unemployed[1]
All science and engineering fields	743,400	91,300	652,100	625,600	26,500
Total science	628,800	86,000	542,800	519,000	23,800
Computer and information sciences	46,000	S	44,300	43,300	S
Life and related sciences	164,000	36,400	127,600	121,300	6,300
Mathematical and related sciences	23,700	2,100	21,600	21,300	S
Physical and related sciences	36,500	4,800	31,700	30,900	800
Psychology	146,700	16,000	130,700	123,800	6,900
Social and related sciences	211,800	24,900	186,900	178,400	8,500
Total engineering	114,600	5,300	109,300	106,600	2,700

[1] The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-3. Employment status of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Not in labor force	In labor force		
			Total	Employed	Unemployed[1]
All science and engineering fields	743,400	91,300	652,100	625,600	26,500
Total science	628,800	86,000	542,800	519,000	23,800
Computer and information sciences	46,000	S	44,300	43,300	S
Life and related sciences	164,000	36,400	127,600	121,300	6,300
Mathematical and related sciences	23,700	2,100	21,600	21,300	S
Physical and related sciences	36,500	4,800	31,700	30,900	800
Psychology	146,700	16,000	130,700	123,800	6,900
Social and related sciences	211,800	24,900	186,900	178,400	8,500
Total engineering	114,600	5,300	109,300	106,600	2,700

[1] The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-4. Employment status of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Not in labor force	In labor force		
			Total	Employed	Unemployed[1]
All science and engineering fields	157,000	14,400	142,700	139,200	3,500
Total science	110,400	11,000	99,300	96,800	2,500
Computer and information sciences	20,000	S	19,400	19,200	S
Life and related sciences	16,600	3,400	13,200	13,000	S
Mathematical and related sciences	7,200	S	6,500	6,200	S
Physical and related sciences	9,100	1,200	7,900	7,700	S
Psychology	30,000	3,300	26,700	25,900	S
Social and related sciences	27,500	1,900	25,700	24,800	S
Total engineering	46,700	3,300	43,300	42,400	1,000

[1] The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-5. Labor force status of science and engineering bachelor's degree recipients in 1997 and 1998 not studying full time, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total number	Not in labor force	In labor force		
			Total	Employed	Unemployed[1]
All science and engineering fields	578,000	23,000	555,000	539,200	15,800
Total science	478,000	21,800	456,200	442,400	13,800
Computer and information sciences	43,700	S	42,700	42,100	S
Life and related sciences	109,800	6,100	103,700	100,000	3,700
Mathematical and related sciences	18,900	S	18,200	17,800	S
Physical and related sciences	24,000	S	23,400	22,900	S
Psychology	112,300	5,200	107,100	102,500	4,600
Social and related sciences	169,400	8,200	161,100	157,100	4,000
Total engineering	100,000	1,200	98,800	96,700	2,000

[1] The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table C-6. Labor force status of science and engineering master's degree recipients in 1997 and 1998 not studying full time, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total number	Not in labor force	In labor force		
			Total	Employed	Unemployed[1]
All science and engineering fields	124,900	4,000	120,900	118,200	2,700
Total science	86,100	3,500	82,600	80,600	2,000
Computer and information sciences	18,400	S	18,100	17,900	S
Life and related sciences	11,600	S	11,200	11,100	S
Mathematical and related sciences	5,500	S	5,200	4,900	S
Physical and related sciences	6,200	S	5,800	5,700	S
Psychology	23,100	S	21,700	20,900	S
Social and related sciences	21,300	S	20,600	20,000	S
Total engineering	38,800	S	38,300	37,500	S

[1] The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-1. Relation of occupation to field of degree among science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total employed	S&E occupation		Non-S&E occupation
		Occupation in same broad S&E field as degree[1]	Occupation in different broad S&E field than degree[1]	
All science and engineering fields	625,600	150,700	47,500	427,400
Total science	519,000	77,900	33,300	407,800
Computer and information sciences	43,300	25,500	S	15,200
Life and related sciences, total	121,300	21,900	7,700	91,700
Agricultural and food sciences	13,300	2,200	S	11,000
Biological sciences	96,200	18,200	5,400	72,600
Environmental life sciences including forestry science	11,800	S	2,200	8,100
Mathematical and related sciences	21,300	2,100	3,700	15,400
Physical and related sciences, total	30,900	12,900	4,600	13,400
Chemistry, except biochemistry	15,800	7,900	1,800	6,200
Earth sciences, geology, and oceanography	8,200	3,300	700	4,200
Physics and astronomy	6,400	1,700	2,100	2,600
Other physical sciences	S	S	S	S
Psychology	123,800	7,600	5,300	110,900
Social and related sciences, total	178,400	7,800	9,400	161,200
Economics	28,700	S	S	24,100
Political science and related sciences	55,300	2,800	2,900	49,700
Sociology and anthropology	61,300	S	S	57,000
Other social sciences	33,100	S	S	30,400
Total engineering	106,600	72,800	14,200	19,600
Aerospace and related engineering	2,100	1,400	200	500
Chemical engineering	11,100	8,200	1,200	1,700
Civil and architectural engineering	18,900	15,000	S	3,300
Electrical, electronic, computer and communications engineering	32,400	18,700	9,100	4,500
Industrial engineering	5,400	3,000	800	1,600
Mechanical engineering	24,700	19,200	S	5,000
Other engineering	12,000	7,400	1,600	3,000

[1] Comparisons between occupation and degree field were done at the broad field level only. For example, there are 7,900 people with chemistry bachelor's degrees working in physical science occupations; these occupations may be in chemistry or in another physical science field. Comparisons are between field of 1997 or 1998 S&E bachelor's degree and principal job in April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-2. Relation of occupation to field of degree among science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total employed	S&E occupation		Non-S&E occupation
		Occupation in same broad S&E field as degree[1]	Occupation in different broad S&E field than degree[1]	
All science and engineering fields	139,200	71,100	18,300	49,800
Total science	96,800	44,000	8,400	44,400
Computer and information sciences	19,200	14,500	S	4,000
Life and related sciences, total	13,000	5,300	1,300	6,400
Agricultural and food sciences	2,100	S	S	1,100
Biological sciences	8,400	3,900	S	3,900
Environmental life sciences including forestry science	2,500	S	S	1,400
Mathematical and related sciences	6,200	3,000	1,200	2,000
Physical and related sciences, total	7,700	4,700	1,300	1,700
Chemistry, except biochemistry	3,000	1,900	S	S
Earth sciences, geology, and oceanography	2,700	1,800	S	600
Physics and astronomy	1,900	1,100	S	S
Other physical sciences	S	S	S	S
Psychology	25,900	9,900	S	14,400
Social and related sciences, total	24,800	6,600	2,300	15,900
Economics	3,800	1,600	S	1,700
Political science and related sciences	8,800	2,300	S	5,900
Sociology and anthropology	3,900	2,000	S	1,800
Other social sciences	8,300	S	S	6,500
Total engineering	42,400	27,100	9,900	5,400
Aerospace and related engineering	1,300	1,000	S	S
Chemical engineering	1,900	1,400	S	S
Civil and architectural engineering	6,100	4,600	S	S
Electrical, electronic, computer and communications engineering	15,000	8,300	5,700	1,000
Industrial engineering	3,400	2,100	S	S
Mechanical engineering	6,200	4,800	S	S
Other engineering	8,300	4,900	1,700	1,700

[1] Comparisons between occupation and degree field were done at the broad field level only. For example, there are 1,900 people with chemistry master's degrees working in physical science occupations; these occupations may be in chemistry or in another physical science field. Comparisons are between field of 1997 or 1998 S&E master's degree and principal job in April 1999.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-3. Science and engineering bachelor's degree recipients in 1997 and 1998 having a career path job and seeking a career path job, by sex and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total recipients	Career path job			No career path job	Seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	743,400	374,800	203,100	171,700	368,700	122,900	55,200	67,700
Total science	628,800	289,000	133,900	155,100	339,800	111,100	46,100	65,000
Computer and information sciences	46,000	37,400	28,800	8,600	8,600	4,300	2,800	S
Life and related sciences, total	164,000	64,600	28,300	36,300	99,400	31,300	14,400	16,900
Agricultural and food sciences	15,700	8,900	5,100	3,800	6,800	2,500	S	S
Biological sciences	134,900	48,700	19,600	29,100	86,100	24,500	10,500	14,000
Environmental life sciences including forestry science	13,500	7,000	3,500	3,500	6,500	4,400	2,600	S
Mathematical and related sciences	23,700	12,700	6,600	6,100	11,100	3,300	1,500	1,800
Physical and related sciences, total	36,500	16,800	11,200	5,700	19,700	6,100	3,300	2,700
Chemistry, except biochemistry	20,100	8,800	5,000	3,800	11,300	3,100	1,400	1,800
Earth sciences, geology, and oceanography	8,700	4,000	2,800	1,200	4,700	2,100	1,300	800
Physics and astronomy	7,200	3,700	3,200	S	3,400	700	600	S
Other physical sciences	600	S	S	S	S	S	S	S
Psychology	146,700	63,300	13,800	49,500	83,400	25,700	5,400	20,300
Social and related sciences, total	211,800	94,200	45,300	48,900	117,500	40,400	18,700	21,700
Economics	32,700	18,600	12,100	6,500	14,100	4,800	3,200	S
Political science and related sciences	71,700	30,800	16,400	14,300	40,900	11,500	6,600	4,900
Sociology and anthropology	69,500	26,700	10,300	16,400	42,800	16,900	5,900	11,000
Other social sciences	37,900	18,200	6,600	11,700	19,700	7,300	3,100	4,200
Total engineering	114,600	85,800	69,100	16,600	28,800	11,700	9,100	2,700
Aerospace and related engineering	2,400	1,600	1,300	200	800	300	300	S
Chemical engineering	12,400	8,000	5,000	3,100	4,300	2,000	1,000	1,000
Civil and architectural engineering	20,200	15,500	11,600	4,000	4,600	2,500	1,900	S
Electrical, electronic, computer and communications engineering	34,200	27,000	24,000	3,000	7,200	2,200	2,000	S
Industrial engineering	6,000	4,600	3,100	1,500	1,300	600	400	S
Mechanical engineering	26,300	19,900	17,200	2,800	6,400	2,500	2,400	S
Other engineering	13,200	9,000	6,900	2,100	4,200	1,500	1,000	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
A career path job was defined in the survey as a job that would help the graduate in future career plans or a job in the field that he/she wants to make a career.
These estimates of recent college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-4. Science and engineering master's degree recipients in 1997 and 1998 having a career path job and seeking a career path job, by sex and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total recipients	Career path job			No career path job	Seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	157,000	103,100	60,800	42,200	54,000	16,200	8,100	8,100
Total science	110,400	67,900	32,300	35,600	42,500	13,200	5,700	7,500
Computer and information sciences	20,000	16,800	11,900	4,900	3,200	S	S	S
Life and related sciences, total	16,600	8,400	4,000	4,400	8,200	2,300	S	S
Agricultural and food sciences	2,300	1,500	S	S	S	S	S	S
Biological sciences	11,600	5,300	2,000	3,300	6,300	1,300	S	S
Environmental life sciences including forestry science	2,600	1,600	S	S	S	S	S	S
Mathematical and related sciences	7,200	4,300	2,500	1,800	2,900	S	S	S
Physical and related sciences, total	9,100	4,500	2,900	1,600	4,500	1,300	700	600
Chemistry, except biochemistry	3,700	1,800	1,000	S	1,900	S	S	S
Earth sciences, geology, and oceanography	3,000	1,600	1,200	S	1,300	800	S	S
Physics and astronomy	2,300	1,000	700	S	1,300	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	30,000	18,200	4,100	14,100	11,800	3,700	S	2,500
Social and related sciences, total	27,500	15,700	6,800	8,800	11,900	4,200	1,500	2,700
Economics	4,300	2,300	1,500	S	2,000	S	S	S
Political science and related sciences	9,400	5,700	2,800	2,900	3,700	1,400	S	S
Sociology and anthropology	4,300	2,100	S	1,500	2,100	S	S	S
Other social sciences	9,500	5,500	2,000	3,500	4,000	1,400	S	S
Total engineering	46,700	35,200	28,600	6,600	11,500	2,900	2,300	S
Aerospace and related engineering	1,500	1,100	1,000	S	400	S	S	S
Chemical engineering	2,300	1,500	1,100	500	700	S	S	S
Civil and architectural engineering	6,600	4,800	3,600	1,200	1,800	S	S	S
Electrical, electronic, computer and communications engineering	16,300	13,200	11,200	2,000	3,100	S	S	S
Industrial engineering	3,600	2,700	2,300	S	800	S	S	S
Mechanical engineering	6,800	5,000	4,500	S	1,800	S	S	S
Other engineering	9,600	6,800	5,000	1,800	2,800	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
A career path job was defined in the survey as a job that would help the graduate in future career plans or a job in the field that he/she wants to make a career.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-5. Relation of job to highest degree among employed science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total employed	Relationship of degree to job[1]		
		Closely related	Somewhat related	Not related
All science and engineering fields	625,600	268,100	185,500	172,100
Total science	519,000	204,500	150,600	163,900
Computer and information sciences	43,300	31,500	8,500	3,300
Life and related sciences, total	121,300	53,900	31,400	36,000
Agricultural and food sciences	13,300	6,300	4,200	2,700
Biological sciences	96,200	42,200	23,500	30,600
Environmental life sciences including forestry sciences	11,800	5,400	3,700	2,700
Mathematical and related sciences	21,300	10,100	7,000	4,200
Physical and related sciences, total	30,900	17,600	7,400	5,900
Chemistry, except biochemistry	15,800	10,200	3,300	2,300
Earth sciences, geology, and oceanography	8,200	3,700	2,100	2,300
Physics and astronomy	6,400	3,400	1,900	1,100
Other physical sciences	S	S	S	S
Psychology	123,800	44,200	38,500	41,100
Social and related sciences, total	178,400	47,300	57,800	73,300
Economics	28,700	9,300	12,800	6,500
Political science and related sciences	55,300	11,400	17,900	26,000
Sociology and anthropology	61,300	17,200	17,800	26,200
Other social sciences	33,100	9,300	9,300	14,600
Total engineering	106,600	63,600	34,800	8,100
Aerospace and related engineering	2,100	1,200	600	300
Chemical engineering	11,100	4,800	4,800	1,500
Civil and architectural engineering	18,900	12,900	4,800	1,100
Electrical, electronic, computer and communications engineering	32,400	21,800	9,300	S
Industrial engineering	5,400	2,000	2,800	500
Mechanical engineering	24,700	14,100	8,400	2,200
Other engineering	12,000	6,700	4,100	1,200

[1] Questionnaire item is "Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15, 1999, related to your highest degree field?"

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-6. Relation of job to highest degree among employed science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total employed	Relationship of degree to job[1]		
		Closely related	Somewhat related	Not related
All science and engineering fields	139,200	96,000	30,100	13,100
Total science	96,800	67,000	19,400	10,300
Computer and information sciences	19,200	15,400	3,300	S
Life and related sciences, total	13,000	9,100	2,400	1,500
Agricultural and food sciences	2,100	1,300	S	S
Biological sciences	8,400	6,400	1,300	S
Environmental life sciences including forestry sciences	2,500	1,400	S	S
Mathematical and related sciences	6,200	4,300	1,500	S
Physical and related sciences, total	7,700	5,000	2,000	700
Chemistry, except biochemistry	3,000	2,000	S	S
Earth sciences, geology, and oceanography	2,700	1,600	800	S
Physics and astronomy	1,900	1,300	S	S
Other physical sciences	S	S	S	S
Psychology	25,900	18,800	3,700	3,400
Social and related sciences, total	24,800	14,500	6,500	3,800
Economics	3,800	2,300	S	S
Political science and related sciences	8,800	5,100	2,600	S
Sociology and anthropology	3,900	2,600	S	S
Other social sciences	8,300	4,500	1,900	1,800
Total engineering	42,400	28,900	10,700	2,800
Aerospace and related engineering	1,300	900	S	S
Chemical engineering	1,900	1,100	600	S
Civil and architectural engineering	6,100	4,300	1,300	S
Electrical, electronic, computer and communications engineering	15,000	11,400	3,000	S
Industrial engineering	3,400	2,000	1,100	S
Mechanical engineering	6,200	4,100	1,700	S
Other engineering	8,300	5,200	2,500	S

[1] Questionnaire item is "Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15, 1999, related to your highest degree field?"

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-7. Occupation of employed science and engineering bachelor's degree recipients in 1997 and 1998, by sex and race/ethnicity: April 1999

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All occupations	625,600	314,800	310,800	477,500	43,900	45,700	55,200	3,400
Total scientists[1]	119,500	70,000	49,500	87,300	7,100	9,000	15,500	S
Computer and information scientists	52,700	39,200	13,500	36,600	4,100	3,600	8,400	S
Life and related scientists	25,300	10,600	14,700	18,500	S	2,200	3,900	S
Mathematical and related scientists	3,800	2,600	S	3,100	S	S	S	S
Physical scientists	19,200	11,500	7,700	16,300	1,000	800	S	S
Psychologists	8,300	S	6,400	5,500	S	S	S	S
Social and related scientists	10,200	4,100	6,100	7,200	S	S	S	S
Total engineers[1]	78,700	63,100	15,600	60,400	3,200	5,000	9,800	S
Total other occupations	427,400	181,700	245,700	329,800	33,600	31,800	29,800	2,500
Managers and related occupations	51,100	25,100	26,000	38,500	3,600	3,700	5,100	S
Health and related occupations[2]	22,000	8,100	13,900	16,700	1,900	S	S	S
Educators other than S&E postsecondary	50,900	18,200	32,600	39,000	3,600	5,600	S	S
Social services and related occupations	33,500	8,100	25,300	24,200	4,800	3,400	S	S
Technicians including computer programmers	43,600	24,400	19,200	31,100	3,200	2,400	7,000	S
Sales and marketing occupations	62,000	30,300	31,700	50,400	3,800	3,800	3,400	S
Other occupations	164,300	67,400	97,000	129,900	12,800	11,500	9,100	S

[1] Science and engineering occupations include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 recent college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-8. Occupation of employed science and engineering master's degree recipients in 1997 and 1998, by sex and race/ethnicity: April 1999

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All occupations	139,200	81,800	57,300	93,600	7,600	6,900	30,500	S
Total scientists[1]	60,500	36,400	24,100	38,100	2,400	2,900	17,000	S
Computer and information scientists	26,200	19,500	6,600	11,500	800	900	12,900	S
Life and related scientists	6,400	3,500	2,900	4,600	S	S	S	S
Mathematical and related scientists	4,200	2,300	1,900	2,900	S	S	S	S
Physical scientists	6,300	4,300	1,900	4,900	S	S	900	S
Psychologists	10,200	2,800	7,400	8,600	S	S	S	S
Social and related scientists	7,300	4,000	3,300	5,600	S	S	S	S
Total engineers[1]	28,900	24,400	4,400	19,500	900	1,100	7,300	S
Total other occupations	49,800	21,000	28,800	36,000	4,400	2,900	6,200	S
Managers and related occupations	11,000	5,300	5,700	7,700	1,200	S	1,400	S
Health and related occupations[2]	2,000	S	1,600	S	S	S	S	S
Educators other than S&E postsecondary	7,400	2,900	4,500	6,000	900	S	S	S
Social services and related occupations	8,500	2,000	6,500	6,400	900	900	S	S
Technicians including computer programmers	7,200	4,100	3,000	3,700	S	S	3,000	S
Sales and marketing occupations	3,300	1,300	2,000	2,700	S	S	S	S
Other occupations	10,500	5,000	5,500	7,900	800	700	S	S

[1] Science and engineering occupations include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-9. Occupation of employed science and engineering bachelor's degree recipients in 1997 and 1998, by age: April 1999

Occupation	Total employed	Age in years			
		Less than 25	25–29	30–34	35 or more
All occupations	625,600	360,700	181,500	34,200	49,200
Total scientists[1]	119,500	74,300	29,000	6,700	9,400
Computer and information scientists	52,700	27,400	15,500	3,900	6,000
Life and related scientists	25,300	19,200	4,500	S	S
Mathematical and related scientists	3,800	2,600	S	S	S
Physical scientists	19,200	10,800	5,300	1,400	1,700
Psychologists	8,300	6,100	S	S	S
Social and related scientists	10,200	8,300	S	S	S
Total engineers[1]	78,700	40,200	27,100	6,400	5,000
Total other occupations	427,400	246,200	125,400	21,000	34,800
Managers and related occupations	51,100	30,300	12,600	S	6,700
Health and related occupations[2]	22,000	13,000	5,700	S	S
Educators other than S&E postsecondary	50,900	26,900	14,600	4,300	5,100
Social services and related occupations	33,500	15,700	13,100	S	3,800
Technicians including computer programmers	43,600	24,300	15,000	1,400	3,000
Sales and marketing occupations	62,000	37,400	18,600	3,400	S
Other occupations	164,300	98,700	45,800	8,100	11,700

[1] Science and engineering occupations include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-10. Occupation of employed science and engineering master's degree recipients in 1997 and 1998, by age: April 1999

Occupation	Total employed	Age in years			
		Less than 25	25–29	30–34	35 or more
All occupations	139,200	6,200	65,600	32,600	34,700
Total scientists[1]	60,500	2,700	30,200	13,400	14,200
Computer and information scientists	26,200	1,200	12,300	6,300	6,300
Life and related scientists	6,400	S	3,700	1,600	S
Mathematical and related scientists	4,200	S	2,000	S	1,200
Physical scientists	6,300	S	3,400	1,300	1,400
Psychologists	10,200	S	4,700	1,700	3,500
Social and related scientists	7,300	S	4,100	1,700	S
Total engineers[1]	28,900	1,700	14,600	7,000	5,500
Total other occupations	49,800	1,700	20,900	12,200	15,000
Managers and related occupations	11,000	S	4,600	3,000	2,900
Health and related occupations[2]	2,000	S	S	S	S
Educators other than S&E postsecondary	7,400	S	2,500	2,300	2,500
Social services and related occupations	8,500	S	2,900	1,500	4,000
Technicians including computer programmers	7,200	S	3,400	1,900	1,600
Sales and marketing occupations	3,300	S	2,100	S	S
Other occupations	10,500	S	5,000	2,600	2,200

[1] Science and engineering occupations include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-11. Primary work activity of employed science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, adminis-tration	Teaching	Other
All science and engineering fields	625,600	127,000	96,400	212,600	75,000	114,700
Total science	519,000	80,200	73,100	187,200	72,500	106,000
Computer and information sciences	43,300	5,200	29,500	5,500	S	S
Life and related sciences, total	121,300	36,900	7,800	35,300	14,400	26,900
Agricultural and food sciences	13,300	2,200	S	6,700	S	2,700
Biological sciences	96,200	32,000	5,400	24,600	12,000	22,400
Environmental life sciences including forestry science	11,800	2,700	S	4,000	S	1,900
Mathematical and related sciences	21,300	2,700	4,800	5,100	6,700	1,900
Physical and related sciences, total	30,900	11,400	3,100	6,700	6,100	3,600
Chemistry, except biochemistry	15,800	6,700	S	3,900	2,700	1,800
Earth sciences, geology, and oceanography	8,200	2,300	1,000	1,900	1,800	1,200
Physics and astronomy	6,400	2,200	1,300	800	1,600	400
Other physical sciences	S	S	S	S	S	S
Psychology	123,800	9,200	9,900	47,300	23,900	33,400
Social and related sciences, total	178,400	14,800	18,000	87,300	19,900	38,500
Economics	28,700	S	3,500	19,600	S	3,000
Political science and related sciences	55,300	6,800	5,400	27,400	4,700	11,000
Sociology and anthropology	61,300	4,500	5,200	25,800	8,500	17,200
Other social sciences	33,100	S	3,900	14,400	5,600	7,200
Total engineering	106,600	46,800	23,200	25,400	2,500	8,700
Aerospace and related engineering	2,100	1,100	400	300	S	200
Chemical engineering	11,100	4,900	1,400	3,300	S	1,400
Civil and architectural engineering	18,900	7,500	3,600	5,500	S	1,900
Electrical, electronic, computer and communications engineering	32,400	13,700	11,900	4,800	S	S
Industrial engineering	5,400	1,200	1,200	2,500	S	400
Mechanical engineering	24,700	13,100	3,000	5,900	S	2,300
Other engineering	12,000	5,300	1,800	3,200	S	1,300

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-12. Primary work activity of employed science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	139,200	44,400	29,200	27,900	13,800	23,900
Total science	96,800	24,400	18,500	20,100	12,700	21,000
Computer and information sciences	19,200	3,700	12,700	2,200	S	S
Life and related sciences, total	13,000	5,500	S	2,500	2,300	1,800
Agricultural and food sciences	2,100	S	S	S	S	S
Biological sciences	8,400	4,000	S	1,200	1,900	S
Environmental life sciences including forestry science	2,500	S	S	S	S	S
Mathematical and related sciences	6,200	2,100	1,500	S	1,900	S
Physical and related sciences, total	7,700	4,000	800	1,000	1,500	S
Chemistry, except biochemistry	3,000	1,700	S	S	S	S
Earth sciences, geology, and oceanography	2,700	1,200	S	S	S	S
Physics and astronomy	1,900	1,100	S	S	S	S
Other physical sciences	S	S	S	S	S	S
Psychology	25,900	3,100	S	5,400	2,400	14,000
Social and related sciences, total	24,800	6,000	1,600	8,600	4,400	4,100
Economics	3,800	S	S	1,400	S	S
Political science and related sciences	8,800	2,600	S	3,300	S	1,600
Sociology and anthropology	3,900	1,100	S	1,000	S	S
Other social sciences	8,300	S	S	3,000	1,800	1,500
Total engineering	42,400	19,900	10,700	7,700	1,100	2,900
Aerospace and related engineering	1,300	600	300	S	S	S
Chemical engineering	1,900	1,000	S	S	S	S
Civil and architectural engineering	6,100	2,700	S	1,600	S	S
Electrical, electronic, computer and communications engineering	15,000	7,300	5,700	1,600	S	S
Industrial engineering	3,400	1,000	800	1,100	S	S
Mechanical engineering	6,200	3,800	1,100	800	S	S
Other engineering	8,300	3,400	1,500	2,200	S	800

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-13. Work-related training taken by employed science and engineering bachelor's degree recipients in 1997 and 1998, by occupation: April 1999

Occupation	Total employed	Total employed who took any type of work-related training[1]	Type of work-related training			
			Management training	Training in occupational field	General professional training	Other training
All occupations	625,600	367,700	86,400	344,700	108,200	33,200
Total scientists[2]	119,500	67,200	10,000	63,500	20,000	4,200
Computer and information scientists	52,700	34,900	5,400	34,500	10,400	S
Life and related scientists	25,300	12,400	S	11,400	3,500	S
Mathematical and related scientists	3,800	S	S	S	S	S
Physical scientists	19,200	9,400	S	8,500	2,300	800
Psychologists	8,300	5,000	S	4,900	S	S
Social and related scientists	10,200	4,400	S	3,400	S	S
Total engineers[2]	78,700	53,600	13,300	50,100	17,400	3,900
Total other occupations	427,400	246,900	63,100	231,100	70,800	25,100
Managers and related occupations	51,100	35,200	14,600	31,400	12,500	2,600
Health and related occupations[3]	22,000	10,600	S	9,600	S	S
Educators other than S&E postsecondary	50,900	35,600	5,300	34,600	8,300	3,000
Social services and related occupations	33,500	27,800	5,900	27,600	9,300	3,600
Technicians including computer programmers	43,600	22,900	2,700	21,400	5,600	S
Sales and marketing occupations	62,000	38,500	13,800	36,900	10,600	S
Other occupations	164,300	76,200	19,800	69,600	23,300	10,400

[1] Respondents may have taken more than one type of work-related training. Therefore, column entries will not add to "Total employed who took any type of work-related training."

[2] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[3] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Training was during the period April 15, 1998, to April 15, 1999.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-14. Work-related training taken by employed science and engineering master's degree recipients in 1997 and 1998, by occupation: April 1999

Occupation	Total employed	Total employed who took any type of work-related training[1]	Type of work-related training			
			Management training	Training in occupational field	General professional training	Other training
All occupations	139,200	92,800	20,000	86,700	23,600	6,800
Total scientists[2]	60,500	37,500	6,000	35,700	8,700	2,300
Computer and information scientists	26,200	17,300	3,700	16,700	4,800	S
Life and related scientists	6,400	3,300	S	3,200	S	S
Mathematical and related scientists	4,200	2,000	S	1,900	S	S
Physical scientists	6,300	3,400	S	3,100	1,000	S
Psychologists	10,200	8,000	S	7,800	S	S
Social and related scientists	7,300	3,500	S	3,100	S	S
Total engineers[2]	28,900	19,100	4,100	17,600	5,200	1,500
Total other occupations	49,800	36,200	9,900	33,500	9,600	3,100
Managers and related occupations	11,000	7,900	3,600	6,600	2,700	S
Health and related occupations[3]	2,000	1,500	S	1,400	S	S
Educators other than S&E postsecondary	7,400	6,000	S	5,700	1,600	S
Social services and related occupations	8,500	7,900	1,700	7,800	S	S
Technicians including computer programmers	7,200	3,900	S	3,700	1,300	S
Sales and marketing occupations	3,300	2,400	S	2,200	S	S
Other occupations	10,500	6,600	2,100	6,200	1,900	S

[1] Respondents may have taken more than one type of work-related training. Therefore, column entries will not add to "Total employed who took any type of work-related training."

[2] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[3] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Training was during the period April 15, 1998, to April 15, 1999.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-15. Work-related training taken by employed science and engineering bachelor's degree recipients in 1997 and 1998, by sector of employment: April 1999

Sector of employment	Total employed	Total employed who took any type of work-related training[1]	Work-related training			
			Management training	Technical training	General professional training	Other training
All sectors	625,600	367,700	86,400	344,700	108,200	33,200
Private industry and business (non-educational)	420,500	245,800	61,700	229,700	70,900	20,800
Private, for-profit company[2]	367,400	210,700	54,200	197,000	62,200	15,100
Nonprofit organizations	44,900	31,100	7,100	28,800	8,300	5,300
Self-employed[2]	8,100	4,000	S	3,900	S	S
Educational institution	139,700	74,700	12,500	69,900	20,000	6,700
4-year college and university[3]	80,200	32,600	4,300	28,900	8,700	2,900
Other educational[4]	59,400	42,100	8,200	40,900	11,300	3,900
Government	65,400	47,300	12,200	45,200	17,300	5,700
Federal Government	23,200	15,800	5,500	15,000	6,700	2,000
State or local government	42,200	31,400	6,700	30,200	10,700	3,700

[1] Respondents may have taken more than one type of work-related training. Therefore, column entries will not add to "Total employed who took any type of work-related training."

[2] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[3] Includes university-affiliated medical schools or research organizations.

[4] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Training was during the period April 15, 1998, to April 15, 1999.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table D-16. Work-related training taken by employed science and engineering master's degree recipients in 1997 and 1998, by sector of employment: April 1999

Sector of employment	Total employed	Total employed who took any type of work-related training[1]	Work-related training			
			Management training	Technical training	General professional training	Other training
All sectors	139,200	92,800	20,000	86,700	23,600	6,800
Private industry and business (non-educational)	85,600	59,000	13,200	54,900	15,800	4,100
Private, for-profit company[2]	73,300	49,500	11,100	45,800	14,100	3,500
Nonprofit organizations	9,500	7,300	1,800	7,000	1,400	S
Self-employed[2]	2,800	2,100	S	2,100	S	S
Educational institution	37,200	21,000	3,500	19,800	4,200	1,800
4-year college and university[3]	25,300	11,100	1,700	10,100	2,200	1,200
Other educational[4]	11,900	9,900	1,700	9,800	2,000	S
Government	16,400	12,800	3,300	12,000	3,600	S
Federal Government	7,100	5,100	1,400	4,700	1,600	S
State or local government	9,300	7,700	1,800	7,300	2,000	S

[1] Respondents may have taken more than one type of work-related training. Therefore, column entries will not add to "Total employed who took any type of work-related training."

[2] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[3] Includes university-affiliated medical schools or research organizations.

[4] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Training was during the period April 15, 1998, to April 15, 1999.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table E-1. Sector of employment of science and engineering bachelor's degree recipients in 1997 and 1998, by occupation: April 1999

Occupation	Total employed	Sector of employment		
		Private industry and business (non-educational)[1]	Educational institution[2]	Government[3]
All occupations	625,600	420,500	139,700	65,400
Total scientists[4]	119,500	73,400	36,900	9,200
Computer and information scientists	52,700	46,400	4,200	2,200
Life and related scientists	25,300	9,200	13,800	S
Mathematical and related scientists	3,800	S	2,900	S
Physical scientists	19,200	9,900	7,300	2,000
Psychologists	8,300	S	4,300	S
Social and related scientists	10,200	3,900	4,500	S
Total engineers[4]	78,700	64,100	8,800	5,800
Total other occupations	427,400	283,000	94,000	50,400
Managers and related occupations	51,100	43,100	3,200	4,800
Health and related occupations[5]	22,000	16,500	3,800	S
Educators other than S&E postsecondary	50,900	4,000	44,900	S
Social services and related occupations	33,500	15,700	6,600	11,200
Technicians including computer programmers	43,600	32,000	8,000	3,600
Sales and marketing occupations	62,000	60,100	S	S
Other occupations	164,300	111,700	26,000	26,600

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

[4] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[5] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table E-2. Sector of employment of science and engineering master's degree recipients in 1997 and 1998, by occupation: April 1999

Occupation	Total employed	Sector of employment		
		Private industry and business (non-educational)[1]	Educational institution[2]	Government[3]
All occupations	139,200	85,600	37,200	16,400
Total scientists[4]	60,500	36,000	19,600	4,900
Computer and information scientists	26,200	23,300	1,900	1,000
Life and related scientists	6,400	2,300	3,300	S
Mathematical and related scientists	4,200	1,200	2,700	S
Physical scientists	6,300	2,800	2,900	S
Psychologists	10,200	4,400	4,600	S
Social and related scientists	7,300	2,000	4,200	S
Total engineers[4]	28,900	21,800	4,000	3,000
Total other occupations	49,800	27,800	13,600	8,400
Managers and related occupations	11,000	7,300	1,400	2,200
Health and related occupations[5]	2,000	S	S	S
Educators other than S&E postsecondary	7,400	S	6,600	S
Social services and related occupations	8,500	3,700	2,600	2,200
Technicians including computer programmers	7,200	5,600	1,100	S
Sales and marketing occupations	3,300	3,200	S	S
Other occupations	10,500	6,200	1,300	3,000

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal government, military, and commissioned corps.

[4] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[5] Health-related majors are not included in sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table E-3. Sector of employment of science and engineering bachelor's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total employed	Sector of employment		
		Private industry and business (non-educational)[1]	Educational institution[2]	Government[3]
All science and engineering fields	625,600	420,500	139,700	65,400
Total science	519,000	333,100	129,400	56,400
Computer and information sciences	43,300	36,400	4,100	2,800
Life and related sciences, total	121,300	75,300	34,900	11,200
Agricultural and food sciences	13,300	10,200	2,200	S
Biological sciences	96,200	56,800	31,100	8,300
Environmental life sciences including forestry science	11,800	8,200	S	S
Mathematical and related sciences	21,300	12,000	8,000	1,200
Physical and related sciences, total	30,900	17,100	11,700	2,100
Chemistry, except biochemistry	15,800	9,000	6,200	S
Earth sciences, geology, and oceanography	8,200	4,700	2,500	900
Physics and astronomy	6,400	3,100	2,800	500
Other physical sciences	S	S	S	S
Psychology	123,800	71,800	37,000	15,100
Social and related sciences, total	178,400	120,600	33,800	24,000
Economics	28,700	24,900	2,800	S
Political science and related sciences	55,300	37,300	8,700	9,300
Sociology and anthropology	61,300	36,100	14,600	10,500
Other social sciences	33,100	22,200	7,600	3,200
Total engineering	106,600	87,400	10,200	9,000
Aerospace and related engineering	2,100	1,400	300	400
Chemical engineering	11,100	9,700	1,100	S
Civil and architectural engineering	18,900	14,000	1,700	3,200
Electrical, electronic, computer and communications engineering	32,400	27,600	2,800	1,900
Industrial engineering	5,400	5,000	S	S
Mechanical engineering	24,700	21,400	1,800	1,600
Other engineering	12,000	8,400	2,200	1,400

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table E-4. Sector of employment of science and engineering master's degree recipients in 1997 and 1998, by major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total employed	Sector of employment		
		Private industry and business (non-educational)[1]	Educational institution[2]	Government[3]
All science and engineering fields	139,200	85,600	37,200	16,400
Total science	96,800	53,100	31,800	11,900
Computer and information sciences	19,200	16,800	2,000	S
Life and related sciences, total	13,000	6,000	5,000	2,000
Agricultural and food sciences	2,100	S	S	S
Biological sciences	8,400	3,500	3,700	S
Environmental life sciences including forestry science	2,500	1,600	S	S
Mathematical and related sciences	6,200	2,500	3,400	S
Physical and related sciences, total	7,700	3,600	3,400	700
Chemistry, except biochemistry	3,000	1,600	1,300	S
Earth sciences, geology, and oceanography	2,700	1,400	800	S
Physics and astronomy	1,900	600	1,200	S
Other physical sciences	S	S	S	S
Psychology	25,900	12,600	9,900	3,400
Social and related sciences, total	24,800	11,600	8,100	5,100
Economics	3,800	2,600	S	S
Political science and related sciences	8,800	3,900	2,500	2,400
Sociology and anthropology	3,900	1,400	1,900	S
Other social sciences	8,300	3,800	2,900	1,600
Total engineering	42,400	32,500	5,400	4,500
Aerospace and related engineering	1,300	700	S	S
Chemical engineering	1,900	1,500	S	S
Civil and architectural engineering	6,100	4,200	S	1,100
Electrical, electronic, computer and communications engineering	15,000	12,400	1,500	1,100
Industrial engineering	3,400	2,800	S	S
Mechanical engineering	6,200	4,900	900	S
Other engineering	8,300	5,900	1,300	1,200

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions. It also includes persons reporting they were self-employed.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates of 1997 and 1998 college graduates are obtained from a sample survey of individuals receiving bachelor's or master's degrees in science or engineering fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-1. Median salary of full-time employed science and engineering bachelor's degree recipients in 1997 and 1998, by sex, race/ethnicity, and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total[1]	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All science and engineering fields	$30,000	$35,000	$26,600	$30,000	$29,000	$30,000	$36,000
Total science	27,900	30,000	26,000	27,000	27,000	28,000	32,500
Computer and information sciences	44,000	45,000	41,000	44,000	40,000	45,000	44,000
Life and related sciences, total	25,000	26,500	25,000	25,000	25,000	28,000	28,000
Agricultural and food sciences	26,500	28,000	24,000	26,000	S	S	S
Biological sciences	25,000	26,000	25,000	24,700	25,000	28,000	27,800
Environmental life sciences including forestry science	26,000	28,000	21,000	25,000	S	S	S
Mathematical and related sciences	30,000	29,000	30,000	29,000	30,000	S	S
Physical and related sciences, total	28,500	30,000	27,500	28,000	30,000	26,400	31,000
Chemistry, except biochemistry	28,500	29,000	28,000	28,900	28,000	25,000	S
Earth sciences, geology, and oceanography	26,000	27,000	23,000	25,000	S	S	S
Physics and astronomy	35,400	37,500	33,000	35,000	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	25,000	27,000	25,000	25,000	25,500	26,000	S
Social and related sciences, total	27,900	30,000	26,000	27,000	27,000	28,000	33,000
Economics	35,000	35,000	35,000	33,000	S	S	38,000
Political science and related sciences	29,000	30,000	28,000	29,000	28,000	28,000	32,000
Sociology and anthropology	24,500	24,200	24,500	24,000	25,000	27,000	S
Other social sciences	26,000	30,000	25,000	26,000	32,000	26,000	S
Total engineering	42,500	43,000	42,000	42,000	40,000	42,000	45,000
Aerospace and related engineering	41,000	40,200	42,000	40,200	S	40,000	41,000
Chemical engineering	45,000	45,000	46,000	45,000	42,000	42,000	46,000
Civil and architectural engineering	37,000	37,000	37,000	37,000	37,000	33,000	S
Electrical, electronic, computer and communications engineering	46,000	46,000	47,000	46,000	45,000	46,000	47,000
Industrial engineering	41,000	41,000	42,000	41,000	40,000	40,000	S
Mechanical engineering	43,000	43,000	44,000	43,000	40,000	44,000	42,000
Other engineering	40,000	40,000	40,000	40,000	S	37,000	S

[1] Total includes American Indian/Alaskan Natives not shown separately because of insufficient sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-2. Median salary of full-time employed science and engineering master's degree recipients in 1997 and 1998, by sex, race/ethnicity, and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total[1]	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All science and engineering fields	$46,000	$50,200	$38,000	$43,000	$42,000	$40,000	$55,000
Total science	40,000	46,000	36,000	38,000	40,000	37,200	54,000
Computer and information sciences	58,000	60,000	55,000	60,000	54,800	S	57,000
Life and related sciences, total	34,000	36,000	33,000	35,000	S	S	S
Agricultural and food sciences	34,500	S	S	34,500	S	S	S
Biological sciences	34,000	37,000	32,000	34,000	S	S	S
Environmental life sciences including forestry science	36,000	36,000	S	35,000	S	S	S
Mathematical and related sciences	44,000	44,000	44,000	40,000	S	S	S
Physical and related sciences, total	41,600	42,000	40,000	40,000	S	S	47,000
Chemistry, except biochemistry	43,000	43,500	42,000	42,000	S	S	S
Earth sciences, geology, and oceanography	37,000	40,000	34,000	37,000	S	S	S
Physics and astronomy	40,000	42,000	S	40,000	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	32,000	33,000	31,000	32,000	34,000	31,000	S
Social and related sciences, total	40,000	41,000	37,000	40,000	38,000	40,000	S
Economics	45,000	50,000	S	45,000	S	S	S
Political science and related sciences	40,000	42,000	38,000	40,000	S	S	S
Sociology and anthropology	31,200	S	27,000	29,000	S	S	S
Other social sciences	38,000	38,300	37,000	39,000	35,000	S	S
Total engineering	55,000	55,000	50,000	54,000	53,000	47,000	57,000
Aerospace and related engineering	50,000	50,000	S	50,000	S	S	S
Chemical engineering	55,000	55,200	50,000	56,000	S	S	S
Civil and architectural engineering	45,000	45,000	43,000	44,000	S	S	S
Electrical, electronic, computer and communications engineering	60,000	60,000	60,000	60,000	55,000	S	60,000
Industrial engineering	55,000	56,000	48,000	56,000	S	S	S
Mechanical engineering	51,000	51,000	S	51,000	S	S	52,000
Other engineering	52,000	53,500	48,000	52,000	S	S	52,000

[1] Total includes American Indian/Alaskan Natives not shown separately because of insufficient sample.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-3. Median salary of full-time employed science and engineering bachelor's degree recipients in 1997 and 1998, by sex, race/ethnicity, and occupation: April 1999

Occupation	Total[1]	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All occupations	$30,000	$35,000	$26,600	$30,000	$29,000	$30,000	$36,000
Total scientists[2]	38,000	40,000	32,000	37,200	38,000	37,400	40,000
Computer and information scientists	45,000	45,000	44,500	45,000	46,000	45,000	45,000
Life and related scientists	27,000	27,000	27,000	27,000	S	S	S
Mathematical and related scientists	S	S	S	S	S	S	S
Physical scientists	31,000	28,000	32,000	31,000	S	28,500	S
Psychologists	22,400	S	22,400	S	S	S	S
Social and related scientists	29,000	29,000	29,000	28,000	S	S	S
Total engineers[2]	42,000	42,000	42,000	42,000	41,000	42,000	45,000
Total other occupations	26,500	29,000	25,000	26,000	26,500	28,000	30,000
Managers and related occupations	35,000	37,000	32,000	35,000	32,000	32,000	37,000
Health and related occupations[3]	23,000	25,000	21,000	23,000	27,000	S	S
Educators other than S&E postsecondary	25,000	25,000	25,000	24,500	27,000	30,000	S
Social services and related occupations	23,000	23,000	23,000	22,000	24,000	24,000	S
Technicians including computer programmers	31,500	35,000	26,400	30,000	33,000	35,000	35,200
Sales and marketing occupations	30,000	31,000	28,000	30,000	28,000	30,000	32,500
Other occupations	25,000	26,000	24,000	24,000	25,000	26,000	27,000

[1] Total includes American Indian/Alaskan Natives not shown separately because of insufficient sample.

[2] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[3] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-4. Median salary of full-time employed science and engineering master's degree recipients in 1997 and 1998, by sex, race/ethnicity, and occupation: April 1999

Occupation	Total[1]	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All occupations	$46,000	$50,200	$38,000	$43,000	$42,000	$40,000	$55,000
Total scientists[2]	49,400	53,000	40,000	43,000	47,000	43,000	57,000
Computer and information scientists	58,000	60,000	55,000	55,000	53,000	60,000	60,000
Life and related scientists	34,000	36,000	34,000	34,000	S	S	S
Mathematical and related scientists	45,000	45,000	47,500	45,000	S	S	S
Physical scientists	42,000	43,000	42,000	42,000	S	S	S
Psychologists	30,000	S	28,000	30,000	S	S	S
Social and related scientists	40,000	43,000	38,000	40,000	S	S	S
Total engineers[2]	53,000	54,000	50,000	52,000	55,000	47,500	55,000
Total other occupations	37,000	42,000	34,000	36,000	35,000	34,000	48,000
Managers and related occupations	49,000	55,000	45,000	46,000	45,000	S	50,000
Health and related occupations[3]	40,000	S	S	S	S	S	S
Educators other than S&E postsecondary	33,000	33,000	34,000	33,000	32,000	S	S
Social services and related occupations	30,000	33,000	30,000	30,000	31,200	S	S
Technicians including computer programmers	45,000	46,000	40,000	41,100	S	S	46,600
Sales and marketing occupations	43,200	48,000	38,000	45,000	S	S	S
Other occupations	33,000	40,000	30,000	33,500	S	S	S

[1] Total includes American Indian/Alaskan Natives not shown separately because of insufficient sample.

[2] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[3] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-5. Median salary of full-time employed science and engineering bachelor's degree recipients in 1997 and 1998, by broad sector of employment and major field of degree: April 1999

Major field of 1997-98 S&E bachelor's degree	Total	Broad sector of employment		
		Private industry and business[1]	Educational institution[2]	Government[3]
All science and engineering fields	$30,000	$33,000	$24,000	$27,000
Total science	27,900	30,000	24,000	26,000
Computer and information sciences	44,000	45,000	S	34,000
Life and related sciences, total	25,000	26,500	23,000	25,000
Agricultural and food sciences	26,500	27,000	S	S
Biological sciences	25,000	26,000	23,000	26,500
Environmental life sciences including forestry sciences	26,000	28,000	S	S
Mathematical and related sciences	30,000	35,800	26,000	S
Physical and related sciences, total	28,500	30,000	25,000	26,000
Chemistry, except biochemistry	28,500	31,000	25,000	S
Earth sciences, geology, and oceanography	26,000	27,000	21,600	26,000
Physics and astronomy	35,400	40,000	26,000	S
Other physical sciences	S	S	S	S
Psychology	25,000	26,000	23,500	25,000
Social and related sciences, total	27,900	29,900	24,000	26,000
Economics	35,000	35,000	S	S
Political science and related sciences	29,000	30,000	24,000	27,000
Sociology and anthropology	24,500	25,000	24,000	25,000
Other social sciences	26,000	28,000	24,000	26,200
Total engineering	42,500	43,000	32,000	34,000
Aerospace and related engineering	41,000	43,000	S	30,000
Chemical engineering	45,000	46,000	S	S
Civil and architectural engineering	37,000	38,000	S	33,000
Electrical, electronic, computer and communications engineering	46,000	47,000	S	40,000
Industrial engineering	41,000	42,000	S	S
Mechanical engineering	43,000	43,000	S	S
Other engineering	40,000	42,000	S	33,000

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-6. Median salary of full-time employed science and engineering master's degree recipients in 1997 and 1998, by broad sector of employment and major field of degree: April 1999

Major field of 1997-98 S&E master's degree	Total	Broad sector of employment		
		Private industry and business[1]	Educational institution[2]	Government[3]
All science and engineering fields	$46,000	$50,000	$33,000	$40,000
Total science	40,000	46,000	32,000	37,000
Computer and information sciences	58,000	59,000	S	S
Life and related sciences, total	34,000	43,000	31,000	34,000
Agricultural and food sciences	34,500	S	S	S
Biological sciences	34,000	45,000	30,000	S
Environmental life sciences including forestry sciences	36,000	36,000	S	S
Mathematical and related sciences	44,000	50,000	33,000	S
Physical and related sciences, total	41,600	44,000	28,300	37,000
Chemistry, except biochemistry	43,000	45,000	S	S
Earth sciences, geology, and oceanography	37,000	42,000	S	S
Physics and astronomy	40,000	47,000	S	S
Other physical sciences	S	S	S	S
Psychology	32,000	31,200	31,000	33,000
Social and related sciences, total	40,000	40,000	34,500	40,000
Economics	45,000	45,000	S	S
Political science and related sciences	40,000	41,000	S	40,000
Sociology and anthropology	31,200	27,000	S	S
Other social sciences	38,000	37,000	34,500	41,100
Total engineering	55,000	55,000	35,000	50,000
Aerospace and related engineering	50,000	51,000	S	S
Chemical engineering	55,000	55,000	S	S
Civil and architectural engineering	45,000	44,000	S	47,800
Electrical, electronic, computer and communications engineering	60,000	60,000	S	56,000
Industrial engineering	55,000	56,000	S	S
Mechanical engineering	51,000	52,000	S	S
Other engineering	52,000	55,000	S	50,000

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-7. Median salary of full-time employed science and engineering bachelor's degree recipients in 1997 and 1998, by broad sector of employment and occupation: April 1999

Occupation	Total	Broad sector of employment		
		Private industry and business[1]	Educational institutions[2]	Government[3]
All occupations	$30,000	$33,000	$24,000	$27,000
Total scientists[4]	38,000	40,000	23,700	30,000
Computer and information scientists	45,000	45,000	37,000	S
Life and related scientists	27,000	30,000	21,000	S
Mathematical and related scientists	S	S	S	S
Physical scientists	31,000	31,000	S	26,200
Psychologists	22,400	S	S	S
Social and related scientists	29,000	28,500	S	S
Total engineers[4]	42,000	43,000	41,000	37,000
Total other occupations	26,500	28,000	24,000	25,300
Managers and related occupations	35,000	36,000	S	29,000
Health and related occupations[5]	23,000	23,000	S	S
Educators other than S&E postsecondary	25,000	20,000	25,000	S
Social services and related occupations	23,000	22,300	22,500	24,000
Technicians including computer programmers	31,500	35,000	24,000	25,000
Sales and marketing occupations	30,000	30,000	S	S
Other occupations	25,000	25,000	19,000	26,500

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

[4] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[5] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999

Table F-8. Median salary of full-time employed science and engineering master's degree recipients in 1997 and 1998, by broad sector of employment and occupation: April 1999

Occupation	Total	Broad sector of employment		
		Private industry and business[1]	Educational institutions[2]	Government[3]
All occupations	$46,000	$50,000	$33,000	$40,000
Total scientists[4]	49,400	54,000	31,000	40,000
Computer and information scientists	58,000	60,000	S	50,000
Life and related scientists	34,000	44,000	26,300	S
Mathematical and related scientists	45,000	48,000	S	S
Physical scientists	42,000	43,500	S	S
Psychologists	30,000	28,000	29,000	S
Social and related scientists	40,000	40,000	S	S
Total engineers[4]	53,000	54,000	S	51,000
Total other occupations	37,000	40,000	33,000	37,000
Managers and related occupations	49,000	53,000	45,000	40,000
Health and related occupations[5]	40,000	S	S	S
Educators other than S&E postsecondary	33,000	S	33,000	S
Social services and related occupations	30,000	29,000	31,000	32,000
Technicians including computer programmers	45,000	46,000	S	S
Sales and marketing occupations	43,200	45,000	S	S
Other occupations	33,000	31,000	S	41,000

[1] Private industry and business includes all private for-profit and private not-for-profit companies, businesses, and organizations, except those reported as educational institutions.

[2] Educational institutions include elementary and secondary schools, 2-year and 4-year colleges and universities, medical schools, university-affiliated research organizations, and all other educational institutions.

[3] Government includes local, state, and Federal Government, military, and commissioned corps.

[4] Science and engineering occupations include postsecondary educators. For more details, see technical notes.

[5] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Salary data are for principal job only. Full-time employed are those working at least 35 hours per week at their principal job. Self-employed persons and full-time students are excluded from salary data.

SOURCE: National Science Foundation/Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999