

TABLE 14. Employed U.S. scientists and engineers, by level and field of highest degree, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity <sup>a</sup>							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
All degree levels and fields <sup>b</sup>	18,021,000	10,437,000	7,585,000	73,000	1,719,000	1,035,000	937,000	13,957,000	300,000
S&E fields	9,579,000	6,153,000	3,426,000	36,000	1,072,000	531,000	513,000	7,257,000	170,000
Sciences	7,245,000	4,090,000	3,156,000	31,000	685,000	456,000	382,000	5,561,000	130,000
Biological/agricultural/environmental life sciences	1,481,000	843,000	638,000	7,000	144,000	61,000	79,000	1,168,000	23,000
Agricultural sciences	249,000	164,000	85,000	S	15,000	6,000	10,000	213,000	5,000
Biological sciences	1,081,000	573,000	508,000	4,000	125,000	53,000	64,000	818,000	16,000
Environmental life sciences	151,000	107,000	44,000	2,000	4,000	2,000	4,000	137,000	2,000
Computer/mathematical sciences	1,437,000	967,000	470,000	7,000	248,000	94,000	63,000	1,002,000	25,000
Computer/information sciences	961,000	671,000	290,000	6,000	199,000	64,000	50,000	624,000	18,000
Mathematics/statistics	476,000	296,000	180,000	S	49,000	29,000	13,000	378,000	6,000
Physical/related sciences	694,000	513,000	181,000	2,000	97,000	21,000	32,000	535,000	7,000
Chemistry, except biochemistry	326,000	219,000	107,000	1,000	61,000	13,000	17,000	231,000	4,000
Earth/atmospheric/ocean sciences	170,000	136,000	35,000	*	7,000	1,000	5,000	154,000	2,000
Physics/astronomy	152,000	130,000	22,000	*	27,000	3,000	5,000	115,000	1,000
Other physical sciences	45,000	28,000	17,000	S	2,000	4,000	4,000	35,000	S
Social/related sciences	3,633,000	1,766,000	1,867,000	16,000	196,000	281,000	209,000	2,857,000	75,000
Economics	551,000	418,000	133,000	S	72,000	19,000	24,000	429,000	7,000
Political/related sciences	666,000	421,000	244,000	5,000	30,000	57,000	37,000	523,000	14,000
Psychology	1,335,000	445,000	891,000	4,000	52,000	103,000	83,000	1,063,000	30,000
Sociology/anthropology	684,000	278,000	406,000	3,000	22,000	67,000	35,000	541,000	16,000
Other social sciences	398,000	204,000	193,000	3,000	21,000	35,000	30,000	301,000	8,000
Engineering	2,334,000	2,064,000	270,000	5,000	387,000	75,000	131,000	1,696,000	40,000
Aerospace/aeronautical/astronautical engineering	85,000	77,000	8,000	1,000	7,000	1,000	4,000	70,000	3,000
Chemical engineering	159,000	126,000	34,000	1,000	31,000	5,000	10,000	110,000	2,000
Civil/architectural engineering	385,000	342,000	43,000	1,000	45,000	12,000	31,000	286,000	10,000
Electrical/computer engineering	748,000	668,000	81,000	S	182,000	34,000	36,000	482,000	14,000
Industrial engineering	134,000	111,000	23,000	S	17,000	5,000	12,000	98,000	1,000
Mechanical engineering	492,000	455,000	37,000	1,000	61,000	11,000	20,000	392,000	6,000
Other engineering	330,000	286,000	44,000	1,000	44,000	7,000	18,000	258,000	4,000
S&E-related fields	4,383,000	1,921,000	2,462,000	17,000	421,000	238,000	249,000	3,387,000	72,000
Health	3,373,000	1,226,000	2,148,000	14,000	343,000	182,000	192,000	2,580,000	62,000
Science/mathematics teacher education	340,000	151,000	189,000	S	11,000	19,000	16,000	291,000	2,000
Technology/technical fields	334,000	292,000	42,000	S	43,000	21,000	20,000	244,000	4,000
Other S&E-related fields	336,000	253,000	83,000	S	24,000	16,000	20,000	272,000	3,000
Non-S&E fields	4,059,000	2,362,000	1,697,000	20,000	226,000	265,000	176,000	3,313,000	59,000
Arts/humanities	366,000	196,000	169,000	S	20,000	9,000	13,000	320,000	4,000

TABLE 14. Employed U.S. scientists and engineers, by level and field of highest degree, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity <sup>a</sup>							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Education, except science/mathematics teacher education	890,000	365,000	525,000	6,000	21,000	70,000	41,000	739,000	13,000
Management/administration	1,367,000	986,000	380,000	9,000	122,000	88,000	60,000	1,067,000	21,000
Sales/marketing	144,000	93,000	52,000	S	10,000	6,000	5,000	122,000	1,000
Social services/related	317,000	141,000	176,000	S	9,000	34,000	13,000	256,000	5,000
Other non-S&E fields	975,000	581,000	394,000	4,000	43,000	60,000	44,000	810,000	15,000
Bachelor's degrees	10,490,000	5,912,000	4,578,000	47,000	873,000	648,000	588,000	8,135,000	198,000
S&E fields	6,953,000	4,424,000	2,529,000	30,000	610,000	426,000	405,000	5,349,000	132,000
Sciences	5,276,000	2,936,000	2,340,000	25,000	396,000	366,000	303,000	4,083,000	101,000
Biological/agricultural/environmental life sciences	1,082,000	601,000	481,000	5,000	81,000	48,000	64,000	865,000	18,000
Agricultural sciences	199,000	130,000	69,000	S	9,000	3,000	7,000	175,000	4,000
Biological sciences	767,000	389,000	378,000	3,000	71,000	44,000	53,000	584,000	13,000
Environmental life sciences	116,000	82,000	34,000	1,000	S	1,000	4,000	107,000	2,000
Computer/mathematical sciences	1,010,000	670,000	340,000	5,000	117,000	75,000	52,000	743,000	18,000
Computer/information sciences	667,000	460,000	207,000	5,000	91,000	53,000	42,000	463,000	13,000
Mathematics/statistics	343,000	210,000	133,000	S	26,000	22,000	11,000	280,000	5,000
Physical/related sciences	423,000	299,000	125,000	2,000	46,000	16,000	25,000	331,000	4,000
Chemistry, except biochemistry	209,000	133,000	76,000	1,000	29,000	10,000	14,000	152,000	3,000
Earth/atmospheric/ocean sciences	105,000	85,000	20,000	S	2,000	1,000	4,000	98,000	1,000
Physics/astronomy	73,000	59,000	14,000	*	13,000	2,000	3,000	54,000	1,000
Other physical sciences	36,000	22,000	15,000	S	2,000	3,000	4,000	27,000	S
Social/related sciences	2,760,000	1,366,000	1,395,000	13,000	153,000	227,000	162,000	2,144,000	61,000
Economics	455,000	346,000	109,000	S	58,000	17,000	20,000	354,000	6,000
Political/related sciences	548,000	347,000	201,000	4,000	23,000	48,000	31,000	430,000	13,000
Psychology	849,000	274,000	574,000	3,000	39,000	73,000	58,000	655,000	20,000
Sociology/anthropology	605,000	243,000	362,000	3,000	18,000	62,000	30,000	478,000	15,000
Other social sciences	303,000	156,000	147,000	3,000	15,000	28,000	23,000	228,000	7,000
Engineering	1,677,000	1,488,000	189,000	4,000	214,000	60,000	102,000	1,266,000	31,000
Aerospace/aeronautical/astronautical engineering	64,000	57,000	7,000	S	3,000	1,000	2,000	54,000	2,000
Chemical engineering	116,000	90,000	26,000	1,000	16,000	4,000	7,000	86,000	2,000
Civil/architectural engineering	288,000	258,000	30,000	1,000	26,000	9,000	25,000	219,000	8,000
Electrical/computer engineering	518,000	466,000	53,000	S	102,000	29,000	29,000	347,000	12,000
Industrial engineering	101,000	83,000	17,000	S	8,000	3,000	10,000	79,000	1,000
Mechanical engineering	393,000	362,000	31,000	1,000	41,000	10,000	16,000	321,000	5,000
Other engineering	197,000	172,000	25,000	S	18,000	4,000	13,000	160,000	2,000
S&E-related fields	2,322,000	824,000	1,498,000	10,000	203,000	144,000	135,000	1,783,000	47,000

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Level and field of highest degree	Employed scientists and engineers	Race/ethnicity <sup>a</sup>							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Health	1,621,000	313,000	1,308,000	8,000	150,000	108,000	89,000	1,225,000	41,000
Science/mathematics teacher education	185,000	85,000	99,000	S	7,000	7,000	11,000	158,000	S
Technology/technical fields	282,000	248,000	33,000	S	29,000	18,000	18,000	212,000	4,000
Other S&E-related fields	235,000	177,000	57,000	S	17,000	11,000	16,000	187,000	2,000
Non-S&E fields	1,215,000	664,000	551,000	7,000	60,000	78,000	49,000	1,004,000	18,000
Arts/humanities	252,000	139,000	114,000	S	10,000	6,000	9,000	224,000	3,000
Education, except science/mathematics teacher education	217,000	77,000	140,000	3,000	6,000	12,000	9,000	184,000	3,000
Management/administration	468,000	315,000	153,000	3,000	34,000	36,000	20,000	367,000	7,000
Sales/marketing	53,000	27,000	26,000	S	S	2,000	2,000	48,000	S
Social services/related	40,000	22,000	18,000	S	1,000	6,000	1,000	32,000	S
Other non-S&E fields	185,000	84,000	101,000	S	7,000	16,000	8,000	149,000	3,000
Master's degrees	4,979,000	2,756,000	2,223,000	20,000	525,000	292,000	217,000	3,856,000	70,000
S&E fields	1,919,000	1,211,000	708,000	5,000	332,000	83,000	86,000	1,383,000	29,000
Sciences	1,384,000	748,000	637,000	5,000	200,000	71,000	60,000	1,028,000	21,000
Biological/agricultural/environmental life sciences	209,000	111,000	98,000	1,000	25,000	7,000	7,000	165,000	3,000
Agricultural sciences	31,000	18,000	13,000	S	2,000	2,000	2,000	24,000	1,000
Biological sciences	148,000	72,000	75,000	1,000	20,000	5,000	6,000	115,000	1,000
Environmental life sciences	30,000	20,000	10,000	S	3,000	1,000	*	25,000	S
Computer/mathematical sciences	375,000	255,000	120,000	S	119,000	16,000	9,000	224,000	6,000
Computer/information sciences	277,000	196,000	80,000	S	102,000	11,000	8,000	150,000	5,000
Mathematics/statistics	98,000	58,000	40,000	S	17,000	5,000	2,000	74,000	1,000
Physical/related sciences	130,000	94,000	35,000	*	24,000	3,000	4,000	97,000	1,000
Chemistry, except biochemistry	46,000	28,000	18,000	S	16,000	1,000	1,000	27,000	S
Earth/atmospheric/ocean sciences	47,000	36,000	11,000	S	3,000	S	1,000	42,000	1,000
Physics/astronomy	31,000	27,000	4,000	S	5,000	1,000	2,000	24,000	S
Other physical sciences	5,000	3,000	2,000	S	S	S	S	5,000	S
Social/related sciences	670,000	288,000	383,000	2,000	31,000	45,000	39,000	542,000	11,000
Economics	72,000	53,000	19,000	S	10,000	1,000	3,000	56,000	*
Political/related sciences	97,000	59,000	38,000	S	6,000	7,000	5,000	77,000	1,000
Psychology	373,000	117,000	256,000	1,000	9,000	26,000	21,000	308,000	8,000
Sociology/anthropology	52,000	21,000	31,000	S	3,000	4,000	4,000	41,000	1,000
Other social sciences	77,000	37,000	39,000	S	3,000	6,000	6,000	60,000	1,000
Engineering	535,000	464,000	71,000	S	132,000	12,000	26,000	355,000	8,000
Aerospace/aeronautical/astronautical engineering	15,000	14,000	1,000	S	2,000	S	1,000	11,000	1,000
Chemical engineering	27,000	21,000	6,000	S	9,000	1,000	2,000	15,000	S

TABLE 14. Employed U.S. scientists and engineers, by level and field of highest degree, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity <sup>a</sup>							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Civil/architectural engineering	86,000	74,000	12,000	S	16,000	2,000	6,000	60,000	2,000
Electrical/computer engineering	194,000	169,000	26,000	S	66,000	5,000	7,000	114,000	2,000
Industrial engineering	29,000	24,000	5,000	S	8,000	2,000	3,000	17,000	S
Mechanical engineering	84,000	79,000	5,000	S	15,000	1,000	3,000	63,000	1,000
Other engineering	99,000	83,000	16,000	S	16,000	2,000	4,000	75,000	1,000
S&E-related fields	915,000	301,000	613,000	3,000	58,000	52,000	36,000	756,000	10,000
Health	624,000	130,000	494,000	2,000	34,000	33,000	25,000	522,000	7,000
Science/mathematics teacher education	147,000	61,000	85,000	S	4,000	11,000	4,000	125,000	S
Technology/technical fields	49,000	40,000	9,000	S	13,000	3,000	2,000	30,000	S
Other S&E-related fields	95,000	70,000	25,000	S	7,000	4,000	4,000	78,000	1,000
Non-S&E fields	2,145,000	1,243,000	902,000	12,000	134,000	157,000	95,000	1,717,000	31,000
Arts/humanities	97,000	48,000	49,000	S	10,000	2,000	4,000	81,000	1,000
Education, except science/mathematics teacher education	606,000	251,000	355,000	3,000	13,000	53,000	28,000	500,000	9,000
Management/administration	882,000	657,000	225,000	6,000	84,000	51,000	39,000	689,000	14,000
Sales/marketing	90,000	64,000	25,000	S	8,000	4,000	3,000	73,000	S
Social services/related	248,000	97,000	151,000	S	7,000	25,000	11,000	200,000	4,000
Other non-S&E fields	222,000	125,000	97,000	S	13,000	21,000	9,000	174,000	3,000
Doctorate degrees	885,000	627,000	258,000	1,000	148,000	33,000	30,000	664,000	10,000
S&E fields	690,000	513,000	177,000	1,000	129,000	21,000	21,000	510,000	8,000
Sciences	568,000	401,000	167,000	1,000	88,000	18,000	18,000	436,000	7,000
Biological/agricultural/environmental life sciences	191,000	131,000	59,000	*	38,000	5,000	7,000	138,000	3,000
Agricultural sciences	19,000	16,000	3,000	S	4,000	1,000	1,000	14,000	*
Biological sciences	165,000	111,000	55,000	*	34,000	4,000	6,000	119,000	2,000
Environmental life sciences	6,000	5,000	1,000	S	*	*	*	5,000	S
Computer/mathematical sciences	51,000	42,000	9,000	S	12,000	3,000	1,000	34,000	*
Computer/information sciences	17,000	15,000	2,000	S	5,000	1,000	1,000	10,000	*
Mathematics/statistics	34,000	27,000	7,000	S	6,000	3,000	1,000	24,000	*
Physical/related sciences	141,000	120,000	21,000	*	27,000	2,000	3,000	107,000	1,000
Chemistry, except biochemistry	71,000	58,000	13,000	*	16,000	1,000	2,000	51,000	1,000
Earth/atmospheric/ocean sciences	18,000	15,000	3,000	S	2,000	*	*	15,000	*
Physics/astronomy	48,000	43,000	4,000	S	9,000	*	1,000	37,000	*
Other physical sciences	4,000	3,000	1,000	S	*	S	S	3,000	S
Social/related sciences	185,000	108,000	78,000	*	11,000	8,000	7,000	156,000	2,000
Economics	24,000	20,000	4,000	S	3,000	1,000	1,000	19,000	*
Political/related sciences	21,000	15,000	5,000	S	1,000	2,000	1,000	17,000	*

TABLE 14. Employed U.S. scientists and engineers, by level and field of highest degree, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Sex		Race/ethnicity <sup>a</sup>					
		Male	Female	American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
Psychology	96,000	48,000	49,000	*	3,000	4,000	3,000	85,000	1,000
Sociology/anthropology	27,000	14,000	13,000	*	1,000	1,000	1,000	22,000	*
Other social sciences	18,000	11,000	7,000	*	3,000	1,000	1,000	13,000	*
Engineering	122,000	112,000	10,000	S	41,000	2,000	3,000	75,000	1,000
Aerospace/aeronautical/astronautical engineering	6,000	6,000	*	S	2,000	*	*	4,000	S
Chemical engineering	16,000	15,000	2,000	S	5,000	*	1,000	10,000	*
Civil/architectural engineering	11,000	10,000	1,000	S	3,000	*	*	7,000	*
Electrical/computer engineering	36,000	33,000	3,000	S	13,000	1,000	1,000	21,000	*
Industrial engineering	4,000	3,000	1,000	S	1,000	*	*	2,000	S
Mechanical engineering	15,000	14,000	1,000	S	6,000	*	*	9,000	*
Other engineering	34,000	31,000	4,000	S	10,000	*	1,000	22,000	*
S&E-related fields	59,000	31,000	28,000	*	10,000	3,000	3,000	43,000	*
Health	41,000	18,000	23,000	*	8,000	2,000	3,000	27,000	*
Science/mathematics teacher education	9,000	4,000	4,000	S	S	S	S	8,000	S
Technology/technical fields	3,000	3,000	S	S	1,000	S	S	2,000	S
Other S&E-related fields	7,000	6,000	1,000	S	S	S	S	6,000	S
Non-S&E fields	136,000	84,000	53,000	S	9,000	9,000	6,000	111,000	1,000
Arts/humanities	17,000	10,000	7,000	S	S	S	1,000	15,000	S
Education, except science/mathematics teacher education	64,000	35,000	29,000	S	1,000	5,000	3,000	53,000	1,000
Management/administration	14,000	12,000	2,000	S	4,000	S	S	9,000	S
Sales/marketing	2,000	1,000	1,000	S	1,000	S	S	1,000	S
Social services/related	19,000	14,000	5,000	S	1,000	3,000	S	15,000	S
Other non-S&E fields	21,000	12,000	9,000	S	2,000	1,000	S	18,000	S

\* = estimate < 500; S = suppressed for reliability or confidentiality.

S&E = science and engineering.

<sup>a</sup> "Other" includes Native Hawaiian/Other Pacific Islander and non-Hispanic respondents reporting 2 or more races.

<sup>b</sup> Total includes professional degrees not broken out separately.

NOTES: Scientists and engineers include any person who has ever received a bachelor's or higher degree in a science or engineering (S&E) or S&E-related field, plus any person holding a non-S&E bachelor's or higher degree who was employed in a S&E or S&E-related occupation in 2003. See <http://sestat.nsf.gov/docs/ed03maj.html> for a detailed description of the educational field classification. Numbers are rounded to the nearest thousand. Detail may not add to total because of rounding.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT): 2003.