

TABLE 16. Employed U.S. scientists and engineers, by level of highest degree, occupation, and employment sector: 2006

Level of highest degree and occupation	Employed scientists and engineers	Educational institution									
		Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
All degrees and occupations ^a	18,927,000	13,137,000	9,978,000	1,329,000	1,830,000	3,562,000	1,549,000	2,014,000	2,228,000	824,000	1,405,000
S&E occupations	5,024,000	3,554,000	3,178,000	183,000	192,000	833,000	675,000	159,000	637,000	300,000	336,000
Scientists	3,403,000	2,236,000	1,925,000	143,000	169,000	743,000	591,000	152,000	424,000	194,000	230,000
Biological/agricultural/other life scientists	487,000	182,000	143,000	9,000	30,000	204,000	190,000	15,000	101,000	56,000	45,000
Agricultural/food scientists	57,000	28,000	25,000	2,000	1,000	13,000	13,000	S	15,000	10,000	6,000
Biological/medical scientists	336,000	142,000	112,000	5,000	25,000	130,000	129,000	1,000	65,000	35,000	30,000
Environmental life scientists	35,000	11,000	5,000	2,000	3,000	3,000	3,000	S	21,000	12,000	9,000
Postsecondary teachers-life/related sciences	60,000	1,000	S	S	S	59,000	45,000	14,000	S	S	S
Computer/mathematical scientists	2,112,000	1,687,000	1,528,000	66,000	92,000	239,000	173,000	66,000	186,000	81,000	105,000
Computer/information scientists	1,938,000	1,633,000	1,485,000	63,000	85,000	138,000	104,000	34,000	167,000	68,000	99,000
Mathematical scientists	85,000	53,000	43,000	3,000	7,000	12,000	11,000	2,000	19,000	13,000	7,000
Postsecondary teachers-computer/mathematical sciences	90,000	*	S	S	S	89,000	59,000	31,000	S	S	S
Physical/related scientists	334,000	182,000	165,000	11,000	7,000	92,000	84,000	8,000	60,000	24,000	36,000
Chemists, except biochemists	134,000	104,000	100,000	2,000	2,000	14,000	14,000	S	15,000	6,000	9,000
Earth/atmospheric/ocean scientists	80,000	48,000	43,000	5,000	1,000	10,000	10,000	S	22,000	12,000	10,000
Physicists/astronomers	29,000	12,000	8,000	1,000	3,000	13,000	13,000	S	4,000	3,000	1,000
Postsecondary teachers-physical/related sciences	52,000	*	S	S	S	51,000	44,000	8,000	S	S	S
Other physical/related scientists	39,000	18,000	13,000	4,000	1,000	3,000	3,000	S	18,000	3,000	15,000
Social/related scientists	470,000	186,000	89,000	57,000	40,000	208,000	144,000	64,000	76,000	33,000	44,000
Economists	33,000	19,000	16,000	1,000	2,000	4,000	3,000	S	11,000	7,000	3,000
Political/related scientists	20,000	9,000	2,000	2,000	5,000	3,000	3,000	S	8,000	4,000	3,000
Postsecondary teachers-social/related sciences	115,000	S	S	S	S	114,000	95,000	19,000	S	S	S
Psychologists	177,000	87,000	26,000	43,000	18,000	69,000	27,000	43,000	20,000	7,000	13,000
Sociologists/anthropologists	21,000	8,000	4,000	2,000	2,000	9,000	8,000	S	4,000	3,000	1,000
Other social/related scientists	103,000	62,000	41,000	9,000	12,000	8,000	7,000	1,000	33,000	10,000	23,000
Engineers	1,621,000	1,317,000	1,254,000	41,000	23,000	90,000	84,000	6,000	213,000	106,000	107,000
Aerospace/aeronautical/astronautical engineers	96,000	76,000	73,000	1,000	1,000	3,000	3,000	S	18,000	17,000	*
Chemical engineers	80,000	73,000	71,000	1,000	1,000	4,000	4,000	S	3,000	2,000	1,000
Civil/architectural/sanitary engineers	266,000	177,000	163,000	10,000	3,000	3,000	3,000	S	86,000	16,000	70,000
Electrical/computer hardware engineers	395,000	346,000	332,000	8,000	6,000	12,000	12,000	S	37,000	29,000	8,000
Industrial engineers	93,000	87,000	85,000	1,000	1,000	1,000	1,000	S	4,000	3,000	S
Mechanical engineers	305,000	278,000	267,000	7,000	3,000	9,000	9,000	S	18,000	13,000	5,000
Postsecondary teachers-engineering	38,000	S	S	S	S	38,000	34,000	4,000	S	S	S
Other engineers	348,000	281,000	262,000	12,000	8,000	19,000	19,000	S	47,000	25,000	22,000
S&E-related occupations	5,246,000	3,515,000	2,246,000	359,000	910,000	1,268,000	472,000	796,000	464,000	178,000	286,000
Health-related occupations	3,625,000	2,727,000	1,598,000	298,000	831,000	573,000	424,000	149,000	325,000	125,000	200,000
S&E managers	382,000	297,000	241,000	2,000	54,000	22,000	17,000	5,000	64,000	23,000	40,000

TABLE 16. Employed U.S. scientists and engineers, by level of highest degree, occupation, and employment sector: 2006

Level of highest degree and occupation	Employed scientists and engineers	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
S&E precollege teachers	644,000	4,000	2,000	S	S	638,000	S	638,000	2,000	S	2,000
S&E technicians/technologists	371,000	282,000	246,000	18,000	18,000	31,000	27,000	3,000	58,000	25,000	32,000
Other S&E-related occupations	224,000	204,000	159,000	38,000	7,000	5,000	4,000	S	15,000	4,000	11,000
Non-S&E occupations	8,657,000	6,068,000	4,554,000	787,000	728,000	1,461,000	402,000	1,059,000	1,128,000	345,000	782,000
Art/humanities/related occupations	262,000	222,000	133,000	62,000	27,000	23,000	18,000	5,000	17,000	8,000	9,000
Management-related occupations	1,361,000	1,110,000	917,000	95,000	98,000	77,000	53,000	24,000	174,000	73,000	101,000
Non-S&E managers	1,118,000	831,000	713,000	21,000	97,000	164,000	59,000	105,000	123,000	42,000	82,000
Non-S&E postsecondary teachers	141,000	4,000	2,000	S	S	137,000	105,000	32,000	1,000	S	*
Non-S&E precollege/other teachers	724,000	24,000	9,000	6,000	10,000	694,000	3,000	691,000	5,000	S	5,000
Sales/marketing occupations	1,435,000	1,409,000	1,182,000	194,000	33,000	10,000	9,000	1,000	16,000	7,000	9,000
Social services/related occupations	714,000	396,000	96,000	40,000	260,000	148,000	39,000	108,000	171,000	9,000	162,000
Other non-S&E occupations	2,902,000	2,073,000	1,503,000	369,000	202,000	208,000	116,000	92,000	620,000	206,000	415,000
Bachelor's degrees, all occupations	10,886,000	8,108,000	6,381,000	630,000	1,098,000	1,465,000	610,000	855,000	1,312,000	461,000	852,000
S&E occupations	2,911,000	2,253,000	2,063,000	85,000	105,000	270,000	222,000	47,000	388,000	161,000	226,000
Scientists	1,865,000	1,383,000	1,232,000	58,000	93,000	237,000	193,000	44,000	245,000	94,000	151,000
Biological/agricultural/other life scientists	203,000	87,000	70,000	5,000	13,000	64,000	61,000	3,000	52,000	24,000	28,000
Agricultural/food scientists	32,000	17,000	16,000	S	S	4,000	4,000	S	11,000	5,000	5,000
Biological/medical scientists	137,000	61,000	49,000	1,000	11,000	48,000	47,000	S	28,000	11,000	17,000
Environmental life scientists	22,000	8,000	4,000	S	S	S	S	S	14,000	8,000	6,000
Postsecondary teachers-life/related sciences	13,000	S	S	S	S	11,000	9,000	3,000	S	S	S
Computer/mathematical scientists	1,394,000	1,148,000	1,038,000	43,000	67,000	113,000	79,000	34,000	133,000	53,000	80,000
Computer/information scientists	1,345,000	1,126,000	1,020,000	43,000	64,000	94,000	68,000	26,000	125,000	48,000	77,000
Mathematical scientists	32,000	22,000	18,000	S	3,000	2,000	2,000	S	8,000	5,000	3,000
Postsecondary teachers-computer/mathematical sciences	17,000	S	S	S	S	17,000	9,000	8,000	S	S	S
Physical/related scientists	159,000	96,000	91,000	4,000	1,000	28,000	28,000	1,000	35,000	9,000	26,000
Chemists, except biochemists	79,000	61,000	60,000	S	S	8,000	8,000	S	9,000	2,000	7,000
Earth/atmospheric/ocean scientists	39,000	23,000	21,000	2,000	S	4,000	4,000	S	12,000	5,000	6,000
Physicists/astronomers	6,000	1,000	1,000	S	S	5,000	5,000	S	*	S	S
Postsecondary teachers-physical/related sciences	9,000	S	S	S	S	9,000	9,000	1,000	S	S	S
Other physical/related scientists	25,000	10,000	9,000	S	S	2,000	2,000	S	14,000	1,000	13,000
Social/related scientists	108,000	52,000	33,000	6,000	13,000	32,000	25,000	6,000	24,000	8,000	16,000
Economists	9,000	6,000	4,000	S	S	S	S	S	2,000	1,000	S
Political/related scientists	10,000	4,000	1,000	S	2,000	S	S	S	4,000	S	S
Postsecondary teachers-social/related sciences	13,000	S	S	S	S	13,000	9,000	4,000	S	S	S
Psychologists	19,000	7,000	4,000	S	3,000	10,000	7,000	2,000	2,000	S	2,000
Sociologists/anthropologists	8,000	3,000	2,000	S	S	4,000	4,000	S	1,000	S	S
Other social/related scientists	50,000	32,000	22,000	4,000	6,000	3,000	3,000	S	15,000	4,000	11,000

TABLE 16. Employed U.S. scientists and engineers, by level of highest degree, occupation, and employment sector: 2006

Level of highest degree and occupation	Employed scientists and engineers	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
Engineers	1,046,000	870,000	830,000	27,000	13,000	33,000	29,000	3,000	143,000	68,000	76,000
Aerospace/aeronautical/astronautical engineers	57,000	46,000	45,000	S	*	1,000	1,000	S	9,000	9,000	S
Chemical engineers	51,000	45,000	45,000	*	S	3,000	3,000	S	2,000	2,000	S
Civil/architectural/sanitary engineers	185,000	120,000	111,000	7,000	1,000	1,000	1,000	S	64,000	12,000	52,000
Electrical/computer hardware engineers	242,000	213,000	204,000	5,000	4,000	5,000	4,000	S	24,000	19,000	5,000
Industrial engineers	65,000	63,000	62,000	S	1,000	1,000	1,000	S	1,000	1,000	S
Mechanical engineers	211,000	194,000	187,000	5,000	2,000	4,000	4,000	S	14,000	9,000	5,000
Postsecondary teachers-engineering	8,000	S	S	S	S	8,000	6,000	2,000	S	S	S
Other engineers	227,000	189,000	177,000	8,000	4,000	10,000	9,000	S	29,000	16,000	13,000
S&E-related occupations	2,810,000	1,959,000	1,253,000	106,000	600,000	568,000	224,000	343,000	283,000	97,000	186,000
Health-related occupations	1,865,000	1,417,000	795,000	67,000	556,000	251,000	194,000	57,000	197,000	62,000	135,000
S&E managers	199,000	163,000	137,000	S	25,000	8,000	6,000	2,000	28,000	10,000	18,000
S&E precollege teachers	283,000	2,000	S	S	S	280,000	S	280,000	S	S	S
S&E technicians/technologists	306,000	234,000	206,000	14,000	13,000	23,000	20,000	3,000	49,000	23,000	26,000
Other S&E-related occupations	156,000	144,000	114,000	24,000	5,000	5,000	4,000	S	8,000	S	6,000
Non-S&E occupations	5,165,000	3,896,000	3,065,000	439,000	392,000	628,000	163,000	465,000	641,000	202,000	439,000
Art/humanities/related occupations	165,000	142,000	98,000	29,000	15,000	13,000	9,000	3,000	11,000	5,000	5,000
Management-related occupations	816,000	687,000	579,000	50,000	58,000	41,000	31,000	11,000	87,000	38,000	49,000
Non-S&E managers	528,000	452,000	406,000	11,000	35,000	26,000	11,000	16,000	49,000	22,000	28,000
Non-S&E postsecondary teachers	29,000	S	S	S	S	28,000	18,000	10,000	S	S	S
Non-S&E precollege/other teachers	360,000	11,000	4,000	S	6,000	346,000	2,000	344,000	3,000	S	2,000
Sales/marketing occupations	1,080,000	1,063,000	905,000	135,000	24,000	5,000	4,000	1,000	12,000	6,000	7,000
Social services/related occupations	271,000	149,000	29,000	3,000	118,000	34,000	14,000	20,000	88,000	1,000	87,000
Other non-S&E occupations	1,915,000	1,390,000	1,044,000	210,000	136,000	135,000	75,000	60,000	390,000	129,000	261,000
Master's degrees, all occupations	5,384,000	3,242,000	2,402,000	323,000	517,000	1,485,000	407,000	1,078,000	656,000	247,000	409,000
S&E occupations	1,497,000	1,047,000	936,000	58,000	53,000	257,000	168,000	89,000	192,000	100,000	92,000
Scientists	1,023,000	661,000	567,000	48,000	46,000	231,000	144,000	87,000	132,000	68,000	64,000
Biological/agricultural/other life scientists	113,000	43,000	35,000	2,000	6,000	38,000	32,000	6,000	31,000	17,000	14,000
Agricultural/food scientists	15,000	6,000	6,000	S	S	6,000	6,000	S	3,000	2,000	S
Biological/medical scientists	76,000	35,000	29,000	1,000	4,000	20,000	20,000	S	22,000	12,000	10,000
Environmental life scientists	11,000	3,000	S	S	2,000	2,000	2,000	S	7,000	3,000	4,000
Postsecondary teachers-life/related sciences	11,000	S	S	S	S	11,000	5,000	6,000	S	S	S
Computer/mathematical scientists	627,000	491,000	451,000	19,000	22,000	88,000	59,000	29,000	48,000	24,000	23,000
Computer/information scientists	546,000	469,000	432,000	18,000	19,000	39,000	31,000	7,000	39,000	18,000	20,000
Mathematical scientists	39,000	23,000	19,000	1,000	2,000	7,000	6,000	S	9,000	6,000	3,000
Postsecondary teachers-computer/mathematical sciences	42,000	S	S	S	S	42,000	21,000	21,000	S	S	S
Physical/related scientists	84,000	50,000	44,000	4,000	2,000	19,000	15,000	5,000	15,000	8,000	7,000

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		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
Chemists, except biochemists	26,000	21,000	21,000	S	1,000	2,000	2,000	S	3,000	1,000	2,000
Earth/atmospheric/ocean scientists	30,000	20,000	18,000	2,000	S	3,000	3,000	S	6,000	4,000	2,000
Physicists/astronomers	7,000	3,000	2,000	S	S	3,000	3,000	S	1,000	1,000	S
Postsecondary teachers-physical/related sciences	11,000	S	S	S	S	11,000	7,000	4,000	S	S	S
Other physical/related scientists	10,000	5,000	3,000	S	S	1,000	1,000	S	4,000	2,000	2,000
Social/related scientists	200,000	76,000	37,000	23,000	16,000	85,000	39,000	46,000	38,000	18,000	20,000
Economists	17,000	10,000	9,000	S	1,000	1,000	1,000	S	6,000	4,000	2,000
Political/related scientists	8,000	4,000	1,000	S	3,000	1,000	1,000	S	3,000	3,000	S
Postsecondary teachers-social/related sciences	36,000	S	S	S	S	35,000	24,000	11,000	S	S	S
Psychologists	87,000	34,000	9,000	17,000	8,000	43,000	9,000	34,000	10,000	4,000	7,000
Sociologists/anthropologists	9,000	4,000	2,000	2,000	S	3,000	3,000	S	2,000	1,000	1,000
Other social/related scientists	43,000	25,000	17,000	3,000	5,000	2,000	2,000	S	16,000	6,000	10,000
Engineers	474,000	387,000	369,000	10,000	8,000	27,000	25,000	2,000	61,000	32,000	28,000
Aerospace/aeronautical/astronautical engineers	32,000	24,000	24,000	S	S	1,000	1,000	S	7,000	7,000	S
Chemical engineers	21,000	20,000	19,000	S	S	1,000	1,000	S	*	S	S
Civil/architectural/sanitary engineers	75,000	53,000	49,000	3,000	2,000	1,000	1,000	S	21,000	4,000	17,000
Electrical/computer hardware engineers	128,000	113,000	111,000	2,000	1,000	4,000	4,000	S	11,000	9,000	2,000
Industrial engineers	25,000	23,000	22,000	S	S	1,000	1,000	S	2,000	1,000	S
Mechanical engineers	84,000	77,000	73,000	2,000	1,000	3,000	3,000	S	4,000	3,000	S
Postsecondary teachers-engineering	9,000	S	S	S	S	9,000	7,000	2,000	S	S	S
Other engineers	99,000	77,000	71,000	3,000	3,000	6,000	6,000	S	16,000	8,000	9,000
S&E-related occupations	1,266,000	628,000	381,000	60,000	186,000	519,000	88,000	431,000	118,000	45,000	74,000
Health-related occupations	646,000	407,000	213,000	39,000	155,000	164,000	75,000	89,000	75,000	30,000	45,000
S&E managers	152,000	114,000	88,000	S	24,000	10,000	7,000	3,000	28,000	10,000	18,000
S&E precollege teachers	343,000	3,000	S	S	S	339,000	S	339,000	S	S	S
S&E technicians/technologists	59,000	46,000	37,000	4,000	5,000	6,000	6,000	S	8,000	2,000	6,000
Other S&E-related occupations	67,000	59,000	43,000	14,000	2,000	S	S	S	7,000	S	5,000
Non-S&E occupations	2,621,000	1,567,000	1,084,000	205,000	277,000	708,000	150,000	558,000	346,000	102,000	243,000
Art/humanities/related occupations	82,000	69,000	31,000	27,000	11,000	9,000	7,000	2,000	5,000	1,000	4,000
Management-related occupations	473,000	366,000	298,000	35,000	34,000	29,000	18,000	12,000	77,000	31,000	46,000
Non-S&E managers	480,000	319,000	261,000	7,000	51,000	101,000	23,000	78,000	60,000	16,000	44,000
Non-S&E postsecondary teachers	57,000	S	S	S	S	55,000	37,000	19,000	S	S	S
Non-S&E precollege/other teachers	350,000	12,000	5,000	S	3,000	336,000	S	335,000	2,000	S	2,000
Sales/marketing occupations	313,000	305,000	246,000	51,000	8,000	4,000	4,000	S	4,000	S	S
Social services/related occupations	410,000	221,000	62,000	32,000	127,000	109,000	25,000	84,000	80,000	8,000	72,000
Other non-S&E occupations	456,000	273,000	181,000	48,000	44,000	64,000	36,000	29,000	118,000	45,000	73,000
Doctorate degrees, all occupations	883,000	379,000	271,000	52,000	56,000	433,000	377,000	56,000	72,000	47,000	25,000
S&E occupations	566,000	226,000	166,000	31,000	29,000	291,000	271,000	19,000	50,000	35,000	14,000

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		Total	Profit	Self- employed	Nonprofit	Total	4-year college/ university	Other	Total	Federal	State/ local
Non-S&E occupations	220,000	111,000	74,000	18,000	19,000	95,000	72,000	23,000	14,000	7,000	7,000
Art/humanities/related occupations	8,000	6,000	2,000	3,000	1,000	1,000	1,000	S	1,000	*	S
Management-related occupations	42,000	30,000	23,000	5,000	3,000	5,000	4,000	1,000	6,000	4,000	3,000
Non-S&E managers	67,000	33,000	25,000	1,000	7,000	31,000	21,000	10,000	4,000	2,000	2,000
Non-S&E postsecondary teachers	47,000	1,000	S	S	S	47,000	43,000	3,000	S	S	S
Non-S&E precollege/other teachers	6,000	*	S	S	S	6,000	S	6,000	S	S	S
Sales/marketing occupations	16,000	15,000	12,000	2,000	1,000	S	S	S	S	S	S
Social services/related occupations	14,000	11,000	4,000	2,000	5,000	3,000	*	2,000	1,000	S	1,000
Other non-S&E occupations	20,000	15,000	8,000	5,000	2,000	3,000	2,000	1,000	2,000	1,000	1,000

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

S&E = science and engineering.

^a 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 through 2005, 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/occ03maj.html> for a detailed description of the occupational classification. Four-year college/university includes medical schools and university-affiliated research institutes. Other educational institution includes 2-year colleges, precollege institutions, and other educational institutions. 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): 2006.