

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
All degree levels¹											
All occupations, total²	10,585,600	7,264,900	5,910,800	728,100	625,900	1,953,500	940,600	1,012,900	1,367,300	575,100	792,100
Male	7,037,600	5,148,100	4,363,500	501,900	282,800	959,400	551,600	407,800	930,200	437,400	492,800
Female	3,548,000	2,116,800	1,547,300	226,200	343,200	994,100	389,000	605,100	437,100	137,800	299,300
S&E occupations, total	3,369,400	2,343,600	2,126,400	110,100	107,000	586,700	475,700	111,000	439,100	250,600	188,600
Male	2,606,100	1,883,400	1,750,300	73,200	59,800	383,000	325,400	57,600	339,800	200,100	139,600
Female	763,300	460,200	376,100	36,900	47,200	203,700	150,300	53,400	99,400	50,400	48,900
Scientists, total	1,995,100	1,236,900	1,066,000	81,000	89,800	512,700	409,100	103,600	245,500	139,600	105,900
Male	1,355,400	869,100	779,800	45,900	43,400	316,300	265,500	50,800	170,000	102,400	67,600
Female	639,600	367,700	286,300	35,100	46,400	196,400	143,600	52,800	75,500	37,200	38,300
Computer/math scientists, total	1,039,500	828,900	771,800	25,100	32,000	121,200	88,200	33,000	89,400	53,300	36,100
Male	758,600	616,600	578,300	19,700	18,600	78,900	59,100	19,800	63,100	39,800	23,200
Female	280,900	212,300	193,500	5,400	13,400	42,200	29,100	13,100	26,300	13,400	12,900
Life/related scientists, total	321,800	102,700	81,400	8,000	13,300	154,500	139,100	15,400	64,600	37,900	26,700
Male	205,900	66,000	53,100	5,900	6,900	94,300	86,400	7,900	45,600	27,700	17,900
Female	115,900	36,700	28,300	2,100	6,300	60,200	52,700	7,600	19,000	10,300	8,700
Physical/related scientists, total ...	284,900	156,100	144,800	6,200	5,100	80,000	71,100	8,900	48,700	30,500	18,200
Male	223,100	122,800	113,300	5,800	3,800	63,100	57,200	6,000	37,100	23,400	13,700
Female	61,800	33,300	31,600	400	1,300	16,900	14,000	2,900	11,600	7,200	4,400
Social/related scientists, total	349,000	149,200	68,000	41,700	39,400	157,000	110,600	46,400	42,800	17,900	24,900
Male	167,900	63,700	35,100	14,500	14,100	79,900	62,800	17,100	24,200	11,500	12,700
Female	181,100	85,400	32,900	27,200	25,300	77,100	47,800	29,300	18,600	6,300	12,300
Engineers, total	1,374,400	1,106,700	1,060,400	29,100	17,200	74,000	66,700	7,400	193,600	110,900	82,700
Male	1,250,700	1,014,200	970,500	27,300	16,400	66,700	59,900	6,800	169,800	97,700	72,100
Female	123,700	92,500	89,900	1,800	800	7,300	6,800	600	23,900	13,200	10,600
Non-S&E occupations, total	7,216,200	4,921,300	3,784,400	618,000	518,900	1,366,800	464,800	901,900	928,100	324,600	603,600
Male	4,431,500	3,264,700	2,613,100	428,600	223,000	576,400	226,200	350,200	590,400	237,200	353,200
Female	2,784,700	1,656,600	1,171,200	189,400	296,000	790,400	238,700	551,700	337,700	87,300	250,400

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

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
All degree levels¹ — continued											
Managers/administrators	2,019,900	1,527,000	1,318,800	70,000	138,300	190,000	90,300	99,700	303,000	122,700	180,200
Male	1,453,100	1,136,900	1,015,000	48,100	73,800	101,400	46,100	55,300	214,700	93,900	120,800
Female	566,800	390,100	303,700	21,900	64,400	88,500	44,200	44,300	88,200	28,800	59,400
Other non-S&E occupations	5,196,300	3,394,300	2,465,600	548,000	380,700	1,176,800	374,500	802,300	625,200	201,800	423,400
Male	2,978,400	2,127,800	1,598,100	380,500	149,100	474,900	180,100	294,900	375,700	143,300	232,400
Female	2,217,900	1,266,500	867,500	167,500	231,500	701,900	194,500	507,400	249,500	58,500	191,000
Bachelor's											
All occupations, total²	6,193,700	4,582,200	3,903,100	360,500	318,600	780,800	317,600	463,200	830,700	337,900	492,900
Male	4,056,500	3,186,700	2,821,600	244,200	120,900	309,600	147,500	162,100	560,200	253,400	306,800
Female	2,137,200	1,395,500	1,081,500	116,200	197,700	471,200	170,000	301,100	270,500	84,400	186,100
S&E occupations, total	1,916,800	1,497,700	1,402,900	47,300	47,500	155,800	130,700	25,100	263,300	141,000	122,300
Male	1,521,800	1,224,200	1,157,200	39,600	27,400	92,000	77,800	14,300	205,500	111,900	93,600
Female	395,000	273,500	245,800	7,700	20,100	63,800	53,000	10,800	57,700	29,000	28,700
Scientists, total	1,000,200	740,100	672,100	29,500	38,500	131,200	110,200	21,100	128,900	69,200	59,700
Male	688,400	529,400	487,600	23,100	18,800	70,500	60,000	10,500	88,500	49,300	39,200
Female	311,800	210,600	184,600	6,400	19,700	60,800	50,100	10,600	40,400	19,900	20,500
Computer/math scientists, total	675,300	571,700	531,500	18,600	21,600	41,700	31,100	10,600	61,900	35,500	26,400
Male	487,900	420,400	394,500	14,000	11,900	25,600	19,400	6,200	41,900	25,000	16,900
Female	187,400	151,200	137,000	4,500	9,700	16,200	11,800	4,400	20,000	10,500	9,500
Life/related scientists, total	125,200	49,300	40,400	4,700	4,200	41,200	36,600	4,600	34,700	18,500	16,200
Male	74,300	29,400	24,300	4,100	1,000	20,700	18,000	2,800	24,200	14,300	9,900
Female	50,900	19,900	16,100	600	3,200	20,500	18,700	1,800	10,500	4,200	6,300
Physical/related scientists, total ...	131,700	87,300	81,800	3,600	1,900	21,900	20,600	1,300	22,400	11,100	11,300
Male	97,100	64,900	60,200	3,400	1,300	15,400	14,700	700	16,800	8,000	8,800
Female	34,600	22,400	21,600	200	600	6,500	5,900	600	5,600	3,200	2,500

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

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
Bachelor's — continued											
Social/related scientists, total	68,000	31,800	18,400	2,700	10,700	26,400	21,700	4,600	9,900	4,100	5,800
Male	29,100	14,700	8,600	1,600	4,600	8,800	8,000	800	5,600	2,100	3,500
Female	38,900	17,100	9,900	1,100	6,100	17,600	13,800	3,800	4,200	2,000	2,300
Engineers, total	916,600	757,700	730,800	17,800	9,100	24,600	20,600	4,000	134,400	71,800	62,600
Male	833,400	694,800	669,600	16,500	8,700	21,600	17,800	3,800	117,100	62,600	54,400
Female	83,200	62,800	61,200	1,300	400	3,000	2,800	200	17,300	9,200	8,100
Non-S&E occupations, total	4,276,900	3,084,500	2,500,100	313,200	271,100	625,000	186,900	438,100	567,500	196,900	370,600
Male	2,534,700	1,962,500	1,664,400	204,600	93,500	217,600	69,800	147,800	354,600	141,500	213,200
Female	1,742,200	1,122,000	835,800	108,600	177,600	407,400	117,100	290,300	212,800	55,400	157,400
Managers/administrators	1,141,100	928,600	827,300	38,100	63,200	55,200	33,400	21,800	157,300	64,500	92,800
Male	808,500	679,900	626,100	25,000	28,800	22,200	12,200	10,000	106,400	46,400	60,000
Female	332,600	248,700	201,200	13,100	34,400	33,000	21,200	11,800	50,900	18,100	32,800
Other non-S&E occupations	3,135,800	2,155,800	1,672,900	275,100	207,900	569,800	153,500	416,300	410,200	132,400	277,800
Male	1,726,200	1,282,600	1,038,300	179,600	64,600	195,400	57,600	137,800	248,300	95,100	153,200
Female	1,409,600	873,200	634,500	95,500	143,200	374,400	95,900	278,500	162,000	37,300	124,600
Master's											
All occupations, total ²	2,819,800	1,736,000	1,370,600	150,200	215,200	711,400	219,300	492,100	372,500	157,000	215,500
Male	1,800,500	1,220,700	1,034,800	85,700	100,200	327,400	115,900	211,500	252,400	122,700	129,700
Female	1,019,300	515,300	335,800	64,500	115,000	383,900	103,400	280,500	120,100	34,300	85,800
S&E occupations, total	967,900	657,200	580,800	39,100	37,300	182,500	113,300	69,200	128,200	74,600	53,600
Male	715,300	512,000	474,200	19,700	18,100	106,100	72,200	33,900	97,200	59,700	37,500
Female	252,600	145,200	106,700	19,300	19,200	76,400	41,100	35,300	31,000	14,900	16,100
Scientists, total	592,000	357,100	296,400	29,400	31,400	158,800	92,700	66,100	76,100	41,500	34,600
Male	374,400	238,400	215,400	10,500	12,500	84,900	53,700	31,100	51,100	30,200	20,900
Female	217,600	118,700	81,000	18,900	18,900	73,900	38,900	35,000	25,000	11,300	13,700

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

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
Master's — continued											
Computer/math scientists, total	301,600	228,400	214,300	5,600	8,500	49,500	29,500	20,000	23,700	15,200	8,500
Male	219,300	171,800	161,500	4,900	5,400	29,500	17,300	12,200	18,000	12,700	5,300
Female	82,300	56,500	52,800	600	3,100	20,000	12,100	7,800	5,700	2,500	3,200
Life/related scientists, total	70,300	22,500	18,000	1,500	3,000	31,100	23,500	7,600	16,600	8,400	8,200
Male	40,000	13,100	11,000	600	1,500	15,000	12,100	3,000	11,900	5,500	6,300
Female	30,300	9,400	7,000	900	1,500	16,100	11,400	4,600	4,800	2,900	1,900
Physical/related scientists, total ...	69,100	35,600	33,300	1,200	1,100	18,400	13,200	5,200	15,200	9,600	5,600
Male	52,600	28,800	27,200	1,000	600	13,500	10,100	3,400	10,300	6,500	3,800
Female	16,500	6,800	6,100	100	500	4,800	3,100	1,800	4,900	3,100	1,800
Social/related scientists, total	151,100	70,700	30,800	21,100	18,800	59,800	26,500	33,300	20,600	8,300	12,300
Male	62,500	24,700	15,800	3,900	5,000	26,800	14,200	12,600	11,000	5,500	5,500
Female	88,600	46,000	15,000	17,200	13,800	33,000	12,300	20,700	9,600	2,800	6,800
Engineers, total	375,900	300,100	284,400	9,700	5,900	23,700	20,600	3,100	52,100	33,000	19,000
Male	340,900	273,600	258,700	9,300	5,600	21,200	18,500	2,800	46,100	29,400	16,600
Female	34,900	26,500	25,700	400	300	2,500	2,200	300	6,000	3,600	2,400
Non-S&E occupations, total	1,851,900	1,078,700	789,700	111,100	177,900	528,900	106,000	422,900	244,300	82,400	161,900
Male	1,085,200	708,700	560,600	65,900	82,200	221,300	43,700	177,600	155,200	63,000	92,200
Female	766,700	370,100	229,100	45,200	95,800	307,600	62,300	245,300	89,100	19,300	69,700
Managers/administrators	724,800	506,500	420,900	24,900	60,700	93,700	30,100	63,600	124,600	48,600	76,000
Male	522,400	379,800	328,500	17,600	33,700	50,900	14,300	36,600	91,700	39,500	52,200
Female	202,400	126,700	92,400	7,300	27,000	42,800	15,800	27,000	32,900	9,100	23,800
Other non-S&E occupations	1,127,100	572,200	368,900	86,200	117,200	435,200	75,800	359,300	119,700	33,800	85,900
Male	562,800	328,800	232,100	48,300	48,400	170,400	29,400	141,000	63,500	23,500	40,000
Female	564,300	243,400	136,800	37,900	68,800	264,700	46,400	218,300	56,100	10,200	45,900

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

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
Doctorate											
All occupations, total²	696,000	289,100	212,500	38,300	38,300	341,800	302,000	39,800	65,100	42,500	22,600
Male	528,000	232,300	179,300	25,800	27,100	244,500	221,000	23,600	51,200	34,700	16,400
Female	168,000	56,800	33,200	12,400	11,200	97,300	81,000	16,200	13,900	7,800	6,200
S&E occupations, total	454,700	174,500	134,600	21,200	18,700	235,600	220,900	14,700	44,600	32,800	11,800
Male	348,300	137,900	113,200	12,400	12,400	175,200	166,800	8,400	35,200	26,900	8,300
Female	106,400	36,500	21,400	8,800	6,300	60,500	54,100	6,400	9,400	5,800	3,500
Scientists, total	375,300	127,200	91,200	19,600	16,400	209,900	195,400	14,500	38,100	27,300	10,800
Male	274,200	93,700	72,500	10,900	10,200	151,200	143,100	8,100	29,400	21,900	7,400
Female	101,000	33,600	18,600	8,700	6,200	58,700	52,300	6,300	8,800	5,400	3,400
Computer/math scientists, total	59,000	25,600	22,700	1,000	1,800	29,600	27,400	2,200	3,800	2,600	1,200
Male	48,500	21,700	19,700	700	1,300	23,500	22,200	1,300	3,200	2,200	1,100
Female	10,500	3,800	3,000	300	600	6,100	5,200	900	600	400	100
Life/related scientists, total	111,800	27,200	20,800	1,300	5,000	72,500	69,500	3,000	12,200	9,900	2,200
Male	80,600	20,800	16,300	1,000	3,500	50,700	48,800	1,900	9,100	7,400	1,700
Female	31,200	6,400	4,500	400	1,500	21,800	20,700	1,100	3,100	2,500	600
Physical/related scientists, total ...	83,700	33,100	29,700	1,300	2,100	39,700	37,300	2,400	10,800	9,500	1,300
Male	73,000	29,100	25,900	1,300	1,900	34,200	32,300	1,900	9,700	8,600	1,100
Female	10,700	4,100	3,800	100	200	5,500	5,000	500	1,100	900	200
Social/related scientists, total	120,800	41,400	18,000	16,000	7,400	68,000	61,200	6,800	11,400	5,300	6,100
Male	72,200	22,100	10,600	7,900	3,500	42,800	39,800	3,000	7,300	3,800	3,500
Female	48,600	19,300	7,300	8,000	3,900	25,300	21,400	3,800	4,100	1,600	2,500
Engineers, total	79,400	47,200	43,400	1,600	2,200	25,700	25,500	300	6,500	5,500	1,000
Male	74,100	44,300	40,700	1,500	2,100	23,900	23,700	300	5,900	5,000	900
Female	5,300	2,900	2,800	100	100	1,800	1,800	S	600	500	100
Non-S&E occupations, total	241,300	114,700	77,900	17,100	19,700	106,200	81,100	25,100	20,500	9,700	10,800
Male	179,700	94,400	66,100	13,500	14,800	69,400	54,200	15,200	15,900	7,800	8,100
Female	61,700	20,300	11,800	3,600	4,900	36,800	26,900	9,900	4,600	1,900	2,700

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

Table E-3. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, sex, and employment sector: 1997

Highest degree, occupation, and sex	Employed S&Es, total	Business/industry				Educational institution			Government		
		Total	Profit	Self-employed	Non-profit	Total	4 yr. College/university	Other	Total	Federal	State/local
Doctorate — continued											
Managers/administrators	102,400	55,200	43,200	3,000	9,000	34,000	22,700	11,200	13,300	6,500	6,800
Male	83,200	47,900	38,300	2,600	7,000	24,500	17,200	7,300	10,800	5,400	5,400
Female	19,200	7,300	4,900	400	2,000	9,500	5,600	3,900	2,500	1,100	1,400
Other non-S&E occupations	138,900	59,500	34,700	14,100	10,700	72,200	58,400	13,800	7,200	3,300	4,000
Male	96,500	46,500	27,800	10,900	7,800	44,900	37,000	7,900	5,100	2,400	2,700
Female	42,400	13,000	6,900	3,200	2,900	27,300	21,400	6,000	2,100	800	1,300

1 Includes professional degrees
 2 Total excludes 18,700 individuals who reported never having worked.

NOTES: The term "Scientists and Engineers" (S&Es) includes all persons who have ever received a bachelor's degree or higher in a science or engineering (S&E) field, plus persons holding a non-S&E bachelor's or higher degree who were employed in a S&E occupation during either the 1993, 1995 or 1997 SESTAT surveys. Figures are rounded to nearest hundred. Details may not add to total because of rounding.

KEY: S = Suppressed for reasons of confidentiality and/or data reliability

SOURCE: National Science Foundation/Science Resources Studies Division, 1997 SESTAT (Scientists and Engineers Statistical Data System)