

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>All degree levels<sup>1</sup></b>						
<b>All occupations, total<sup>2</sup></b> .....	10,585,600	2,904,700	1,560,700	6,343,700	2,164,600	3,588,300
Male .....	7,037,600	2,172,200	774,600	4,324,800	1,499,400	2,253,600
Female .....	3,548,000	732,500	786,100	2,018,900	665,100	1,334,800
<b>S&amp;E occupations, total</b> .....	3,369,400	1,873,700	387,200	1,424,900	1,228,700	663,900
Male .....	2,606,100	1,510,400	262,300	1,130,600	948,800	469,900
Female .....	763,300	363,300	124,900	294,300	279,900	194,000
<b>Scientists, total</b> .....	1,995,100	980,600	336,800	731,100	917,500	388,600
Male .....	1,355,400	694,700	216,200	501,400	669,300	217,900
Female .....	639,600	285,900	120,600	229,700	248,200	170,800
<b>Computer/math sci, total</b> .....	1,039,500	423,800	97,400	407,600	812,300	78,700
Male .....	758,600	319,300	64,300	298,200	597,600	53,900
Female .....	280,900	104,500	33,100	109,400	214,700	24,800
Computer/information scientists .....	933,200	368,800	29,100	386,200	781,100	69,400
Male .....	688,800	281,700	19,100	283,800	577,000	49,100
Female .....	244,500	87,100	10,000	102,400	204,100	20,400
Mathematical scientists .....	34,700	25,600	800	12,300	17,400	3,500
Male .....	23,100	16,100	700	8,800	12,100	2,100
Female .....	11,600	9,600	100	3,400	5,300	1,400
Postsecondary teachers- computer math sci .....	71,500	29,300	67,500	9,200	13,800	5,800
Male .....	46,700	21,500	44,500	5,600	8,500	2,700
Female .....	24,800	7,800	23,000	3,600	5,300	3,100
<b>Life/related scientists, total</b> .....	321,800	227,700	79,300	112,600	32,300	61,500
Male .....	205,900	146,100	50,800	72,700	19,400	41,500
Female .....	115,900	81,700	28,500	40,000	12,800	19,900
Agricultural/food scientists .....	43,000	26,100	2,200	22,300	4,900	11,500
Male .....	32,500	19,800	1,600	16,300	3,600	8,900
Female .....	10,600	6,300	600	6,000	1,300	2,600
Biological scientists .....	181,900	152,700	8,700	61,500	20,500	29,700
Male .....	105,600	89,500	4,700	35,900	10,500	17,900
Female .....	76,300	63,200	4,100	25,600	10,100	11,800
Environmental life scientists .....	20,200	7,700	400	13,200	3,500	8,500
Male .....	17,000	6,500	200	11,100	3,100	7,500
Female .....	3,200	1,100	200	2,100	400	1,000
Postsecondary teachers- life/related sciences .....	76,600	41,300	68,000	15,600	3,300	11,700
Male .....	50,800	30,300	44,300	9,300	2,300	7,300
Female .....	25,800	11,000	23,700	6,300	1,100	4,500

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>All degree levels<sup>1</sup> — continued</b>						
<b>Physical/related scientists, total</b> ...	284,900	198,100	49,700	100,700	46,700	53,500
Male .....	223,100	156,700	39,000	77,800	36,800	42,500
Female .....	61,800	41,400	10,800	22,900	10,000	11,000
Chemistry, except biochemistry .....	119,800	90,300	1,800	45,800	14,800	17,700
Male .....	87,800	65,600	1,500	33,600	10,200	13,600
Female .....	32,000	24,700	300	12,100	4,600	4,000
Earth scientists/geologists/oceanographers .....	68,600	45,800	800	31,100	18,900	19,600
Male .....	57,900	38,800	700	26,500	15,300	16,800
Female .....	10,700	7,000	200	4,600	3,600	2,800
Physicists/astronomers .....	31,500	27,300	1,400	7,900	7,800	4,400
Male .....	28,400	25,300	1,200	6,900	7,100	3,600
Female .....	3,100	2,000	200	1,000	700	800
Other physical/related scientists .....	16,700	7,700	400	8,500	1,900	8,400
Male .....	11,600	5,300	400	5,400	1,400	5,800
Female .....	5,200	2,500	S	3,200	500	2,700
Postsecondary teachers-physical/related sci .....	48,200	26,900	45,300	7,400	3,300	3,400
Male .....	37,400	21,700	35,200	5,400	2,700	2,600
Female .....	10,800	5,200	10,100	2,100	600	800
<b>Social/related scientists, total</b> .....	349,000	131,000	110,300	110,100	26,200	194,900
Male .....	167,900	72,600	62,200	52,700	15,500	79,900
Female .....	181,100	58,400	48,200	57,400	10,600	115,000
Economists .....	45,100	24,100	1,600	26,300	8,700	14,700
Male .....	29,800	16,500	900	17,300	5,900	10,900
Female .....	15,400	7,600	700	9,000	2,800	3,700
Political/related scientists .....	9,100	4,700	100	3,700	900	2,700
Male .....	5,300	3,000	100	1,700	800	1,300
Female .....	3,800	1,700	S	2,000	100	1,300
Psychologists .....	181,700	32,600	26,500	61,000	7,800	160,200
Male .....	67,600	11,900	9,600	24,900	3,600	58,600
Female .....	114,100	20,800	16,900	36,200	4,200	101,600
Sociologists/anthropologists .....	15,800	13,600	700	5,200	2,100	2,600
Male .....	7,100	6,100	400	2,300	800	1,300
Female .....	8,700	7,500	300	2,800	1,300	1,200
Other social/related scientists .....	11,900	8,400	500	4,900	2,100	3,900
Male .....	4,700	3,600	S	1,300	1,400	1,500
Female .....	7,200	4,800	500	3,600	800	2,400
Postsecondary teachers-social/related sci .....	85,300	47,600	81,000	9,000	4,500	11,000
Male .....	53,400	31,600	51,200	5,200	3,100	6,200
Female .....	31,900	16,000	29,800	3,900	1,500	4,800

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>All degree levels<sup>1</sup> — continued</b>						
<b>Engineers, total</b> .....	1,374,400	893,100	50,400	693,800	311,200	275,300
Male .....	1,250,700	815,700	46,100	629,200	279,500	252,100
Female .....	123,700	77,400	4,300	64,700	31,700	23,200
Aerospace/related engineers .....	72,500	55,700	300	29,400	22,200	10,600
Male .....	67,000	51,700	200	27,100	19,600	10,000
Female .....	5,600	4,000	100	2,200	2,600	600
Chemical engineers .....	76,300	59,600	400	32,400	11,600	15,500
Male .....	65,800	51,600	200	27,300	9,900	13,800
Female .....	10,400	8,100	200	5,100	1,700	1,800
Civil/architectural engineers .....	206,800	99,300	2,200	136,700	37,900	62,100
Male .....	187,500	88,900	2,000	125,000	32,500	57,800
Female .....	19,300	10,300	200	11,700	5,400	4,300
Electrical/related engineers .....	364,800	265,800	3,800	146,700	131,400	46,600
Male .....	341,000	250,600	3,600	135,300	122,000	44,600
Female .....	23,800	15,200	200	11,400	9,400	2,000
Industrial engineers .....	79,700	44,700	2,500	51,400	17,000	19,400
Male .....	70,900	38,900	2,300	45,100	15,000	18,200
Female .....	8,800	5,800	200	6,400	2,000	1,100
Mechanical engineers .....	271,100	217,100	3,000	124,100	41,400	43,300
Male .....	254,900	204,300	2,800	117,100	38,700	40,800
Female .....	16,300	12,800	300	7,000	2,700	2,500
Other engineers .....	269,200	129,300	6,400	167,800	46,500	75,700
Male .....	232,900	109,600	6,100	147,400	39,700	64,900
Female .....	36,300	19,700	300	20,400	6,900	10,800
Postsecondary teachers-engineers .....	33,900	21,600	31,800	5,400	3,200	2,100
Male .....	30,700	20,100	28,900	4,900	2,300	2,000
Female .....	3,200	1,500	2,900	500	900	100
<b>Non-S&amp;E occupations, total</b> .....	7,216,200	1,031,000	1,173,500	4,918,800	935,900	2,924,400
Male .....	4,431,500	661,800	512,300	3,194,200	550,600	1,783,600
Female .....	2,784,700	369,300	661,200	1,724,600	385,300	1,140,800
Managers/administrators .....	2,019,900	282,500	53,900	1,894,700	223,200	391,100
Male .....	1,453,100	214,900	33,300	1,364,700	148,600	276,900
Female .....	566,800	67,500	20,700	530,000	74,600	114,200
Health and related .....	802,400	94,400	156,200	342,700	31,300	725,700
Male .....	446,900	51,200	74,600	202,900	12,600	417,200
Female .....	355,500	43,200	81,500	139,800	18,700	308,500
Teachers, except S&E postsecondary .....	779,100	139,200	741,400	230,600	72,000	95,200
Male .....	315,500	60,800	299,800	92,500	33,200	36,400
Female .....	463,700	78,400	441,600	138,100	38,700	58,800

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>All degree levels<sup>1</sup> — continued</b>						
Sales/marketing .....	920,300	98,500	25,000	878,300	102,000	180,900
Male .....	640,300	75,300	13,400	609,100	70,400	132,100
Female .....	280,000	23,200	11,600	269,200	31,600	48,800
Other non-S&E occupations .....	2,694,500	416,400	196,900	1,572,500	507,500	1,531,500
Male .....	1,575,800	259,500	91,100	925,000	285,800	921,000
Female .....	1,118,700	157,000	105,800	647,400	221,700	610,500
<b>Bachelor's</b>						
<b>All occupations, total<sup>2</sup></b> .....	6,193,700	1,624,300	669,600	3,947,600	1,492,000	1,759,300
Male .....	4,056,500	1,206,100	279,600	2,635,000	1,010,100	1,094,500
Female .....	2,137,200	418,200	389,900	1,312,600	481,900	664,900
<b>S&amp;E occupations, total</b> .....	1,916,800	1,020,700	98,000	894,300	817,600	327,000
Male .....	1,521,800	826,800	64,300	725,500	625,600	265,600
Female .....	395,000	193,900	33,700	168,800	191,900	61,400
<b>Scientists, total</b> .....	1,000,200	452,000	79,100	405,000	610,400	134,300
Male .....	688,400	309,500	46,900	281,600	441,300	88,400
Female .....	311,800	142,500	32,200	123,500	169,000	45,900
<b>Computer/math sci, total</b> .....	675,300	257,100	35,100	276,500	562,100	48,000
Male .....	487,900	191,600	21,800	198,700	409,200	33,100
Female .....	187,400	65,500	13,300	77,700	152,900	14,800
Computer/information scientists .....	649,900	246,300	22,800	267,700	553,700	45,100
Male .....	471,500	184,500	14,200	193,200	403,100	31,900
Female .....	178,400	61,900	8,600	74,500	150,600	13,200
Mathematical scientists .....	11,900	7,400	200	6,600	5,200	1,000
Male .....	8,300	4,500	200	4,800	3,900	500
Female .....	3,700	3,000	S	1,800	1,300	500
Postsecondary teachers- computer math sci .....	13,500	3,300	12,200	2,200	3,100	1,900
Male .....	8,100	2,600	7,500	700	2,100	700
Female .....	5,400	700	4,700	1,400	1,000	1,200
<b>Life/related scientists, total</b> .....	125,200	78,300	17,800	50,900	15,800	30,400
Male .....	74,300	43,300	10,600	32,700	9,300	20,300
Female .....	50,900	35,000	7,200	18,100	6,500	10,200
Agricultural/food scientists .....	22,200	10,100	1,300	13,100	2,200	8,000
Male .....	16,600	7,000	1,000	9,800	1,700	6,700
Female .....	5,600	3,100	300	3,300	500	1,300
Biological scientists .....	73,300	58,300	2,800	23,900	9,600	13,800
Male .....	36,500	29,400	1,100	12,400	4,500	6,700
Female .....	36,800	28,800	1,700	11,500	5,200	7,100
Environmental life scientists .....	14,600	4,200	300	10,200	3,000	6,600
Male .....	11,900	3,300	100	8,400	2,700	5,800
Female .....	2,700	900	200	1,800	300	800

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Bachelor's — continued</b>						
Postsecondary teachers- life/related sciences .....	15,000	5,700	13,400	3,700	1,000	2,000
Male .....	9,200	3,600	8,300	2,100	500	1,200
Female .....	5,800	2,100	5,000	1,600	500	900
<b>Physical/related scientists, total</b> ...	131,700	86,600	11,800	53,000	24,400	28,200
Male .....	97,100	62,000	8,000	39,700	18,900	23,100
Female .....	34,600	24,600	3,800	13,300	5,500	5,100
Chemistry, except biochemistry .....	70,600	49,600	1,000	29,500	10,100	11,200
Male .....	48,700	32,800	900	20,500	7,100	8,600
Female .....	21,900	16,900	100	9,000	3,000	2,600
Earth scientists/geologists/oceanograp- hers .....	34,900	22,100	200	16,600	10,800	10,500
Male .....	29,400	18,000	200	14,200	8,800	9,900
Female .....	5,500	4,100	S	2,400	2,000	600
Physicists/astronomers .....	7,400	6,100	300	2,200	1,700	1,400
Male .....	6,800	5,800	300	2,000	1,600	1,200
Female .....	600	300	S	200	100	200
Other physical/related scientists .....	8,100	4,100	200	3,300	1,100	4,200
Male .....	5,600	2,600	200	2,300	900	2,800
Female .....	2,400	1,500	S	1,000	300	1,400
Postsecondary teachers- physical/related sci .....	10,700	4,700	10,100	1,500	600	900
Male .....	6,600	2,700	6,400	700	500	600
Female .....	4,100	1,900	3,700	800	100	300
<b>Social/related scientists, total</b> .....	68,000	30,000	14,400	24,700	8,100	27,700
Male .....	29,100	12,700	6,500	10,400	4,000	11,900
Female .....	38,900	17,400	7,900	14,300	4,100	15,800
Economists .....	15,900	8,100	300	8,900	2,900	4,300
Male .....	8,100	4,400	S	4,400	1,500	3,000
Female .....	7,800	3,700	300	4,500	1,400	1,300
Political/related scientists .....	5,100	2,400	S	2,200	500	1,100
Male .....	2,900	1,600	S	1,000	400	700
Female .....	2,100	800	S	1,200	S	500
Psychologists .....	26,200	8,500	5,000	10,000	2,300	17,800
Male .....	9,200	1,700	2,300	4,200	700	6,500
Female .....	17,000	6,800	2,700	5,800	1,600	11,300
Sociologists/anthropologists .....	7,000	6,000	400	1,800	600	1,100
Male .....	2,800	2,200	300	700	S	600
Female .....	4,200	3,800	100	1,100	600	500
Other social/related scientists .....	4,500	2,000	S	1,500	1,600	2,000
Male .....	2,100	1,400	S	S	1,100	600
Female .....	2,500	600	S	1,500	500	1,400

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Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Bachelor's — continued</b>						
Postsecondary teachers-social/related sci .....	9,300	3,000	8,700	300	300	1,400
Male .....	4,000	1,400	3,900	S	300	500
Female .....	5,200	1,500	4,800	300	S	900
<b>Engineers, total</b> .....	916,600	568,700	18,900	489,200	207,200	192,600
Male .....	833,400	517,400	17,400	444,000	184,300	177,200
Female .....	83,200	51,400	1,500	45,300	22,900	15,400
Aerospace/related engineers .....	40,900	30,500	200	17,000	12,300	6,700
Male .....	37,200	27,900	200	15,400	10,700	6,200
Female .....	3,700	2,600	S	1,600	1,600	500
Chemical engineers .....	49,300	37,400	200	22,100	6,600	11,500
Male .....	41,900	31,800	100	18,500	5,200	10,000
Female .....	7,400	5,600	100	3,600	1,400	1,400
Civil/architectural engineers .....	150,500	66,800	1,900	102,600	27,300	43,500
Male .....	135,800	58,800	1,800	93,600	23,100	40,600
Female .....	14,700	8,100	100	9,000	4,200	2,900
Electrical/related engineers .....	239,600	166,000	2,700	100,100	87,500	34,500
Male .....	223,900	156,400	2,600	92,100	80,800	33,500
Female .....	15,800	9,600	100	8,000	6,700	1,100
Industrial engineers .....	58,700	31,900	2,000	38,000	12,100	15,700
Male .....	52,300	27,800	1,800	33,400	10,400	14,800
Female .....	6,400	4,100	100	4,600	1,700	900
Mechanical engineers .....	200,300	158,700	2,600	94,900	27,800	33,100
Male .....	188,800	149,300	2,400	89,500	26,200	31,300
Female .....	11,500	9,400	200	5,400	1,600	1,800
Other engineers .....	171,800	75,300	4,300	113,700	32,400	47,400
Male .....	149,000	63,700	4,200	100,600	27,000	40,600
Female .....	22,800	11,600	200	13,100	5,400	6,700
Postsecondary teachers-engineers .....	5,400	2,200	5,000	900	1,100	200
Male .....	4,600	1,800	4,500	900	800	200
Female .....	800	400	600	S	300	S
<b>Non-S&amp;E occupations, total</b> .....	4,276,900	603,600	571,500	3,053,300	674,500	1,432,300
Male .....	2,534,700	379,200	215,300	1,909,500	384,500	828,900
Female .....	1,742,200	224,300	356,200	1,143,900	289,900	603,500
Managers/administrators .....	1,141,100	139,900	25,700	1,074,800	139,800	199,200
Male .....	808,500	103,100	15,900	760,700	89,000	144,800
Female .....	332,600	36,800	9,700	314,100	50,900	54,400
Health and related .....	280,400	37,400	50,200	117,500	20,200	233,400
Male .....	95,900	14,400	13,100	42,100	6,300	80,300
Female .....	184,600	23,000	37,100	75,300	13,900	153,000

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Bachelor's — continued</b>						
Teachers, except S&E postsecondary .....	380,700	56,100	363,200	119,300	32,600	38,900
Male .....	131,400	20,000	126,200	38,500	13,600	13,000
Female .....	249,300	36,100	237,000	80,900	19,000	25,900
Sales/marketing .....	718,800	78,300	20,000	683,800	81,900	131,200
Male .....	493,500	59,000	10,600	468,000	56,600	94,100
Female .....	225,200	19,400	9,400	215,800	25,300	37,000
Other non-S&E occupations .....	1,755,900	291,900	112,500	1,058,000	399,800	829,700
Male .....	1,005,400	182,800	49,400	600,200	219,000	496,600
Female .....	750,500	109,100	63,100	457,800	180,800	333,100
<b>Master's</b>						
<b>All occupations, total</b> <sup>2</sup> .....	2,819,800	779,500	545,300	1,656,600	572,100	877,300
Male .....	1,800,500	575,700	246,200	1,127,600	406,200	461,900
Female .....	1,019,300	203,800	299,100	529,000	165,900	415,400
<b>S&amp;E occupations, total</b> .....	967,900	506,100	116,800	402,800	348,000	229,900
Male .....	715,300	407,700	66,200	311,800	269,500	136,700
Female .....	252,600	98,500	50,600	91,000	78,400	93,200
<b>Scientists, total</b> .....	592,000	251,200	104,600	219,300	258,900	157,100
Male .....	374,400	174,500	55,500	146,000	188,300	71,000
Female .....	217,600	76,700	49,200	73,300	70,600	86,100
<b>Computer/math sci, total</b> .....	301,600	125,000	36,800	117,900	222,800	25,700
Male .....	219,300	93,200	21,900	88,300	165,200	17,400
Female .....	82,300	31,800	14,900	29,700	57,600	8,400
Computer/information scientists .....	254,200	104,300	5,800	109,100	205,600	22,400
Male .....	192,200	81,400	4,600	82,300	155,300	15,800
Female .....	62,000	22,900	1,200	26,800	50,400	6,600
Mathematical scientists .....	15,900	12,100	300	4,400	9,000	1,700
Male .....	9,600	7,000	300	3,000	5,900	900
Female .....	6,200	5,000	100	1,400	3,200	800
Postsecondary teachers-computer math sci .....	31,500	8,700	30,700	4,400	8,100	1,600
Male .....	17,400	4,800	17,000	3,000	4,100	600
Female .....	14,100	3,900	13,700	1,400	4,000	1,000
<b>Life/related scientists, total</b> .....	70,300	45,800	19,700	24,800	9,500	11,100
Male .....	40,000	27,300	9,700	14,200	4,900	6,100
Female .....	30,300	18,500	10,000	10,600	4,500	5,000
Agricultural/food scientists .....	10,900	7,600	700	5,400	1,900	1,600
Male .....	7,500	5,700	500	3,300	1,400	700
Female .....	3,400	1,900	200	2,100	600	900
Biological scientists .....	37,600	30,200	2,100	12,000	6,000	6,300
Male .....	20,200	16,400	1,000	5,900	2,500	4,100
Female .....	17,400	13,800	1,000	6,100	3,600	2,200

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Master's — continued</b>						
Environmental life scientists .....	4,200	2,200	S	2,500	300	1,500
Male .....	3,800	2,100	S	2,300	300	1,400
Female .....	300	100	S	200	100	100
Postsecondary teachers- life/related sciences .....	17,600	5,700	17,000	4,900	1,200	1,800
Male .....	8,500	3,100	8,200	2,700	800	S
Female .....	9,100	2,600	8,800	2,200	400	1,800
<b>Physical/related scientists, total ...</b>	<b>69,100</b>	<b>40,900</b>	<b>10,700</b>	<b>28,800</b>	<b>13,400</b>	<b>17,300</b>
Male .....	52,600	32,500	7,800	21,600	9,900	12,700
Female .....	16,500	8,500	2,900	7,200	3,500	4,600
Chemistry, except biochemistry .....	20,200	14,300	500	8,000	3,000	4,000
Male .....	14,500	10,300	300	6,300	1,600	3,000
Female .....	5,700	4,000	200	1,700	1,300	900
Earth scientists/geologists/oceanograp- hers .....	23,100	14,100	300	11,300	5,900	7,300
Male .....	19,000	12,200	200	9,500	4,500	5,500
Female .....	4,100	1,900	100	1,800	1,400	1,800
Physicists/astronomers .....	9,000	7,300	600	2,300	2,600	1,500
Male .....	7,500	6,400	500	1,700	2,300	1,000
Female .....	1,500	900	100	600	300	500
Other physical/related scientists .....	7,100	2,400	200	4,800	500	3,800
Male .....	4,500	1,500	200	2,700	300	2,600
Female .....	2,600	900	S	2,100	200	1,200
Postsecondary teachers- physical/related sci .....	9,700	2,800	9,100	2,300	1,400	700
Male .....	7,000	2,100	6,600	1,400	1,100	500
Female .....	2,700	700	2,500	900	300	200
<b>Social/related scientists, total .....</b>	<b>151,100</b>	<b>39,400</b>	<b>37,400</b>	<b>47,800</b>	<b>13,300</b>	<b>103,000</b>
Male .....	62,500	21,500	16,100	21,900	8,300	34,800
Female .....	88,600	17,900	21,300	25,900	5,000	68,100
Economists .....	21,100	9,600	1,000	13,900	4,900	8,000
Male .....	15,400	7,400	700	10,000	3,700	6,100
Female .....	5,700	2,300	300	3,900	1,200	1,900
Political/related scientists .....	3,200	1,700	S	1,200	300	1,300
Male .....	1,600	1,000	S	500	300	500
Female .....	1,500	700	S	700	100	800
Psychologists .....	95,000	11,400	14,700	27,500	4,300	88,700
Male .....	28,900	4,100	3,700	9,300	2,100	26,000
Female .....	66,000	7,300	11,000	18,200	2,200	62,700
Sociologists/anthropologists .....	5,200	4,500	S	2,000	1,200	500
Male .....	2,500	2,400	S	900	600	200
Female .....	2,700	2,100	S	1,200	600	300

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



**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Master's — continued</b>						
Other social/related scientists .....	3,700	3,100	100	1,300	200	1,400
Male .....	1,600	1,400	S	700	100	700
Female .....	2,100	1,700	100	600	100	700
Postsecondary teachers- social/related sci .....	22,900	9,000	21,600	1,900	2,400	3,100
Male .....	12,400	5,200	11,700	500	1,400	1,300
Female .....	10,500	3,800	9,900	1,400	1,000	1,800
<b>Engineers, total .....</b>	<b>375,900</b>	<b>254,900</b>	<b>12,200</b>	<b>183,500</b>	<b>89,000</b>	<b>72,800</b>
Male .....	340,900	233,200	10,800	165,800	81,200	65,700
Female .....	34,900	21,700	1,400	17,700	7,800	7,100
Aerospace/related engineers .....	27,300	21,100	100	11,400	8,300	3,700
Male .....	25,700	19,900	S	10,800	7,400	3,600
Female .....	1,600	1,200	100	600	1,000	100
Chemical engineers .....	19,900	15,800	200	8,300	3,800	3,400
Male .....	17,400	13,800	100	7,000	3,600	3,100
Female .....	2,500	2,000	100	1,300	200	300
Civil/architectural engineers .....	51,700	29,700	100	32,000	9,600	16,400
Male .....	47,300	27,600	100	29,400	8,500	15,100
Female .....	4,300	2,100	100	2,700	1,100	1,300
Electrical/related engineers .....	107,400	83,800	1,000	41,800	39,000	10,500
Male .....	100,300	79,100	1,000	38,500	36,500	9,600
Female .....	7,100	4,700	100	3,300	2,500	900
Industrial engineers .....	19,300	11,400	400	12,800	4,600	3,500
Male .....	17,100	9,900	400	11,100	4,300	3,300
Female .....	2,200	1,500	S	1,700	300	200
Mechanical engineers .....	61,600	50,000	300	27,200	10,900	9,200
Male .....	57,100	46,900	300	25,600	9,900	8,600
Female .....	4,500	3,200	S	1,600	1,000	700
Other engineers .....	79,500	39,000	1,800	47,800	11,400	25,200
Male .....	67,800	32,200	1,800	41,300	10,200	21,500
Female .....	11,700	6,800	S	6,500	1,200	3,700
Postsecondary teachers-engineers .....	9,300	4,100	8,200	2,200	1,400	900
Male .....	8,200	3,900	7,200	2,100	900	900
Female .....	1,100	200	1,000	100	500	S
<b>Non-S&amp;E occupations, total .....</b>	<b>1,851,900</b>	<b>273,300</b>	<b>428,500</b>	<b>1,253,800</b>	<b>224,100</b>	<b>647,400</b>
Male .....	1,085,200	168,000	179,900	815,800	136,600	325,100
Female .....	766,700	105,300	248,500	438,100	87,500	322,300
Managers/administrators .....	724,800	105,000	19,500	678,000	75,300	153,900
Male .....	522,400	80,400	10,500	491,400	53,200	102,800
Female .....	202,400	24,600	9,000	186,700	22,100	51,100

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Master's — continued</b>						
Health and related .....	92,500	15,300	21,300	35,100	5,000	77,100
Male .....	22,600	5,100	2,800	10,000	1,400	18,900
Female .....	69,900	10,200	18,500	25,100	3,600	58,300
Teachers, except S&E postsecondary .....	323,300	47,400	309,600	96,900	36,100	43,500
Male .....	136,900	17,900	131,100	45,100	17,300	15,800
Female .....	186,400	29,500	178,500	51,800	18,800	27,700
Sales/marketing .....	183,100	17,700	4,600	177,100	18,500	44,000
Male .....	132,400	14,200	2,500	127,400	13,000	33,400
Female .....	50,700	3,500	2,100	49,700	5,500	10,600
Other non-S&E occupations .....	528,200	88,000	73,400	266,700	89,200	328,900
Male .....	270,900	50,400	33,100	141,900	51,700	154,200
Female .....	257,300	37,500	40,300	124,700	37,500	174,700
<b>Doctorate</b>						
<b>All occupations, total</b> <sup>2</sup> .....	696,000	417,600	234,800	261,500	76,100	172,000
Male .....	528,000	328,900	171,300	199,500	63,900	114,800
Female .....	168,000	88,600	63,500	62,100	12,100	57,100
<b>S&amp;E occupations, total</b> .....	454,700	333,200	165,100	115,500	59,400	91,400
Male .....	348,300	266,500	126,300	84,900	50,600	57,000
Female .....	106,400	66,700	38,800	30,500	8,800	34,400
<b>Scientists, total</b> .....	375,300	265,200	145,800	95,800	44,800	82,700
Male .....	274,200	202,500	108,400	66,900	37,000	49,000
Female .....	101,000	62,600	37,400	28,900	7,800	33,700
<b>Computer/math sci, total</b> .....	59,000	40,300	25,200	11,000	24,800	4,800
Male .....	48,500	33,500	20,400	9,300	21,200	3,200
Female .....	10,500	6,800	4,800	1,800	3,600	1,600
Computer/information scientists .....	25,700	16,800	400	7,200	19,100	1,800
Male .....	22,300	14,800	300	6,400	16,700	1,200
Female .....	3,400	2,000	100	800	2,400	600
Mathematical scientists .....	6,900	6,100	200	1,300	3,100	800
Male .....	5,200	4,500	200	1,000	2,200	700
Female .....	1,700	1,600	S	200	900	100
Postsecondary teachers- computer math sci .....	26,300	17,400	24,500	2,600	2,600	2,200
Male .....	21,000	14,100	19,900	1,800	2,300	1,300
Female .....	5,300	3,200	4,600	800	300	900
<b>Life/related scientists, total</b> .....	111,800	95,300	36,800	31,800	6,900	12,700
Male .....	80,600	69,100	26,800	21,900	5,100	9,200
Female .....	31,200	26,200	10,000	9,900	1,800	3,500
Agricultural/food scientists .....	9,800	8,300	200	3,800	700	1,900
Male .....	8,200	7,100	200	3,200	600	1,500
Female .....	1,600	1,200	100	600	200	400

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Doctorate — continued</b>						
Biological scientists .....	64,100	59,400	3,300	22,200	4,800	7,000
Male .....	44,200	40,600	2,200	15,100	3,400	5,000
Female .....	19,900	18,800	1,100	7,100	1,300	2,000
Environmental life scientists .....	1,200	1,100	100	500	200	200
Male .....	1,100	1,000	S	400	200	200
Female .....	200	100	S	100	S	S
Postsecondary teachers- life/related sciences .....	36,700	26,600	33,200	5,300	1,200	3,600
Male .....	27,100	20,500	24,400	3,300	1,000	2,600
Female .....	9,600	6,100	8,800	2,000	300	1,000
<b>Physical/related scientists, total</b> ...	83,700	70,200	27,300	18,800	8,900	8,000
Male .....	73,000	61,900	23,200	16,400	7,900	6,600
Female .....	10,700	8,300	4,100	2,400	900	1,400
Chemistry, except biochemistry .....	28,900	26,400	300	8,200	1,700	2,500
Male .....	24,500	22,500	300	6,800	1,400	2,000
Female .....	4,400	3,900	100	1,400	300	500
Earth scientists/geologists/oceanograp- hers .....	10,500	9,400	300	3,000	2,200	1,800
Male .....	9,300	8,400	200	2,700	2,000	1,400
Female .....	1,200	1,000	100	400	200	400
Physicists/astronomers .....	15,100	13,900	500	3,500	3,500	1,500
Male .....	14,100	13,100	500	3,300	3,200	1,400
Female .....	1,000	900	100	200	300	100
Other physical/related scientists .....	1,400	1,100	S	400	100	400
Male .....	1,300	1,000	S	400	100	300
Female .....	100	100	S	100	S	100
Postsecondary teachers- physical/related sci .....	27,800	19,400	26,100	3,600	1,300	1,800
Male .....	23,700	16,900	22,300	3,200	1,100	1,500
Female .....	4,000	2,500	3,900	400	200	300
<b>Social/related scientists, total</b> .....	120,800	59,300	56,500	34,200	4,200	57,200
Male .....	72,200	38,000	37,900	19,300	2,700	29,900
Female .....	48,600	21,300	18,600	14,900	1,500	27,300
Economists .....	7,800	6,100	300	3,500	900	2,100
Male .....	6,200	4,700	300	2,800	700	1,700
Female .....	1,600	1,400	S	700	200	400
Political/related scientists .....	900	500	100	300	100	300
Male .....	700	400	100	300	S	200
Female .....	200	100	S	S	S	100
Psychologists .....	54,300	12,100	6,200	21,100	1,300	47,400
Male .....	26,800	6,000	3,200	10,300	800	23,400
Female .....	27,500	6,100	3,100	10,800	400	24,000

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Doctorate — continued</b>						
Sociologists/anthropologists .....	3,600	3,100	300	1,400	300	900
Male .....	1,700	1,500	100	700	200	500
Female .....	1,800	1,600	200	600	100	400
Other social/related scientists .....	2,700	2,400	300	1,100	300	400
Male .....	1,000	800	S	500	200	100
Female .....	1,600	1,600	300	600	200	300
Postsecondary teachers- social/related sci .....	51,600	35,100	49,300	6,900	1,300	6,100
Male .....	35,700	24,600	34,300	4,700	800	4,000
Female .....	15,900	10,500	15,000	2,200	500	2,100
<b>Engineers, total</b> .....	<b>79,400</b>	<b>68,000</b>	<b>19,400</b>	<b>19,700</b>	<b>14,600</b>	<b>8,700</b>
Male .....	74,100	63,900	17,900	18,100	13,600	8,000
Female .....	5,300	4,100	1,400	1,600	1,000	700
Aerospace/related engineers .....	4,300	4,000	S	900	1,600	200
Male .....	4,000	3,800	S	800	1,500	200
Female .....	200	200	S	100	100	S
Chemical engineers .....	7,100	6,500	100	2,000	1,100	700
Male .....	6,500	6,000	100	1,800	1,000	600
Female .....	500	500	S	200	100	100
Civil/architectural engineers .....	4,000	2,800	100	1,400	1,000	1,600
Male .....	3,800	2,600	100	1,400	900	1,500
Female .....	200	200	S	100	100	100
Electrical/related engineers .....	16,800	15,300	100	4,600	4,700	1,100
Male .....	15,900	14,500	100	4,400	4,300	1,000
Female .....	900	800	S	100	300	S
Industrial engineers .....	1,400	1,100	200	600	300	200
Male .....	1,200	1,000	100	500	300	200
Female .....	200	100	S	100	S	S
Mechanical engineers .....	9,000	8,200	100	1,800	2,600	900
Male .....	8,700	8,000	100	1,700	2,600	800
Female .....	300	200	S	S	S	S
Other engineers .....	17,700	14,900	300	6,100	2,600	3,100
Male .....	16,000	13,700	200	5,500	2,300	2,700
Female .....	1,700	1,200	100	700	300	400
Postsecondary teachers-engineers .....	19,200	15,300	18,500	2,300	600	1,000
Male .....	17,900	14,400	17,200	1,900	600	900
Female .....	1,300	900	1,300	400	100	S
<b>Non-S&amp;E occupations, total</b> .....	<b>241,300</b>	<b>84,400</b>	<b>69,700</b>	<b>146,000</b>	<b>16,700</b>	<b>80,500</b>
Male .....	179,700	62,400	45,000	114,500	13,300	57,800
Female .....	61,700	21,900	24,700	31,500	3,400	22,700

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

**Table E-7. Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and primary/secondary work activity : 1997**

Highest degree, occupation, and sex	Employed S&Es, total	Primary/secondary work activity				
		Research and development	Teaching	Management, sales, admin	Computer applications	Professional services/ other
<b>Doctorate — continued</b>						
Managers/administrators .....	102,400	33,600	7,700	94,200	4,600	18,800
Male .....	83,200	28,000	6,000	76,300	3,900	14,800
Female .....	19,200	5,600	1,700	17,900	800	4,000
Health and related .....	21,800	5,100	4,100	7,400	800	18,900
Male .....	15,500	3,900	2,600	5,500	500	13,700
Female .....	6,300	1,300	1,400	1,900	300	5,200
Teachers, except S&E postsecondary .....	57,900	31,400	51,900	10,900	3,000	8,300
Male .....	35,900	19,400	31,800	6,800	2,300	4,200
Female .....	22,000	12,000	20,100	4,200	700	4,100
Sales/marketing .....	8,300	2,100	200	7,800	500	1,800
Male .....	7,000	2,000	100	6,600	300	1,400
Female .....	1,300	100	100	1,200	100	400
Other non-S&E occupations .....	51,000	12,200	5,800	25,700	7,700	32,700
Male .....	38,200	9,200	4,400	19,400	6,300	23,700
Female .....	12,800	2,900	1,400	6,300	1,500	9,000

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.  
 Sum of primary/secondary work activity categories exceeds total because of multiple responses.

**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)