

Table E-4. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, age, and employment sector: 1999

Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹					
All occupations, total	10,981,600	7,556,000	961,500	1,060,900	1,403,300
<30	1,534,200	1,049,700	193,100	146,400	144,900
30-39	2,718,200	1,976,200	231,000	198,000	312,900
40-49	3,426,400	2,399,900	250,400	311,200	464,800
50-59	2,477,400	1,560,600	198,800	322,900	395,000
60+	825,500	569,500	88,100	82,400	85,500
S&E occupations, total	3,540,800	2,482,400	496,400	112,100	449,900
<30	499,500	349,600	105,100	9,000	35,900
30-39	1,047,200	786,700	124,300	20,100	116,100
40-49	1,060,400	762,900	119,200	31,300	147,000
50-59	692,800	432,600	100,900	37,900	121,400
60+	240,900	150,700	46,800	13,900	29,500
Scientists, total	2,170,500	1,373,600	434,200	107,600	255,100
<30	318,900	198,900	89,700	8,400	21,900
30-39	634,900	446,000	108,700	19,500	60,600
40-49	664,900	440,400	108,100	30,300	86,200
50-59	427,200	227,100	88,500	36,400	75,200
60+	124,600	61,200	39,200	13,000	11,200
Computer/math scientists, total	1,167,400	943,800	95,000	37,300	91,300
<30	154,100	131,600	14,400	2,200	5,900
30-39	388,600	335,600	23,600	6,400	22,900
40-49	375,300	309,300	27,500	9,700	28,700
50-59	209,500	144,800	22,100	13,000	29,600
60+	39,900	22,600	7,300	5,900	4,100
Life/related scientists, total	341,900	113,400	148,900	14,400	65,300
<30	54,800	20,100	29,800	300	4,700
30-39	92,300	33,100	40,200	3,200	15,800
40-49	101,400	36,100	38,100	2,500	24,700
50-59	68,800	16,500	28,600	6,500	17,200
60+	24,600	7,500	12,300	1,900	2,900
Physical/related scientists, total ...	297,900	161,200	73,200	9,100	54,300
<30	47,800	24,400	18,700	100	4,500
30-39	79,100	46,100	18,000	2,000	12,900
40-49	86,700	50,000	15,000	2,700	19,000
50-59	58,600	28,300	13,000	2,400	14,900
60+	25,700	12,400	8,500	2,000	2,800
Social/related scientists, total	363,400	155,200	117,100	46,800	44,300
<30	62,200	22,800	26,800	5,800	6,800
30-39	74,900	31,200	26,900	7,900	8,900
40-49	101,500	45,000	27,400	15,400	13,700
50-59	90,400	37,500	24,900	14,500	13,500
60+	34,400	18,700	11,100	3,300	1,400

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

Table E-4. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, age, and employment sector: 1999

Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹ — continued					
Engineers, total	1,370,300	1,108,800	62,100	4,500	194,800
<30	180,700	150,700	15,400	500	14,000
30-39	412,300	340,600	15,500	600	55,500
40-49	395,500	322,500	11,200	1,000	60,800
50-59	265,600	205,500	12,400	1,500	46,200
60+	116,300	89,600	7,600	800	18,200
Non-S&E occupations, total	7,440,800	5,073,500	465,100	948,800	953,400
<30	1,034,600	700,200	88,000	137,500	109,000
30-39	1,671,000	1,189,600	106,800	177,900	196,800
40-49	2,365,900	1,637,000	131,100	279,900	317,900
50-59	1,784,600	1,128,000	98,000	285,000	273,600
60+	584,600	418,800	41,300	68,500	56,100
Managers/administrators	2,035,600	1,543,800	86,500	107,000	298,300
<30	146,600	125,400	5,900	3,000	12,300
30-39	414,500	341,700	12,900	15,900	44,000
40-49	725,100	551,500	32,400	30,300	110,900
50-59	585,500	399,100	27,000	45,900	113,500
60+	163,800	126,100	8,300	11,800	17,600
Other non-S&E occupations	5,405,200	3,529,700	378,600	841,800	655,100
<30	888,100	574,800	82,100	134,400	96,700
30-39	1,256,500	847,800	93,900	161,900	152,800
40-49	1,640,800	1,085,500	98,800	249,600	207,000
50-59	1,199,100	728,900	70,900	239,100	160,200
60+	420,800	292,600	32,900	56,700	38,500
Bachelor's					
All occupations, total	6,350,100	4,694,100	327,100	479,700	849,300
<30	1,263,200	887,000	141,000	114,400	120,800
30-39	1,666,600	1,288,900	71,100	106,700	199,900
40-49	1,889,700	1,410,500	66,200	132,000	281,000
50-59	1,153,600	805,500	36,400	104,900	206,800
60+	377,000	302,300	12,400	21,600	40,700
S&E occupations, total	1,994,400	1,555,000	142,500	29,300	267,600
<30	394,500	285,000	77,300	4,800	27,400
30-39	611,800	505,400	28,500	6,100	71,900
40-49	575,600	458,800	20,400	8,100	88,300
50-59	307,700	221,900	12,000	8,500	65,300
60+	104,900	83,900	4,300	1,800	14,800
Scientists, total	1,087,100	802,300	123,500	26,900	134,300
<30	245,600	159,100	66,600	4,400	15,600
30-39	344,600	278,200	26,000	6,000	34,500
40-49	316,700	245,400	19,000	7,400	45,000
50-59	149,400	96,600	8,900	7,800	36,100
60+	30,600	23,200	3,000	1,400	3,100

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

Table E-4. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, age, and employment sector: 1999

Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
Computer/math scientists, total	740,500	630,000	36,100	14,900	59,500
<30	123,000	106,500	9,700	2,000	4,800
30-39	258,100	229,600	9,700	3,000	15,900
40-49	235,600	201,000	10,400	4,500	19,700
50-59	105,300	79,100	4,800	4,400	17,000
60+	18,500	13,800	1,500	1,000	2,100
Life/related scientists, total	135,500	55,600	43,000	4,300	32,500
<30	45,000	16,400	24,700	200	3,700
30-39	34,800	15,400	9,400	1,200	8,800
40-49	34,400	15,600	5,600	S	13,200
50-59	17,100	5,100	2,800	2,600	6,600
60+	4,200	3,100	500	300	300
Physical/related scientists, total ...	139,600	87,200	21,200	1,100	30,200
<30	39,500	20,900	14,800	S	3,800
30-39	38,400	26,000	4,200	600	7,600
40-49	33,900	23,400	800	500	9,200
50-59	20,900	11,300	800	S	8,800
60+	6,900	5,500	600	S	700
Social/related scientists, total	71,400	29,600	23,100	6,700	12,100
<30	38,200	15,300	17,300	2,100	3,400
30-39	13,200	7,200	2,700	1,200	2,200
40-49	12,900	5,400	2,300	2,400	2,900
50-59	6,000	1,000	500	900	3,600
60+	1,100	700	300	S	S
Engineers, total	907,400	752,700	19,000	2,400	133,300
<30	148,800	125,900	10,600	500	11,800
30-39	267,100	227,200	2,500	S	37,400
40-49	258,800	213,500	1,400	700	43,300
50-59	158,300	125,300	3,100	700	29,200
60+	74,300	60,800	1,400	500	11,600
Non-S&E occupations, total	4,355,700	3,139,100	184,600	450,400	581,600
<30	868,700	602,000	63,800	109,600	93,400
30-39	1,054,800	783,500	42,700	100,600	128,100
40-49	1,314,200	951,600	45,800	124,000	192,800
50-59	845,900	583,600	24,400	96,400	141,500
60+	272,100	218,300	8,000	19,800	25,900
Managers/administrators	1,156,800	936,900	30,900	23,600	165,300
<30	125,400	107,300	4,700	2,400	11,000
30-39	269,400	230,500	6,100	7,100	25,600
40-49	407,200	323,000	14,100	6,400	63,800
50-59	271,800	204,600	3,700	6,100	57,500
60+	83,000	71,600	2,400	1,600	7,500

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

Table E-4. Employed U.S. scientists and engineers, by highest degree attained, broad occupation, age, and employment sector: 1999

Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
Other non-S&E occupations	3,198,800	2,202,100	153,700	426,700	416,300
<30	743,300	494,700	59,000	107,100	82,400
30-39	785,400	553,000	36,600	93,500	102,400
40-49	906,900	628,700	31,700	117,600	128,900
50-59	574,100	379,100	20,700	90,300	84,000
60+	189,100	146,700	5,700	18,200	18,400
Master's					
All occupations, total	2,982,000	1,851,000	226,000	518,000	387,000
<30	202,200	122,300	33,000	30,500	16,400
30-39	689,400	460,600	64,000	82,700	82,200
40-49	969,100	622,900	60,900	160,800	124,400
50-59	863,900	484,300	49,400	194,200	135,900
60+	257,400	160,900	18,700	49,800	28,000
S&E occupations, total	1,032,100	719,400	111,800	66,600	134,300
<30	95,900	61,200	22,900	3,900	7,800
30-39	312,300	225,100	40,000	11,700	35,500
40-49	317,500	234,700	22,300	17,900	42,600
50-59	235,900	153,200	18,800	23,200	40,700
60+	70,500	45,100	7,800	9,900	7,700
Scientists, total	655,500	415,600	94,100	65,100	80,800
<30	66,300	37,800	18,900	3,900	5,800
30-39	193,700	129,600	33,900	11,300	18,900
40-49	205,200	140,200	19,400	17,900	27,700
50-59	150,400	85,900	15,600	22,400	26,400
60+	40,000	22,000	6,300	9,500	2,000
Computer/math scientists, total	354,100	276,400	29,900	20,300	27,600
<30	29,300	24,200	3,700	300	1,100
30-39	111,900	94,200	8,200	3,100	6,500
40-49	116,000	94,600	8,400	4,900	8,000
50-59	82,100	56,300	7,200	7,700	10,900
60+	14,900	7,000	2,400	4,300	1,100
Life/related scientists, total	72,500	25,000	20,900	6,900	19,700
<30	7,700	3,400	3,400	100	700
30-39	23,200	8,300	8,800	1,600	4,600
40-49	20,900	8,800	4,200	1,300	6,600
50-59	16,900	3,200	3,600	2,900	7,100
60+	3,800	1,300	800	1,100	500
Physical/related scientists, total ...	73,000	40,100	14,200	5,200	13,500
<30	6,500	2,900	3,000	S	600
30-39	19,600	10,700	5,100	800	3,100
40-49	26,300	15,100	3,100	1,500	6,500
50-59	15,200	9,100	1,900	1,300	2,900
60+	5,400	2,300	1,100	1,500	400

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Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
Social/related scientists, total	155,900	74,100	29,100	32,700	20,000
<30	22,900	7,300	8,700	3,500	3,300
30-39	38,900	16,400	11,900	5,800	4,700
40-49	42,000	21,600	3,700	10,200	6,500
50-59	36,300	17,400	2,900	10,500	5,500
60+	15,900	11,300	2,000	2,600	S
Engineers, total	376,500	303,800	17,700	1,500	53,500
<30	29,600	23,400	4,100	100	2,100
30-39	118,600	95,600	6,000	500	16,600
40-49	112,300	94,500	2,900	S	14,900
50-59	85,500	67,300	3,200	700	14,300
60+	30,500	23,100	1,400	300	5,700
Non-S&E occupations, total	1,949,900	1,131,600	114,200	451,400	252,700
<30	106,300	61,000	10,100	26,600	8,600
30-39	377,100	235,400	24,000	70,900	46,800
40-49	651,600	388,200	38,600	142,800	81,900
50-59	628,000	331,100	30,600	171,100	95,200
60+	186,900	115,800	10,900	40,000	20,300
Managers/administrators	726,600	512,000	33,700	66,800	114,100
<30	19,700	17,000	1,100	300	1,300
30-39	129,400	98,700	5,400	7,500	17,800
40-49	265,900	194,100	12,300	20,100	39,400
50-59	251,100	159,100	12,900	31,500	47,600
60+	60,500	43,100	2,000	7,400	8,000
Other non-S&E occupations	1,223,300	619,500	80,500	384,600	138,700
<30	86,600	44,000	8,900	26,300	7,300
30-39	247,700	136,700	18,600	63,400	29,000
40-49	385,700	194,100	26,400	122,700	42,500
50-59	376,900	172,000	17,700	139,600	47,600
60+	126,400	72,800	8,900	32,500	12,300
Doctorate					
All occupations, total	736,700	322,000	309,400	39,700	65,600
<30	10,500	4,400	5,300	200	600
30-39	153,500	73,400	66,000	4,300	9,800
40-49	221,900	98,300	91,900	10,300	21,400
50-59	239,300	98,800	98,000	17,700	24,700
60+	111,400	47,100	48,200	7,100	9,000
S&E occupations, total	484,100	195,000	229,900	14,400	44,800
<30	8,900	3,300	4,800	200	600
30-39	119,100	53,800	55,000	2,100	8,200
40-49	153,200	62,300	71,300	4,300	15,200
50-59	141,400	54,500	67,100	5,700	14,200
60+	61,500	21,100	31,700	2,200	6,500

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Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Scientists, total	399,900	144,000	204,400	13,800	37,700
<30	6,800	2,000	4,100	200	500
30-39	92,900	36,000	48,000	2,000	6,800
40-49	130,000	48,800	64,400	4,000	12,800
50-59	120,100	41,700	61,000	5,500	11,900
60+	50,200	15,500	26,900	2,100	5,600
Computer/math scientists, total	67,100	32,600	28,700	2,000	3,800
<30	1,900	900	1,000	S	100
30-39	16,900	10,500	5,700	100	600
40-49	20,600	10,400	8,700	400	1,100
50-59	21,200	9,100	9,900	900	1,200
60+	6,600	1,700	3,400	500	900
Life/related scientists, total	121,100	30,400	75,600	2,900	12,200
<30	2,000	300	1,400	S	300
30-39	33,100	8,900	21,200	500	2,400
40-49	41,000	11,200	24,400	1,000	4,400
50-59	32,300	7,300	20,500	1,000	3,500
60+	12,800	2,700	8,000	400	1,600
Physical/related scientists, total ...	84,900	33,800	37,800	2,800	10,400
<30	1,800	600	900	S	200
30-39	20,700	9,400	8,700	600	2,000
40-49	26,600	11,500	11,200	700	3,200
50-59	22,500	7,900	10,300	1,100	3,300
60+	13,300	4,400	6,700	500	1,700
Social/related scientists, total	126,900	47,100	62,300	6,100	11,300
<30	1,100	200	700	200	S
30-39	22,300	7,200	12,400	900	1,800
40-49	41,900	15,700	20,200	1,900	4,100
50-59	44,100	17,400	20,300	2,500	4,000
60+	17,500	6,600	8,800	700	1,400
Engineers, total	84,200	51,000	25,500	600	7,100
<30	2,100	1,300	700	S	100
30-39	26,300	17,800	7,000	100	1,400
40-49	23,200	13,500	6,900	300	2,400
50-59	21,300	12,900	6,100	100	2,200
60+	11,300	5,600	4,800	S	900
Non-S&E occupations, total	252,600	127,000	79,500	25,300	20,800
<30	1,600	1,100	500	100	S
30-39	34,400	19,600	11,000	2,200	1,600
40-49	68,700	36,000	20,600	6,000	6,100
50-59	97,900	44,300	30,900	12,100	10,600
60+	49,900	26,100	16,500	5,000	2,400

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Highest degree, occupation, and age	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Managers/administrators	98,400	57,900	18,400	10,200	12,000
<30	300	200	S	S	S
30-39	9,900	7,400	1,400	500	500
40-49	27,600	17,600	3,800	1,700	4,500
50-59	45,000	23,500	9,400	6,100	5,900
60+	15,700	9,100	3,800	2,000	1,000
Other non-S&E occupations	154,200	69,200	61,100	15,100	8,800
<30	1,400	900	500	100	S
30-39	24,600	12,200	9,600	1,700	1,100
40-49	41,100	18,300	16,800	4,400	1,600
50-59	52,900	20,800	21,500	6,000	4,600
60+	34,200	17,000	12,700	3,000	1,500

¹ Total includes professional degrees not broken out separately.

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, 1997, or 1999 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 Statistics Division, 1999 SESTAT (Scientists and Engineers Statistical Data System)