

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹					
All occupations, total²	10,585,600	7,264,900	940,600	1,012,900	1,367,300
White	8,877,500	6,205,100	752,500	847,000	1,072,900
Black	555,600	279,600	49,700	90,000	136,300
Hispanic	371,500	227,700	38,400	44,000	61,400
Asian	745,600	532,900	95,700	27,900	89,100
Other	35,400	19,500	4,300	4,100	7,500
S&E occupations, total	3,369,400	2,343,600	475,700	111,000	439,100
White	2,791,900	1,955,600	386,200	96,700	353,300
Black	113,000	68,700	14,100	5,700	24,500
Hispanic	103,500	65,500	17,100	4,300	16,500
Asian	349,800	247,400	56,500	3,800	42,000
Other	11,300	6,300	1,900	400	2,800
Scientists, total	1,995,100	1,236,900	409,100	103,600	245,500
White	1,654,600	1,023,000	337,300	90,500	203,700
Black	77,500	44,200	12,000	5,300	16,100
Hispanic	55,800	29,400	14,800	4,100	7,500
Asian	200,100	137,200	43,200	3,300	16,300
Other	7,100	3,000	1,800	400	1,900
Computer/math scientists, total	1,039,500	828,900	88,200	33,000	89,400
White	839,400	669,300	71,400	28,000	70,700
Black	44,900	32,100	2,900	1,800	8,000
Hispanic	26,200	19,300	2,900	1,300	2,600
Asian	126,600	106,700	10,600	1,800	7,500
Other	2,500	1,500	400	S	600
Life/related scientists, total	321,800	102,700	139,100	15,400	64,600
White	272,400	88,200	114,100	13,800	56,300
Black	7,700	2,600	2,900	300	2,000
Hispanic	8,000	1,500	4,200	700	1,600
Asian	32,300	10,300	17,500	500	4,000
Other	1,400	100	400	100	700
Physical/related scientists, total ...	284,900	156,100	71,100	8,900	48,700
White	240,200	131,700	59,500	8,000	41,000
Black	8,400	4,200	1,300	200	2,600
Hispanic	7,200	3,700	2,300	100	1,200
Asian	27,900	16,100	7,700	500	3,600
Other	1,200	400	300	100	300
Social/related scientists, total	349,000	149,200	110,600	46,400	42,800
White	302,600	133,900	92,300	40,600	35,800
Black	16,500	5,200	4,800	3,100	3,500
Hispanic	14,400	4,900	5,500	2,000	2,000
Asian	13,300	4,100	7,400	500	1,300
Other	2,100	1,000	600	200	200

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

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹ — continued					
Engineers, total	1,374,400	1,106,700	66,700	7,400	193,600
White	1,137,300	932,600	48,900	6,200	149,600
Black	35,400	24,500	2,100	400	8,400
Hispanic	47,700	36,100	2,300	300	9,000
Asian	149,700	110,200	13,300	500	25,700
Other	4,200	3,200	100	S	900
Non-S&E occupations, total	7,216,200	4,921,300	464,800	901,900	928,100
White	6,085,600	4,249,500	366,300	750,200	719,600
Black	442,600	210,900	35,600	84,300	111,800
Hispanic	268,000	162,200	21,300	39,600	44,800
Asian	395,800	285,500	39,200	24,000	47,100
Other	24,100	13,200	2,400	3,700	4,800
Managers/administrators	2,019,900	1,527,000	90,300	99,700	303,000
White	1,735,100	1,341,000	73,800	78,900	241,500
Black	112,900	55,200	10,300	13,400	33,900
Hispanic	64,000	44,000	2,700	3,800	13,500
Asian	102,500	83,800	3,300	3,000	12,400
Other	5,400	3,100	200	600	1,600
Other non-S&E occupations	5,196,300	3,394,300	374,500	802,300	625,200
White	4,350,500	2,908,500	292,500	671,400	478,100
Black	329,700	155,700	25,300	70,900	77,800
Hispanic	204,000	118,200	18,600	35,800	31,300
Asian	293,400	201,700	35,900	21,100	34,800
Other	18,700	10,200	2,200	3,100	3,200
Bachelor's					
All occupations, total²	6,193,700	4,582,200	317,600	463,200	830,700
White	5,212,700	3,938,600	251,300	382,700	640,100
Black	345,000	193,900	19,200	40,900	91,000
Hispanic	237,700	156,500	17,300	23,200	40,700
Asian	374,900	279,200	27,800	14,400	53,500
Other	23,400	13,900	2,000	2,100	5,500
S&E occupations, total	1,916,800	1,497,700	130,700	25,100	263,300
White	1,631,800	1,292,300	108,300	21,100	210,100
Black	72,600	51,700	3,300	1,700	15,900
Hispanic	62,200	43,300	6,600	1,000	11,200
Asian	143,200	106,000	11,800	1,200	24,000
Other	7,000	4,400	600	100	2,000
Scientists, total	1,000,200	740,100	110,200	21,100	128,900
White	846,300	629,700	92,500	17,800	106,300
Black	46,200	33,000	2,500	1,300	9,300
Hispanic	29,400	18,500	5,900	900	4,200
Asian	74,200	56,900	8,700	1,000	7,700
Other	4,000	2,000	600	100	1,300

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

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
Computer/math scientists, total	675,300	571,700	31,100	10,600	61,900
White	566,600	482,800	26,800	8,600	48,400
Black	33,100	25,400	900	1,000	5,800
Hispanic	18,100	14,500	1,200	300	2,000
Asian	55,800	47,900	2,200	700	5,100
Other	1,700	1,100	S	S	600
Life/related scientists, total	125,200	49,300	36,600	4,600	34,700
White	110,000	44,700	30,900	4,200	30,200
Black	3,000	1,300	400	S	1,300
Hispanic	3,300	600	1,400	300	1,000
Asian	8,000	2,600	3,700	100	1,600
Other	900	S	300	S	600
Physical/related scientists, total ...	131,700	87,300	20,600	1,300	22,400
White	114,000	76,000	17,800	1,200	19,000
Black	5,500	3,300	500	S	1,600
Hispanic	3,900	2,100	1,100	S	700
Asian	7,900	5,700	1,100	100	1,000
Other	400	200	100	S	100
Social/related scientists, total	68,000	31,800	21,700	4,600	9,900
White	55,800	26,200	17,000	3,900	8,700
Black	4,600	3,000	700	300	600
Hispanic	4,200	1,200	2,200	300	500
Asian	2,500	700	1,700	100	S
Other	900	700	200	100	S
Engineers, total	916,600	757,700	20,600	4,000	134,400
White	785,600	662,600	15,800	3,300	103,800
Black	26,300	18,600	800	400	6,600
Hispanic	32,800	24,800	800	100	7,100
Asian	68,900	49,200	3,200	300	16,300
Other	3,000	2,400	S	S	600
Non-S&E occupations, total	4,276,900	3,084,500	186,900	438,100	567,500
White	3,580,900	2,646,300	142,900	361,600	430,000
Black	272,400	142,300	15,900	39,200	75,100
Hispanic	175,500	113,300	10,600	22,200	29,500
Asian	231,700	173,200	15,900	13,200	29,400
Other	16,400	9,500	1,400	2,000	3,500
Managers/administrators	1,141,100	928,600	33,400	21,800	157,300
White	990,500	822,300	28,000	16,300	123,900
Black	58,500	33,000	3,100	3,400	19,200
Hispanic	38,900	28,800	1,300	700	8,000
Asian	49,800	42,500	900	1,300	5,000
Other	3,400	1,900	100	100	1,200

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

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	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	3,135,800	2,155,800	153,500	416,300	410,200
White	2,590,300	1,824,000	115,000	345,400	306,100
Black	213,900	109,300	12,800	35,800	55,900
Hispanic	136,700	84,400	9,400	21,400	21,500
Asian	181,900	130,600	15,000	11,900	24,400
Other	13,000	7,500	1,300	1,900	2,300
Master's					
All occupations, total ²	2,819,800	1,736,000	219,300	492,100	372,500
White	2,330,500	1,444,400	172,400	416,000	297,700
Black	151,300	57,200	14,800	45,300	34,000
Hispanic	88,100	46,600	8,300	18,400	14,800
Asian	242,000	183,900	23,000	10,600	24,500
Other	7,900	3,800	700	1,900	1,500
S&E occupations, total	967,900	657,200	113,300	69,200	128,200
White	770,200	517,500	88,000	61,400	103,200
Black	30,000	14,100	5,000	3,300	7,500
Hispanic	29,300	18,600	3,600	2,800	4,200
Asian	135,800	105,500	16,300	1,300	12,700
Other	2,700	1,400	500	300	600
Scientists, total	592,000	357,100	92,700	66,100	76,100
White	475,100	279,600	73,800	58,700	63,000
Black	21,900	8,700	4,200	3,300	5,700
Hispanic	16,000	8,200	2,700	2,700	2,400
Asian	77,400	60,000	11,500	1,100	4,700
Other	1,700	600	500	300	300
Computer/math scientists, total	301,600	228,400	29,500	20,000	23,700
White	226,400	166,400	23,100	17,800	19,000
Black	10,300	6,100	1,300	700	2,200
Hispanic	6,300	4,100	900	800	600
Asian	57,900	51,500	3,900	700	1,800
Other	600	300	300	S	S
Life/related scientists, total	70,300	22,500	23,500	7,600	16,600
White	59,400	19,200	18,300	6,900	15,000
Black	2,500	700	1,200	200	400
Hispanic	1,400	200	500	300	400
Asian	6,700	2,500	3,400	100	800
Other	200	S	100	100	S
Physical/related scientists, total ...	69,100	35,600	13,200	5,200	15,200
White	57,700	30,000	10,400	4,800	12,400
Black	1,500	400	200	100	800
Hispanic	1,600	1,100	200	100	300
Asian	7,900	3,900	2,300	200	1,500
Other	500	200	S	S	200

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

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
Social/related scientists, total	151,100	70,700	26,500	33,300	20,600
White	131,600	64,100	22,000	29,100	16,500
Black	7,500	1,500	1,400	2,400	2,300
Hispanic	6,600	2,800	1,100	1,500	1,100
Asian	4,800	2,200	1,900	200	600
Other	400	100	100	100	100
Engineers, total	375,900	300,100	20,600	3,100	52,100
White	295,100	238,000	14,200	2,700	40,200
Black	8,100	5,400	800	S	1,800
Hispanic	13,300	10,400	900	100	1,900
Asian	58,400	45,500	4,800	200	7,900
Other	1,000	800	S	S	200
Non-S&E occupations, total	1,851,900	1,078,700	106,000	422,900	244,300
White	1,560,300	926,800	84,400	354,500	194,500
Black	121,400	43,100	9,800	42,000	26,500
Hispanic	58,900	28,000	4,800	15,600	10,600
Asian	106,200	78,400	6,800	9,200	11,800
Other	5,200	2,400	200	1,600	900
Managers/administrators	724,800	506,500	30,100	63,600	124,600
White	613,900	439,800	23,300	50,300	100,500
Black	44,700	18,600	4,500	8,900	12,700
Hispanic	21,600	13,100	1,000	2,700	4,800
Asian	43,000	34,000	1,400	1,300	6,300
Other	1,700	900	S	400	400
Other non-S&E occupations	1,127,100	572,200	75,800	359,300	119,700
White	946,400	487,000	61,100	304,300	94,100
Black	76,600	24,500	5,400	33,100	13,700
Hispanic	37,300	14,900	3,800	12,900	5,800
Asian	63,200	44,400	5,400	8,000	5,500
Other	3,500	1,500	200	1,200	600
Doctorate					
All occupations, total ²	696,000	289,100	302,000	39,800	65,100
White	562,200	228,600	246,500	32,200	54,800
Black	21,300	5,100	10,900	3,200	2,100
Hispanic	19,100	7,300	8,600	1,700	1,500
Asian	91,100	47,400	34,700	2,500	6,400
Other	2,200	600	1,200	200	300
S&E occupations, total	454,700	174,500	220,900	14,700	44,600
White	363,600	133,700	180,400	12,300	37,200
Black	9,600	2,300	5,600	600	1,100
Hispanic	10,700	3,000	6,400	500	900
Asian	69,200	35,000	27,700	1,300	5,200
Other	1,600	500	800	100	200

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

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Scientists, total	375,300	127,200	195,400	14,500	38,100
White	309,100	103,200	161,500	12,100	32,300
Black	8,600	1,800	5,100	600	1,100
Hispanic	9,300	2,300	5,800	500	700
Asian	46,900	19,500	22,400	1,200	3,800
Other	1,400	400	700	100	200
Computer/math scientists, total	59,000	25,600	27,400	2,200	3,800
White	43,800	17,800	21,300	1,500	3,200
Black	1,100	300	700	100	S
Hispanic	1,600	500	800	200	S
Asian	12,300	6,900	4,500	400	500
Other	200	100	100	S	S
Life/related scientists, total	111,800	27,200	69,500	3,000	12,200
White	90,700	21,400	56,700	2,500	10,000
Black	1,800	300	1,100	100	300
Hispanic	2,600	500	1,800	100	200
Asian	16,500	4,900	9,700	400	1,600
Other	300	100	100	S	100
Physical/related scientists, total ...	83,700	33,100	37,300	2,400	10,800
White	68,200	25,600	31,300	2,000	9,300
Black	1,400	500	600	100	200
Hispanic	1,700	500	1,000	S	200
Asian	12,100	6,500	4,200	300	1,100
Other	200	100	200	S	S
Social/related scientists, total	120,800	41,400	61,200	6,800	11,400
White	106,400	38,500	52,100	6,000	9,700
Black	4,400	700	2,700	400	600
Hispanic	3,300	700	2,100	200	300
Asian	5,900	1,200	3,900	200	700
Other	700	200	400	100	100
Engineers, total	79,400	47,200	25,500	300	6,500
White	54,500	30,500	18,900	200	4,900
Black	1,100	400	600	S	100
Hispanic	1,500	700	600	S	100
Asian	22,300	15,500	5,300	100	1,400
Other	100	100	S	S	S
Non-S&E occupations, total	241,300	114,700	81,100	25,100	20,500
White	198,700	94,900	66,100	20,000	17,600
Black	11,700	2,900	5,300	2,600	1,000
Hispanic	8,400	4,300	2,200	1,200	700
Asian	21,900	12,400	7,100	1,300	1,200
Other	700	100	400	100	S

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Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1997

Highest degree, occupation, and race/ethnicity	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Managers/administrators	102,400	55,200	22,700	11,200	13,300
White	85,700	45,700	19,200	9,300	11,500
Black	5,200	1,300	2,100	1,200	600
Hispanic	2,400	1,400	400	300	400
Asian	8,800	6,700	1,000	400	800
Other	200	100	100	S	S
Other non-S&E occupations	138,900	59,500	58,400	13,800	7,200
White	112,900	49,200	46,900	10,600	6,100
Black	6,500	1,600	3,200	1,400	400
Hispanic	6,000	2,900	1,800	900	300
Asian	13,100	5,700	6,100	800	400
Other	400	S	300	100	S

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)