

Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1999

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, total	10,981,600	7,556,000	961,500	1,060,900	1,403,300
White	9,124,600	6,393,300	761,100	879,500	1,090,700
Black	597,100	308,300	53,900	93,800	141,100
Hispanic	417,200	251,100	42,000	53,800	70,200
Asian/Pacific Islander	805,900	582,400	100,500	30,000	92,900
Other	36,800	20,900	3,900	3,700	8,300
S&E occupations, total	3,540,800	2,482,400	496,400	112,100	449,900
White	2,896,600	2,036,200	404,600	97,900	357,900
Black	121,600	74,700	17,200	5,400	24,400
Hispanic	120,900	79,800	18,100	5,000	18,000
Asian/Pacific Islander	390,500	284,900	54,600	3,600	47,400
Other	11,300	6,900	1,800	300	2,200
Scientists, total	2,170,500	1,373,600	434,200	107,600	255,100
White	1,774,200	1,112,100	358,300	94,300	209,500
Black	84,000	47,900	15,000	5,300	15,800
Hispanic	71,800	42,600	15,700	4,700	8,900
Asian/Pacific Islander	233,900	167,500	43,400	3,100	19,800
Other	6,700	3,500	1,700	300	1,200
Computer/math scientists, total	1,167,400	943,800	95,000	37,300	91,300
White	922,200	741,900	78,900	30,900	70,400
Black	51,400	37,800	3,200	2,800	7,600
Hispanic	37,600	29,400	2,700	1,700	3,800
Asian/Pacific Islander	153,600	132,500	9,900	1,900	9,300
Other	2,700	2,300	300	S	100
Life/related scientists, total	341,900	113,400	148,900	14,400	65,300
White	285,100	95,100	120,900	12,800	56,300
Black	6,600	1,300	3,000	400	1,900
Hispanic	10,900	3,000	5,900	500	1,600
Asian/Pacific Islander	37,700	13,600	18,900	400	4,700
Other	1,600	400	300	100	700
Physical/related scientists, total ...	297,900	161,200	73,200	9,100	54,300
White	252,500	135,700	62,400	8,300	46,000
Black	8,800	4,400	1,200	300	2,900
Hispanic	7,800	4,600	2,000	100	1,100
Asian/Pacific Islander	27,800	15,900	7,300	400	4,200
Other	900	500	300	S	100
Social/related scientists, total	363,400	155,200	117,100	46,800	44,300
White	314,400	139,300	96,100	42,200	36,700
Black	17,200	4,400	7,700	1,800	3,300
Hispanic	15,500	5,700	5,100	2,300	2,400
Asian/Pacific Islander	14,800	5,500	7,400	400	1,600
Other	1,500	300	900	100	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: 1999

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	1,370,300	1,108,800	62,100	4,500	194,800
White	1,122,400	924,100	46,300	3,600	148,400
Black	37,700	26,800	2,200	100	8,600
Hispanic	49,100	37,200	2,400	400	9,100
Asian/Pacific Islander	156,600	117,300	11,200	500	27,600
Other	4,600	3,500	100	S	1,000
Non-S&E occupations, total	7,440,800	5,073,500	465,100	948,800	953,400
White	6,228,100	4,357,100	356,500	781,700	732,800
Black	475,500	233,600	36,700	88,400	116,700
Hispanic	296,300	171,300	23,900	48,800	52,200
Asian/Pacific Islander	415,400	297,600	45,900	26,400	45,500
Other	25,600	13,900	2,000	3,500	6,100
Managers/administrators	2,035,600	1,543,800	86,500	107,000	298,300
White	1,740,900	1,347,300	69,900	85,800	238,000
Black	115,900	59,300	9,700	14,500	32,500
Hispanic	66,100	45,100	2,700	4,100	14,200
Asian/Pacific Islander	106,500	89,000	4,100	2,100	11,300
Other	6,200	3,100	200	500	2,400
Other non-S&E occupations	5,405,200	3,529,700	378,600	841,800	655,100
White	4,487,200	3,009,800	286,700	695,900	494,800
Black	359,600	174,300	27,100	74,000	84,300
Hispanic	230,200	126,200	21,200	44,700	38,100
Asian/Pacific Islander	309,000	208,600	41,900	24,300	34,200
Other	19,300	10,800	1,800	2,900	3,700
Bachelor's					
All occupations, total	6,350,100	4,694,100	327,100	479,700	849,300
White	5,300,500	4,010,700	251,900	389,900	648,000
Black	362,000	205,600	20,800	41,800	93,700
Hispanic	268,800	172,500	20,300	29,000	47,000
Asian/Pacific Islander	394,800	290,200	32,400	17,400	54,900
Other	23,900	15,000	1,700	1,600	5,600
S&E occupations, total	1,994,400	1,555,000	142,500	29,300	267,600
White	1,680,900	1,327,000	117,200	25,500	211,200
Black	73,900	51,600	4,900	1,400	16,000
Hispanic	74,800	53,900	7,200	1,300	12,400
Asian/Pacific Islander	158,300	117,900	12,700	1,100	26,700
Other	6,600	4,600	500	S	1,500
Scientists, total	1,087,100	802,300	123,500	26,900	134,300
White	908,100	671,100	103,400	23,600	110,000
Black	46,600	32,300	4,000	1,300	9,000
Hispanic	41,500	28,100	6,100	1,300	6,000
Asian/Pacific Islander	87,700	68,900	9,400	700	8,600
Other	3,100	2,000	500	S	700

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: 1999

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	740,500	630,000	36,100	14,900	59,500
White	612,200	522,100	31,300	12,400	46,300
Black	34,200	27,200	1,000	1,100	4,900
Hispanic	27,000	21,800	1,300	800	3,100
Asian/Pacific Islander	65,400	57,300	2,400	600	5,000
Other	1,700	1,500	100	S	100
Life/related scientists, total	135,500	55,600	43,000	4,300	32,500
White	117,100	49,700	34,900	4,300	28,200
Black	2,000	100	500	S	1,400
Hispanic	5,700	1,500	3,100	100	1,000
Asian/Pacific Islander	9,800	4,000	4,400	S	1,300
Other	900	200	100	S	500
Physical/related scientists, total ...	139,600	87,200	21,200	1,100	30,200
White	120,600	74,700	18,900	1,000	26,000
Black	5,800	3,600	300	S	1,900
Hispanic	4,600	3,300	600	S	700
Asian/Pacific Islander	8,400	5,300	1,400	100	1,600
Other	300	200	S	S	S
Social/related scientists, total	71,400	29,600	23,100	6,700	12,100
White	58,300	24,500	18,300	6,000	9,400
Black	4,600	1,400	2,200	200	800
Hispanic	4,200	1,400	1,200	500	1,200
Asian/Pacific Islander	4,000	2,200	1,100	S	700
Other	300	S	300	S	S
Engineers, total	907,400	752,700	19,000	2,400	133,300
White	772,800	655,800	13,700	2,000	101,200
Black	27,300	19,400	900	100	7,000
Hispanic	33,300	25,900	1,000	S	6,300
Asian/Pacific Islander	70,600	49,000	3,300	300	18,100
Other	3,400	2,600	S	S	700
Non-S&E occupations, total	4,355,700	3,139,100	184,600	450,400	581,600
White	3,619,600	2,683,800	134,700	364,300	436,800
Black	288,100	154,000	15,900	40,400	77,800
Hispanic	194,000	118,600	13,100	27,700	34,700
Asian/Pacific Islander	236,500	172,300	19,700	16,300	28,300
Other	17,400	10,400	1,200	1,600	4,100
Managers/administrators	1,156,800	936,900	30,900	23,600	165,300
White	997,500	823,800	25,100	18,100	130,400
Black	62,900	37,900	2,900	3,200	18,900
Hispanic	41,100	29,700	1,200	1,100	9,100
Asian/Pacific Islander	51,300	43,600	1,500	1,000	5,200
Other	3,900	1,900	200	100	1,700

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: 1999

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	3,198,800	2,202,100	153,700	426,700	416,300
White	2,622,100	1,860,000	109,600	346,200	306,400
Black	225,200	116,100	13,000	37,200	58,900
Hispanic	152,900	88,800	12,000	26,600	25,500
Asian/Pacific Islander	185,200	128,700	18,200	15,300	23,000
Other	13,400	8,500	1,000	1,500	2,400
Master's					
All occupations, total	2,982,000	1,851,000	226,000	518,000	387,000
White	2,440,500	1,516,500	180,000	437,400	306,600
Black	168,600	71,200	15,300	46,100	36,000
Hispanic	98,000	51,300	8,200	22,600	15,900
Asian/Pacific Islander	266,600	208,100	21,900	10,000	26,600
Other	8,200	3,800	600	1,900	1,900
S&E occupations, total	1,032,100	719,400	111,800	66,600	134,300
White	807,200	551,700	89,300	58,700	107,500
Black	35,900	20,300	5,800	2,900	6,900
Hispanic	32,800	21,000	3,700	3,400	4,700
Asian/Pacific Islander	153,000	124,600	12,600	1,300	14,600
Other	3,100	1,800	400	200	600
Scientists, total	655,500	415,600	94,100	65,100	80,800
White	516,000	316,500	75,500	57,600	66,400
Black	27,300	13,600	5,400	2,900	5,400
Hispanic	19,100	10,900	3,100	3,100	2,000
Asian/Pacific Islander	91,100	73,400	9,700	1,200	6,700
Other	2,100	1,100	400	200	300
Computer/math scientists, total ...	354,100	276,400	29,900	20,300	27,600
White	256,200	194,100	24,100	17,000	21,000
Black	15,200	10,100	1,600	1,300	2,400
Hispanic	8,800	6,500	700	900	700
Asian/Pacific Islander	72,900	64,900	3,400	1,000	3,500
Other	900	700	200	S	S
Life/related scientists, total	72,500	25,000	20,900	6,900	19,700
White	61,200	20,500	16,700	6,100	17,900
Black	2,200	800	900	400	200
Hispanic	1,800	500	500	400	400
Asian/Pacific Islander	7,100	3,200	2,800	S	1,000
Other	300	S	S	100	100
Physical/related scientists, total ...	73,000	40,100	14,200	5,200	13,500
White	62,300	35,000	11,600	5,000	10,800
Black	1,800	500	300	100	1,000
Hispanic	1,400	800	300	100	200
Asian/Pacific Islander	7,100	3,600	1,900	S	1,500
Other	400	300	100	S	S

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Table E-5. Employed U.S. scientists and engineers, by highest degree attained, occupation, race/ethnicity, and employment sector: 1999

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	155,900	74,100	29,100	32,700	20,000
White	136,200	66,900	23,100	29,500	16,600
Black	8,100	2,300	2,700	1,200	1,900
Hispanic	7,100	3,000	1,500	1,700	800
Asian/Pacific Islander	4,000	1,700	1,600	200	500
Other	500	100	200	100	200
Engineers, total	376,500	303,800	17,700	1,500	53,500
White	291,300	235,100	13,800	1,100	41,200
Black	8,600	6,600	500	S	1,600
Hispanic	13,600	10,200	600	300	2,600
Asian/Pacific Islander	62,000	51,100	2,800	100	7,900
Other	1,000	700	S	S	300
Non-S&E occupations, total	1,949,900	1,131,600	114,200	451,400	252,700
White	1,633,200	964,800	90,600	378,700	199,100
Black	132,700	50,900	9,500	43,200	29,100
Hispanic	65,300	30,300	4,600	19,100	11,300
Asian/Pacific Islander	113,600	83,600	9,300	8,700	12,000
Other	5,100	2,000	100	1,700	1,300
Managers/administrators	726,600	512,000	33,700	66,800	114,100
White	618,100	445,600	26,900	54,400	91,200
Black	42,500	17,300	3,800	8,500	12,800
Hispanic	20,400	12,800	1,100	2,600	3,900
Asian/Pacific Islander	44,100	35,700	1,800	900	5,700
Other	1,500	700	S	400	400
Other non-S&E occupations	1,223,300	619,500	80,500	384,600	138,700
White	1,015,100	519,300	63,700	324,200	107,900
Black	90,200	33,600	5,700	34,700	16,200
Hispanic	44,900	17,500	3,500	16,500	7,300
Asian/Pacific Islander	69,500	47,900	7,500	7,800	6,300
Other	3,600	1,200	100	1,400	800
Doctorate					
All occupations, total	736,700	322,000	309,400	39,700	65,600
White	583,300	247,700	249,900	31,500	54,300
Black	25,800	6,300	12,400	4,800	2,300
Hispanic	21,200	8,200	9,500	1,500	2,000
Asian/Pacific Islander	103,800	59,200	36,100	1,800	6,700
Other	2,600	700	1,500	200	200
S&E occupations, total	484,100	195,000	229,900	14,400	44,800
White	381,600	146,000	186,900	12,000	36,700
Black	11,000	2,500	6,200	1,000	1,300
Hispanic	12,900	4,400	7,300	300	1,000
Asian/Pacific Islander	77,000	41,600	28,600	1,100	5,700
Other	1,600	500	900	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: 1999

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	399,900	144,000	204,400	13,800	37,700
White	325,100	114,000	168,200	11,500	31,400
Black	9,300	1,700	5,400	1,000	1,200
Hispanic	11,000	3,400	6,500	200	800
Asian/Pacific Islander	53,100	24,400	23,500	1,000	4,200
Other	1,500	400	800	S	100
Computer/math scientists, total	67,100	32,600	28,700	2,000	3,800
White	49,500	21,800	23,300	1,400	3,100
Black	1,400	300	700	400	100
Hispanic	1,600	800	700	S	S
Asian/Pacific Islander	14,500	9,700	4,000	200	600
Other	S	S	S	S	S
Life/related scientists, total	121,100	30,400	75,600	2,900	12,200
White	95,600	22,900	60,800	2,500	9,400
Black	2,100	400	1,300	100	400
Hispanic	3,500	900	2,300	100	200
Asian/Pacific Islander	19,500	6,100	10,900	300	2,100
Other	400	200	200	S	100
Physical/related scientists, total ...	84,900	33,800	37,800	2,800	10,400
White	69,200	25,900	31,900	2,400	9,000
Black	1,200	400	600	200	100
Hispanic	1,800	400	1,100	S	200
Asian/Pacific Islander	12,300	7,100	4,000	300	1,000
Other	300	S	200	S	S
Social/related scientists, total	126,900	47,100	62,300	6,100	11,300
White	110,800	43,500	52,200	5,300	9,800
Black	4,500	700	2,800	400	700
Hispanic	4,100	1,300	2,400	100	400
Asian/Pacific Islander	6,800	1,500	4,600	200	400
Other	700	200	400	S	100
Engineers, total	84,200	51,000	25,500	600	7,100
White	56,500	32,000	18,700	500	5,300
Black	1,700	700	800	S	100
Hispanic	1,900	1,000	800	S	200
Asian/Pacific Islander	23,900	17,200	5,100	100	1,500
Other	100	100	100	S	S
Non-S&E occupations, total	252,600	127,000	79,500	25,300	20,800
White	201,700	101,600	63,000	19,500	17,600
Black	14,800	3,800	6,100	3,800	1,100
Hispanic	8,300	3,800	2,300	1,200	1,000
Asian/Pacific Islander	26,800	17,600	7,400	700	1,100
Other	1,000	200	600	100	100

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: 1999

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	98,400	57,900	18,400	10,200	12,000
White	79,800	46,900	14,900	7,500	10,600
Black	5,700	900	2,200	2,200	400
Hispanic	3,000	1,700	500	400	500
Asian/Pacific Islander	9,700	8,400	700	200	400
Other	200	100	S	S	100
Other non-S&E occupations	154,200	69,200	61,100	15,100	8,800
White	121,900	54,800	48,200	12,000	6,900
Black	9,100	2,900	3,900	1,600	600
Hispanic	5,300	2,100	1,800	800	600
Asian/Pacific Islander	17,100	9,200	6,700	500	700
Other	800	100	600	100	S

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)