

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
All degree levels¹								
All occupations, total²	12,512,000	10,585,600	9,476,700	1,109,000	191,900	1,734,600	1,005,100	729,500
White	10,557,900	8,877,500	7,913,200	964,300	147,600	1,532,800	918,300	614,500
Black	640,200	555,600	509,300	46,300	14,300	70,300	40,700	29,500
Hispanic	422,200	371,500	333,600	37,900	9,700	41,000	13,500	27,500
Asian	849,400	745,600	688,500	57,100	19,000	84,800	30,000	54,800
Other	42,400	35,400	32,100	3,300	1,300	5,700	2,500	3,200
S&E occupations, total	3,899,000	3,369,400	3,105,000	264,400	52,900	476,600	334,300	142,300
White	3,260,200	2,791,900	2,561,500	230,400	40,500	427,800	312,400	115,400
Black	126,600	113,000	105,500	7,500	2,200	11,400	5,100	6,200
Hispanic	114,900	103,500	95,200	8,200	2,700	8,700	4,300	4,300
Asian	384,700	349,800	332,200	17,600	7,100	27,800	12,100	15,700
Other	12,600	11,300	10,600	700	400	900	300	600
Scientists, total	2,261,500	1,995,100	1,791,000	204,000	30,000	236,400	126,000	110,500
White	1,881,900	1,654,600	1,476,100	178,500	22,600	204,800	115,600	89,200
Black	88,300	77,500	71,400	6,200	1,300	9,500	3,900	5,500
Hispanic	62,800	55,800	48,900	6,800	1,900	5,100	1,800	3,200
Asian	220,400	200,100	188,200	11,900	3,900	16,400	4,500	11,900
Other	8,100	7,100	6,400	600	300	700	100	600
Computer/math scientists, total	1,129,700	1,039,500	974,400	65,100	14,600	75,700	40,000	35,700
White	917,100	839,400	782,500	56,900	11,100	66,600	36,800	29,800
Black	48,000	44,900	42,900	1,900	500	2,600	1,100	1,600
Hispanic	28,200	26,200	24,600	1,600	800	1,200	300	900
Asian	133,600	126,600	121,900	4,600	2,000	5,000	1,700	3,400
Other	2,800	2,500	2,400	100	200	100	100	100
Life/related scientists, total ..	387,300	321,800	292,700	29,000	7,400	58,100	26,700	31,400
White	324,000	272,400	246,900	25,400	5,200	46,400	22,900	23,500
Black	11,400	7,700	7,300	500	400	3,200	1,500	1,700
Hispanic	10,700	8,000	7,300	700	400	2,400	800	1,600
Asian	39,700	32,300	30,000	2,400	1,300	6,000	1,400	4,600
Other	1,500	1,400	1,300	100	S	100	S	100
Physical/related scientists, total	343,500	284,900	259,500	25,300	4,600	54,100	37,000	17,200
White	292,100	240,200	218,400	21,800	3,200	48,700	34,900	13,800
Black	10,000	8,400	7,900	400	100	1,500	800	800
Hispanic	8,800	7,200	6,600	700	700	900	400	500
Asian	31,400	27,900	25,700	2,200	500	3,000	900	2,200
Other	1,200	1,200	1,000	200	100	S	S	S
Social/related scientists, total	401,000	349,000	264,400	84,500	3,500	48,500	22,300	26,200
White	348,800	302,600	228,300	74,300	3,000	43,200	21,000	22,100
Black	18,900	16,500	13,200	3,300	300	2,100	600	1,500
Hispanic	15,100	14,400	10,500	3,900	100	600	200	400
Asian	15,700	13,300	10,600	2,700	S	2,300	500	1,800
Other	2,500	2,100	1,700	300	S	400	S	400

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
All degree levels¹ — continued								
Engineers, total	1,637,500	1,374,400	1,314,000	60,400	22,900	240,200	208,400	31,800
White	1,378,300	1,137,300	1,085,400	51,900	17,900	223,000	196,800	26,200
Black	38,300	35,400	34,100	1,300	900	1,900	1,200	700
Hispanic	52,100	47,700	46,300	1,400	800	3,600	2,500	1,100
Asian	164,400	149,700	144,000	5,700	3,200	11,500	7,700	3,800
Other	4,500	4,200	4,100	100	100	200	200	S
Non-S&E occupations, total	8,613,100	7,216,200	6,371,600	844,600	138,900	1,257,900	670,700	587,200
White	7,297,700	6,085,600	5,351,700	734,000	107,100	1,105,000	605,900	499,100
Black	513,600	442,600	403,800	38,800	12,100	58,900	35,600	23,300
Hispanic	307,300	268,000	238,300	29,700	6,900	32,400	9,200	23,200
Asian	464,700	395,800	356,300	39,600	11,900	57,000	17,900	39,100
Other	29,800	24,100	21,500	2,600	1,000	4,700	2,200	2,500
Managers/administrators	2,321,300	2,019,900	1,941,100	78,800	29,100	272,300	212,000	60,300
White	2,006,300	1,735,100	1,665,200	70,000	23,000	248,200	195,400	52,800
Black	126,500	112,900	110,000	2,900	2,600	11,000	9,800	1,200
Hispanic	68,800	64,000	62,200	1,800	600	4,200	2,000	2,200
Asian	112,800	102,500	98,800	3,700	2,800	7,500	4,100	3,400
Other	6,800	5,400	5,000	400	S	1,400	800	600
Other non-S&E occupations ..	6,291,800	5,196,300	4,430,500	765,700	109,800	985,700	458,800	526,900
White	5,291,300	4,350,500	3,686,500	664,000	84,100	856,800	410,500	446,300
Black	387,100	329,700	293,800	35,900	9,400	47,900	25,800	22,100
Hispanic	238,500	204,000	176,200	27,800	6,300	28,100	7,200	20,900
Asian	351,900	293,400	257,500	35,900	9,100	49,500	13,800	35,700
Other	23,000	18,700	16,500	2,200	900	3,300	1,400	1,900
Bachelor's								
All occupations, total²	7,456,800	6,193,700	5,545,400	648,300	123,600	1,139,500	604,800	534,700
White	6,314,700	5,212,700	4,649,200	563,500	93,300	1,008,700	559,700	449,000
Black	399,700	345,000	319,100	25,900	10,700	44,000	20,400	23,600
Hispanic	272,600	237,700	213,300	24,500	6,500	28,400	6,300	22,100
Asian	441,200	374,900	342,500	32,300	12,200	54,100	17,000	37,100
Other	28,700	23,400	21,200	2,200	1,000	4,300	1,400	2,900
S&E occupations, total	2,252,100	1,916,800	1,794,800	122,000	31,800	303,500	214,100	89,400
White	1,932,200	1,631,800	1,523,600	108,300	24,300	276,100	202,500	73,700
Black	82,100	72,600	69,300	3,300	1,700	7,800	3,300	4,400
Hispanic	69,300	62,200	58,200	4,000	1,800	5,400	2,000	3,400
Asian	160,400	143,200	137,100	6,100	3,800	13,500	6,100	7,300
Other	8,100	7,000	6,700	400	300	800	200	600
Scientists, total	1,135,500	1,000,200	915,400	84,800	16,700	118,600	52,300	66,300
White	960,000	846,300	771,600	74,700	11,900	101,800	48,400	53,400
Black	53,400	46,200	43,700	2,500	1,000	6,200	2,200	4,000
Hispanic	33,600	29,400	25,900	3,500	1,300	2,900	400	2,400
Asian	83,700	74,200	70,500	3,800	2,200	7,300	1,300	6,000
Other	4,800	4,000	3,700	300	300	500	S	500

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
Bachelor's — continued								
Computer/math scientists, total	731,900	675,300	639,100	36,200	10,500	46,000	21,000	25,000
White	615,700	566,600	533,500	33,000	8,000	41,100	19,200	22,000
Black	35,400	33,100	32,300	800	300	1,900	900	1,100
Hispanic	19,600	18,100	17,200	900	700	700	100	600
Asian	59,200	55,800	54,500	1,400	1,200	2,200	900	1,300
Other	2,000	1,700	1,700	100	200	100	S	100
Life/related scientists, total ..	158,100	125,200	111,400	13,800	3,100	29,900	8,700	21,200
White	134,300	110,000	97,700	12,300	1,500	22,800	7,600	15,200
Black	5,700	3,000	2,800	200	400	2,300	700	1,600
Hispanic	5,300	3,300	2,900	400	300	1,600	300	1,300
Asian	11,800	8,000	7,000	900	800	3,000	100	2,900
Other	1,000	900	900	S	S	100	S	100
Physical/related scientists, total	163,300	131,700	118,200	13,500	2,400	29,200	18,800	10,400
White	142,000	114,000	102,000	12,000	1,800	26,200	17,900	8,300
Black	6,700	5,500	5,200	300	S	1,100	600	500
Hispanic	4,500	3,900	3,400	500	200	400	S	400
Asian	9,600	7,900	7,200	700	200	1,500	300	1,200
Other	500	400	300	100	100	S	S	S
Social/related scientists, total	82,200	68,000	46,700	21,300	800	13,500	3,700	9,700
White	68,000	55,800	38,400	17,400	500	11,700	3,700	7,900
Black	5,600	4,600	3,400	1,300	200	800	S	800
Hispanic	4,300	4,200	2,400	1,800	S	100	S	100
Asian	3,100	2,500	1,700	800	S	600	S	600
Other	1,300	900	800	100	S	300	S	300
Engineers, total	1,116,600	916,600	879,400	37,200	15,100	184,900	161,800	23,000
White	972,200	785,600	752,000	33,600	12,300	174,400	154,100	20,300
Black	28,700	26,300	25,600	700	700	1,600	1,100	400
Hispanic	35,700	32,800	32,300	500	500	2,500	1,600	900
Asian	76,700	68,900	66,600	2,300	1,500	6,200	4,900	1,400
Other	3,200	3,000	3,000	100	S	200	200	S
Non-S&E occupations, total	5,204,700	4,276,900	3,750,600	526,300	91,800	836,000	390,700	445,300
White	4,382,400	3,580,900	3,125,700	455,200	69,000	732,500	357,200	375,300
Black	317,600	272,400	249,800	22,600	8,900	36,300	17,100	19,200
Hispanic	203,300	175,500	155,100	20,500	4,700	23,000	4,300	18,700
Asian	280,800	231,700	205,500	26,200	8,400	40,600	10,900	29,700
Other	20,600	16,400	14,600	1,800	700	3,600	1,200	2,300
Managers/administrators	1,319,600	1,141,100	1,095,300	45,800	14,200	164,300	129,800	34,500
White	1,152,100	990,500	949,700	40,800	10,200	151,400	121,500	29,900
Black	65,300	58,500	57,300	1,200	1,700	5,000	4,500	500
Hispanic	41,600	38,900	37,500	1,400	200	2,500	900	1,700
Asian	56,200	49,800	47,800	2,000	2,000	4,400	2,500	1,900
Other	4,400	3,400	3,100	300	S	1,000	400	600

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
Bachelor's — continued								
Other non-S&E occupations ..	3,885,100	3,135,800	2,655,300	480,600	77,600	671,700	260,900	410,800
White	3,230,400	2,590,300	2,176,000	414,400	58,900	581,200	235,700	345,500
Black	252,300	213,900	192,500	21,400	7,200	31,300	12,600	18,700
Hispanic	161,600	136,700	117,600	19,100	4,500	20,500	3,500	17,000
Asian	224,600	181,900	157,700	24,200	6,400	36,200	8,400	27,900
Other	16,200	13,000	11,400	1,600	700	2,500	800	1,700
Master's								
All occupations, total²	3,311,300	2,819,800	2,503,300	316,500	52,200	439,300	289,600	149,700
White	2,756,700	2,330,500	2,056,700	273,700	41,400	384,900	259,100	125,800
Black	176,100	151,300	136,600	14,700	2,900	21,900	16,900	5,000
Hispanic	99,600	88,100	79,000	9,100	2,700	8,800	4,800	3,900
Asian	270,000	242,000	223,900	18,100	4,800	23,200	8,400	14,800
Other	8,800	7,900	7,000	900	300	700	500	200
S&E occupations, total	1,100,000	967,900	863,800	104,100	14,000	118,200	76,300	41,900
White	883,800	770,200	681,900	88,300	10,700	102,900	70,200	32,700
Black	33,400	30,000	26,500	3,500	400	3,100	1,400	1,700
Hispanic	31,900	29,300	26,200	3,100	700	1,900	1,200	800
Asian	148,100	135,800	126,700	9,100	2,100	10,200	3,500	6,800
Other	2,800	2,700	2,500	200	100	100	S	100
Scientists, total	671,100	592,000	507,400	84,600	7,200	71,900	37,700	34,200
White	542,700	475,100	402,000	73,100	5,600	62,000	34,600	27,500
Black	24,900	21,900	19,100	2,900	300	2,700	1,300	1,400
Hispanic	17,500	16,000	13,700	2,300	400	1,100	500	600
Asian	84,300	77,400	71,200	6,100	900	6,000	1,300	4,700
Other	1,700	1,700	1,500	200	S	100	S	100
Computer/math scientists, total	328,500	301,600	277,400	24,200	3,100	23,800	14,600	9,200
White	249,000	226,400	206,300	20,000	2,200	20,400	13,800	6,600
Black	11,200	10,300	9,500	800	100	700	200	500
Hispanic	6,600	6,300	5,800	500	100	200	S	200
Asian	61,100	57,900	55,200	2,800	600	2,500	600	2,000
Other	600	600	600	S	S	S	S	S
Life/related scientists, total ..	83,800	70,300	61,700	8,500	1,200	12,400	5,700	6,600
White	69,900	59,400	52,100	7,400	1,000	9,500	4,300	5,100
Black	3,300	2,500	2,300	200	S	800	800	S
Hispanic	1,700	1,400	1,300	200	S	300	100	200
Asian	8,600	6,700	5,900	800	100	1,800	500	1,300
Other	200	200	100	100	S	S	S	S
Physical/related scientists, total	83,300	69,100	61,800	7,300	1,000	13,100	8,200	4,900
White	70,000	57,700	51,700	6,000	500	11,800	7,700	4,100
Black	1,900	1,500	1,400	100	S	400	100	200
Hispanic	2,200	1,600	1,500	200	300	300	200	S
Asian	8,700	7,900	6,800	1,100	200	600	100	500
Other	500	500	400	S	S	S	S	S

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
Master's — continued								
Social/related scientists, total	175,600	151,100	106,500	44,600	2,000	22,600	9,200	13,400
White	153,800	131,600	91,900	39,700	1,800	20,300	8,700	11,600
Black	8,500	7,500	5,800	1,800	100	800	200	600
Hispanic	7,000	6,600	5,100	1,500	S	300	200	200
Asian	5,900	4,800	3,300	1,500	S	1,100	100	900
Other	500	400	400	100	S	S	S	S
Engineers, total	428,900	375,900	356,300	19,500	6,800	46,300	38,500	7,700
White	341,100	295,100	279,900	15,200	5,100	40,800	35,700	5,200
Black	8,500	8,100	7,500	600	100	300	100	300
Hispanic	14,400	13,300	12,500	800	300	800	700	200
Asian	63,800	58,400	55,500	2,900	1,200	4,300	2,100	2,100
Other	1,100	1,000	1,000	S	100	S	S	S
Non-S&E occupations, total	2,211,300	1,851,900	1,639,600	212,400	38,100	321,200	213,400	107,800
White	1,872,900	1,560,300	1,374,900	185,400	30,600	282,000	188,900	93,200
Black	142,600	121,400	110,100	11,200	2,500	18,800	15,500	3,300
Hispanic	67,700	58,900	52,900	6,000	2,000	6,800	3,700	3,100
Asian	121,900	106,200	97,200	9,000	2,800	12,900	4,900	8,000
Other	6,000	5,200	4,500	700	300	600	500	100
Managers/administrators	826,600	724,800	698,500	26,300	13,300	88,400	65,700	22,800
White	705,400	613,900	590,900	23,000	12,000	79,500	59,100	20,300
Black	50,600	44,700	43,600	1,200	600	5,300	4,600	600
Hispanic	23,000	21,600	21,100	400	200	1,300	900	300
Asian	45,900	43,000	41,500	1,500	500	2,400	1,000	1,400
Other	1,800	1,700	1,500	200	S	100	S	100
Other non-S&E occupations ..	1,384,700	1,127,100	941,000	186,100	24,800	232,700	147,700	85,000
White	1,167,600	946,400	784,000	162,400	18,600	202,600	129,700	72,800
Black	92,000	76,600	66,600	10,100	1,800	13,500	10,800	2,700
Hispanic	44,700	37,300	31,800	5,600	1,800	5,600	2,800	2,800
Asian	76,100	63,200	55,700	7,500	2,300	10,500	3,900	6,600
Other	4,300	3,500	2,900	500	200	500	500	100
Doctorate								
All occupations, total ²	789,700	696,000	637,400	58,700	9,700	83,900	67,700	16,200
White	642,800	562,200	511,000	51,200	7,400	73,200	59,800	13,400
Black	24,500	21,300	20,100	1,300	600	2,600	2,200	400
Hispanic	21,600	19,100	17,200	1,900	300	2,200	1,600	600
Asian	98,100	91,100	87,000	4,100	1,500	5,400	3,700	1,700
Other	2,700	2,200	2,100	200	S	500	400	S
S&E occupations, total	511,900	454,700	418,900	35,800	6,300	50,900	41,300	9,600
White	413,700	363,600	332,000	31,600	4,800	45,300	37,500	7,900
Black	10,200	9,600	8,900	700	100	500	300	100
Hispanic	12,100	10,700	9,900	900	300	1,100	900	200
Asian	74,200	69,200	66,800	2,400	1,100	3,800	2,500	1,300
Other	1,700	1,600	1,400	200	S	100	100	S

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
Doctorate — continued								
Scientists, total	422,700	375,300	342,800	32,400	5,300	42,100	33,500	8,600
White	351,300	309,100	280,400	28,700	4,400	37,800	30,500	7,300
Black	9,100	8,600	7,800	700	100	500	300	100
Hispanic	10,300	9,300	8,400	800	200	800	600	200
Asian	50,400	46,900	44,900	2,000	600	2,800	1,900	1,000
Other	1,600	1,400	1,300	200	S	100	100	S
Computer/math scientists, total	64,800	59,000	54,500	4,500	1,000	4,900	3,900	1,000
White	48,800	43,800	40,300	3,500	800	4,200	3,400	900
Black	1,100	1,100	800	300	S	S	S	S
Hispanic	1,900	1,600	1,400	100	S	300	200	S
Asian	12,800	12,300	11,800	500	200	300	200	100
Other	200	200	200	S	S	100	100	S
Life/related scientists, total ..	128,400	111,800	105,500	6,300	2,400	14,200	10,900	3,200
White	105,300	90,700	85,300	5,400	2,000	12,700	9,900	2,700
Black	1,900	1,800	1,700	100	S	100	S	100
Hispanic	2,800	2,600	2,400	200	S	200	100	100
Asian	18,000	16,500	15,900	600	300	1,200	800	400
Other	300	300	300	S	S	S	S	S
Physical/related scientists, total	96,100	83,700	79,200	4,500	1,200	11,200	9,500	1,700
White	79,300	68,200	64,300	3,900	900	10,200	8,800	1,400
Black	1,400	1,400	1,300	100	S	S	S	S
Hispanic	2,100	1,700	1,700	100	100	200	200	S
Asian	13,100	12,100	11,600	500	100	800	500	300
Other	300	200	200	S	S	S	S	S
Social/related scientists, total	133,300	120,800	103,600	17,200	800	11,800	9,200	2,600
White	117,800	106,400	90,500	15,900	700	10,800	8,400	2,300
Black	4,700	4,400	4,100	300	S	300	300	100
Hispanic	3,500	3,300	2,900	400	S	200	100	100
Asian	6,500	5,900	5,500	400	S	500	400	100
Other	800	700	600	200	S	S	S	S
Engineers, total	89,200	79,400	76,100	3,300	1,000	8,800	7,800	900
White	62,500	54,500	51,600	2,900	400	7,500	6,900	600
Black	1,100	1,100	1,100	S	S	S	S	S
Hispanic	1,800	1,500	1,400	100	S	300	200	S
Asian	23,800	22,300	21,900	400	500	1,000	700	300
Other	100	100	100	S	S	S	S	S
Non-S&E occupations, total	277,800	241,300	218,400	22,900	3,400	33,100	26,400	6,700
White	229,100	198,700	179,000	19,600	2,600	27,800	22,300	5,500
Black	14,300	11,700	11,200	500	500	2,200	1,900	300
Hispanic	9,500	8,400	7,400	1,000	S	1,100	700	400
Asian	23,900	21,900	20,200	1,700	300	1,600	1,200	400
Other	1,000	700	700	S	S	300	300	S

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

Table D-4. U.S. scientists and engineers, by highest degree attained, broad occupation, race/ethnicity, and employment status: 1997

Highest degree, occupation, and race/ethnicity	S&Es, total	Employed			Unemploy- ed/seeking job	Not in labor force		
		Total	Full-time	Part-time		Total	Retired	Not seeking job
Doctorate — continued								
Managers/administrators	115,300	102,400	98,300	4,100	1,200	11,700	10,600	1,100
White	97,000	85,700	81,800	3,900	800	10,400	9,400	1,000
Black	5,900	5,200	5,100	100	300	500	500	S
Hispanic	2,500	2,400	2,400	S	S	100	100	S
Asian	9,300	8,800	8,700	100	S	400	400	S
Other	600	200	200	S	S	300	300	S
Other non-S&E occupations ..	162,500	138,900	120,200	18,800	2,200	21,300	15,800	5,600
White	132,100	112,900	97,200	15,700	1,700	17,500	13,000	4,500
Black	8,400	6,500	6,100	500	200	1,700	1,400	300
Hispanic	7,000	6,000	5,000	1,000	S	1,000	600	400
Asian	14,600	13,100	11,500	1,600	300	1,200	800	400
Other	400	400	400	S	S	S	S	S

1 Includes professional degrees

2 Total excludes 18,700 individuals who reported never having worked. For unemployed individuals, occupation is for their previous reported job.

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)