

Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹					
All occupations, total²	9,793,500	6,661,200	906,100	855,300	1,370,900
U.S. citizen, total ³	9,350,700	6,360,300	807,900	836,600	1,345,800
Native	8,672,400	5,878,800	740,600	800,800	1,252,100
Naturalized	678,300	481,500	67,200	35,800	93,700
Non-U.S. citizen, total ⁴	442,800	300,900	98,100	18,700	25,000
Permanent resident	352,400	260,300	54,400	16,400	21,300
Temporary resident	89,300	40,200	43,100	2,300	3,700
S&E occupations, total	3,303,400	2,240,600	472,100	116,000	474,700
U.S. citizen, total ³	3,091,500	2,116,300	399,700	111,800	463,700
Native	2,807,500	1,920,900	362,900	105,100	418,600
Naturalized	283,900	195,400	36,800	6,700	45,100
Non-U.S. citizen, total ⁴	211,900	124,300	72,400	4,200	11,100
Permanent resident	151,800	104,000	35,900	3,400	8,600
Temporary resident	59,400	20,100	36,100	800	2,500
Scientists, total	1,912,300	1,145,400	402,900	107,000	257,000
U.S. citizen, total ³	1,779,400	1,077,400	346,300	103,500	252,300
Native	1,646,100	995,600	318,000	98,400	234,100
Naturalized	133,300	81,700	28,300	5,100	18,100
Non-U.S. citizen, total ⁴	132,900	68,100	56,600	3,500	4,800
Permanent resident	92,000	57,000	28,800	3,000	3,200
Temporary resident	40,400	10,900	27,600	500	1,500
Computer/math scientists, total	991,500	759,600	87,200	39,800	104,900
U.S. citizen, total ³	930,000	714,400	73,900	38,100	103,500
Native	853,600	655,900	66,500	36,000	95,200
Naturalized	76,300	58,500	7,300	2,100	8,300
Non-U.S. citizen, total ⁴	61,500	45,200	13,400	1,600	1,400
Permanent resident	47,900	38,300	7,000	1,400	1,200
Temporary resident	13,600	6,800	6,300	200	100
Life/related scientists, total	322,300	102,100	140,400	15,200	64,600
U.S. citizen, total ³	292,600	94,700	119,900	14,800	63,100
Native	270,900	87,700	109,000	14,400	59,800
Naturalized	21,700	7,100	10,900	400	3,400
Non-U.S. citizen, total ⁴	29,700	7,400	20,500	300	1,400
Permanent resident	17,700	6,400	10,300	300	800
Temporary resident	11,900	1,000	10,200	S	700
Physical/related scientists, total ...	280,900	154,900	72,200	9,500	44,300
U.S. citizen, total ³	255,100	144,500	58,300	8,900	43,400
Native	233,200	132,000	53,500	8,200	39,600
Naturalized	21,900	12,500	4,800	700	3,900
Non-U.S. citizen, total ⁴	25,800	10,500	13,900	600	900
Permanent resident	16,100	8,900	6,200	600	500
Temporary resident	9,700	1,600	7,700	S	400

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

Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹ — continued					
Social/related scientists, total	317,600	128,800	103,000	42,600	43,200
U.S. citizen, total ³	301,800	123,800	94,200	41,600	42,200
Native	288,300	120,100	88,900	39,800	39,600
Naturalized	13,400	3,700	5,300	1,900	2,600
Non-U.S. citizen, total ⁴	15,800	5,000	8,800	900	1,100
Permanent resident	10,300	3,500	5,400	700	700
Temporary resident	5,300	1,500	3,400	200	300
Engineers, total	1,391,100	1,095,200	69,200	9,000	217,700
U.S. citizen, total ³	1,312,000	1,038,900	53,400	8,300	211,400
Native	1,161,400	925,300	44,900	6,800	184,500
Naturalized	150,600	113,700	8,500	1,500	26,900
Non-U.S. citizen, total ⁴	79,000	56,300	15,800	700	6,300
Permanent resident	59,800	47,000	7,100	400	5,300
Temporary resident	19,000	9,300	8,400	300	1,000
Non-S&E occupations, total	6,490,100	4,420,600	434,000	739,400	896,200
U.S. citizen, total ³	6,259,300	4,244,000	408,200	724,800	882,200
Native	5,864,900	3,958,000	377,800	695,700	833,500
Naturalized	394,300	286,000	30,400	29,200	48,700
Non-U.S. citizen, total ⁴	230,900	176,600	25,800	14,500	14,000
Permanent resident	200,600	156,300	18,500	13,000	12,800
Temporary resident	29,900	20,100	7,100	1,500	1,200
Managers/administrators	1,994,400	1,456,300	96,800	88,500	352,800
U.S. citizen, total ³	1,926,600	1,397,700	93,600	87,000	348,400
Native	1,807,900	1,302,000	88,300	84,400	333,200
Naturalized	118,800	95,700	5,300	2,600	15,200
Non-U.S. citizen, total ⁴	67,800	58,600	3,200	1,600	4,400
Permanent resident	57,700	49,200	2,900	1,400	4,200
Temporary resident	10,100	9,400	300	200	200
Other non-S&E occupations	4,495,700	2,964,400	337,200	650,800	543,400
U.S. citizen, total ³	4,332,600	2,846,400	314,600	637,900	533,800
Native	4,057,000	2,656,000	289,400	611,300	500,300
Naturalized	275,600	190,400	25,200	26,600	33,400
Non-U.S. citizen, total ⁴	163,100	118,000	22,600	12,900	9,600
Permanent resident	142,900	107,100	15,600	11,600	8,600
Temporary resident	19,900	10,700	6,800	1,400	1,000
Bachelor's					
All occupations, total²	5,727,200	4,242,600	290,100	363,000	831,500
U.S. citizen, total ³	5,529,000	4,086,600	270,500	353,900	818,000
Native	5,166,500	3,811,600	252,000	337,500	765,400
Naturalized	362,500	275,000	18,500	16,400	52,600
Non-U.S. citizen, total ⁴	198,200	156,000	19,600	9,100	13,500
Permanent resident	171,400	140,400	10,800	8,100	12,000
Temporary resident	26,700	15,400	8,800	1,000	1,500

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Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
S&E occupations, total	1,980,300	1,509,200	128,600	33,800	308,700
U.S. citizen, total ³	1,914,600	1,461,500	117,700	32,100	303,400
Native	1,771,400	1,352,700	110,400	30,000	278,300
Naturalized	143,200	108,700	7,200	2,200	25,100
Non-U.S. citizen, total ⁴	65,700	47,700	10,900	1,700	5,400
Permanent resident	53,300	42,500	4,600	1,400	4,800
Temporary resident	12,400	5,200	6,300	300	600
Scientists, total	1,007,000	725,600	106,500	29,000	145,900
U.S. citizen, total ³	971,500	701,700	97,900	27,500	144,400
Native	912,900	657,300	93,000	26,400	136,200
Naturalized	58,600	44,400	4,900	1,100	8,200
Non-U.S. citizen, total ⁴	35,500	23,900	8,600	1,400	1,500
Permanent resident	27,200	21,200	3,400	1,200	1,300
Temporary resident	8,300	2,700	5,200	300	200
Computer/math scientists, total	676,200	555,000	31,700	17,500	72,000
U.S. citizen, total ³	652,300	535,600	28,600	16,800	71,300
Native	608,100	498,700	26,600	16,100	66,700
Naturalized	44,100	36,900	2,000	700	4,600
Non-U.S. citizen, total ⁴	24,000	19,300	3,200	700	800
Permanent resident	20,000	17,000	1,500	600	800
Temporary resident	4,000	2,300	1,600	100	S
Life/related scientists, total	131,600	56,200	33,700	5,200	36,500
U.S. citizen, total ³	127,200	54,900	31,100	5,000	36,200
Native	122,800	53,000	29,600	4,900	35,200
Naturalized	4,500	1,900	1,500	100	1,000
Non-U.S. citizen, total ⁴	4,400	1,200	2,600	200	300
Permanent resident	2,600	1,200	1,000	200	200
Temporary resident	1,800	100	1,600	S	200
Physical/related scientists, total	130,700	85,200	19,100	2,700	23,600
U.S. citizen, total ³	125,200	82,500	16,800	2,300	23,600
Native	117,700	77,600	16,200	2,100	21,700
Naturalized	7,600	4,900	600	200	1,900
Non-U.S. citizen, total ⁴	5,400	2,700	2,300	400	100
Permanent resident	3,600	2,500	600	400	100
Temporary resident	1,800	100	1,700	S	S
Social/related scientists, total	68,500	29,300	22,000	3,500	13,800
U.S. citizen, total ³	66,800	28,600	21,400	3,300	13,400
Native	64,400	28,000	20,600	3,200	12,700
Naturalized	2,400	600	800	200	800
Non-U.S. citizen, total ⁴	1,700	600	600	200	300
Permanent resident	1,000	500	200	S	300
Temporary resident	700	200	300	200	S

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

Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
Engineers, total	973,300	783,600	22,100	4,900	162,800
U.S. citizen, total ³	943,100	759,700	19,800	4,600	158,900
Native	858,500	695,400	17,400	3,600	142,000
Naturalized	84,600	64,300	2,300	1,000	16,900
Non-U.S. citizen, total ⁴	30,200	23,800	2,300	200	3,800
Permanent resident	26,200	21,300	1,100	200	3,500
Temporary resident	4,000	2,500	1,100	S	400
Non-S&E occupations, total	3,746,900	2,733,400	161,500	329,100	522,800
U.S. citizen, total ³	3,614,300	2,625,200	152,800	321,700	514,600
Native	3,395,100	2,458,900	141,600	307,500	487,100
Naturalized	219,300	166,300	11,200	14,200	27,500
Non-U.S. citizen, total ⁴	132,500	108,300	8,700	7,400	8,100
Permanent resident	118,000	97,900	6,200	6,700	7,200
Temporary resident	14,300	10,200	2,500	700	900
Managers/administrators	1,134,700	898,200	32,300	18,500	185,700
U.S. citizen, total ³	1,098,000	864,900	31,500	18,200	183,400
Native	1,040,300	816,900	29,900	17,500	176,100
Naturalized	57,600	48,000	1,600	700	7,300
Non-U.S. citizen, total ⁴	36,800	33,300	900	300	2,300
Permanent resident	32,200	29,000	800	100	2,300
Temporary resident	4,600	4,300	100	200	S
Other non-S&E occupations	2,612,200	1,835,200	129,200	310,600	337,100
U.S. citizen, total ³	2,516,400	1,760,200	121,400	303,500	331,200
Native	2,354,700	1,642,000	111,700	290,100	311,000
Naturalized	161,600	118,300	9,700	13,400	20,200
Non-U.S. citizen, total ⁴	95,800	75,000	7,800	7,100	5,800
Permanent resident	85,800	68,900	5,500	6,600	4,900
Temporary resident	9,700	5,900	2,400	500	900
Master's					
All occupations, total ²	2,575,600	1,523,200	224,500	447,200	380,800
U.S. citizen, total ³	2,422,500	1,419,900	190,400	439,400	372,800
Native	2,224,200	1,279,600	178,400	422,300	343,900
Naturalized	198,300	140,300	12,100	17,100	28,900
Non-U.S. citizen, total ⁴	153,100	103,300	34,000	7,800	8,000
Permanent resident	110,600	85,500	11,900	6,800	6,500
Temporary resident	42,000	17,800	21,700	1,000	1,400
S&E occupations, total	891,300	571,800	121,500	69,500	128,600
U.S. citizen, total ³	805,500	518,500	94,600	67,400	124,900
Native	715,400	453,500	87,700	64,200	110,000
Naturalized	90,100	65,000	7,000	3,300	14,900
Non-U.S. citizen, total ⁴	85,800	53,300	26,800	2,000	3,600
Permanent resident	55,500	43,600	8,000	1,500	2,400
Temporary resident	29,800	9,600	18,600	500	1,200

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Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
Scientists, total	541,400	299,800	97,900	65,400	78,300
U.S. citizen, total ³	490,400	270,500	79,400	63,900	76,600
Native	451,900	245,800	74,400	61,000	70,700
Naturalized	38,500	24,700	5,000	2,800	5,900
Non-U.S. citizen, total ⁴	51,000	29,200	18,500	1,600	1,700
Permanent resident	32,100	24,100	5,800	1,400	800
Temporary resident	18,800	5,000	12,800	200	800
Computer/math scientists, total	263,600	184,300	29,400	20,800	29,200
U.S. citizen, total ³	235,200	162,200	24,400	19,900	28,700
Native	210,000	143,100	22,500	18,700	25,800
Naturalized	25,200	19,100	1,900	1,200	3,000
Non-U.S. citizen, total ⁴	28,400	22,100	5,000	800	400
Permanent resident	21,100	18,500	1,600	700	300
Temporary resident	7,200	3,500	3,500	100	100
Life/related scientists, total	70,400	19,800	26,300	7,800	16,500
U.S. citizen, total ³	63,500	18,500	21,200	7,700	16,100
Native	59,300	16,700	19,600	7,600	15,400
Naturalized	4,300	1,800	1,600	100	800
Non-U.S. citizen, total ⁴	6,900	1,300	5,100	100	400
Permanent resident	2,900	1,000	1,600	100	200
Temporary resident	3,900	300	3,500	S	200
Physical/related scientists, total ...	72,600	38,000	16,600	4,900	13,100
U.S. citizen, total ³	63,900	34,600	11,700	4,800	12,800
Native	59,400	32,000	11,100	4,700	11,600
Naturalized	4,600	2,600	600	200	1,200
Non-U.S. citizen, total ⁴	8,600	3,400	4,900	S	300
Permanent resident	4,200	2,800	1,400	S	100
Temporary resident	4,400	600	3,600	S	200
Social/related scientists, total	134,900	57,700	25,600	32,000	19,500
U.S. citizen, total ³	127,700	55,200	22,200	31,400	19,000
Native	123,200	54,000	21,300	30,100	17,900
Naturalized	4,500	1,200	900	1,300	1,000
Non-U.S. citizen, total ⁴	7,200	2,500	3,500	600	500
Permanent resident	3,900	1,900	1,200	600	200
Temporary resident	3,200	700	2,300	S	300
Engineers, total	349,900	272,000	23,500	4,000	50,300
U.S. citizen, total ³	315,100	248,000	15,200	3,600	48,300
Native	263,500	207,700	13,300	3,100	39,400
Naturalized	51,700	40,300	2,000	500	9,000
Non-U.S. citizen, total ⁴	34,700	24,000	8,300	400	2,000
Permanent resident	23,400	19,500	2,200	100	1,500
Temporary resident	11,100	4,500	5,800	300	400

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		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
Non-S&E occupations, total	1,684,300	951,400	103,000	377,700	252,200
U.S. citizen, total ³	1,616,900	901,300	95,800	371,900	247,900
Native	1,508,700	826,000	90,700	358,100	233,800
Naturalized	108,200	75,300	5,100	13,800	14,000
Non-U.S. citizen, total ⁴	67,400	50,000	7,200	5,800	4,300
Permanent resident	55,100	41,800	3,900	5,200	4,100
Temporary resident	12,100	8,200	3,100	600	200
Managers/administrators	693,200	466,700	30,900	56,900	138,700
U.S. citizen, total ³	669,000	446,900	29,600	55,600	136,900
Native	621,000	408,600	28,300	53,800	130,300
Naturalized	48,000	38,300	1,300	1,800	6,600
Non-U.S. citizen, total ⁴	24,300	19,800	1,400	1,300	1,800
Permanent resident	19,900	15,800	1,200	1,300	1,700
Temporary resident	4,300	4,000	100	S	200
Other non-S&E occupations	991,100	484,700	72,100	320,900	113,500
U.S. citizen, total ³	947,900	454,400	66,200	316,300	111,000
Native	887,700	417,400	62,400	304,300	103,600
Naturalized	60,200	37,000	3,800	12,000	7,400
Non-U.S. citizen, total ⁴	43,100	30,300	5,900	4,500	2,500
Permanent resident	35,100	26,100	2,700	3,900	2,400
Temporary resident	7,800	4,200	3,000	600	100
Doctorate					
All occupations, total ²	634,800	263,500	280,100	32,000	59,100
U.S. citizen, total ³	558,900	230,600	241,600	30,300	56,400
Native	484,400	192,700	214,300	28,300	49,200
Naturalized	74,400	37,900	27,200	2,000	7,200
Non-U.S. citizen, total ⁴	75,900	32,900	38,500	1,700	2,700
Permanent resident	57,000	26,100	27,500	1,400	2,000
Temporary resident	18,500	6,700	10,800	300	700
S&E occupations, total	395,600	147,200	204,100	10,600	33,600
U.S. citizen, total ³	338,700	124,700	172,200	10,200	31,700
Native	292,100	104,300	151,400	9,300	27,200
Naturalized	46,500	20,400	20,700	900	4,500
Non-U.S. citizen, total ⁴	56,800	22,500	32,000	400	1,900
Permanent resident	40,600	17,200	21,800	400	1,300
Temporary resident	15,900	5,200	10,000	S	700
Scientists, total	330,500	110,000	180,600	10,500	29,400
U.S. citizen, total ³	287,600	95,700	153,800	10,100	28,000
Native	255,100	84,200	137,200	9,200	24,500
Naturalized	32,400	11,500	16,600	900	3,500
Non-U.S. citizen, total ⁴	42,900	14,300	26,800	400	1,400
Permanent resident	30,600	11,200	18,100	400	900
Temporary resident	12,000	3,000	8,500	S	500

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		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Computer/math scientists, total	48,700	18,000	25,900	1,400	3,400
U.S. citizen, total ³	39,600	14,300	20,700	1,400	3,200
Native	32,700	11,900	17,300	1,100	2,500
Naturalized	6,800	2,400	3,400	300	800
Non-U.S. citizen, total ⁴	9,100	3,700	5,200	100	100
Permanent resident	6,700	2,700	3,900	S	100
Temporary resident	2,300	1,000	1,300	S	S
Life/related scientists, total	98,100	22,600	64,200	1,600	9,700
U.S. citizen, total ³	82,900	18,100	54,000	1,600	9,200
Native	73,100	15,600	48,000	1,600	7,900
Naturalized	9,800	2,500	6,000	S	1,200
Non-U.S. citizen, total ⁴	15,200	4,400	10,200	S	500
Permanent resident	10,200	3,800	6,100	S	300
Temporary resident	5,000	600	4,000	S	300
Physical/related scientists, total ...	77,000	31,200	36,500	1,900	7,400
U.S. citizen, total ³	65,200	26,800	29,800	1,700	6,900
Native	55,500	22,000	26,100	1,400	6,100
Naturalized	9,700	4,800	3,700	300	800
Non-U.S. citizen, total ⁴	11,800	4,400	6,700	200	500
Permanent resident	8,300	3,600	4,200	200	300
Temporary resident	3,500	800	2,400	S	200
Social/related scientists, total	106,700	38,200	54,000	5,500	9,000
U.S. citizen, total ³	100,000	36,500	49,300	5,500	8,700
Native	93,800	34,700	45,800	5,200	8,100
Naturalized	6,200	1,800	3,500	200	700
Non-U.S. citizen, total ⁴	6,800	1,700	4,700	100	200
Permanent resident	5,300	1,100	3,900	100	200
Temporary resident	1,300	500	700	S	S
Engineers, total	65,000	37,200	23,600	100	4,200
U.S. citizen, total ³	51,100	29,000	18,300	100	3,700
Native	37,000	20,100	14,200	100	2,600
Naturalized	14,100	8,900	4,100	S	1,000
Non-U.S. citizen, total ⁴	13,900	8,200	5,200	S	500
Permanent resident	10,000	6,000	3,700	S	300
Temporary resident	3,800	2,200	1,500	S	200
Non-S&E occupations, total	239,200	116,300	76,000	21,400	25,500
U.S. citizen, total ³	220,100	105,800	69,500	20,100	24,700
Native	192,300	88,400	62,900	19,000	22,000
Naturalized	27,900	17,500	6,500	1,100	2,700
Non-U.S. citizen, total ⁴	19,100	10,500	6,500	1,300	800
Permanent resident	16,400	8,900	5,700	1,100	800
Temporary resident	2,700	1,500	800	300	S

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

Table E-6. Employed U.S. scientists and engineers, by highest degree attained, occupation, citizenship status, and employment sector: 1993

Highest degree, occupation, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Managers/administrators	119,000	61,400	29,400	11,000	17,200
U.S. citizen, total ³	112,900	56,500	28,400	11,000	17,000
Native	101,000	48,000	26,100	10,900	16,000
Naturalized	11,900	8,500	2,300	100	1,100
Non-U.S. citizen, total ⁴	6,100	4,900	1,000	S	200
Permanent resident	4,900	3,800	900	S	200
Temporary resident	1,200	1,100	100	S	S
Other non-S&E occupations	120,200	54,900	46,600	10,500	8,300
U.S. citizen, total ³	107,300	49,400	41,100	9,200	7,700
Native	91,300	40,400	36,800	8,100	6,000
Naturalized	16,000	9,000	4,300	1,000	1,700
Non-U.S. citizen, total ⁴	12,900	5,500	5,500	1,300	600
Permanent resident	11,400	5,000	4,800	1,000	600
Temporary resident	1,500	500	700	300	S

- 1 Includes professional degrees
- 2 Total excludes 37,000 individuals who reported never having worked.
- 3 Includes U.S. citizens who did not specify mode of gaining citizenship
- 4 Includes non-citizens who did not specify visa status

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 are employed in an S&E occupation.
 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, 1993 SESTAT (Scientists and Engineers Statistical Data System)