

Table C-5. Employed U.S. scientists and engineers, by level and field of highest degree attained, citizenship status, and employment sector: 1999

Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹					
All degree fields, total	10,981,600	7,556,000	961,500	1,060,900	1,403,300
U.S. citizen, total ²	10,591,600	7,274,600	884,000	1,046,600	1,386,400
Native	9,696,800	6,640,200	794,200	995,100	1,267,300
Naturalized	894,800	634,500	89,800	51,500	119,100
Non-U.S. citizen, total ³	390,100	281,300	77,500	14,300	16,900
Permanent resident	300,600	218,300	54,000	12,600	15,700
Temporary resident	89,400	63,000	23,500	1,700	1,200
S&E degree fields, total	7,980,100	5,545,400	701,700	677,400	1,055,600
U.S. citizen, total ²	7,640,900	5,296,200	637,500	667,100	1,040,000
Native	6,938,100	4,790,400	568,500	632,500	946,800
Naturalized	702,800	505,900	69,000	34,600	93,300
Non-U.S. citizen, total ³	339,200	249,200	64,300	10,200	15,500
Permanent resident	253,000	188,500	41,300	8,800	14,400
Temporary resident	86,200	60,700	22,900	1,400	1,200
Sciences, total	6,043,700	3,945,200	621,000	658,200	819,400
U.S. citizen, total ²	5,826,000	3,799,200	569,900	648,600	808,400
Native	5,399,300	3,510,400	514,200	616,000	758,800
Naturalized	426,700	288,800	55,700	32,700	49,500
Non-U.S. citizen, total ³	217,700	146,000	51,100	9,500	11,000
Permanent resident	167,400	112,900	35,400	8,500	10,600
Temporary resident	50,300	33,000	15,700	1,100	500
Computer/math sciences, total	1,045,800	804,100	66,600	97,500	77,600
U.S. citizen, total ²	980,600	750,100	58,300	95,600	76,700
Native	867,300	658,500	50,000	90,600	68,300
Naturalized	113,300	91,600	8,300	5,000	8,400
Non-U.S. citizen, total ³	65,200	54,100	8,300	1,900	900
Permanent resident	44,000	36,100	5,200	1,700	900
Temporary resident	21,200	18,000	3,100	200	S
Life/related sciences, total	1,287,700	768,700	219,700	125,500	173,800
U.S. citizen, total ²	1,241,700	746,100	199,900	124,100	171,500
Native	1,144,900	690,200	175,900	117,800	161,000
Naturalized	96,800	55,900	24,000	6,300	10,600
Non-U.S. citizen, total ³	46,000	22,600	19,800	1,300	2,300
Permanent resident	37,000	18,900	14,900	1,300	2,000
Temporary resident	9,000	3,700	4,900	100	300
Physical/related sciences, total	621,700	414,500	90,700	40,200	76,300
U.S. citizen, total ²	581,400	387,100	80,700	39,300	74,300
Native	523,000	349,300	72,200	35,500	66,000
Naturalized	58,400	37,800	8,500	3,700	8,300
Non-U.S. citizen, total ³	40,400	27,400	10,000	900	2,000
Permanent resident	32,400	23,200	6,600	700	1,900
Temporary resident	8,000	4,200	3,400	200	100
Social/related sciences, total	3,088,400	1,957,800	243,900	394,900	491,700
U.S. citizen, total ²	3,022,300	1,915,900	230,900	389,600	485,900
Native	2,864,100	1,812,400	216,100	372,000	463,600
Naturalized	158,200	103,500	14,800	17,600	22,300
Non-U.S. citizen, total ³	66,100	41,900	13,000	5,300	5,800
Permanent resident	54,000	34,800	8,700	4,800	5,800
Temporary resident	12,000	7,200	4,300	600	S

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

Table C-5. Employed U.S. scientists and engineers, by level and field of highest degree attained, citizenship status, and employment sector: 1999

Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
All degree levels¹ — continued					
Engineering, total	1,936,400	1,600,300	80,800	19,200	236,200
U.S. citizen, total ²	1,814,900	1,497,100	67,600	18,500	231,700
Native	1,538,700	1,280,000	54,300	16,500	187,900
Naturalized	276,100	217,100	13,300	2,000	43,700
Non-U.S. citizen, total ³	121,500	103,200	13,200	700	4,500
Permanent resident	85,600	75,500	5,900	400	3,800
Temporary resident	35,900	27,700	7,200	300	700
Non-S&E degree fields, total	3,001,500	2,010,500	259,800	383,500	347,700
U.S. citizen, total ²	2,950,700	1,978,400	246,500	379,400	346,400
Native	2,758,700	1,849,800	225,700	362,600	320,600
Naturalized	192,000	128,600	20,800	16,800	25,800
Non-U.S. citizen, total ³	50,900	32,100	13,300	4,100	1,300
Permanent resident	47,600	29,900	12,700	3,800	1,300
Temporary resident	3,200	2,300	600	400	S
Bachelor's					
All degree fields, total	6,350,100	4,694,100	327,100	479,700	849,300
U.S. citizen, total ²	6,208,600	4,583,700	311,500	472,500	840,800
Native	5,738,400	4,232,000	282,000	449,700	774,700
Naturalized	470,200	351,700	29,500	22,800	66,100
Non-U.S. citizen, total ³	141,500	110,300	15,500	7,200	8,400
Permanent resident	119,400	95,100	9,800	6,300	8,100
Temporary resident	22,200	15,200	5,700	900	400
S&E degree fields, total	5,866,100	4,312,700	305,400	457,300	790,700
U.S. citizen, total ²	5,731,900	4,207,200	290,900	451,600	782,200
Native	5,295,500	3,881,100	262,500	430,200	721,700
Naturalized	436,400	326,000	28,400	21,400	60,500
Non-U.S. citizen, total ³	134,200	105,500	14,500	5,700	8,400
Permanent resident	112,400	90,300	9,200	4,800	8,100
Temporary resident	21,800	15,200	5,300	900	400
Sciences, total	4,486,100	3,148,800	275,500	442,400	619,400
U.S. citizen, total ²	4,396,700	3,082,300	263,600	437,000	613,900
Native	4,123,300	2,884,200	239,700	417,000	582,500
Naturalized	273,400	198,100	24,000	20,000	31,400
Non-U.S. citizen, total ³	89,400	66,500	11,900	5,400	5,500
Permanent resident	75,400	56,900	8,300	4,700	5,500
Temporary resident	14,000	9,600	3,700	800	S
Computer/math sciences, total	742,700	595,500	23,700	65,400	58,000
U.S. citizen, total ²	719,700	576,600	21,700	64,100	57,300
Native	649,400	517,500	19,000	61,200	51,700
Naturalized	70,300	59,100	2,700	2,900	5,600
Non-U.S. citizen, total ³	23,000	19,000	2,000	1,300	700
Permanent resident	18,300	15,000	1,500	1,100	700
Temporary resident	4,700	4,000	500	200	S

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

Table C-5. Employed U.S. scientists and engineers, by level and field of highest degree attained, citizenship status, and employment sector: 1999

Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Bachelor's — continued					
Life/related sciences, total	947,000	631,000	101,700	88,200	126,100
U.S. citizen, total ²	931,200	621,500	96,700	87,600	125,400
Native	871,700	584,700	83,800	83,800	119,400
Naturalized	59,500	36,800	12,900	3,800	6,000
Non-U.S. citizen, total ³	15,800	9,500	5,000	600	700
Permanent resident	13,300	8,300	3,800	600	700
Temporary resident	2,500	1,200	1,200	S	S
Physical/related sciences, total	380,900	278,700	32,700	22,900	46,600
U.S. citizen, total ²	367,800	267,900	31,500	22,500	45,800
Native	339,500	248,100	30,000	20,000	41,400
Naturalized	28,400	19,900	1,600	2,500	4,400
Non-U.S. citizen, total ³	13,100	10,700	1,200	300	800
Permanent resident	10,900	9,400	400	200	800
Temporary resident	2,200	1,300	700	100	S
Social/related sciences, total	2,415,500	1,643,600	117,400	265,900	388,600
U.S. citizen, total ²	2,378,000	1,616,300	113,700	262,700	385,300
Native	2,262,800	1,533,900	106,900	252,000	370,000
Naturalized	115,200	82,400	6,800	10,700	15,300
Non-U.S. citizen, total ³	37,500	27,300	3,700	3,200	3,300
Permanent resident	32,900	24,200	2,600	2,800	3,300
Temporary resident	4,700	3,100	1,200	400	S
Engineering, total	1,380,000	1,163,900	29,900	14,900	171,300
U.S. citizen, total ²	1,335,200	1,124,900	27,300	14,600	168,400
Native	1,172,200	997,000	22,800	13,200	139,200
Naturalized	163,000	127,900	4,500	1,400	29,200
Non-U.S. citizen, total ³	44,800	39,000	2,600	300	2,900
Permanent resident	37,000	33,400	1,000	100	2,600
Temporary resident	7,800	5,600	1,700	100	400
Non-S&E degree fields, total	484,000	381,400	21,600	22,400	58,600
U.S. citizen, total ²	476,600	376,500	20,700	20,900	58,600
Native	442,900	350,900	19,600	19,500	53,000
Naturalized	33,800	25,700	1,100	1,400	5,600
Non-U.S. citizen, total ³	7,300	4,900	1,000	1,500	S
Permanent resident	6,900	4,900	600	1,500	S
Temporary resident	400	S	400	S	S
Master's					
All degree fields, total	2,982,000	1,851,000	226,000	518,000	387,000
U.S. citizen, total ²	2,833,100	1,731,000	207,100	513,000	381,900
Native	2,562,100	1,534,100	193,500	488,900	345,600
Naturalized	271,000	197,000	13,600	24,100	36,300
Non-U.S. citizen, total ³	148,900	119,900	18,800	5,100	5,100
Permanent resident	98,700	81,400	8,200	4,400	4,700
Temporary resident	50,200	38,500	10,600	700	400

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

Table C-5. Employed U.S. scientists and engineers, by level and field of highest degree attained, citizenship status, and employment sector: 1999

Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
S&E degree fields, total	1,491,200	954,600	133,900	195,700	207,000
U.S. citizen, total ²	1,367,000	855,000	116,800	192,600	202,600
Native	1,188,300	721,600	107,200	181,700	177,800
Naturalized	178,700	133,300	9,700	10,900	24,800
Non-U.S. citizen, total ³	124,200	99,600	17,000	3,100	4,400
Permanent resident	76,200	62,900	6,400	2,800	4,000
Temporary resident	48,000	36,700	10,600	300	400
Sciences, total	1,040,400	585,600	111,900	192,600	150,200
U.S. citizen, total ²	970,300	532,700	101,100	189,600	146,900
Native	878,500	471,200	93,800	178,900	134,600
Naturalized	91,900	61,500	7,300	10,700	12,400
Non-U.S. citizen, total ³	70,100	52,900	10,800	3,000	3,300
Permanent resident	44,200	33,700	4,500	2,800	3,200
Temporary resident	25,800	19,200	6,300	200	100
Computer/math sciences, total	262,600	192,700	21,400	31,200	17,200
U.S. citizen, total ²	228,600	162,000	18,900	30,700	17,100
Native	192,200	131,800	17,200	28,700	14,500
Naturalized	36,400	30,200	1,600	2,000	2,600
Non-U.S. citizen, total ³	34,000	30,800	2,600	500	100
Permanent resident	19,200	17,800	800	500	100
Temporary resident	14,800	13,000	1,800	S	S
Life/related sciences, total	164,100	75,400	27,500	31,100	30,200
U.S. citizen, total ²	155,700	70,300	24,900	31,000	29,600
Native	142,100	62,400	23,000	29,000	27,600
Naturalized	13,600	7,900	1,800	2,000	1,900
Non-U.S. citizen, total ³	8,500	5,100	2,600	100	600
Permanent resident	6,000	3,800	1,500	100	500
Temporary resident	2,500	1,300	1,000	S	100
Physical/related sciences, total	113,900	69,400	14,600	13,100	16,700
U.S. citizen, total ²	104,700	63,600	12,200	12,700	16,200
Native	94,200	56,900	11,000	12,200	14,100
Naturalized	10,500	6,700	1,200	500	2,100
Non-U.S. citizen, total ³	9,200	5,800	2,400	400	600
Permanent resident	6,200	4,200	1,000	400	600
Temporary resident	3,000	1,700	1,400	S	S
Social/related sciences, total	499,800	248,000	48,400	117,200	86,200
U.S. citizen, total ²	481,300	236,800	45,100	115,300	84,100
Native	450,000	220,100	42,500	109,100	78,400
Naturalized	31,300	16,700	2,700	6,200	5,700
Non-U.S. citizen, total ³	18,400	11,200	3,300	1,900	2,100
Permanent resident	12,800	7,800	1,200	1,800	2,100
Temporary resident	5,600	3,300	2,100	100	S

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

Table C-5. Employed U.S. scientists and engineers, by level and field of highest degree attained, citizenship status, and employment sector: 1999

Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Master's — continued					
Engineering, total	450,800	369,000	21,900	3,100	56,700
U.S. citizen, total ²	396,700	322,300	15,700	3,000	55,700
Native	309,800	250,500	13,400	2,800	43,200
Naturalized	86,900	71,800	2,400	300	12,500
Non-U.S. citizen, total ³	54,100	46,700	6,200	100	1,100
Permanent resident	32,000	29,200	1,900	S	800
Temporary resident	22,200	17,500	4,300	100	200
Non-S&E degree fields, total	1,490,800	896,400	92,100	322,300	180,000
U.S. citizen, total ²	1,466,100	876,100	90,300	320,400	179,300
Native	1,373,800	812,400	86,400	307,200	167,800
Naturalized	92,300	63,600	3,900	13,200	11,500
Non-U.S. citizen, total ³	24,700	20,300	1,800	1,900	700
Permanent resident	22,500	18,500	1,800	1,600	700
Temporary resident	2,200	1,800	S	400	S
Doctorate					
All degree fields, total	736,700	322,000	309,400	39,700	65,600
U.S. citizen, total ²	646,200	275,900	269,600	38,000	62,600
Native	548,200	226,300	234,700	34,000	53,200
Naturalized	98,000	49,600	34,900	4,000	9,500
Non-U.S. citizen, total ³	90,500	46,100	39,700	1,700	2,900
Permanent resident	73,700	37,000	32,600	1,600	2,500
Temporary resident	16,900	9,200	7,100	200	400
S&E degree fields, total	614,600	274,700	261,200	21,800	56,800
U.S. citizen, total ²	533,800	230,600	228,600	20,400	54,100
Native	446,300	184,100	197,700	18,300	46,200
Naturalized	87,500	46,500	30,900	2,100	7,900
Non-U.S. citizen, total ³	80,800	44,100	32,600	1,400	2,700
Permanent resident	64,400	35,300	25,700	1,200	2,300
Temporary resident	16,400	8,800	6,900	200	400
Sciences, total	509,000	207,300	232,300	20,700	48,700
U.S. citizen, total ²	450,800	180,700	204,000	19,600	46,500
Native	389,600	151,600	179,600	17,800	40,700
Naturalized	61,200	29,200	24,400	1,800	5,800
Non-U.S. citizen, total ³	58,200	26,600	28,300	1,100	2,200
Permanent resident	47,800	22,400	22,600	900	1,900
Temporary resident	10,400	4,200	5,700	200	300
Computer/math sciences, total	40,600	15,800	21,500	900	2,300
U.S. citizen, total ²	32,300	11,500	17,700	800	2,200
Native	25,700	9,200	13,700	700	2,000
Naturalized	6,600	2,300	4,000	100	200
Non-U.S. citizen, total ³	8,200	4,300	3,700	100	100
Permanent resident	6,400	3,300	3,000	100	100
Temporary resident	1,800	1,000	800	S	S

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

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Level and field of highest degree, and citizenship	Employed S&Es, total	Sector of employment			
		Business/industry	4-yr. College/university	Other educational institution	Government
Doctorate — continued					
Life/related sciences, total	176,200	62,400	90,500	6,100	17,200
U.S. citizen, total ²	154,500	54,400	78,400	5,600	16,200
Native	130,800	43,100	69,100	5,100	13,500
Naturalized	23,700	11,300	9,300	500	2,700
Non-U.S. citizen, total ³	21,700	8,000	12,100	600	1,000
Permanent resident	17,700	6,800	9,500	500	800
Temporary resident	4,000	1,200	2,600	S	200
Physical/related sciences, total	125,900	65,700	43,300	4,200	12,700
U.S. citizen, total ²	107,800	54,800	36,800	4,000	12,100
Native	88,300	43,600	31,100	3,300	10,300
Naturalized	19,500	11,200	5,800	700	1,800
Non-U.S. citizen, total ³	18,100	10,800	6,500	200	600
Permanent resident	15,300	9,600	5,100	100	500
Temporary resident	2,800	1,300	1,300	100	100
Social/related sciences, total	166,400	63,500	77,000	9,400	16,400
U.S. citizen, total ²	156,200	60,000	71,100	9,200	16,000
Native	144,800	55,600	65,700	8,700	14,800
Naturalized	11,400	4,400	5,400	500	1,200
Non-U.S. citizen, total ³	10,100	3,500	5,900	300	500
Permanent resident	8,300	2,800	5,000	200	400
Temporary resident	1,800	700	1,000	100	S
Engineering, total	105,600	67,400	28,900	1,100	8,100
U.S. citizen, total ²	83,000	49,900	24,600	900	7,600
Native	56,700	32,600	18,100	600	5,500
Naturalized	26,200	17,300	6,500	300	2,100
Non-U.S. citizen, total ³	22,600	17,500	4,300	200	500
Permanent resident	16,600	12,900	3,100	200	400
Temporary resident	6,000	4,600	1,300	S	100
Non-S&E degree fields, total	122,100	47,300	48,100	17,900	8,800
U.S. citizen, total ²	112,400	45,300	41,000	17,500	8,600
Native	101,900	42,100	37,000	15,700	7,000
Naturalized	10,500	3,100	4,000	1,800	1,600
Non-U.S. citizen, total ³	9,800	2,000	7,100	400	200
Permanent resident	9,300	1,700	7,000	400	200
Temporary resident	500	400	100	S	S

- 1 Total includes professional degrees not broken out separately.
- 2 Includes U.S. citizens who did not specify mode of gaining citizenship
- 3 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 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)