

Table C-12. Employed U.S. scientists and engineers, by level and field of highest degree attained and geographic region of employment: 1999

Level and field of highest degree	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All degree levels²										
All degree fields, total	10,981,600	832,200	1,693,100	1,569,500	764,800	2,017,800	414,400	925,200	693,100	2,048,900
S&E degree fields, total	7,980,100	580,500	1,182,300	1,124,900	567,100	1,467,100	301,900	705,200	512,800	1,518,200
Sciences, total	6,043,700	443,700	927,500	824,300	456,900	1,134,100	228,300	499,900	383,500	1,131,000
Computer/math sciences, total	1,045,800	73,000	169,200	139,400	73,500	197,600	40,500	109,900	62,700	177,500
Computer/information sciences	586,500	37,700	96,900	78,200	38,300	117,300	15,600	60,800	36,300	103,300
Mathematical sciences	459,300	35,300	72,300	61,200	35,200	80,300	25,000	49,200	26,400	74,100
Life/related sciences, total	1,287,700	92,700	173,200	178,200	119,900	218,400	54,400	112,500	86,900	248,900
Agricultural/food sciences	230,400	10,300	16,600	35,000	36,600	32,100	12,800	27,400	15,700	43,500
Biological sciences	955,300	74,700	143,200	133,100	77,300	168,100	37,400	78,300	61,400	180,200
Environmental life sciences	102,100	7,700	13,400	10,100	6,000	18,200	4,200	6,800	9,800	25,200
Physical/related sciences, total	621,700	42,300	90,300	85,800	35,900	117,300	24,200	61,100	52,000	112,100
Chemistry, except biochemistry	276,200	18,700	47,200	45,000	18,100	55,900	11,100	22,000	14,500	43,200
Earth science, geology and oceanography	152,800	8,700	16,400	16,000	5,700	23,000	5,100	27,300	17,400	32,800
Physics/astronomy	144,000	12,200	20,500	15,800	6,700	28,900	4,600	8,700	15,300	31,100
Other physical sciences	48,800	2,700	6,200	9,000	5,300	9,500	3,400	3,000	4,800	4,900
Social/related sciences, total	3,088,400	235,600	494,900	421,000	227,700	600,800	109,100	216,400	182,000	592,600
Economics	406,500	31,600	75,200	59,900	28,500	74,400	10,500	25,600	21,300	78,500
Political/related sciences	567,000	39,800	88,200	77,500	33,200	141,000	22,200	44,100	29,500	89,900
Psychology	1,166,100	97,100	196,300	158,700	86,200	209,000	40,600	92,000	66,000	217,400
Sociology/anthropology	592,700	46,600	87,900	72,000	47,300	113,200	23,700	36,000	37,900	126,500
Other social sciences	356,100	20,600	47,300	53,000	32,400	63,200	12,100	18,700	27,300	80,300
Engineering, total	1,936,400	136,900	254,800	300,600	110,200	333,000	73,600	205,300	129,200	387,200
Aerospace/related engineering	76,300	3,000	4,900	10,400	5,300	16,500	3,100	8,200	4,800	19,800
Chemical engineering	147,700	8,500	20,300	23,400	7,200	24,900	6,200	27,900	9,600	19,400
Civil/architectural engineering	330,200	22,500	46,500	46,000	21,100	61,300	12,200	25,300	23,200	71,500
Electrical/related engineering	587,000	44,600	75,400	77,600	36,300	94,000	22,200	55,200	43,800	136,700
Industrial engineering	106,200	3,700	15,600	20,800	5,500	22,600	5,300	12,400	3,900	15,600
Mechanical engineering	386,000	31,000	50,900	79,800	19,600	59,400	12,500	39,800	20,400	71,400
Other engineering	303,000	23,600	41,100	42,600	15,300	54,300	12,100	36,600	23,400	52,900

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

Table C-12. Employed U.S. scientists and engineers, by level and field of highest degree attained and geographic region of employment: 1999

Level and field of highest degree	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All degree levels² — continued										
Non-S&E degrees, total	3,001,500	251,600	510,700	444,600	197,600	550,700	112,600	220,000	180,300	530,700
Bachelor's										
All degree fields, total	6,350,100	449,500	910,300	912,300	477,400	1,157,000	244,700	577,700	409,400	1,197,300
S&E degree fields, total	5,866,100	418,800	840,600	838,000	439,800	1,071,600	223,100	527,700	379,600	1,112,400
Sciences, total	4,486,100	326,000	669,600	612,000	357,100	831,800	168,400	373,900	288,100	848,900
Computer/math sciences, total	742,700	50,000	110,600	102,100	57,700	137,000	30,700	83,800	44,600	124,600
Computer/information sciences	413,500	25,000	60,500	59,800	32,400	80,100	12,700	49,700	24,100	68,000
Mathematical sciences	329,200	25,000	50,200	42,300	25,300	56,900	18,000	34,100	20,500	56,600
Life/related sciences, total	947,000	64,500	126,400	125,800	94,200	153,900	41,200	83,000	66,100	189,600
Agricultural/food sciences	182,300	7,600	13,100	27,100	30,500	24,000	10,000	21,000	12,700	36,100
Biological sciences	686,000	50,700	103,400	91,000	59,200	116,500	27,400	57,000	45,600	133,800
Environmental life sciences	78,700	6,200	9,900	7,700	4,500	13,500	3,800	4,900	7,800	19,700
Physical/related sciences, total	380,900	24,300	49,700	53,000	25,000	73,600	15,600	38,100	32,700	68,500
Chemistry, except biochemistry	175,100	10,400	26,600	27,100	13,300	38,600	7,700	14,000	9,200	28,100
Earth science, geology and oceanography	101,800	5,500	10,400	10,800	3,400	15,700	3,100	18,300	12,400	22,100
Physics/astronomy	66,900	6,800	8,300	7,200	3,600	12,800	2,500	3,700	7,500	14,500
Other physical sciences	37,000	1,600	4,500	7,800	4,700	6,500	2,400	2,200	3,700	3,700
Social/related sciences, total	2,415,500	187,200	382,900	331,100	180,200	467,200	80,800	169,100	144,700	466,200
Economics	340,300	27,200	62,300	52,000	23,900	58,700	8,700	20,600	17,600	68,700
Political/related sciences	482,900	34,400	72,900	68,100	30,900	116,100	18,500	38,500	28,100	74,300
Psychology	794,500	69,000	135,200	108,300	57,300	144,700	24,400	64,000	42,800	146,000
Sociology/anthropology	525,200	42,400	76,300	62,000	42,000	102,900	20,700	32,500	33,300	112,400
Other social sciences	272,600	14,200	36,100	40,800	26,100	44,800	8,500	13,500	23,000	64,700

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

Table C-12. Employed U.S. scientists and engineers, by level and field of highest degree attained and geographic region of employment: 1999

Level and field of highest degree	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Bachelor's — continued										
Engineering, total	1,380,000	92,800	171,100	226,000	82,600	239,800	54,700	153,800	91,600	263,500
Aerospace/related engineering	53,600	1,500	3,300	7,900	4,100	10,500	2,000	6,600	3,500	13,800
Chemical engineering	112,000	6,100	13,500	17,700	5,800	19,500	4,500	21,700	8,000	15,000
Civil/architectural engineering	247,000	17,400	33,700	37,400	15,900	47,400	8,600	18,700	17,100	50,200
Electrical/related engineering	407,400	28,500	48,300	58,900	28,200	65,500	18,700	40,400	31,200	86,900
Industrial engineering	79,500	2,400	12,000	15,600	4,300	17,500	3,600	8,800	2,800	12,000
Mechanical engineering	304,200	23,100	38,200	63,600	15,100	50,100	9,500	33,500	15,100	55,200
Other engineering	176,300	14,000	21,900	24,900	9,300	29,400	7,800	24,000	13,800	30,400
Non-S&E degrees, total	484,000	30,700	69,600	74,300	37,700	85,400	21,600	50,000	29,800	84,900
Master's										
All degree fields, total	2,982,000	249,400	505,500	419,000	180,100	550,500	108,000	224,300	187,600	551,400
S&E degree fields, total	1,491,200	108,800	237,700	198,800	91,100	279,700	56,000	129,500	93,700	291,000
Sciences, total	1,040,400	72,600	169,400	140,500	68,300	202,100	41,000	88,000	64,100	191,000
Computer/math sciences, total	262,600	19,500	51,300	32,400	13,600	52,600	8,500	23,100	15,600	45,200
Computer/information sciences	160,900	12,100	34,200	17,400	5,300	34,900	2,700	10,000	11,600	32,100
Mathematical sciences	101,700	7,400	17,100	15,000	8,400	17,700	5,800	13,100	4,000	13,100
Life/related sciences, total	164,100	12,400	20,200	27,700	12,700	28,900	5,600	15,700	11,000	29,700
Agricultural/food sciences	30,100	1,800	1,800	5,100	3,200	4,900	1,700	4,600	1,900	5,000
Biological sciences	116,200	9,400	15,200	20,700	8,400	20,400	3,900	9,700	7,700	20,700
Environmental life sciences	17,900	1,100	3,200	1,900	1,100	3,600	S	1,500	1,400	4,000
Physical/related sciences, total	113,900	6,500	18,500	15,500	5,600	21,400	4,500	13,100	9,600	18,700
Chemistry, except biochemistry	37,400	2,100	8,100	6,900	1,500	6,600	1,400	3,600	2,200	4,900
Earth science, geology and oceanography	34,200	1,900	4,700	3,700	1,800	4,100	1,400	6,700	2,800	6,900
Physics/astronomy	32,500	1,700	4,400	4,000	1,600	8,100	800	2,200	3,600	6,000
Other physical sciences	9,800	800	1,300	900	600	2,700	900	700	900	1,000

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

Table C-12. Employed U.S. scientists and engineers, by level and field of highest degree attained and geographic region of employment: 1999

Level and field of highest degree	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Master's — continued										
Social/related sciences, total	499,800	34,200	79,400	64,900	36,300	99,200	22,400	36,000	27,900	97,300
Economics	43,700	2,500	8,400	5,200	3,400	9,000	1,100	3,700	2,800	7,200
Political/related sciences	67,400	3,600	12,900	7,300	1,300	20,500	3,000	4,500	800	13,000
Psychology	276,100	20,500	42,000	35,900	22,600	48,100	12,900	21,500	18,300	54,100
Sociology/anthropology	44,400	2,200	7,400	6,900	3,500	5,900	2,100	2,300	3,000	10,400
Other social sciences	68,100	5,300	8,700	9,600	5,600	15,600	3,200	4,100	3,100	12,600
Engineering, total	450,800	36,300	68,300	58,300	22,800	77,600	15,000	41,500	29,600	100,100
Aerospace/related engineering	17,800	1,100	1,400	1,800	700	4,800	1,000	1,300	800	4,900
Chemical engineering	22,000	1,500	4,200	3,300	800	3,500	1,200	4,000	700	2,700
Civil/architectural engineering	73,300	4,300	11,600	7,400	4,900	11,900	3,200	5,600	5,200	19,100
Electrical/related engineering	151,300	13,600	22,500	15,800	7,100	24,700	2,700	12,600	10,800	41,000
Industrial engineering	23,500	1,100	3,200	4,500	1,000	4,700	1,600	3,200	800	3,000
Mechanical engineering	68,300	7,000	11,100	13,100	3,700	7,900	2,500	5,000	4,400	13,400
Other engineering	94,600	7,600	14,400	12,500	4,500	20,000	2,800	9,600	7,000	16,100
Non-S&E degrees, total	1,490,800	140,600	267,800	220,200	89,000	270,800	52,000	94,800	93,900	260,400
Doctorate										
All degree fields, total	736,700	60,600	121,700	104,300	45,800	139,900	29,000	56,100	46,200	132,200
S&E degree fields, total	614,600	52,500	102,200	85,600	36,100	114,700	22,800	47,400	39,200	113,500
Sciences, total	509,000	44,800	86,700	69,400	31,300	99,000	18,900	37,400	31,200	89,800
Computer/math sciences, total	40,600	3,500	7,300	5,000	2,200	8,000	1,400	3,100	2,500	7,600
Computer/information sciences	12,100	700	2,200	1,000	700	2,300	200	1,100	600	3,200
Mathematical sciences	28,500	2,800	5,100	3,900	1,500	5,700	1,200	2,000	1,800	4,400
Life/related sciences, total	176,200	15,600	26,600	24,700	13,000	35,500	7,600	13,800	9,800	29,300
Agricultural/food sciences	18,100	800	1,700	2,800	2,900	3,200	1,100	1,800	1,200	2,500
Biological sciences	153,100	14,600	24,600	21,400	9,700	31,300	6,100	11,600	8,000	25,600
Environmental life sciences	5,000	200	300	500	400	1,000	400	400	600	1,200

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

Table C-12. Employed U.S. scientists and engineers, by level and field of highest degree attained and geographic region of employment: 1999

Level and field of highest degree	Employed S&Es, total ¹	Geographic region of employment								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Doctorate — continued										
Physical/related sciences, total	125,900	11,500	21,900	17,300	5,200	22,000	4,000	9,800	9,700	24,200
Chemistry, except biochemistry	63,600	6,300	12,600	11,000	3,300	10,700	2,000	4,400	3,100	10,000
Earth science, geology and oceanography	16,500	1,300	1,300	1,500	500	2,900	600	2,400	2,200	3,800
Physics/astronomy	43,800	3,800	7,600	4,600	1,400	8,000	1,300	2,800	4,200	10,100
Other physical sciences	1,900	200	400	200	100	400	100	200	200	300
Social/related sciences, total	166,400	14,100	31,000	22,400	10,900	33,600	5,900	10,600	9,100	28,700
Economics	22,500	1,900	4,400	2,700	1,300	6,700	800	1,300	1,000	2,600
Political/related sciences	16,700	1,700	2,400	2,100	1,000	4,500	600	1,200	700	2,500
Psychology	88,800	7,300	17,400	12,000	6,100	15,300	3,200	5,800	4,800	16,800
Sociology/anthropology	23,100	2,000	4,200	3,100	1,800	4,400	900	1,300	1,600	3,700
Other social sciences	15,300	1,200	2,500	2,600	800	2,700	300	1,100	1,100	3,100
Engineering, total	105,600	7,700	15,500	16,200	4,800	15,600	3,900	10,000	8,000	23,600
Aerospace/related engineering	4,900	400	200	700	500	1,200	200	200	500	1,100
Chemical engineering	13,600	900	2,700	2,300	600	1,900	500	2,200	900	1,700
Civil/architectural engineering	9,900	800	1,200	1,200	300	1,900	400	1,000	900	2,200
Electrical/related engineering	28,300	2,500	4,600	2,900	900	3,900	800	2,100	1,800	8,800
Industrial engineering	3,300	100	500	600	200	400	100	300	300	600
Mechanical engineering	13,500	900	1,500	3,200	700	1,500	500	1,300	1,000	2,800
Other engineering	32,100	2,100	4,800	5,200	1,500	4,900	1,500	3,000	2,600	6,400
Non-S&E degrees, total	122,100	8,100	19,500	18,700	9,700	25,300	6,200	8,700	7,000	18,800

¹ Includes individuals employed in the U.S. who reported employer address outside the U.S., not shown separately

² 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)