

Table B-7. U.S. scientists and engineers, by level and field of highest degree attained and age: 1999

Level and field of highest degree	S&Es, total	Age range								
		<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+
All degree levels¹										
All degree fields, total	13,050,800	332,100	1,440,100	1,345,100	1,604,700	1,805,000	1,879,500	1,667,300	1,098,300	1,878,700
S&E degree fields, total	9,614,400	329,900	1,281,500	1,071,800	1,169,900	1,260,800	1,277,700	1,118,100	738,400	1,366,400
Sciences, total	7,291,100	287,700	1,049,900	807,900	828,100	928,600	1,036,500	887,400	566,200	899,000
Computer/math sciences, total	1,185,600	26,200	121,100	161,000	206,900	175,700	157,200	140,000	89,700	107,700
Computer/information sciences	625,300	15,000	69,900	107,600	154,100	117,600	80,500	46,800	19,400	14,300
Mathematical sciences	560,300	11,200	51,200	53,500	52,800	58,100	76,600	93,200	70,200	93,400
Life/related sciences, total	1,582,900	81,300	248,600	150,400	172,900	229,600	227,400	178,500	114,100	180,000
Agricultural/food sciences	276,000	5,200	27,000	21,800	39,400	50,600	40,000	26,100	16,800	49,200
Biological sciences	1,186,600	70,500	203,500	116,500	121,400	158,000	168,900	139,700	89,400	118,800
Environmental life sciences	120,300	5,600	18,100	12,100	12,100	21,100	18,500	12,700	8,000	12,100
Physical/related sciences, total	777,400	17,500	73,000	65,000	90,000	105,300	97,500	82,300	77,100	169,700
Chemistry, except biochemistry	363,700	9,800	37,000	30,800	35,900	41,900	41,700	40,700	39,800	86,100
Earth science, geology and oceanography	178,900	3,300	17,000	11,700	29,200	33,900	27,600	14,400	10,800	30,900
Physics/astronomy	174,500	3,700	14,200	17,500	19,100	19,800	18,100	20,800	21,300	40,200
Other physical sciences	60,300	700	4,800	5,000	5,800	9,700	10,100	6,400	5,200	12,500
Social/related sciences, total	3,745,200	162,700	607,100	431,400	358,300	417,900	554,400	486,500	285,300	441,600
Economics	487,000	17,800	62,200	67,700	56,800	57,200	55,900	50,400	36,600	82,400
Political/related sciences	683,800	40,300	127,900	101,200	81,900	67,400	83,800	68,000	44,600	68,700
Psychology	1,408,600	62,300	228,700	155,700	122,200	171,600	226,000	194,400	97,600	150,000
Sociology/anthropology	734,900	26,900	120,300	65,000	55,700	82,200	124,200	111,100	62,300	87,300
Other social sciences	430,900	15,400	68,100	41,800	41,700	39,500	64,500	62,600	44,300	53,200
Engineering, total	2,323,300	42,300	231,600	263,900	341,800	332,200	241,200	230,700	172,200	467,400
Aerospace/related engineering	91,900	1,200	8,000	10,700	12,500	13,600	8,100	9,500	7,900	20,500
Chemical engineering	182,800	5,900	24,000	18,100	24,900	26,000	15,000	19,200	13,900	35,700
Civil/architectural engineering	386,700	6,900	39,400	36,600	46,000	59,100	47,900	45,400	26,000	79,500
Electrical/related engineering	696,900	11,200	65,900	93,000	112,100	103,000	73,700	63,500	52,100	122,400
Industrial engineering	129,900	1,700	13,000	16,300	21,300	18,100	10,200	12,200	9,100	28,000
Mechanical engineering	469,300	9,500	49,500	55,300	72,900	57,800	42,300	40,600	32,800	108,700
Other engineering	365,800	5,800	31,800	33,900	52,200	54,600	44,100	40,300	30,500	72,600
Non-S&E degrees, total	3,436,400	2,100	158,700	273,300	434,900	544,300	601,800	549,200	359,900	512,200
Bachelor's										
All degree fields, total	7,682,100	325,500	1,151,200	864,800	966,600	1,030,600	1,021,300	826,600	496,900	998,600
S&E degree fields, total	7,131,300	325,400	1,140,300	825,800	873,600	920,600	913,100	747,600	448,900	936,100

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

Table B-7. U.S. scientists and engineers, by level and field of highest degree attained and age: 1999

Level and field of highest degree	S&Es, total	Age range								
		<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+
Bachelor's — continued										
Sciences, total	5,441,700	284,800	953,900	644,600	632,900	682,400	747,600	587,300	339,700	568,500
Computer/math sciences, total	845,300	25,600	99,100	123,700	160,200	121,500	108,200	90,400	52,200	64,400
Computer/information sciences	440,300	14,800	55,900	82,300	121,300	79,200	50,800	23,700	8,300	4,000
Mathematical sciences	404,900	10,900	43,200	41,400	38,900	42,300	57,400	66,700	43,900	60,300
Life/related sciences, total	1,177,300	80,200	231,900	114,900	124,300	170,500	162,800	116,300	62,600	113,800
Agricultural/food sciences	220,100	5,200	25,100	16,300	33,000	41,100	29,900	18,000	12,700	38,700
Biological sciences	863,900	69,400	190,000	89,100	83,400	113,300	118,700	88,800	44,800	66,200
Environmental life sciences	93,400	5,600	16,800	9,400	7,900	16,100	14,200	9,500	5,000	8,800
Physical/related sciences, total	486,200	17,200	61,800	42,400	55,700	65,700	58,300	45,300	36,700	103,000
Chemistry, except biochemistry	238,800	9,500	31,600	20,900	22,300	25,600	25,600	25,900	21,800	55,600
Earth science, geology and oceanography	117,900	3,300	14,200	7,900	20,800	24,200	16,200	7,400	4,400	19,600
Physics/astronomy	84,900	3,600	11,500	9,100	8,900	9,100	8,500	7,300	7,800	19,000
Other physical sciences	44,600	700	4,500	4,600	3,600	6,800	8,000	4,800	2,700	8,900
Social/related sciences, total	2,932,900	161,700	561,000	363,600	292,800	324,700	418,300	335,300	188,200	287,300
Economics	407,800	17,700	58,100	60,200	49,900	47,800	45,200	37,400	28,800	62,800
Political/related sciences	578,200	39,900	119,900	88,200	71,000	56,100	69,200	52,000	34,000	47,800
Psychology	963,800	62,000	206,300	124,200	88,700	116,600	144,100	102,000	47,300	72,500
Sociology/anthropology	653,600	26,800	114,400	59,000	50,000	73,300	110,200	98,700	49,900	71,400
Other social sciences	329,400	15,200	62,300	32,000	33,200	31,000	49,500	45,200	28,200	32,800
Engineering, total	1,689,600	40,600	186,500	181,200	240,700	238,200	165,500	160,300	109,200	367,600
Aerospace/related engineering	64,400	1,100	5,900	7,400	9,200	10,100	5,400	7,300	4,200	13,700
Chemical engineering	138,500	5,800	21,100	13,800	18,600	20,600	9,800	13,900	8,300	26,600
Civil/architectural engineering	294,300	6,600	33,100	27,400	34,200	45,300	34,800	33,300	14,800	64,800
Electrical/related engineering	496,100	10,700	51,100	61,400	75,500	71,600	51,700	43,400	35,000	95,700
Industrial engineering	100,500	1,700	11,200	10,900	16,400	12,800	7,000	9,800	6,600	24,000
Mechanical engineering	375,500	9,200	41,300	41,800	56,900	45,400	32,200	31,600	26,300	90,600
Other engineering	220,400	5,400	22,800	18,300	29,900	32,300	24,500	20,900	14,000	52,200
Non-S&E degrees, total	550,800	200	10,900	39,000	93,000	110,000	108,300	79,000	48,000	62,500
Master's										
All degree fields, total	3,535,900	6,500	216,300	326,800	416,600	498,800	545,400	564,500	393,400	567,400
S&E degree fields, total	1,775,600	4,500	130,100	189,600	208,400	239,300	260,700	263,600	191,600	287,600
Sciences, total	1,259,900	2,900	87,600	120,600	126,100	162,500	198,100	206,600	144,100	211,400

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

Table B-7. U.S. scientists and engineers, by level and field of highest degree attained and age: 1999

Level and field of highest degree	S&Es, total	Age range								
		<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+
Master's — continued										
Computer/math sciences, total	295,600	500	20,400	33,600	40,600	47,500	42,400	43,100	30,900	36,500
Computer/information sciences	172,400	200	13,800	23,900	30,000	35,300	26,900	21,500	10,700	10,200
Mathematical sciences	123,200	300	6,700	9,600	10,600	12,200	15,500	21,700	20,200	26,400
Life/related sciences, total	203,100	1,100	13,900	18,700	23,300	28,100	31,700	32,200	25,500	28,700
Agricultural/food sciences	35,000	S	1,900	4,100	3,800	5,900	6,200	5,500	1,600	6,000
Biological sciences	147,300	1,000	10,800	12,400	15,800	18,100	22,400	24,500	21,900	20,400
Environmental life sciences	20,800	S	1,300	2,200	3,700	4,000	3,200	2,100	2,000	2,200
Physical/related sciences, total	143,100	300	8,900	11,900	14,800	19,100	21,000	17,100	19,300	30,600
Chemistry, except biochemistry	48,200	200	3,800	4,400	3,500	5,500	6,500	5,900	7,000	11,200
Earth science, geology and oceanography	41,700	S	2,700	3,100	5,900	6,900	8,700	3,400	4,000	7,000
Physics/astronomy	39,500	S	2,100	4,100	3,600	4,100	4,000	6,400	6,100	9,000
Other physical sciences	13,700	S	200	300	1,800	2,500	1,800	1,400	2,200	3,500
Social/related sciences, total	618,100	1,000	44,300	56,500	47,500	67,800	103,000	114,200	68,400	115,500
Economics	53,400	100	3,900	5,400	4,400	5,900	7,400	8,700	4,000	13,500
Political/related sciences	86,500	400	7,900	11,800	9,000	9,300	12,000	12,700	7,200	16,200
Psychology	339,500	300	20,800	25,000	23,400	40,200	62,200	71,200	36,900	59,400
Sociology/anthropology	54,800	S	5,800	4,900	3,800	6,000	9,400	7,300	7,500	9,900
Other social sciences	84,000	200	5,800	9,300	6,900	6,400	12,000	14,200	12,800	16,500
Engineering, total	515,700	1,700	42,500	69,000	82,300	76,800	62,700	57,000	47,500	76,200
Aerospace/related engineering	22,300	100	1,900	2,500	2,800	2,700	2,300	1,700	3,100	5,300
Chemical engineering	28,200	100	2,500	2,500	3,800	2,800	4,000	3,700	3,000	5,900
Civil/architectural engineering	81,700	300	6,100	8,400	10,300	12,500	11,800	10,500	9,300	12,500
Electrical/related engineering	169,900	500	14,000	27,600	31,000	26,900	18,500	16,700	13,400	21,300
Industrial engineering	26,000	S	1,900	4,900	4,500	4,600	2,800	2,200	2,000	3,100
Mechanical engineering	78,700	300	7,900	11,500	13,300	9,800	8,400	7,200	5,000	15,400
Other engineering	108,900	400	8,300	11,600	16,800	17,500	14,800	15,100	11,600	12,800
Non-S&E degrees, total	1,760,300	2,000	86,200	137,200	208,200	259,500	284,700	300,900	201,800	279,800
Doctorate										
All degree fields, total	839,000	S	11,100	61,000	98,200	108,800	121,100	129,000	123,800	186,000
S&E degree fields, total	698,500	S	10,400	55,700	87,300	99,400	102,300	104,600	96,900	141,800
Sciences, total	580,400	S	7,900	42,000	68,500	82,200	89,200	91,100	81,400	118,100

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

Table B-7. U.S. scientists and engineers, by level and field of highest degree attained and age: 1999

Level and field of highest degree	S&Es, total	Age range								
		<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+
Doctorate — continued										
Computer/math sciences, total	44,500	S	1,600	3,800	6,100	6,700	6,400	6,500	6,600	6,800
Computer/information sciences	12,400	S	300	1,400	2,800	3,100	2,700	1,700	400	100
Mathematical sciences	32,200	S	1,300	2,400	3,300	3,600	3,700	4,800	6,100	6,800
Life/related sciences, total	202,000	S	2,700	16,700	25,400	30,700	32,900	30,000	26,100	37,500
Agricultural/food sciences	21,000	S	S	1,400	2,500	3,600	3,900	2,600	2,500	4,500
Biological sciences	175,400	S	2,700	15,000	22,300	26,500	27,900	26,300	22,600	32,100
Environmental life sciences	5,700	S	S	300	600	700	1,000	1,100	1,000	1,000
Physical/related sciences, total	147,000	S	2,300	10,400	19,300	20,500	18,200	19,300	21,000	36,000
Chemistry, except biochemistry	76,500	S	1,600	5,400	10,000	10,800	9,600	8,900	10,900	19,300
Earth science, geology and oceanography	19,100	S	100	800	2,300	2,800	2,700	3,700	2,500	4,300
Physics/astronomy	49,500	S	600	4,100	6,600	6,500	5,600	6,500	7,300	12,200
Other physical sciences	2,000	S	S	200	400	400	300	200	300	200
Social/related sciences, total	186,800	S	1,200	11,100	17,700	24,300	31,800	35,200	27,700	37,800
Economics	25,800	S	100	2,100	2,500	3,600	3,300	4,300	3,700	6,100
Political/related sciences	19,100	S	S	1,200	1,900	2,000	2,600	3,300	3,300	4,700
Psychology	98,000	S	1,000	6,300	9,800	13,700	18,300	19,300	12,400	17,200
Sociology/anthropology	26,500	S	S	1,000	2,000	2,900	4,600	5,100	4,900	6,000
Other social sciences	17,500	S	S	500	1,600	2,100	3,000	3,200	3,300	3,800
Engineering, total	118,100	S	2,600	13,800	18,800	17,200	13,100	13,500	15,500	23,700
Aerospace/related engineering	5,200	S	200	800	600	700	400	500	600	1,500
Chemical engineering	16,100	S	400	1,800	2,500	2,600	1,300	1,600	2,600	3,300
Civil/architectural engineering	10,700	S	200	700	1,500	1,300	1,200	1,600	1,900	2,300
Electrical/related engineering	30,900	S	800	4,000	5,500	4,600	3,500	3,400	3,600	5,500
Industrial engineering	3,500	S	S	400	500	700	400	200	500	900
Mechanical engineering	15,100	S	300	2,000	2,700	2,600	1,600	1,800	1,500	2,700
Other engineering	36,500	S	700	4,000	5,500	4,700	4,700	4,300	4,900	7,700
Non-S&E degrees, total	140,600	S	600	5,300	10,900	9,400	18,900	24,400	26,900	44,200

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)