

Table D-11. U.S. scientists and engineers, by highest degree attained, occupation, sex, and race: 1993

Highest degree and occupation	S&Es, total	Sex		Race/ethnicity				
		Male	Female	White	Black	Hispanic	Asian	Other
All degree levels¹								
All occupations, total²	11,578,200	7,734,000	3,844,200	9,871,500	573,200	350,400	748,100	35,000
S&E occupations, total	3,786,100	2,910,500	875,600	3,204,200	131,500	107,300	332,000	11,000
Scientists, total	2,140,900	1,405,500	735,400	1,809,300	87,400	60,200	177,300	6,700
Computer/math sci, total	1,065,900	724,400	341,500	890,700	47,200	28,600	96,800	2,500
Computer/information scientists	926,000	637,000	289,000	775,100	40,100	24,400	84,500	1,800
Mathematical scientists	55,200	34,700	20,400	46,000	3,000	1,800	3,900	500
Postsecondary teachers- computer math sci	84,700	52,700	32,000	69,600	4,000	2,400	8,400	200
Life/related scientists, total	379,000	244,600	134,400	317,400	12,600	11,300	36,400	1,300
Agricultural/food scientists	52,500	40,300	12,100	47,500	900	1,100	3,000	S
Biological scientists	209,400	121,800	87,600	166,000	8,000	7,600	27,400	500
Environmental life scientists	28,200	23,400	4,800	27,200	200	500	100	200
Postsecondary teachers- life/related sciences	88,900	59,100	29,900	76,800	3,500	2,200	5,900	600
Physical/related scientists, total	339,500	261,600	77,900	289,800	9,100	8,600	30,800	1,100
Chemistry, except biochemistry	142,600	100,000	42,600	116,900	5,900	3,200	16,100	600
Earth scientists/ geologists/oceanographers	83,300	70,100	13,200	76,500	500	2,100	3,900	300
Physicists/astronomers	40,900	37,000	3,900	34,900	700	700	4,500	S
Other physical/related scientists	20,500	14,900	5,600	17,500	800	600	1,600	100
Postsecondary teachers- physical/related sci	52,200	39,600	12,600	44,000	1,200	2,100	4,700	100
Social/related scientists, total	356,600	174,900	181,600	311,400	18,600	11,700	13,300	1,700
Economists	37,000	26,200	10,900	30,600	1,800	1,600	2,900	200
Political/related scientists	10,000	6,300	3,700	8,400	300	400	700	100
Psychologists	167,500	62,000	105,400	150,600	8,200	5,200	3,000	600
Sociologists/anthropologists	19,100	7,800	11,300	16,100	1,000	1,100	800	100
Other social/related scientists	25,300	11,500	13,900	21,400	2,300	800	700	100
Postsecondary teachers- social/related sci	97,700	61,200	36,500	84,300	4,900	2,700	5,100	700
Engineers, total	1,645,100	1,505,000	140,200	1,394,900	44,100	47,100	154,700	4,300
Aerospace/related engineers	109,000	101,400	7,600	95,100	2,300	2,900	8,300	400
Chemical engineers	96,300	81,500	14,800	81,500	2,400	2,600	9,700	200
Civil/architectural engineers	223,500	203,400	20,100	185,000	4,600	8,100	25,500	300
Electrical/related engineers	422,600	400,500	22,100	345,900	13,300	13,100	49,400	900
Industrial engineers	83,700	74,400	9,300	71,000	4,100	2,900	5,600	200
Mechanical engineers	302,900	286,800	16,100	260,800	7,200	7,100	26,700	1,100
Other engineers	368,400	321,500	46,800	325,200	9,100	9,400	23,600	1,100
Postsecondary teachers-engineers ..	38,800	35,500	3,300	30,500	1,200	1,000	5,900	200
Non-S&E occupations, total	7,792,100	4,823,500	2,968,600	6,667,200	441,700	243,100	416,100	24,000
Managers/administrators	2,296,500	1,716,300	580,200	2,006,200	113,300	64,700	105,300	7,000
Health/related	857,600	486,300	371,300	727,100	42,200	30,900	55,200	2,300
Teachers, except S&E postsecondary ..	843,000	349,300	493,700	718,000	67,400	30,000	25,200	2,400
Sales/marketing	892,800	614,100	278,700	788,300	32,900	19,800	50,300	1,600
Other non-S&E occupations	2,902,300	1,657,600	1,244,700	2,427,700	186,000	97,700	180,100	10,800

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

Table D-11. U.S. scientists and engineers, by highest degree attained, occupation, sex, and race: 1993

Highest degree and occupation	S&Es, total	Sex		Race/ethnicity				
		Male	Female	White	Black	Hispanic	Asian	Other
Bachelor's								
All occupations, total ²	6,948,800	4,546,200	2,402,600	5,943,700	366,800	222,600	393,500	22,300
S&E occupations, total	2,293,600	1,794,800	498,800	1,979,800	92,800	69,100	144,500	7,300
Scientists, total	1,122,700	724,900	397,800	957,900	57,500	35,100	68,000	4,200
Computer/math sci, total	720,300	477,600	242,700	612,500	36,500	21,200	48,100	2,000
Computer/information scientists	674,300	451,300	222,900	575,300	33,000	19,500	45,000	1,500
Mathematical scientists	24,900	14,400	10,400	20,800	1,700	900	1,000	400
Postsecondary teachers- computer math sci	21,200	11,800	9,300	16,400	1,800	800	2,200	100
Life/related scientists, total	159,900	97,400	62,400	137,500	7,500	5,800	8,300	700
Agricultural/food scientists	31,200	23,300	7,900	29,000	600	600	900	S
Biological scientists	90,800	47,100	43,700	75,100	5,300	3,900	6,400	100
Environmental life scientists	20,200	17,400	2,800	19,400	100	400	100	200
Postsecondary teachers- life/related sciences	17,700	9,700	8,000	14,000	1,500	900	900	400
Physical/related scientists, total	163,200	118,000	45,200	142,600	6,500	4,500	8,900	800
Chemistry, except biochemistry	85,000	55,800	29,200	71,300	4,700	2,100	6,500	400
Earth scientists/ geologists/oceanographers	43,200	36,800	6,400	40,700	400	1,000	800	300
Physicists/astronomers	11,000	10,100	900	10,100	300	100	400	S
Other physical/related scientists	11,200	8,100	3,100	10,000	600	400	100	100
Postsecondary teachers- physical/related sci	12,900	7,300	5,600	10,400	300	1,000	1,100	S
Social/related scientists, total	79,300	31,900	47,400	65,300	7,000	3,600	2,700	700
Economists	13,400	8,200	5,200	11,300	1,000	400	600	200
Political/related scientists	5,900	3,300	2,600	4,800	300	300	500	100
Psychologists	30,000	7,900	22,100	24,900	2,600	1,600	800	200
Sociologists/anthropologists	7,600	2,200	5,500	5,800	800	500	400	100
Other social/related scientists	9,300	4,300	4,900	7,300	1,600	300	S	100
Postsecondary teachers- social/related sci	13,100	6,000	7,100	11,300	700	600	400	100
Engineers, total	1,170,900	1,069,900	101,000	1,021,900	35,300	34,000	76,500	3,200
Aerospace/related engineers	73,900	68,300	5,500	66,100	1,700	2,000	3,700	300
Chemical engineers	64,300	54,300	10,000	56,400	1,700	1,700	4,300	100
Civil/architectural engineers	165,700	149,800	15,900	141,100	3,800	5,700	14,800	200
Electrical/related engineers	298,900	283,400	15,500	252,400	10,800	9,200	25,900	500
Industrial engineers	65,300	57,800	7,500	55,900	3,600	2,400	3,200	200
Mechanical engineers	234,200	222,100	12,100	207,600	5,900	5,800	14,100	800
Other engineers	260,700	227,400	33,300	235,900	7,200	7,200	9,600	900
Postsecondary teachers-engineers ..	8,000	6,800	1,200	6,500	400	100	800	100
Non-S&E occupations, total	4,655,200	2,751,400	1,903,800	3,963,900	274,000	153,400	249,000	14,900
Managers/administrators	1,340,300	991,300	349,000	1,177,700	64,200	40,100	54,100	4,200
Health/related	293,800	91,200	202,600	241,000	20,300	12,200	19,400	800
Teachers, except S&E postsecondary ..	392,300	135,700	256,600	329,700	32,500	16,700	12,200	1,200
Sales/marketing	717,800	485,100	232,700	637,200	26,400	16,700	36,300	1,200
Other non-S&E occupations	1,911,000	1,048,100	862,900	1,578,200	130,600	67,600	127,000	7,600

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

Table D-11. U.S. scientists and engineers, by highest degree attained, occupation, sex, and race: 1993

Highest degree and occupation	S&Es, total	Sex		Race/ethnicity				
		Male	Female	White	Black	Hispanic	Asian	Other
Master's								
All occupations, total ²	3,002,400	1,927,400	1,075,000	2,526,400	148,100	82,200	237,600	8,100
S&E occupations, total	1,013,600	741,300	272,300	831,000	28,100	26,900	125,600	2,000
Scientists, total	615,600	378,200	237,400	513,000	20,400	15,300	65,900	1,000
Computer/math sci, total	290,100	201,200	88,900	233,900	8,900	6,000	40,900	400
Computer/information scientists	230,300	167,200	63,100	183,400	6,200	4,500	35,900	300
Mathematical scientists	22,000	13,600	8,400	18,400	1,200	600	1,800	S
Postsecondary teachers- computer math sci	37,700	20,300	17,400	32,100	1,500	900	3,100	S
Life/related scientists, total	85,100	47,000	38,100	70,000	3,000	2,000	9,900	100
Agricultural/food scientists	11,700	8,800	2,900	10,100	200	300	1,100	S
Biological scientists	44,400	23,900	20,500	34,200	1,600	1,200	7,200	100
Environmental life scientists	6,800	5,100	1,700	6,600	100	100	S	S
Postsecondary teachers- life/related sciences	22,100	9,300	12,800	19,100	1,100	400	1,600	S
Physical/related scientists, total	87,400	65,700	21,600	74,000	1,400	2,200	9,500	200
Chemistry, except biochemistry	26,700	18,000	8,600	21,300	600	500	4,100	100
Earth scientists/ geologists/oceanographers	28,800	23,000	5,800	25,900	100	1,000	1,900	S
Physicists/astronomers	13,000	11,300	1,700	11,100	200	300	1,400	S
Other physical/related scientists	6,900	4,800	2,100	5,900	100	S	800	S
Postsecondary teachers- physical/related sci	12,000	8,700	3,400	9,900	400	500	1,300	S
Social/related scientists, total	153,100	64,300	88,800	135,000	7,200	5,000	5,600	300
Economists	15,900	11,700	4,200	13,100	500	800	1,500	S
Political/related scientists	2,400	1,800	600	2,000	S	100	200	S
Psychologists	85,600	26,600	59,000	77,500	4,200	2,400	1,300	200
Sociologists/anthropologists	7,500	3,300	4,200	6,800	100	400	300	S
Other social/related scientists	11,700	4,600	7,100	10,100	700	400	600	S
Postsecondary teachers- social/related sci	30,000	16,300	13,700	25,500	1,700	900	1,700	100
Engineers, total	398,000	363,100	34,900	318,000	7,700	11,600	59,700	1,000
Aerospace/related engineers	31,100	29,100	2,000	26,400	500	900	3,200	100
Chemical engineers	24,800	20,500	4,400	20,000	600	800	3,500	S
Civil/architectural engineers	53,300	49,300	4,000	40,600	700	2,400	9,600	S
Electrical/related engineers	110,200	104,100	6,100	84,200	2,400	3,600	19,600	300
Industrial engineers	17,700	15,900	1,800	14,600	400	500	2,200	S
Mechanical engineers	60,900	57,100	3,800	48,300	1,300	1,100	10,000	300
Other engineers	88,200	76,600	11,600	74,600	1,700	2,000	9,600	200
Postsecondary teachers-engineers ..	11,800	10,600	1,200	9,200	100	400	1,900	100
Non-S&E occupations, total	1,988,800	1,186,100	802,700	1,695,400	120,000	55,300	112,000	6,000
Managers/administrators	775,900	576,800	199,100	672,800	40,000	20,400	40,700	1,900
Health/related	98,700	25,600	73,200	83,600	5,700	2,100	7,000	400
Teachers, except S&E postsecondary	380,800	168,400	212,400	329,600	30,700	11,200	8,400	1,100
Sales/marketing	156,600	113,400	43,200	134,800	6,000	2,700	12,800	400
Other non-S&E occupations	576,700	301,900	274,800	474,600	37,700	18,900	43,100	2,300

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

Table D-11. U.S. scientists and engineers, by highest degree attained, occupation, sex, and race: 1993

Highest degree and occupation	S&Es, total	Sex		Race/ethnicity				
		Male	Female	White	Black	Hispanic	Asian	Other
Doctorate								
All occupations, total ²	706,100	554,300	151,800	583,400	22,200	18,800	79,200	2,500
S&E occupations, total	439,400	346,500	92,900	360,300	9,400	10,000	58,200	1,500
Scientists, total	367,100	278,100	89,000	308,800	8,400	8,600	39,900	1,400
Computer/math sci, total	52,400	42,800	9,500	41,800	1,300	1,400	7,700	200
Computer/information scientists	18,500	15,800	2,800	14,100	400	400	3,600	S
Mathematical scientists	8,200	6,600	1,600	6,700	100	300	1,000	S
Postsecondary teachers- computer math sci	25,600	20,400	5,200	20,900	700	800	3,100	100
Life/related scientists, total	111,400	83,500	27,900	91,600	1,700	2,500	15,200	300
Agricultural/food scientists	9,500	8,300	1,200	8,200	100	200	1,000	S
Biological scientists	63,800	45,200	18,600	49,200	900	1,900	11,600	200
Environmental life scientists	1,100	900	200	1,100	S	S	S	S
Postsecondary teachers- life/related sciences	36,900	29,000	7,900	33,100	700	500	2,500	100
Physical/related scientists, total	87,800	77,500	10,200	72,200	1,200	1,900	12,300	200
Chemistry, except biochemistry	30,200	25,900	4,300	23,600	500	600	5,500	S
Earth scientists/ geologists/oceanographers	11,400	10,400	1,000	9,900	S	200	1,300	S
Physicists/astronomers	17,000	15,700	1,300	13,700	200	300	2,700	S
Other physical/related scientists	2,300	1,900	400	1,600	S	200	500	S
Postsecondary teachers- physical/related sci	26,900	23,700	3,200	23,300	500	600	2,300	100
Social/related scientists, total	115,600	74,200	41,400	103,300	4,200	2,800	4,600	700
Economists	7,100	5,700	1,300	5,800	200	200	900	S
Political/related scientists	1,600	1,200	500	1,500	S	S	S	S
Psychologists	46,700	25,100	21,600	43,500	1,300	1,100	700	200
Sociologists/anthropologists	3,900	2,400	1,600	3,500	100	100	100	S
Other social/related scientists	3,300	2,300	1,000	3,000	S	100	100	S
Postsecondary teachers- social/related sci	52,900	37,500	15,400	45,900	2,500	1,200	2,800	500
Engineers, total	72,300	68,400	3,900	51,500	1,000	1,400	18,300	100
Aerospace/related engineers	4,000	3,900	100	2,500	S	S	1,400	S
Chemical engineers	7,100	6,700	400	5,000	100	100	1,900	S
Civil/architectural engineers	3,600	3,500	100	2,500	S	100	1,000	S
Electrical/related engineers	12,900	12,400	500	8,700	100	200	3,900	100
Industrial engineers	600	600	S	400	S	100	100	S
Mechanical engineers	7,100	6,900	200	4,300	S	200	2,500	S
Other engineers	18,100	16,400	1,700	13,400	100	200	4,300	S
Postsecondary teachers-engineers ..	18,900	18,000	900	14,700	600	400	3,100	S

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

Table D-11. U.S. scientists and engineers, by highest degree attained, occupation, sex, and race: 1993

Highest degree and occupation	S&Es, total	Sex		Race/ethnicity				
		Male	Female	White	Black	Hispanic	Asian	Other
Doctorate — continued								
Non-S&E occupations, total	266,700	207,900	58,900	223,000	12,800	8,800	21,100	1,000
Managers/administrators	128,500	107,900	20,700	110,900	5,300	2,600	9,100	600
Health/related	25,000	17,700	7,300	17,200	700	2,600	4,500	100
Teachers, except S&E postsecondary	54,900	35,800	19,100	45,500	3,500	1,700	4,100	100
Sales/marketing	8,300	6,600	1,700	7,100	200	200	800	S
Other non-S&E occupations	50,000	40,000	10,000	42,300	3,100	1,700	2,700	200

1 Includes professional degrees

2 Total excludes 37,000 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 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)