

TABLE A-14. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity ^a							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
All degree levels and fields ^b	82,000	60,000	56,000	6,000	22,000	20,000	20,000	77,000	12,000
S&E fields	67,000	53,000	41,000	4,000	18,000	15,000	14,000	61,000	8,000
Sciences	64,000	46,000	41,000	4,000	15,000	15,000	12,000	58,000	7,000
Biological/agricultural/environmental life sciences	27,000	20,000	17,000	1,000	7,000	5,000	6,000	24,000	3,000
Agricultural sciences	12,000	9,000	8,000	S	3,000	1,000	2,000	12,000	2,000
Biological sciences	25,000	19,000	16,000	1,000	7,000	5,000	6,000	23,000	2,000
Environmental life sciences	9,000	8,000	5,000	1,000	1,000	1,000	1,000	8,000	1,000
Computer/mathematical sciences	24,000	18,000	16,000	3,000	9,000	7,000	5,000	22,000	3,000
Computer/information sciences	18,000	14,000	12,000	3,000	8,000	5,000	4,000	16,000	3,000
Mathematics/statistics	16,000	12,000	11,000	S	4,000	4,000	2,000	15,000	2,000
Physical/related sciences	16,000	15,000	9,000	1,000	5,000	3,000	3,000	14,000	1,000
Chemistry, except biochemistry	12,000	11,000	6,000	1,000	4,000	2,000	2,000	11,000	1,000
Earth/atmospheric/ocean sciences	9,000	8,000	4,000	*	1,000	500	1,000	9,000	500
Physics/astronomy	6,000	5,000	3,000	*	2,000	1,000	1,000	5,000	500
Other physical sciences	5,000	4,000	3,000	S	1,000	1,000	1,000	5,000	S
Social/related sciences	50,000	34,000	33,000	3,000	10,000	13,000	9,000	47,000	6,000
Economics	20,000	19,000	9,000	S	6,000	3,000	3,000	19,000	2,000
Political/related sciences	23,000	19,000	14,000	2,000	4,000	6,000	4,000	21,000	3,000
Psychology	28,000	16,000	22,000	1,000	5,000	7,000	5,000	27,000	3,000
Sociology/anthropology	20,000	14,000	15,000	1,000	3,000	6,000	4,000	18,000	3,000
Other social sciences	17,000	12,000	13,000	2,000	3,000	5,000	5,000	15,000	2,000
Engineering	28,000	28,000	9,000	1,000	10,000	4,000	6,000	25,000	4,000
Aerospace/aeronautical/astronautical engineering	7,000	7,000	2,000	500	1,000	1,000	1,000	6,000	1,000
Chemical engineering	7,000	7,000	3,000	1,000	3,000	1,000	2,000	6,000	1,000
Civil/architectural engineering	12,000	11,000	3,000	500	3,000	2,000	4,000	10,000	3,000
Electrical/computer engineering	13,000	13,000	5,000	S	6,000	3,000	2,000	11,000	3,000
Industrial engineering	9,000	8,000	3,000	S	2,000	1,000	2,000	8,000	500
Mechanical engineering	15,000	15,000	4,000	1,000	4,000	2,000	2,000	14,000	1,000
Other engineering	12,000	11,000	3,000	500	3,000	1,000	2,000	11,000	1,000
S&E-related fields	39,000	26,000	29,000	3,000	11,000	9,000	10,000	37,000	7,000
Health	31,000	18,000	26,000	3,000	10,000	8,000	8,000	30,000	6,000
Science/mathematics teacher education	15,000	10,000	12,000	S	3,000	3,000	3,000	15,000	1,000
Technology/technical fields	14,000	13,000	5,000	S	4,000	3,000	3,000	12,000	1,000
Other S&E-related fields	15,000	12,000	8,000	S	3,000	3,000	3,000	14,000	1,000
Non-S&E fields	45,000	33,000	31,000	4,000	9,000	12,000	9,000	42,000	6,000
Arts/humanities	16,000	12,000	11,000	S	3,000	2,000	2,000	16,000	1,000

TABLE A-14. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity ^a							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Education, except science/mathematics									
teacher education	25,000	16,000	19,000	2,000	2,000	6,000	4,000	24,000	2,000
Management/administration	28,000	21,000	15,000	3,000	7,000	7,000	5,000	26,000	5,000
Sales/marketing	10,000	8,000	5,000	S	2,000	2,000	1,000	9,000	1,000
Social services/related	13,000	9,000	9,000	S	2,000	3,000	2,000	12,000	2,000
Other non-S&E fields	23,000	17,000	16,000	2,000	4,000	5,000	4,000	22,000	3,000
Bachelor's degrees	69,000	51,000	45,000	5,000	18,000	16,000	15,000	64,000	10,000
S&E fields	60,000	48,000	35,000	4,000	14,000	14,000	13,000	57,000	7,000
Sciences	59,000	44,000	35,000	4,000	12,000	14,000	12,000	55,000	6,000
Biological/agricultural/environmental life sciences	26,000	19,000	18,000	1,000	6,000	5,000	6,000	24,000	3,000
Agricultural sciences	12,000	9,000	8,000	S	3,000	1,000	2,000	11,000	1,000
Biological sciences	24,000	17,000	16,000	1,000	6,000	5,000	6,000	22,000	2,000
Environmental life sciences	7,000	6,000	4,000	1,000	S	1,000	1,000	7,000	1,000
Computer/mathematical sciences	21,000	17,000	15,000	2,000	6,000	6,000	4,000	21,000	3,000
Computer/information sciences	16,000	13,000	11,000	2,000	5,000	5,000	4,000	14,000	2,000
Mathematics/statistics	15,000	12,000	9,000	S	4,000	3,000	2,000	15,000	2,000
Physical/related sciences	14,000	13,000	8,000	1,000	4,000	2,000	3,000	13,000	1,000
Chemistry, except biochemistry	11,000	9,000	6,000	1,000	4,000	2,000	2,000	10,000	1,000
Earth/atmospheric/ocean sciences	8,000	7,000	3,000	S	1,000	500	1,000	8,000	500
Physics/astronomy	6,000	5,000	3,000	*	2,000	1,000	1,000	5,000	500
Other physical sciences	5,000	3,000	3,000	S	1,000	1,000	1,000	4,000	S
Social/related sciences	45,000	32,000	29,000	3,000	9,000	12,000	9,000	43,000	5,000
Economics	19,000	18,000	8,000	S	6,000	3,000	3,000	18,000	2,000
Political/related sciences	21,000	18,000	12,000	2,000	3,000	5,000	4,000	19,000	3,000
Psychology	25,000	15,000	21,000	1,000	5,000	7,000	5,000	25,000	3,000
Sociology/anthropology	20,000	13,000	15,000	1,000	3,000	6,000	3,000	18,000	2,000
Other social sciences	16,000	11,000	12,000	2,000	2,000	4,000	4,000	14,000	2,000
Engineering	25,000	24,000	8,000	1,000	8,000	4,000	6,000	22,000	4,000
Aerospace/aeronautical/astronautical engineering	7,000	6,000	2,000	S	1,000	1,000	1,000	6,000	1,000
Chemical engineering	7,000	6,000	2,000	1,000	2,000	1,000	2,000	6,000	1,000
Civil/architectural engineering	11,000	11,000	3,000	500	3,000	2,000	3,000	9,000	3,000
Electrical/computer engineering	11,000	11,000	5,000	S	5,000	3,000	2,000	9,000	2,000
Industrial engineering	8,000	8,000	3,000	S	2,000	1,000	2,000	7,000	500
Mechanical engineering	13,000	13,000	4,000	500	4,000	2,000	2,000	13,000	1,000
Other engineering	10,000	10,000	3,000	S	3,000	1,000	2,000	9,000	500
S&E-related fields	36,000	21,000	28,000	2,000	10,000	8,000	8,000	33,000	6,000

TABLE A-14. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity ^a							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Health	29,000	12,000	25,000	2,000	8,000	7,000	6,000	26,000	6,000
Science/mathematics teacher education	13,000	8,000	9,000	S	3,000	2,000	2,000	12,000	S
Technology/technical fields	13,000	12,000	5,000	S	4,000	3,000	3,000	11,000	1,000
Other S&E-related fields	13,000	11,000	6,000	S	3,000	2,000	3,000	12,000	1,000
Non-S&E fields	29,000	20,000	21,000	3,000	5,000	7,000	4,000	27,000	3,000
Arts/humanities	15,000	10,000	10,000	S	2,000	1,000	2,000	15,000	1,000
Education, except science/mathematics teacher education	11,000	8,000	10,000	2,000	1,000	2,000	2,000	11,000	1,000
Management/administration	18,000	14,000	11,000	1,000	4,000	5,000	3,000	17,000	2,000
Sales/marketing	5,000	4,000	4,000	S	S	1,000	1,000	5,000	S
Social services/related	5,000	4,000	3,000	S	1,000	2,000	500	5,000	S
Other non-S&E fields	11,000	7,000	8,000	S	2,000	3,000	2,000	10,000	1,000
Master's degrees	47,000	33,000	32,000	3,000	11,000	11,000	9,000	39,000	6,000
S&E fields	28,000	22,000	17,000	1,000	9,000	6,000	6,000	24,000	3,000
Sciences	25,000	18,000	16,000	1,000	8,000	5,000	4,000	21,000	3,000
Biological/agricultural/environmental life sciences	9,000	7,000	6,000	500	2,000	1,000	2,000	8,000	1,000
Agricultural sciences	4,000	3,000	3,000	S	1,000	1,000	1,000	3,000	1,000
Biological sciences	7,000	5,000	5,000	500	2,000	1,000	1,000	7,000	500
Environmental life sciences	4,000	3,000	2,000	S	1,000	500	*	4,000	S
Computer/mathematical sciences	11,000	9,000	7,000	S	6,000	2,000	2,000	9,000	1,000
Computer/information sciences	10,000	9,000	6,000	S	6,000	2,000	2,000	8,000	1,000
Mathematics/statistics	5,000	4,000	4,000	S	2,000	1,000	500	5,000	500
Physical/related sciences	7,000	6,000	3,000	*	3,000	1,000	1,000	6,000	500
Chemistry, except biochemistry	4,000	3,000	2,000	S	2,000	500	500	3,000	S
Earth/atmospheric/ocean sciences	4,000	4,000	2,000	S	1,000	S	500	4,000	500
Physics/astronomy	3,000	3,000	1,000	S	1,000	500	1,000	3,000	S
Other physical sciences	1,000	1,000	1,000	S	S	S	S	1,000	S
Social/related sciences	19,000	13,000	13,000	1,000	4,000	5,000	4,000	17,000	2,000
Economics	6,000	6,000	3,000	S	2,000	500	1,000	6,000	*
Political/related sciences	8,000	6,000	5,000	S	2,000	2,000	1,000	7,000	500
Psychology	14,000	8,000	10,000	1,000	2,000	3,000	3,000	13,000	2,000
Sociology/anthropology	5,000	3,000	4,000	S	1,000	1,000	1,000	5,000	1,000
Other social sciences	6,000	4,000	5,000	S	1,000	2,000	2,000	6,000	500
Engineering	12,000	12,000	4,000	S	5,000	1,000	3,000	10,000	1,000
Aerospace/aeronautical/astronautical engineering	2,000	2,000	500	S	1,000	S	1,000	1,000	500
Chemical engineering	3,000	3,000	1,000	S	2,000	500	1,000	2,000	S

TABLE A-14. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity ^a							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Civil/architectural engineering	5,000	5,000	2,000	S	2,000	1,000	2,000	4,000	1,000
Electrical/computer engineering	6,000	6,000	2,000	S	4,000	1,000	1,000	5,000	1,000
Industrial engineering	2,000	2,000	1,000	S	1,000	1,000	1,000	2,000	S
Mechanical engineering	5,000	5,000	1,000	S	1,000	500	1,000	5,000	1,000
Other engineering	5,000	5,000	2,000	S	2,000	1,000	1,000	5,000	500
S&E-related fields	20,000	12,000	17,000	1,000	4,000	4,000	3,000	18,000	2,000
Health	16,000	8,000	15,000	1,000	4,000	4,000	3,000	15,000	2,000
Science/mathematics teacher education	8,000	6,000	7,000	S	1,000	2,000	1,000	8,000	S
Technology/technical fields	4,000	3,000	2,000	S	2,000	1,000	1,000	3,000	S
Other S&E-related fields	7,000	6,000	3,000	S	1,000	1,000	1,000	7,000	1,000
Non-S&E fields	34,000	26,000	21,000	3,000	7,000	10,000	6,000	30,000	5,000
Arts/humanities	9,000	7,000	5,000	S	2,000	1,000	1,000	8,000	500
Education, except science/mathematics teacher education	21,000	12,000	16,000	1,000	2,000	5,000	3,000	20,000	2,000
Management/administration	20,000	17,000	11,000	2,000	6,000	6,000	5,000	19,000	5,000
Sales/marketing	8,000	7,000	3,000	S	2,000	1,000	1,000	8,000	S
Social services/related	11,000	7,000	9,000	S	2,000	3,000	2,000	10,000	1,000
Other non-S&E fields	12,000	10,000	8,000	S	2,000	3,000	2,000	10,000	1,000
Doctorate degrees	11,000	8,000	6,000	500	3,000	2,000	2,000	10,000	1,000
S&E fields	5,000	4,000	3,000	500	3,000	2,000	1,000	4,000	1,000
Sciences	5,000	4,000	3,000	500	2,000	2,000	1,000	4,000	1,000
Biological/agricultural/environmental life sciences	3,000	2,000	2,000	*	2,000	1,000	1,000	3,000	500
Agricultural sciences	1,000	1,000	500	S	500	500	1,000	500	*
Biological sciences	3,000	2,000	2,000	*	2,000	1,000	1,000	3,000	500
Environmental life sciences	500	500	500	S	*	*	*	500	S
Computer/mathematical sciences	2,000	1,000	2,000	S	1,000	2,000	500	1,000	*
Computer/information sciences	1,000	1,000	500	S	500	500	500	1,000	*
Mathematics/statistics	2,000	1,000	2,000	S	500	2,000	500	1,000	*
Physical/related sciences	2,000	2,000	1,000	*	1,000	500	500	2,000	500
Chemistry, except biochemistry	2,000	1,000	1,000	*	1,000	500	500	1,000	500
Earth/atmospheric/ocean sciences	1,000	1,000	500	S	500	*	*	1,000	*
Physics/astronomy	1,000	1,000	500	S	500	*	500	1,000	*
Other physical sciences	1,000	1,000	500	S	*	S	S	1,000	S
Social/related sciences	2,000	1,000	1,000	*	1,000	500	500	2,000	500
Economics	1,000	1,000	500	S	500	500	500	500	*
Political/related sciences	1,000	1,000	500	S	500	500	500	1,000	*

TABLE A-14. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree attained, sex, and race/ethnicity: 2003

Level and field of highest degree	Employed scientists and engineers	Race/ethnicity ^a							
		Sex		American Indian/Alaska Native	Asian	Black	Hispanic	White	Other
		Male	Female						
Psychology	1,000	1,000	1,000	*	500	500	500	1,000	500
Sociology/anthropology	1,000	500	1,000	*	500	500	500	1,000	*
Other social sciences	1,000	1,000	500	*	1,000	500	500	1,000	*
Engineering	2,000	2,000	500	S	1,000	500	500	1,000	500
Aerospace/aeronautical/astronautical engineering	1,000	1,000	*	S	1,000	*	*	500	S
Chemical engineering	1,000	1,000	500	S	1,000	*	500	500	*
Civil/architectural engineering	1,000	1,000	500	S	500	*	*	500	*
Electrical/computer engineering	1,000	1,000	500	S	1,000	500	500	1,000	*
Industrial engineering	500	500	500	S	500	*	*	500	S
Mechanical engineering	1,000	1,000	500	S	500	*	*	500	*
Other engineering	1,000	1,000	500	S	1,000	*	500	1,000	*
S&E-related fields	4,000	4,000	3,000	*	1,000	1,000	1,000	4,000	*
Health	3,000	1,000	2,000	*	1,000	1,000	1,000	2,000	*
Science/mathematics teacher education	2,000	2,000	1,000	S	S	S	S	2,000	S
Technology/technical fields	1,000	1,000	S	S	500	S	S	1,000	S
Other S&E-related fields	3,000	3,000	1,000	S	S	S	S	3,000	S
Non-S&E fields	8,000	6,000	4,000	S	1,000	1,000	1,000	7,000	500
Arts/humanities	2,000	2,000	1,000	S	S	S	500	2,000	S
Education, except science/mathematics teacher education	6,000	5,000	3,000	S	500	1,000	1,000	6,000	500
Management/administration	2,000	2,000	1,000	S	1,000	S	S	2,000	S
Sales/marketing	500	500	500	S	500	S	S	500	S
Social services/related	3,000	3,000	1,000	S	500	1,000	S	3,000	S
Other non-S&E fields	3,000	2,000	2,000	S	1,000	1,000	S	3,000	S

* = standard error is not calculated when estimate is less than 500; S = standard error is not calculated when estimate is suppressed for reliability or confidentiality.

S&E = science and engineering.

^a "Other" includes Native Hawaiian/Other Pacific Islander and non-Hispanic respondents reporting 2 or more races.

^b Total includes professional degrees not broken out separately.

NOTES: Scientists and engineers include any person who has ever received a bachelor's or higher degree in a science or engineering (S&E) or S&E-related field, plus any person holding a non-S&E bachelor's or higher degree who was employed in a S&E or S&E-related occupation in 2003. See <http://sestat.nsf.gov/docs/ed03maj.html> for a detailed description of the educational field classification. Standard errors of less than 500 are rounded up to 500 and standard errors equal to or greater than 500 are rounded up to the nearest thousand.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT): 2003.