

TABLE A-5. Standard errors for employed U.S. scientists and engineers, by level and field of highest degree and occupation: 2003

Field of highest degree and selected occupations	Level of highest degree			
	All degree levels <sup>a</sup>	Bachelor's	Master's	Doctorate
All degree fields and occupations	82,000	69,000	47,000	11,000
S&E occupations	39,000	32,000	20,000	5,000
Biological/agricultural/environmental life scientists	10,000	9,000	5,000	3,000
Computer/mathematical scientists	27,000	24,000	14,000	3,000
Physical scientists	9,000	8,000	5,000	2,000
Social scientists	14,000	8,000	10,000	2,000
Engineers	18,000	17,000	9,000	2,000
S&E-related occupations	48,000	39,000	23,000	5,000
Health occupations	32,000	31,000	16,000	3,000
S&E managers	14,000	12,000	7,000	1,000
S&E precollege teachers	21,000	14,000	12,000	3,000
S&E technologists/technicians	15,000	14,000	6,000	1,000
Other S&E-related occupations	10,000	9,000	5,000	2,000
Non-S&E occupations	70,000	58,000	38,000	8,000
Art/humanities/related occupations	17,000	14,000	8,000	1,000
Management-related occupations	34,000	28,000	16,000	4,000
Non-S&E managers	26,000	21,000	13,000	4,000
Non-S&E postsecondary teachers	7,000	3,000	6,000	3,000
Non-S&E precollege/other teachers	21,000	17,000	14,000	2,000
Sales/marketing occupations	32,000	28,000	16,000	3,000
Social services/related occupations	17,000	12,000	12,000	2,000
Other non-S&E occupations	41,000	36,000	18,000	2,000
Biological/agricultural/environmental life sciences degree fields	27,000	26,000	9,000	3,000
S&E occupations	11,000	10,000	5,000	3,000
Biological/agricultural/environmental life scientists	9,000	7,000	4,000	3,000
Computer/mathematical scientists	4,000	4,000	2,000	1,000
Physical scientists	4,000	4,000	1,000	1,000
Social scientists	2,000	2,000	500	500
Engineers	4,000	4,000	1,000	500
S&E-related occupations	14,000	13,000	4,000	1,000
Health occupations	12,000	11,000	3,000	1,000
S&E managers	3,000	2,000	1,000	1,000
S&E precollege teachers	5,000	5,000	2,000	500
S&E technologists/technicians	6,000	6,000	1,000	500
Other S&E-related occupations	1,000	1,000	S	S
Non-S&E occupations	22,000	22,000	7,000	1,000
Art/humanities/related occupations	4,000	4,000	2,000	500
Management-related occupations	9,000	8,000	3,000	1,000
Non-S&E managers	6,000	5,000	2,000	1,000
Non-S&E postsecondary teachers	3,000	1,000	2,000	*
Non-S&E precollege/other teachers	6,000	6,000	2,000	*
Sales/marketing occupations	11,000	11,000	2,000	500
Social services/related occupations	3,000	2,000	S	*
Other non-S&E occupations	14,000	14,000	5,000	1,000
Computer/mathematical science degree fields	24,000	21,000	11,000	2,000
S&E occupations	15,000	12,000	9,000	2,000
Biological/agricultural/environmental life scientists	1,000	500	500	*
Computer/mathematical scientists	14,000	12,000	8,000	2,000
Physical scientists	1,000	500	S	*
Social scientists	2,000	1,000	1,000	*
Engineers	4,000	4,000	1,000	500
S&E-related occupations	9,000	8,000	4,000	1,000
Health occupations	2,000	2,000	1,000	*

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Field of highest degree and selected occupations	Level of highest degree			
	All degree levels <sup>a</sup>	Bachelor's	Master's	Doctorate
S&E managers	5,000	4,000	2,000	500
S&E precollege teachers	5,000	5,000	2,000	*
S&E technologists/technicians	6,000	5,000	3,000	500
Other S&E-related occupations	2,000	2,000	1,000	*
Non-S&E occupations	19,000	18,000	7,000	1,000
Art/humanities/related occupations	3,000	3,000	S	*
Management-related occupations	8,000	7,000	4,000	500
Non-S&E managers	5,000	5,000	2,000	1,000
Non-S&E postsecondary teachers	1,000	S	1,000	500
Non-S&E precollege/other teachers	5,000	5,000	1,000	S
Sales/marketing occupations	9,000	8,000	4,000	500
Social services/related occupations	4,000	3,000	1,000	S
Other non-S&E occupations	12,000	12,000	2,000	*
Physical/related science degree fields	16,000	14,000	7,000	2,000
S&E occupations	9,000	8,000	4,000	2,000
Biological/agricultural/environmental life scientists	2,000	2,000	1,000	1,000
Computer/mathematical scientists	4,000	4,000	1,000	1,000
Physical scientists	7,000	6,000	3,000	2,000
Social scientists	1,000	1,000	S	*
Engineers	4,000	3,000	1,000	1,000
S&E-related occupations	6,000	6,000	3,000	1,000
Health occupations	3,000	3,000	1,000	500
S&E managers	2,000	2,000	1,000	500
S&E precollege teachers	4,000	3,000	2,000	500
S&E technologists/technicians	3,000	2,000	1,000	1,000
Other S&E-related occupations	500	S	S	S
Non-S&E occupations	12,000	12,000	5,000	1,000
Art/humanities/related occupations	2,000	2,000	1,000	500
Management-related occupations	6,000	5,000	2,000	1,000
Non-S&E managers	5,000	5,000	1,000	1,000
Non-S&E postsecondary teachers	1,000	1,000	S	500
Non-S&E precollege/other teachers	3,000	3,000	1,000	*
Sales/marketing occupations	5,000	5,000	1,000	1,000
Social services/related occupations	2,000	2,000	S	*
Other non-S&E occupations	7,000	7,000	3,000	500
Social/related science degree fields	50,000	45,000	19,000	2,000
S&E occupations	13,000	10,000	7,000	2,000
Biological/agricultural/environmental life scientists	2,000	2,000	1,000	500
Computer/mathematical scientists	8,000	7,000	3,000	500
Physical scientists	1,000	1,000	1,000	500
Social scientists	9,000	6,000	6,000	2,000
Engineers	3,000	3,000	1,000	500
S&E-related occupations	14,000	13,000	5,000	500
Health occupations	11,000	10,000	4,000	500
S&E managers	4,000	3,000	2,000	500
S&E precollege teachers	5,000	4,000	2,000	*
S&E technologists/technicians	4,000	4,000	1,000	*
Other S&E-related occupations	2,000	2,000	S	S
Non-S&E occupations	47,000	43,000	18,000	1,000
Art/humanities/related occupations	11,000	10,000	5,000	500
Management-related occupations	22,000	21,000	7,000	1,000
Non-S&E managers	16,000	14,000	7,000	1,000
Non-S&E postsecondary teachers	3,000	2,000	2,000	1,000

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Field of highest degree and selected occupations	Level of highest degree			
	All degree levels <sup>a</sup>	Bachelor's	Master's	Doctorate
Non-S&E precollege/other teachers	13,000	12,000	5,000	500
Sales/marketing occupations	23,000	23,000	7,000	1,000
Social services/related occupations	12,000	10,000	7,000	500
Other non-S&E occupations	27,000	26,000	8,000	1,000
Engineering degree fields	28,000	25,000	12,000	2,000
S&E occupations	16,000	15,000	8,000	2,000
Biological/agricultural/environmental life scientists	1,000	1,000	1,000	500
Computer/mathematical scientists	9,000	8,000	4,000	1,000
Physical scientists	2,000	1,000	1,000	500
Social scientists	1,000	500	1,000	*
Engineers	14,000	13,000	6,000	1,000
S&E-related occupations	9,000	8,000	4,000	500
Health occupations	2,000	3,000	1,000	500
S&E managers	6,000	5,000	2,000	500
S&E precollege teachers	2,000	2,000	1,000	*
S&E technologists/technicians	5,000	5,000	2,000	500
Other S&E-related occupations	3,000	3,000	1,000	S
Non-S&E occupations	20,000	19,000	7,000	1,000
Art/humanities/related occupations	2,000	2,000	1,000	*
Management-related occupations	10,000	9,000	3,000	1,000
Non-S&E managers	9,000	9,000	4,000	1,000
Non-S&E postsecondary teachers	1,000	1,000	1,000	500
Non-S&E precollege/other teachers	2,000	2,000	1,000	*
Sales/marketing occupations	9,000	9,000	3,000	500
Social services/related occupations	1,000	1,000	S	*
Other non-S&E occupations	12,000	11,000	4,000	1,000
S&E-related degree fields	39,000	36,000	20,000	4,000
S&E occupations	11,000	7,000	6,000	1,000
Biological/agricultural/environmental life scientists	3,000	1,000	2,000	1,000
Computer/mathematical scientists	6,000	5,000	3,000	1,000
Physical scientists	2,000	1,000	2,000	500
Social scientists	3,000	2,000	2,000	500
Engineers	6,000	5,000	3,000	500
S&E-related occupations	30,000	28,000	17,000	3,000
Health occupations	27,000	25,000	13,000	2,000
S&E managers	6,000	5,000	3,000	500
S&E precollege teachers	9,000	7,000	6,000	500
S&E technologists/technicians	4,000	4,000	1,000	500
Other S&E-related occupations	9,000	8,000	5,000	S
Non-S&E occupations	25,000	23,000	13,000	3,000
Art/humanities/related occupations	7,000	7,000	4,000	500
Management-related occupations	11,000	9,000	5,000	1,000
Non-S&E managers	9,000	7,000	4,000	1,000
Non-S&E postsecondary teachers	4,000	2,000	2,000	2,000
Non-S&E precollege/other teachers	11,000	9,000	6,000	*
Sales/marketing occupations	12,000	11,000	6,000	2,000
Social services/related occupations	6,000	4,000	4,000	S
Other non-S&E occupations	16,000	14,000	6,000	1,000
Non-S&E degree fields	45,000	29,000	34,000	8,000
S&E occupations	24,000	19,000	14,000	2,000
Biological/agricultural/environmental life scientists	4,000	3,000	2,000	1,000
Computer/mathematical scientists	17,000	15,000	9,000	1,000
Physical scientists	4,000	2,000	3,000	S

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Field of highest degree and selected occupations	Level of highest degree			
	All degree levels <sup>a</sup>	Bachelor's	Master's	Doctorate
Social scientists	9,000	6,000	7,000	2,000
Engineers	9,000	7,000	6,000	1,000
S&E-related occupations	25,000	20,000	15,000	4,000
Health occupations	15,000	13,000	8,000	2,000
S&E managers	8,000	6,000	4,000	1,000
S&E precollege teachers	17,000	10,000	11,000	3,000
S&E technologists/technicians	9,000	9,000	4,000	S
Other S&E-related occupations	4,000	3,000	3,000	S
Non-S&E occupations	36,000	9,000	30,000	6,000
Art/humanities/related occupations	6,000	S	5,000	1,000
Management-related occupations	15,000	4,000	13,000	3,000
Non-S&E managers	12,000	2,000	11,000	3,000
Non-S&E postsecondary teachers	5,000	S	5,000	2,000
Non-S&E precollege/other teachers	12,000	4,000	11,000	2,000
Sales/marketing occupations	13,000	2,000	12,000	1,000
Social services/related occupations	10,000	2,000	9,000	2,000
Other non-S&E occupations	20,000	4,000	13,000	2,000

\* = 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.

<sup>a</sup> 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 and <http://sestat.nsf.gov/docs/occ03maj.html> for a detailed description of the occupational 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.