

TABLE A-7. Standard errors for U.S. scientists and engineers, by field and level of highest degree: 2006

Field of highest degree	Level of highest degree			
	All degree levels ^a	Bachelor's	Master's	Doctorate
All degree fields	91,000	76,000	51,000	10,000
S&E fields	73,000	68,000	30,000	5,000
Sciences	68,000	65,000	27,000	4,000
Biological/agricultural/environmental life sciences	30,000	29,000	9,000	3,000
Agricultural/food sciences	14,000	13,000	3,000	1,000
Animal sciences	10,000	10,000	1,000	500
Food sciences/technology	5,000	4,000	2,000	500
Plant sciences	7,000	6,000	2,000	1,000
Other agricultural sciences	6,000	6,000	2,000	500
Biological sciences	25,000	25,000	8,000	3,000
Biochemistry/biophysics	7,000	6,000	2,000	2,000
Biology, general	20,000	20,000	4,000	1,000
Botany	5,000	4,000	2,000	500
Cell/molecular biology	5,000	4,000	2,000	1,000
Ecology	5,000	4,000	3,000	500
Genetics, animal/plant	3,000	2,000	1,000	1,000
Microbiological sciences/immunology	8,000	7,000	3,000	1,000
Nutritional science	6,000	5,000	3,000	500
Pharmacology, human/animal	2,000	2,000	2,000	1,000
Physiology/pathology/human/animal	5,000	4,000	2,000	1,000
Zoology, general	6,000	6,000	2,000	1,000
Other biological sciences	7,000	6,000	3,000	1,000
Environmental life sciences	10,000	9,000	4,000	500
Environmental science studies	8,000	7,000	3,000	500
Forestry sciences	7,000	6,000	3,000	500
Computer/mathematical sciences	25,000	23,000	12,000	2,000
Computer/information sciences	18,000	15,000	10,000	1,000
Computer/information sciences	10,000	8,000	5,000	500
Computer science	20,000	19,000	7,000	1,000
Computer systems analysis	6,000	6,000	2,000	S
Information services/systems	9,000	8,000	4,000	S
Other computer/information sciences	9,000	8,000	3,000	S
Mathematics/statistics	18,000	17,000	6,000	1,000
Applied mathematics	8,000	8,000	2,000	1,000
Mathematics, general	14,000	14,000	4,000	500
Operations research	4,000	2,000	2,000	500
Statistics	4,000	3,000	2,000	500
Other mathematics	4,000	3,000	1,000	500
Physical/related sciences	16,000	15,000	7,000	2,000
Chemistry, except biochemistry	13,000	11,000	4,000	2,000
Earth/atmospheric/ocean sciences	10,000	8,000	4,000	1,000
Atmospheric sciences/meteorology	2,000	2,000	1,000	500
Earth sciences	4,000	3,000	1,000	S
Geology	8,000	7,000	3,000	500
Other geological sciences	2,000	1,000	1,000	500
Oceanography	2,000	2,000	1,000	500
Physics/astronomy	7,000	7,000	3,000	1,000
Astronomy/astrophysics	1,000	1,000	1,000	500
Physics	7,000	7,000	3,000	1,000
Other physical sciences	5,000	5,000	1,000	500

TABLE A-7. Standard errors for U.S. scientists and engineers, by field and level of highest degree: 2006

Field of highest degree	Level of highest degree			
	All degree levels ^a	Bachelor's	Master's	Doctorate
Social/related sciences	54,000	50,000	20,000	2,000
Economics	21,000	20,000	7,000	1,000
Agricultural economics	9,000	9,000	3,000	500
Economics	19,000	18,000	6,000	1,000
Political/related sciences	25,000	23,000	9,000	1,000
Public policy studies	4,000	2,000	4,000	500
International relations	9,000	8,000	4,000	500
Political science/government	23,000	23,000	6,000	1,000
Psychology	31,000	27,000	15,000	1,000
Educational psychology	9,000	6,000	7,000	1,000
Clinical psychology	8,000	6,000	5,000	1,000
Counseling psychology	13,000	8,000	11,000	500
Experimental psychology	5,000	5,000	1,000	500
Psychology, general	22,000	22,000	5,000	500
Industrial/organizational psychology	7,000	5,000	4,000	500
Social psychology	6,000	6,000	1,000	500
Other psychology	10,000	10,000	4,000	1,000
Sociology/anthropology	23,000	23,000	5,000	1,000
Anthropology/archeology	9,000	9,000	3,000	500
Criminology	8,000	8,000	2,000	500
Sociology	21,000	21,000	4,000	500
Other social sciences	18,000	16,000	6,000	1,000
Area/ethnic studies	8,000	7,000	3,000	500
Linguistics	4,000	4,000	2,000	500
Philosophy of science	5,000	5,000	S	S
Geography	9,000	8,000	3,000	500
History of science	4,000	4,000	S	500
Other social sciences	12,000	11,000	4,000	500
Engineering	32,000	29,000	13,000	2,000
Aerospace/related engineering	6,000	6,000	2,000	1,000
Chemical engineering	8,000	7,000	3,000	1,000
Civil/architectural engineering	11,000	10,000	5,000	1,000
Architectural engineering	4,000	4,000	2,000	S
Civil engineering	11,000	9,000	5,000	1,000
Electrical/computer engineering	15,000	13,000	8,000	1,000
Computer/systems engineering	7,000	6,000	4,000	500
Other electrical/related engineering	15,000	13,000	7,000	1,000
Industrial engineering	9,000	9,000	3,000	500
Mechanical engineering	14,000	13,000	4,000	1,000
Other engineering	13,000	11,000	6,000	1,000
Agricultural engineering	4,000	3,000	1,000	500
Bioengineering/biomedical engineering	3,000	2,000	2,000	500
Engineering science, mechanical/physics	3,000	3,000	2,000	500
Environmental engineering	4,000	3,000	2,000	500
Engineering, general	5,000	5,000	2,000	500
Geophysical/geological engineering	2,000	2,000	1,000	S
Materials engineering	4,000	3,000	2,000	500
Metallurgical engineering	3,000	3,000	1,000	500
Mining/minerals engineering	4,000	3,000	1,000	500
Naval architecture/marine engineering	2,000	2,000	500	S
Nuclear engineering	1,000	1,000	1,000	500

TABLE A-7. Standard errors for U.S. scientists and engineers, by field and level of highest degree: 2006

Field of highest degree	Level of highest degree			
	All degree levels ^a	Bachelor's	Master's	Doctorate
Petroleum engineering	3,000	3,000	1,000	*
Other engineering	5,000	4,000	3,000	500
S&E-related fields	46,000	41,000	21,000	3,000
Health	40,000	35,000	16,000	2,000
Audiology/speech pathology	10,000	7,000	7,000	500
Health services administration	11,000	8,000	8,000	500
Health/medical assistants	2,000	2,000	1,000	S
Health/medical technologies	8,000	8,000	2,000	S
Medical preparatory programs	5,000	5,000	1,000	S
Medicine	20,000	6,000	3,000	2,000
Nursing	25,000	25,000	9,000	500
Pharmacy	10,000	9,000	2,000	500
Physical therapy/other rehabilitation/therapeutic services	15,000	13,000	8,000	1,000
Public health	9,000	5,000	7,000	1,000
Other health/medical sciences	14,000	12,000	7,000	1,000
Science/mathematics teacher education	18,000	13,000	10,000	2,000
Computer teacher education	5,000	2,000	5,000	S
Mathematics teacher education	10,000	8,000	6,000	1,000
Science teacher education	9,000	7,000	5,000	1,000
Social science teacher education	10,000	8,000	5,000	500
Technology/technical fields	14,000	13,000	5,000	1,000
Computer programming	6,000	5,000	2,000	S
Data processing	2,000	2,000	S	S
Electrical/electronic technologies	5,000	5,000	1,000	500
Industrial production technologies	10,000	9,000	3,000	S
Mechanical engineering-related technologies	5,000	4,000	1,000	S
Other engineering-related technologies	7,000	6,000	3,000	1,000
Other S&E-related fields	15,000	12,000	7,000	1,000
Architecture/Environmental Design	14,000	12,000	7,000	1,000
Actuarial science	3,000	3,000	S	S
Non-S&E fields	53,000	29,000	41,000	7,000
Arts/humanities	14,000	12,000	9,000	3,000
Education, except science/mathematics teacher education	27,000	11,000	25,000	6,000
Management/administration	30,000	18,000	24,000	3,000
Sales/marketing	10,000	6,000	8,000	500
Social services/related	15,000	5,000	13,000	3,000
Other non-S&E fields	26,000	11,000	13,000	3,000

* = 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.

^a 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 through 2005, 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): 2006.