



**Appendix Table 3-12** Employed scientists and engineers, by sex and occupation: 2013

Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
All occupations	23,557,000	10,865,000	46.1	12,693,000	53.9
S&E occupations	5,749,000	1,670,000	29.0	4,080,000	71.0
Computer and mathematical scientists	2,647,000	671,000	25.3	1,976,000	74.7
Computer and information scientists	2,412,000	577,000	23.9	1,835,000	76.1
Computer and information scientists, research	42,000	13,000	31.0	29,000	69.0
Computer network architect	51,000	3,000	5.9	48,000	94.1
Computer support specialists	223,000	58,000	26.0	164,000	73.5
Computer system analysts	329,000	114,000	34.7	215,000	65.3
Database administrators	120,000	37,000	30.8	83,000	69.2
Information security analysts	67,000	21,000	31.3	46,000	68.7
Network and computer systems administrators	195,000	22,000	11.3	173,000	88.7
Software developers—applications and systems software	468,000	93,000	19.9	374,000	79.9
Web developers	153,000	43,000	28.1	109,000	71.2
Other computer information science occupations	259,000	95,000	36.7	164,000	63.3
Computer engineers—software	504,000	78,000	15.5	427,000	84.7
Mathematical scientists	127,000	53,000	41.7	74,000	58.3
Mathematicians	13,000	2000	5	11,000	84.6
Operations research analysts, including modeling	64,000	27,000	42.2	38,000	59.4
Statisticians	39,000	19,000	48.7	20,000	51.3
Other mathematical scientists	11000	5,000	45.5	6000	54.5



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Postsecondary teachers—computer and mathematical sciences	109,000	41,000	37.6	68,000	62.4
Computer science	25,000	9,000	36.0	16,000	64.0
Mathematics and statistics	83,000	32,000	38.6	51,000	61.4
Biological, agricultural, and environmental life scientists	638,000	309,000	48.4	329,000	51.6
Agricultural and food scientists	69,000	32,000	46.4	38,000	55.1
Biological and medical scientists	448,000	234,000	52.2	214,000	47.8
Biochemists and biophysicists	75,000	30,000	40.0	44,000	58.7
Biological scientists (e.g., botanists, ecologists, zoologists)	132,000	65,000	49.2	67,000	50.8
Medical scientists (excluding practitioners)	135,000	75,000	55.6	60,000	44.4
Other biological and life scientists	106,000	64,000	60.4	42,000	39.6
Forestry and conservation scientists	33,000	6,000	18.2	27,000	81.8
Postsecondary teachers—life and related sciences	88,000	37,000	42.0	50,000	56.8
Agriculture	7,000	2,000	28.6	4,000	57.1
Biological sciences	70,000	31,000	44.3	38,000	54.3
Other natural sciences	11,000	3,000	27.3	8,000	72.7
Physical and related scientists	319,000	98,000	30.7	220,000	69.0
Chemists, except biochemists	105,000	37,000	35.2	68,000	64.8
Earth scientists, geologists, and oceanographers	70,000	18,000	25.7	52,000	74.3
Atmospheric and space scientists	14,000	3,000	21.4	11,000	78.6
Geologists, including earth scientists	52,000	13,000	25.0	39,000	75.0
Oceanographers	4,000	1,000	25.0	3,000	75.0
Physicists and astronomers	36,000	4,000	11.1	31,000	86.1
Astronomers	5,000	1,000	20.0	3,000	60.0
Physicists, except biophysicists	31,000	3,000	9.7	28,000	90.3



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Other physical and related scientists	45,000	22,000	48.9	23,000	51.1
Postsecondary teachers—physical and related sciences	63,000	17,000	27.0	46,000	73.0
Chemistry	26,000	8,000	30.8	18,000	69.2
Earth, environmental, and marine science	15,000	4,000	26.7	11,000	73.3
Physics	22,000	5,000	22.7	17,000	77.3
Social and related scientists	581,000	358,000	61.6	223,000	38.4
Economists	37,000	18,000	48.6	19,000	51.4
Political scientists	18,000	10,000	55.6	8,000	44.4
Psychologists, including clinical	208,000	154,000	74.0	54,000	26.0
Sociologists and anthropologists	21,000	12,000	57.1	9,000	42.9
Anthropologists	11,000	7,000	63.6	4,000	36.4
Sociologists	10,000	5,000	50.0	5,000	50.0
Other social and related scientists	125,000	78,000	62.4	47,000	37.6
Postsecondary teachers—social and related sciences	172,000	85,000	49.4	86,000	50.0
Economics	26,000	7,000	26.9	19,000	73.1
Political science	19,000	5,000	26.3	14,000	73.7
Psychology	43,000	29,000	67.4	14,000	32.6
Sociology	22,000	14,000	63.6	8,000	36.4
Other social sciences	62,000	31,000	50.0	31,000	50.0
Engineers	1,564,000	233,000	14.9	1,331,000	85.1
Aerospace, aeronautical, or astronautical engineers	98,000	12,000	12.2	85,000	86.7
Chemical engineers	66,000	15,000	22.7	50,000	75.8
Civil, architectural, or sanitary engineers	223,000	39,000	17.5	184,000	82.5
Electrical or computer hardware engineers	345,000	37,000	10.7	308,000	89.3



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Computer engineer—hardware	69,000	9,000	13.0	60,000	87.0
Electrical and electronics engineers	276,000	28,000	10.1	248,000	89.9
Industrial engineers	70,000	12,000	17.1	58,000	82.9
Mechanical engineers	302,000	24,000	7.9	277,000	91.7
Other engineers	419,000	84,000	20.0	335,000	80.0
Agricultural engineers	6,000	S	S	6,000	100.0
Bioengineers or biomedical engineers	28,000	9,000	32.1	19,000	67.9
Environmental engineers	68,000	23,000	33.8	45,000	66.2
Marine engineers and naval architects	10,000	S	S	9,000	90.0
Materials and metallurgical engineers	38,000	9,000	23.7	29,000	76.3
Mining and geological engineers	7,000	S	S	6,000	85.7
Nuclear engineers	23,000	5,000	21.7	19,000	82.6
Petroleum engineers	20,000	2,000	10.0	17,000	85.0
Sales engineers	88,000	11,000	12.5	77,000	87.5
Other engineers	131,000	22,000	16.8	108,000	82.4
Postsecondary teachers—engineering	42,000	10,000	23.8	32,000	76.2
S&E-related occupations	7,439,000	4,196,000	56.4	3,243,000	43.6
Health-related occupations	4,590,000	3,153,000	68.7	1,437,000	31.3
Diagnosing/treating practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)	1,109,000	407,000	36.7	702,000	63.3
Registered nurses, pharmacists, dieticians, therapists, physician assistants, nurse practitioners	2,195,000	1,830,000	83.4	365,000	16.6
Health technologists and technicians (e.g., dental hygienists, health record technicians, licensed practical nurses, laboratory/radiology technicians)	521,000	366,000	70.2	154,000	29.6
Other health occupations	620,000	448,000	72.3	172,000	27.7



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Postsecondary teachers—health and related sciences	145,000	102,000	70.3	44,000	30.3
S&E managers	902,000	278,000	30.8	624,000	69.2
Computer and information systems managers	212,000	50,000	23.6	162,000	76.4
Engineering managers	318,000	35,000	11.0	282,000	88.7
Medical and health services managers	322,000	177,000	55.0	146,000	45.3
Natural sciences managers	50,000	16,000	32.0	34,000	68.0
S&E precollege teachers	968,000	541,000	55.9	428,000	44.2
Secondary—computer, math, or sciences	636,000	385,000	60.5	250,000	39.3
Secondary—social sciences	333,000	156,000	46.8	177,000	53.2
S&E technicians and technologists	778,000	175,000	22.5	603,000	77.5
Technologists and technicians in the biological/life sciences	93,000	58,000	62.4	34,000	36.6
Computer programmers (business, scientific, process control)	177,000	47,000	26.6	130,000	73.4
Electrical, electronic, industrial, and mechanical technicians	247,000	18,000	7.3	229,000	92.7
Drafting occupations, including computer drafting	26,000	3,000	11.5	22,000	84.6
Surveying and mapping technicians	18,000	4,000	22.2	13,000	72.2
Other engineering technologists and technicians	148,000	26,000	17.6	123,000	83.1
Surveyors, cartographers, photogrammetrists	36,000	11,000	30.6	25,000	69.4
Technologists and technicians in the mathematical sciences	S	S	S	S	S
Technologists and technicians in the physical sciences	34,000	8,000	23.5	26,000	76.5
Other S&E-related occupations	201,000	49,000	24.4	152,000	75.6
Architects	172,000	40,000	23.3	132,000	76.7
Actuaries	29,000	9,000	31.0	20,000	69.0
Non-S&E occupations	10,368,000	4,999,000	48.2	5,369,000	51.8
Non-S&E managers	1,684,000	450,000	26.7	1,234,000	73.3



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Top-level managers, executives, administrators (e.g., chief executive officer/chief operating officer/chief financial officer, president, district/general manager/provost)	1,005,000	248,000	24.7	757,000	75.3
Education administrators (e.g., registrar, dean, principal)	114,000	48,000	42.1	66,000	57.9
Other mid-level managers	566,000	155,000	27.4	411,000	72.6
Management-related occupations	1,794,000	847,000	47.2	948,000	52.8
Accountants, auditors, and other financial specialists	627,000	274,000	43.7	353,000	56.3
Personnel, training, and labor relations specialists	231,000	146,000	63.2	85,000	36.8
Other management-related occupations	937,000	426,000	45.5	510,000	54.4
Non-S&E precollege teachers	821,000	666,000	81.1	156,000	19.0
Prekindergarten and kindergarten	88,000	86,000	97.7	2,000	2.3
Elementary	349,000	310,000	88.8	39,000	11.2
Secondary—other subjects	147,000	81,000	55.1	65,000	44.2
Special education—primary and secondary	167,000	140,000	83.8	27,000	16.2
Other precollegiate area	70,000	48,000	68.6	22,000	31.4
Non-S&E postsecondary teachers	188,000	90,000	47.9	97,000	51.6
Art, drama, and music	7,000	2,000	28.6	5,000	71.4
Business, commerce, and marketing	31,000	8,000	25.8	23,000	74.2
Education	38,000	27,000	71.1	11,000	28.9
English	24,000	16,000	66.7	8,000	33.3
Foreign language	10,000	4,000	40.0	6,000	60.0
History	10,000	4,000	40.0	7,000	70.0
Physical education	7,000	S	S	6,000	85.7
Other postsecondary fields	61,000	30,000	49.2	32,000	52.5
Social services and related occupations	844,000	617,000	73.1	227,000	26.9



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Clergy and other religious workers	99,000	39,000	39.4	60,000	60.6
Counselors (e.g., educational, vocational, mental health, and substance abuse)	388,000	293,000	75.5	95,000	24.5
Social workers	357,000	285,000	79.8	72,000	20.2
Sales and marketing occupations	1,419,000	627,000	44.2	793,000	55.9
Insurance, securities, real estate, and business services	377,000	149,000	39.5	228,000	60.5
Sales—commodities, except retail (e.g., industrial/medical/dental machinery, equipment, supplies)	243,000	69,000	28.4	174,000	71.6
Sales—retail (e.g., furnishings, clothing, motor vehicles, cosmetics)	340,000	171,000	50.3	169,000	49.7
Other marketing and sales occupations	459,000	237,000	51.6	222,000	48.4
Arts, humanities, and related occupations	316,000	175,000	55.4	141,000	44.6
Writers, editors, public relations specialists, artists, entertainers, broadcasters	314,000	174,000	55.4	140,000	44.6
Historians	2,000	1,000	50.0	S	S
Other non-S&E occupations	3,302,000	1,527,000	46.2	1,775,000	53.8
Accounting clerks and bookkeepers	160,000	120,000	75.0	40,000	25.0
Secretaries, receptionists, typists	214,000	199,000	93.0	15,000	7.0
Other administrative (e.g., record clerks, telephone operators)	535,000	328,000	61.3	207,000	38.7
Farmers, foresters, and fishermen	115,000	36,000	31.3	78,000	67.8
Lawyers, judges	606,000	222,000	36.6	384,000	63.4
Librarians, archivists, curators	81,000	67,000	82.7	13,000	16.0
Food preparation and service (e.g., cooks, waitresses, bartenders)	161,000	77,000	47.8	85,000	52.8
Protective services (e.g., firefighters, police, guards, wardens, park rangers)	208,000	29,000	13.9	180,000	86.5
Other service occupations, except health (e.g., probation officers, human services work)	385,000	195,000	50.6	190,000	49.4
Other teachers and instructors (e.g., private tutors, dance, flying, martial arts)	171,000	96,000	56.1	74,000	43.3
Construction and extraction occupations	104,000	8,000	7.7	96,000	92.3



Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Installation, maintenance, and repair occupations	99,000	5,000	5.1	95,000	96.0
Precision/production occupations (e.g., metal/wood workers, butchers, bakers, assemblers, tailors)	144,000	43,000	29.9	101,000	70.1
Transportation and material moving occupations	174,000	18,000	10.3	156,000	89.7
Other occupations	146,000	85,000	58.2	61,000	41.8

NOTES: S = suppressed for reasons of confidentiality and/or reliability.  
 Scientists and engineers include those with one or more S&E or S&E-related degrees at the bachelor's level or higher and those who have only a non-S&E degree at the bachelor's level or higher and are employed in an S&E or S&E-related occupation. Detail may not add to total because of rounding. Numbers are rounded to the nearest 1,000. Percentages are based on rounded numbers.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Scientists and Engineers Statistical Data System (SESTAT) (2013), <http://sestat.nsf.gov/>.  
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