

Appendix table 3-13

Employed scientists and engineers, by sex and occupation: 2010

Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
All occupations	21,903,000	9,765,000	44.6	12,138,000	55.4
S&E occupations	5,398,000	1,487,000	27.5	3,911,000	72.5
Computer and mathematical scientists	2,394,000	602,000	25.1	1,791,000	74.8
Computer and information scientists	2,179,000	509,000	23.4	1,670,000	76.6
Computer and information scientists, research	35,000	12,000	34.3	23,000	65.7
Computer network architect	42,000	2,000	4.8	40,000	95.2
Computer support specialists	219,000	67,000	30.6	152,000	69.4
Computer system analysts	325,000	97,000	29.8	228,000	70.2
Database administrators	107,000	30,000	28.0	78,000	72.9
Information security analysts	37,000	6,000	16.2	31,000	83.8
Network and computer systems administrators	181,000	24,000	13.3	157,000	86.7
Software developers—applications and systems software	431,000	88,000	20.4	343,000	79.6
Web developers	130,000	47,000	36.2	83,000	63.8
Other computer information science occupations	236,000	75,000	31.8	161,000	68.2
Computer engineers—software	435,000	61,000	14.0	374,000	86.0
Mathematical scientists	121,000	55,000	45.5	66,000	54.5
Mathematicians	12,000	S	S	3,000	S
Operations research analysts, including modeling	53,000	21,000	39.6	32,000	60.4
Statisticians	41,000	22,000	53.7	19,000	46.3
Other mathematical scientists	S	3,000	S	S	S
Postsecondary teachers—computer and mathematical sciences	94,000	38,000	40.4	56,000	59.6
Computer science	25,000	8,000	32.0	17,000	68.0
Mathematics and statistics	69,000	30,000	43.5	39,000	56.5
Biological, agricultural, and environmental life scientists	597,000	288,000	48.2	309,000	51.8
Agricultural and food scientists	62,000	23,000	37.1	39,000	62.9
Biological and medical scientists	426,000	223,000	52.3	204,000	47.9
Biochemists and biophysicists	58,000	24,000	41.4	34,000	58.6
Biological scientists (e.g., botanists, ecologists, zoologists)	129,000	64,000	49.6	65,000	50.4
Medical scientists (excluding practitioners)	130,000	64,000	49.2	67,000	51.5
Other biological and life scientists	109,000	71,000	65.1	38,000	34.9
Forestry and conservation scientists	31,000	10,000	32.3	21,000	67.7
Postsecondary teachers—life and related sciences	77,000	32,000	41.6	45,000	58.4
Agriculture	6,000	2,000	33.3	4,000	66.7
Biological sciences	62,000	27,000	43.5	34,000	54.8
Other natural sciences	9,000	3,000	33.3	6,000	66.7
Physical and related scientists	320,000	96,000	30.0	225,000	70.3
Chemists, except biochemists	103,000	37,000	35.9	66,000	64.1
Earth scientists, geologists, and oceanographers	69,000	16,000	23.2	53,000	76.8
Atmospheric and space scientists	14,000	2,000	14.3	12,000	85.7
Geologists, including earth scientists	50,000	13,000	26.0	38,000	76.0
Oceanographers	5,000	1,000	20.0	3,000	60.0
Physicists and astronomers	34,000	6,000	17.6	28,000	82.4
Astronomers	4,000	1,000	25.0	3,000	75.0
Physicists, except biophysicists	31,000	5,000	16.1	25,000	80.6
Other physical and related scientists	46,000	16,000	34.8	30,000	65.2
Postsecondary teachers—physical and related sciences	67,000	20,000	29.9	47,000	70.1
Chemistry	29,000	9,000	31.0	20,000	69.0
Earth, environmental, and marine science	19,000	8,000	42.1	11,000	57.9
Physics	19,000	3,000	15.8	16,000	84.2
Social and related scientists	518,000	301,000	58.1	217,000	41.9
Economists	30,000	11,000	36.7	19,000	63.3
Political scientists	23,000	S	S	6,000	26.1
Psychologists, including clinical	171,000	119,000	69.6	52,000	30.4
Sociologists and anthropologists	18,000	9,000	50.0	9,000	50.0
Anthropologists	11,000	4,000	36.4	6,000	54.5

Appendix table 3-13

Employed scientists and engineers, by sex and occupation: 2010

Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Sociologists	8,000	5,000	62.5	3,000	37.5
Other social and related scientists	126,000	74,000	58.7	52,000	41.3
Postsecondary teachers—social and related sciences	150,000	72,000	48.0	78,000	52.0
Economics	19,000	5,000	26.3	14,000	73.7
Political science	18,000	5,000	27.8	13,000	72.2
Psychology	38,000	22,000	57.9	16,000	42.1
Sociology	19,000	10,000	52.6	8,000	42.1
Other social sciences	56,000	29,000	51.8	27,000	48.2
Engineers	1,569,000	200,000	12.7	1,369,000	87.3
Aerospace, aeronautical, or astronautical engineers	91,000	10,000	11.0	81,000	89.0
Chemical engineers	69,000	13,000	18.8	55,000	79.7
Civil, architectural, or sanitary engineers	228,000	34,000	14.9	193,000	84.6
Electrical or computer hardware engineers	385,000	46,000	11.9	340,000	88.3
Computer engineer—hardware	70,000	15,000	21.4	55,000	78.6
Electrical and electronics engineers	316,000	31,000	9.8	285,000	90.2
Industrial engineers	74,000	13,000	17.6	61,000	82.4
Mechanical engineers	299,000	22,000	7.4	277,000	92.6
Other engineers	380,000	56,000	14.7	324,000	85.3
Agricultural engineers	7,000	S	S	7,000	100.0
Bioengineers or biomedical engineers	22,000	4,000	18.2	17,000	77.3
Environmental engineers	64,000	17,000	26.6	47,000	73.4
Marine engineers and naval architects	10,000	1,000	10.0	10,000	100.0
Materials and metallurgical engineers	32,000	4,000	12.5	28,000	87.5
Mining and geological engineers	7,000	1,000	14.3	6,000	85.7
Nuclear engineers	21,000	4,000	19.0	17,000	81.0
Petroleum engineers	19,000	2,000	10.5	16,000	84.2
Sales engineers	63,000	6,000	9.5	56,000	88.9
Other engineers	136,000	17,000	12.5	119,000	87.5
Postsecondary teachers—engineering	43,000	5,000	11.6	38,000	88.4
S&E-related occupations	6,957,000	3,898,000	56.0	3,059,000	44.0
Health-related occupations	4,325,000	2,953,000	68.3	1,373,000	31.7
Diagnosing/treating practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)	1,051,000	375,000	35.7	676,000	64.3
Registered nurses, pharmacists, dieticians, therapists, physician assistants, nurse practitioners	1,977,000	1,655,000	83.7	322,000	16.3
Health technologists and technicians (e.g., dental hygienists, health record technicians, licensed practical nurses, laboratory/radiology technicians)	504,000	368,000	73.0	136,000	27.0
Other health occupations	652,000	460,000	70.6	191,000	29.3
Postsecondary teachers—health and related sciences	141,000	94,000	66.7	47,000	33.3
S&E managers	861,000	260,000	30.2	601,000	69.8
Computer and information systems managers	237,000	65,000	27.4	172,000	72.6
Engineering managers	272,000	33,000	12.1	239,000	87.9
Medical and health services managers	309,000	153,000	49.5	156,000	50.5
Natural sciences managers	43,000	9,000	20.9	34,000	79.1
S&E precollege teachers	917,000	480,000	52.3	437,000	47.7
Secondary—computer, math, or sciences	618,000	382,000	61.8	236,000	38.2
Secondary—social sciences	299,000	98,000	32.8	202,000	67.6
S&E technicians and technologists	654,000	157,000	24.0	497,000	76.0
Technologists and technicians in the biological/life sciences	92,000	56,000	60.9	36,000	39.1
Computer programmers (business, scientific, process control)	189,000	59,000	31.2	130,000	68.8
Electrical, electronic, industrial, and mechanical technicians	165,000	8,000	4.8	157,000	95.2
Drafting occupations, including computer drafting	32,000	5,000	15.6	27,000	84.4
Surveying and mapping technicians	8,000	2,000	25.0	6,000	75.0
Other engineering technologists and technicians	118,000	20,000	16.9	99,000	83.9

Appendix table 3-13

Employed scientists and engineers, by sex and occupation: 2010

Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Surveyors, cartographers, photogrammetrists	15,000	S	S	13,000	86.7
Technologists and technicians in the mathematical sciences	S	S	S	S	S
Technologists and technicians in the physical sciences	31,000	4,000	12.9	27,000	87.1
Other S&E-related occupations	199,000	48,000	24.1	150,000	75.4
Architects	158,000	33,000	20.9	124,000	78.5
Actuaries	41,000	15,000	36.6	26,000	63.4
Non-S&E occupations	9,549,000	4,380,000	45.9	5,169,000	54.1
Non-S&E managers	1,655,000	405,000	24.5	1,250,000	75.5
Top-level managers, executives, administrators (e.g., chief executive officer/chief operating officer/chief financial officer, president, district/general manager/provost)	1,014,000	214,000	21.1	800,000	78.9
Education administrators (e.g., registrar, dean, principal)	116,000	48,000	41.4	69,000	59.5
Other mid-level managers	524,000	143,000	27.3	381,000	72.7
Management-related occupations	1,665,000	740,000	44.4	925,000	55.6
Accountants, auditors, and other financial specialists	587,000	234,000	39.9	353,000	60.1
Personnel, training, and labor relations specialists	217,000	148,000	68.2	69,000	31.8
Other management-related occupations	860,000	358,000	41.6	502,000	58.4
Non-S&E precollege teachers	763,000	599,000	78.5	164,000	21.5
Prekindergarten and kindergarten	78,000	73,000	93.6	5,000	6.4
Elementary	310,000	263,000	84.8	47,000	15.2
Secondary—other subjects	138,000	79,000	57.2	59,000	42.8
Special education—primary and secondary	162,000	134,000	82.7	28,000	17.3
Other precollegiate area	75,000	50,000	66.7	26,000	34.7
Non-S&E postsecondary teachers	159,000	77,000	48.4	82,000	51.6
Art, drama, and music	7,000	3,000	42.9	4,000	57.1
Business, commerce, and marketing	30,000	8,000	26.7	22,000	73.3
Education	28,000	18,000	64.3	10,000	35.7
English	16,000	13,000	81.3	3,000	18.8
Foreign language	12,000	7,000	58.3	6,000	50.0
History	10,000	3,000	30.0	7,000	70.0
Physical education	5,000	S	S	4,000	80.0
Other postsecondary fields	52,000	25,000	48.1	26,000	50.0
Social services and related occupations	747,000	533,000	71.4	214,000	28.6
Clergy and other religious workers	101,000	34,000	33.7	68,000	67.3
Counselors (e.g., educational, vocational, mental health, and substance abuse)	339,000	259,000	76.4	81,000	23.9
Social workers	307,000	241,000	78.5	66,000	21.5
Sales and marketing occupations	1,351,000	515,000	38.1	836,000	61.9
Insurance, securities, real estate, and business services	393,000	135,000	34.4	258,000	65.6
Sales—commodities, except retail (e.g., industrial/medical/dental machinery, equipment, supplies)	216,000	58,000	26.9	157,000	72.7
Sales—retail (e.g., furnishings, clothing, motor vehicles, cosmetics)	295,000	139,000	47.1	156,000	52.9
Other marketing and sales occupations	448,000	184,000	41.1	264,000	58.9
Arts, humanities, and related occupations	296,000	149,000	50.3	148,000	50.0
Writers, editors, public relations specialists, artists, entertainers, broadcasters	291,000	146,000	50.2	144,000	49.5
Historians	6,000	3,000	50.0	3,000	50.0
Other non-S&E occupations	2,912,000	1,362,000	46.8	1,550,000	53.2
Accounting clerks and bookkeepers	113,000	91,000	80.5	22,000	19.5
Secretaries, receptionists, typists	171,000	155,000	90.6	16,000	9.4
Other administrative (e.g., record clerks, telephone operators)	373,000	259,000	69.4	114,000	30.6
Farmers, foresters, and fishermen	95,000	21,000	22.1	73,000	76.8
Lawyers, judges	614,000	232,000	37.8	382,000	62.2
Librarians, archivists, curators	62,000	46,000	74.2	16,000	25.8
Food preparation and service (e.g., cooks, waitresses, bartenders)	154,000	78,000	50.6	76,000	49.4

Employed scientists and engineers, by sex and occupation: 2010

Occupation	Total	Female		Male	
		Number	Percent	Number	Percent
Protective services (e.g., firefighters, police, guards, wardens, park rangers)	148,000	22,000	14.9	126,000	85.1
Other service occupations, except health (e.g., probation officers, human services work)	366,000	201,000	54.9	165,000	45.1
Other teachers and instructors (e.g., private tutors, dance, flying, martial arts)	177,000	114,000	64.4	63,000	35.6
Construction and extraction occupations	106,000	5,000	4.7	101,000	95.3
Installation, maintenance, and repair occupations	107,000	7,000	6.5	100,000	93.5
Precision/production occupations (e.g., metal/wood workers, butchers, bakers, assemblers, tailors)	110,000	27,000	24.5	84,000	76.4
Transportation and material moving occupations	162,000	18,000	11.1	144,000	88.9
Other occupations	154,000	85,000	55.2	69,000	44.8

S = suppressed for reasons of confidentiality and/or reliability.

NOTES: Scientists and engineers include those with one or more S&E or S&E-related degrees at the bachelor's level or higher or 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) (2010), <http://sestat.nsf.gov/>.