TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–21

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019	2021
Employed scientists and engineers	4,588,000	5,374,000	5,766,000	6,407,000	6,769,000	7,466,000	7,894,000
S&E fields	3,319,000	3,971,000	4,350,000	4,854,000	5,085,000	5,709,000	6,059,000
Biological, agricultural, and environmental life sciences	415,000	539,000	587,000	624,000	633,000	705,000	768,000
Agricultural and food sciences	47,000	71,000	61,000	60,000	57,000	59,000	73,000
Biological sciences	316,000	410,000	464,000	495,000	522,000	565,000	610,000
Environmental life sciences	53,000	58,000	61,000	69,000	53,000	80,000	85,000
Computer and mathematical sciences	751,000	1,023,000	1,195,000	1,350,000	1,437,000	1,670,000	1,795,000
Computer and information sciences	575,000	831,000	997,000	1,153,000	1,257,000	1,427,000	1,556,000
Mathematics and statistics	176,000	192,000	197,000	197,000	180,000	243,000	239,000
Physical and related sciences	330,000	354,000	359,000	386,000	366,000	422,000	461,000
Chemistry, except biochemistry	147,000	154,000	158,000	173,000	156,000	179,000	189,000
Earth, atmospheric, and ocean sciences	86,000	92,000	96,000	100,000	93,000	108,000	120,000
Physics and astronomy	87,000	100,000	100,000	109,000	109,000	131,000	146,000
Other physical sciences	9,000	8,000	5,000	4,000	8,000	4,000	6,000
Social and related sciences	462,000	556,000	599,000	660,000	679,000	754,000	758,000
Economics	67,000	80,000	78,000	98,000	115,000	130,000	123,000
Political and related sciences	61,000	89,000	82,000	89,000	107,000	107,000	115,000
Psychology	237,000	260,000	296,000	309,000	306,000	341,000	337,000
Sociology and anthropology	61,000	66,000	78,000	88,000	95,000	102,000	112,000
Other social sciences	36,000	61,000	65,000	75,000	58,000	74,000	71,000
Engineering	1,362,000	1,498,000	1,611,000	1,834,000	1,970,000	2,159,000	2,277,000
Aerospace, aeronautical, and astronautical engineering	42,000	44,000	46,000	62,000	58,000	81,000	84,000
Chemical engineering	89,000	95,000	101,000	114,000	129,000	138,000	148,000
Civil and architectural engineering	225,000	223,000	229,000	235,000	250,000	284,000	296,000
Electrical and computer engineering	497,000	580,000	621,000	739,000	820,000	849,000	885,000
Industrial engineering	57,000	62,000	73,000	80,000	83,000	86,000	82,000
Mechanical engineering	278,000	308,000	338,000	396,000	387,000	452,000	500,000
Other engineering	174,000	186,000	202,000	209,000	243,000	269,000	283,000
S&E-related fields	274,000	329,000	326,000	367,000	382,000	428,000	439,000
Health	93,000	119,000	117,000	133,000	146,000	164,000	190,000
Science and mathematics teacher education	23,000	23,000	30,000	23,000	29,000	29,000	30,000
Technology and technical fields	130,000	153,000	135,000	168,000	173,000	186,000	170,000
Other S&E-related fields	28,000	34,000	43,000	44,000	35,000	49,000	48,000
Non-S&E fields	995,000	1,074,000	1,090,000	1,186,000	1,301,000	1,330,000	1,396,000
Management and administration fields	511,000	567,000	514,000	559,000	573,000	666,000	647,000
Education, except science and math teacher education	92,000	57,000	54,000	62,000	98,000	76,000	94,000
Social service and related fields	47,000	57,000	70,000	66,000	58,000	77,000	77,000
Sales and marketing fields	52,000	42,000	33,000	43,000	103,000	53,000	61,000
Art and humanities fields	146,000	183,000	192,000	229,000	226,000	224,000	273,000
Other non-S&E fields	147,000	168,000	227,000	228,000	242,000	233,000	244,000
Bachelor's	2,529,000	2,980,000	3,288,000	3,518,000	3,846,000	4,176,000	4,438,000
S&E fields	1,821,000	2,204,000	2,482,000	2,707,000	2,918,000	3,251,000	3,499,000
Biological, agricultural, and environmental life sciences	184,000	237,000	291,000	270,000	321,000	344,000	371,000
Agricultural and food sciences	23,000	35,000	28,000	22,000	24,000	31,000	39,000
Biological sciences	125,000	170,000	223,000	204,000	265,000	266,000	281,000
Environmental life sciences	36,000	32,000	39,000	44,000	31,000	47,000	51,000
Computer and mathematical sciences	454,000	640,000	757,000	808,000	879,000	1,032,000	1,137,000
Computer and information sciences	366,000	552,000	661,000	721,000	807,000	915,000	1,024,000
Mathematics and statistics	88,000	88,000	95,000	87,000	72,000	117,000	113,000
Physical and related sciences	144,000	148,000	150,000	159,000	147,000	194,000	199,000
Chemistry, except biochemistry	68,000	73,000	73,000	86,000	73,000	91,000	93,000

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–21

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019	2021
Earth, atmospheric, and ocean sciences	42,000	38,000	40,000	39,000	39,000	59,000	54,000
Physics and astronomy	29,000	33,000	33,000	31,000	29,000	40,000	49,000
Other physical sciences	5,000	4,000	4,000	S	7,000	S	S
Social and related sciences	159,000	207,000	226,000	272,000	305,000	327,000	321,000
Economics	34,000	37,000	38,000	57,000	70,000	79,000	67,000
Political and related sciences	35,000	37,000	39,000	33,000	52,000	48,000	52,000
Psychology	45,000	73,000	77,000	88,000	101,000	116,000	108,000
Sociology and anthropology	26,000	26,000	38,000	42,000	50,000	45,000	54,000
Other social sciences	19,000	34,000	35,000	51,000	32,000	39,000	39,000
Engineering	880,000	973,000	1,058,000	1,197,000	1,265,000	1,355,000	1,470,000
Aerospace, aeronautical, and astronautical engineering	25,000	22,000	29,000	40,000	32,000	47,000	47,000
Chemical engineering	59,000	66,000	71,000	83,000	95,000	98,000	112,000
Civil and architectural engineering	157,000	163,000	154,000	150,000	169,000	182,000	194,000
Electrical and computer engineering	312,000	364,000	402,000	476,000	516,000	523,000	569,000
Industrial engineering	37,000	38,000	54,000	53,000	51,000	54,000	46,000
Mechanical engineering	205,000	229,000	247,000	297,000	284,000	325,000	372,000
Other engineering	84,000	91,000	99,000	98,000	118,000	125,000	130,000
S&E-related fields	151,000	180,000	170,000	183,000	189,000	193,000	203,000
Health	28,000	44,000	37,000	43,000	43,000	36,000	57,000
Science and mathematics teacher education	7,000	10,000	8,000	5,000	5,000	4,000	S
Technology and technical fields	102,000	115,000	109,000	117,000	125,000	132,000	117,000
Other S&E-related fields	13,000	12,000	16,000	18,000	16,000	21,000	18,000
Non-S&E fields	558,000	596,000	637,000	628,000	740,000	732,000	736,000
Management and administration fields	263,000	309,000	264,000	263,000	274,000	344,000	292,000
Education, except science and math teacher education	37,000	22,000	19,000	18,000	38,000	28,000	32,000
Social service and related fields	17,000	14,000	22,000	15,000	17,000	22,000	26,000
Sales and marketing fields	33,000	31,000	21,000	24,000	83,000	37,000	44,000
Art and humanities fields	123,000	149,000	164,000	191,000	197,000	189,000	231,000
Other non-S&E fields	85,000	71,000	146,000	117,000	130,000	112,000	112,000
Master's	1,406,000	1,644,000	1,689,000	2,076,000	2,069,000	2,286,000	2,411,000
S&E fields	929,000	1,126,000	1,192,000	1,461,000	1,442,000	1,589,000	1,671,000
Biological, agricultural, and environmental life sciences	82,000	123,000	119,000	175,000	123,000	132,000	157,000
Agricultural and food sciences	9,000	25,000	23,000	29,000	21,000	13,000	20,000
Biological sciences	57,000	78,000	79,000	125,000	83,000	90,000	107,000
Environmental life sciences	15,000	20,000	17,000	21,000	18,000	28,000	29,000
Computer and mathematical sciences	246,000	321,000	375,000	474,000	482,000	543,000	560,000
Computer and information sciences	194,000	255,000	308,000	401,000	411,000	463,000	481,000
Mathematics and statistics	52,000	65,000	67,000	73,000	70,000	81,000	79,000
Physical and related sciences	75,000	78,000	81,000	91,000	98,000	88,000	106,000
Chemistry, except biochemistry	26,000	24,000	26,000	25,000	32,000	26,000	28,000
Earth, atmospheric, and ocean sciences	29,000	32,000	34,000	41,000	38,000	28,000	39,000
Physics and astronomy	19,000	19,000	20,000	24,000	27,000	33,000	37,000
Other physical sciences	1,000	3,000	1,000	1,000	1,000	1,000	S
Social and related sciences	146,000	179,000	182,000	203,000	176,000	194,000	212,000
Economics	17,000	17,000	19,000	20,000	20,000	26,000	30,000
Political and related sciences	17,000	37,000	27,000	39,000	37,000	34,000	46,000
Psychology	84,000	82,000	99,000	102,000	87,000	92,000	96,000
Sociology and anthropology	18,000	20,000	16,000	24,000	18,000	19,000	22,000
Other social sciences	10,000	23,000	21,000	16,000	14,000	23,000	18,000
Engineering	381,000	425,000	434,000	518,000	563,000	632,000	635,000
Aerospace, aeronautical, and astronautical engineering	12,000	16,000	13,000	17,000	22,000	27,000	29,000

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–21

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019	2021
Chemical engineering	18,000	16,000	18,000	18,000	21,000	17,000	19,000
Civil and architectural engineering	58,000	53,000	63,000	76,000	69,000	85,000	85,000
Electrical and computer engineering	152,000	183,000	179,000	227,000	257,000	273,000	262,000
Industrial engineering	18,000	22,000	17,000	21,000	28,000	26,000	31,000
Mechanical engineering	60,000	67,000	70,000	79,000	79,000	104,000	107,000
Other engineering	65,000	69,000	75,000	81,000	86,000	101,000	102,000
S&E-related fields	81,000	99,000	102,000	125,000	131,000	172,000	156,000
Health	28,000	33,000	35,000	42,000	52,000	76,000	65,000
Science and mathematics teacher education	13,000	10,000	18,000	14,000	19,000	21,000	14,000
Technology and technical fields	26,000	34,000	24,000	44,000	43,000	49,000	48,000
Other S&E-related fields	14,000	21,000	25,000	25,000	17,000	27,000	28,000
Non-S&E fields	395,000	419,000	396,000	490,000	496,000	524,000	584,000
Management and administration fields	245,000	255,000	246,000	290,000	295,000	314,000	349,000
Education, except science and math teacher education	43,000	27,000	29,000	39,000	54,000	40,000	53,000
Social service and related fields	27,000	36,000	34,000	37,000	33,000	40,000	39,000
Sales and marketing fields	19,000	11,000	12,000	19,000	20,000	16,000	17,000
Art and humanities fields	20,000	27,000	24,000	32,000	25,000	30,000	38,000
Other non-S&E fields	41,000	64,000	52,000	73,000	69,000	84,000	89,000
Doctorate	605,000	692,000	724,000	751,000	786,000	938,000	962,000
S&E fields	556,000	624,000	650,000	664,000	702,000	841,000	861,000
Biological, agricultural, and environmental life sciences	149,000	179,000	177,000	178,000	189,000	229,000	240,000
Agricultural and food sciences	14,000	11,000	10,000	9,000	12,000	15,000	14,000
Biological sciences	133,000	162,000	162,000	166,000	173,000	209,000	221,000
Environmental life sciences	2,000	6,000	5,000	3,000	4,000	5,000	5,000
Computer and mathematical sciences	51,000	63,000	63,000	68,000	76,000	94,000	98,000
Computer and information sciences	15,000	24,000	28,000	30,000	39,000	50,000	51,000
Mathematics and statistics	36,000	38,000	35,000	38,000	37,000	45,000	47,000
Physical and related sciences	111,000	128,000	128,000	136,000	121,000	140,000	155,000
Chemistry, except biochemistry	53,000	57,000	59,000	61,000	51,000	62,000	68,000
Earth, atmospheric, and ocean sciences	16,000	22,000	21,000	20,000	16,000	20,000	27,000
Physics and astronomy	40,000	48,000	47,000	54,000	52,000	58,000	59,000
Other physical sciences	2,000	S	S	D	S	*	1,000
Social and related sciences	144,000	154,000	164,000	162,000	174,000	207,000	196,000
Economics	17,000	26,000	22,000	21,000	25,000	25,000	26,000
Political and related sciences	10,000	15,000	16,000	16,000	17,000	25,000	16,000
Psychology	94,000	90,000	93,000	96,000	95,000	106,000	105,000
Sociology and anthropology	17,000	20,000	24,000	21,000	26,000	39,000	36,000
Other social sciences	6,000	3,000	9,000	8,000	11,000	12,000	14,000
Engineering	101,000	100,000	118,000	119,000	142,000	171,000	171,000
Aerospace, aeronautical, and astronautical engineering	5,000	5,000	4,000	5,000	4,000	8,000	7,000
Chemical engineering	12,000	13,000	12,000	13,000	13,000	23,000	17,000
Civil and architectural engineering	10,000	8,000	11,000	9,000	13,000	16,000	17,000
Electrical and computer engineering	33,000	33,000	40,000	36,000	46,000	53,000	54,000
Industrial engineering	2,000	3,000	2,000	6,000	4,000	6,000	5,000
Mechanical engineering	14,000	13,000	20,000	20,000	24,000	23,000	21,000
Other engineering	25,000	26,000	29,000	29,000	39,000	43,000	51,000
S&E-related fields	22,000	31,000	32,000	42,000	42,000	44,000	51,000
Health	17,000	23,000	24,000	31,000	31,000	33,000	40,000
Science and mathematics teacher education	3,000	3,000	4,000	3,000	5,000	5,000	5,000
Technology and technical fields	2,000	4,000	3,000	7,000	5,000	5,000	5,000
Other S&E-related fields	1,000	1,000	2,000	S	2,000	1,000	2,000

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–21

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019	2021
Non-S&E fields	27,000	36,000	42,000	45,000	41,000	53,000	50,000
Management and administration fields	3,000	3,000	3,000	S	4,000	9,000	6,000
Education, except science and math teacher education	12,000	8,000	7,000	6,000	5,000	8,000	9,000
Social service and related fields	3,000	8,000	14,000	13,000	9,000	15,000	13,000
Sales and marketing fields	D	D	D	D	D	D	D
Art and humanities fields	3,000	S	4,000	5,000	4,000	5,000	5,000
Other non-S&E fields	6,000	10,000	14,000	15,000	19,000	16,000	18,000
Professional	49,000	58,000	64,000	63,000	67,000	67,000	82,000
S&E fields	13,000	16,000	27,000	22,000	24,000	28,000	28,000
S&E-related fields	20,000	20,000	22,000	16,000	20,000	18,000	29,000
Non-S&E fields	15,000	22,000	15,000	24,000	24,000	21,000	25,000

* = suppressed when population estimate < 500. D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding. Scientists and engineers are bachelor's and higher degreed individuals living in the United States employed in an S&E occupation.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates.