

Table 9-6

## Employed scientists and engineers, by highest degree level, occupation, ethnicity, and race: 2019

(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
All degrees <sup>b</sup>	28,627,000	2,646,000	89,000	3,869,000	2,065,000	82,000	19,225,000	650,000
S&E occupations	7,466,000	564,000	S	1,543,000	379,000	17,000	4,784,000	158,000
Science occupations	5,545,000	405,000	S	1,212,000	302,000	9,000	3,479,000	121,000
Biological, agricultural, and other life scientist	698,000	64,000	1,000	157,000	23,000	D	439,000	14,000
Agricultural/ food scientist	58,000	10,000	D	9,000	2,000	D	36,000	D
Biological and medical scientist	500,000	40,000	S	130,000	18,000	D	300,000	12,000
Environmental life scientist	39,000	S	D	S	D	D	29,000	S
Postsecondary teacher	101,000	7,000	D	18,000	2,000	D	74,000	S
Computer and information scientist	3,409,000	214,000	S	885,000	189,000	6,000	2,017,000	84,000
Computer/ information scientist	3,379,000	210,000	S	877,000	188,000	6,000	2,000,000	83,000
Postsecondary teacher	30,000	4,000	D	8,000	1,000	D	17,000	1,000
Mathematical scientist	365,000	24,000	D	70,000	S	D	242,000	4,000
Mathematical scientist	284,000	20,000	D	55,000	S	D	183,000	3,000
Postsecondary teacher	81,000	3,000	D	15,000	2,000	D	59,000	1,000
Physical scientist	409,000	27,000	1,000	55,000	18,000	S	300,000	7,000
Chemist, except biochemist	132,000	9,000	D	19,000	7,000	*	95,000	S
Earth, atmospheric, and ocean scientist	85,000	3,000	D	5,000	*	D	74,000	1,000
Physicist	45,000	2,000	D	11,000	D	D	29,000	S
Other physical and related scientist, including astronomer	67,000	7,000	D	5,000	6,000	D	47,000	S
Postsecondary teacher	80,000	6,000	D	16,000	3,000	D	54,000	D
Psychologist	276,000	24,000	*	10,000	14,000	D	222,000	5,000
Psychologist	228,000	21,000	*	7,000	13,000	D	183,000	3,000
Postsecondary teacher	48,000	3,000	D	3,000	1,000	D	39,000	2,000
Social scientist	387,000	52,000	S	34,000	33,000	S	259,000	7,000
Economist	56,000	5,000	D	8,000	2,000	D	40,000	*
Political scientist	22,000	1,000	D	S	S	D	18,000	D
Anthropologist	16,000	1,000	D	D	D	D	12,000	S
Other social scientist, including sociologist	142,000	33,000	D	11,000	12,000	D	81,000	4,000
Postsecondary teacher	151,000	12,000	D	14,000	16,000	D	106,000	2,000
Engineering occupations	1,921,000	159,000	5,000	331,000	77,000	7,000	1,305,000	37,000
Aerospace, aeronautical, or astronautical engineer	126,000	13,000	D	17,000	3,000	D	88,000	2,000
Chemical engineer	84,000	4,000	D	14,000	5,000	D	60,000	S
Civil, architectural, or sanitary engineer	294,000	30,000	D	40,000	12,000	D	208,000	3,000
Electrical or computer hardware engineer	412,000	30,000	D	110,000	22,000	S	237,000	7,000
Industrial engineer	95,000	13,000	D	11,000	5,000	D	64,000	1,000

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## Employed scientists and engineers, by highest degree level, occupation, ethnicity, and race: 2019

(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Mechanical engineer	377,000	28,000	D	60,000	8,000	D	273,000	6,000
Other engineer	472,000	37,000	S	60,000	17,000	D	340,000	15,000
Postsecondary teacher	61,000	3,000	D	18,000	S	D	34,000	1,000
S&E-related occupations	8,893,000	821,000	29,000	1,151,000	613,000	30,000	6,053,000	198,000
Health-related occupation	5,728,000	491,000	23,000	754,000	399,000	25,000	3,895,000	139,000
S&E manager, including health	999,000	99,000	S	135,000	70,000	D	679,000	14,000
S&E pre-college teacher	925,000	95,000	1,000	34,000	54,000	1,000	719,000	21,000
S&E technician/technologist	973,000	115,000	3,000	189,000	84,000	S	560,000	20,000
Other S&E-related occupation	270,000	21,000	D	38,000	5,000	D	200,000	4,000
Non-S&E occupations <sup>c</sup>	12,267,000	1,261,000	39,000	1,176,000	1,074,000	35,000	8,388,000	295,000
Arts, humanities, and related occupation	305,000	21,000	D	24,000	11,000	D	236,000	11,000
Management-related occupation	2,534,000	234,000	S	299,000	234,000	14,000	1,696,000	49,000
Non-S&E manager	2,003,000	146,000	7,000	219,000	98,000	1,000	1,488,000	43,000
Non-S&E postsecondary teacher	191,000	18,000	D	17,000	14,000	D	139,000	2,000
Non-S&E precollege teacher	924,000	109,000	S	72,000	88,000	S	638,000	11,000
Sales and marketing occupation	1,444,000	146,000	2,000	144,000	81,000	S	1,032,000	32,000
Social service and related occupation	1,057,000	134,000	8,000	54,000	159,000	D	666,000	35,000
Other non-S&E occupation	3,810,000	453,000	9,000	347,000	389,000	8,000	2,493,000	110,000
Bachelor's	16,042,000	1,668,000	53,000	1,829,000	1,153,000	64,000	10,888,000	388,000
S&E occupations	4,176,000	372,000	S	636,000	219,000	11,000	2,810,000	109,000
Science occupation	3,017,000	262,000	S	502,000	170,000	6,000	1,979,000	83,000
Biological/ life scientist	277,000	36,000	1,000	34,000	10,000	D	187,000	8,000
Agricultural/ food science	29,000	S	D	S	D	D	20,000	D
Biological/ scientist	206,000	21,000	S	30,000	9,000	D	137,000	7,000
Forestry and conservation scientist	28,000	D	D	D	D	D	19,000	D
Postsecondary teacher	15,000	D	D	S	D	D	11,000	D
Computer and information scientist	2,277,000	170,000	S	427,000	139,000	S	1,454,000	68,000
Computer/ information scientist	2,271,000	168,000	S	426,000	139,000	S	1,451,000	67,000
Postsecondary teacher	6,000	D	D	S	D	D	3,000	D
Mathematical scientist	126,000	12,000	D	15,000	5,000	D	93,000	2,000
Mathematical scientist	115,000	10,000	D	13,000	S	D	86,000	S
Postsecondary teacher	11,000	1,000	D	S	D	D	7,000	D
Physical scientist	189,000	15,000	*	19,000	10,000	*	141,000	4,000
Chemist, except biochemist	71,000	6,000	D	8,000	5,000	*	50,000	S

Table 9-6

## Employed scientists and engineers, by highest degree level, occupation, ethnicity, and race: 2019

(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Earth scientist/ geologist/ oceanographer	45,000	1,000	D	1,000	D	D	43,000	*
Physicist/ astronomer	10,000	S	D	3,000	D	D	7,000	D
Other physical scientist	41,000	S	D	2,000	S	D	28,000	S
Postsecondary teachers	21,000	1,000	D	5,000	D	D	S	D
Psychologist	50,000	2,000	D	2,000	D	D	45,000	D
Psychologist	39,000	1,000	D	2,000	D	D	36,000	D
Postsecondary teacher	S	D	D	D	D	D	S	D
Social scientist	97,000	27,000	D	5,000	5,000	D	58,000	2,000
Economist	22,000	S	D	S	S	D	19,000	D
Political scientist	3,000	D	D	D	D	D	2,000	D
Sociologist/ anthropologist	3,000	D	D	D	D	D	2,000	D
Other social scientist	59,000	S	D	3,000	2,000	D	29,000	S
Postsecondary teacher	10,000	D	D	1,000	D	D	6,000	D
Engineering occupations	1,158,000	110,000	4,000	134,000	49,000	S	830,000	25,000
Aerospace engineer	68,000	8,000	D	9,000	S	D	45,000	S
Chemical engineer	50,000	3,000	D	4,000	S	D	41,000	S
Civil engineer	191,000	20,000	D	17,000	8,000	D	143,000	2,000
Electrical engineer	226,000	21,000	D	37,000	15,000	D	144,000	5,000
Industrial engineer	62,000	9,000	D	5,000	4,000	D	43,000	S
Mechanical engineer	247,000	20,000	D	26,000	7,000	D	191,000	2,000
Other engineer	308,000	28,000	D	33,000	11,000	D	222,000	13,000
Postsecondary teacher	7,000	D	D	S	D	D	2,000	D
S&E-related occupations	4,794,000	485,000	11,000	534,000	336,000	25,000	3,298,000	105,000
Health occupations	2,978,000	282,000	7,000	346,000	207,000	S	2,047,000	69,000
S&E managers, including health	501,000	47,000	*	53,000	31,000	D	361,000	9,000
S&E pre-college teacher	395,000	46,000	1,000	14,000	27,000	*	295,000	S
S&E technician/ technologist	738,000	96,000	3,000	103,000	68,000	S	450,000	15,000
Other S&E-related occupation	182,000	13,000	D	17,000	S	D	145,000	S
Non-S&E occupations <sup>c</sup>	7,072,000	811,000	23,000	658,000	597,000	28,000	4,780,000	174,000
Arts, humanities, and related occupation	157,000	8,000	D	13,000	10,000	D	123,000	4,000
Management-related occupation	1,531,000	137,000	S	149,000	116,000	14,000	1,075,000	34,000
Non-S&E manager	1,026,000	78,000	3,000	108,000	43,000	S	771,000	23,000
Non-S&E postsecondary teacher	23,000	3,000	D	S	S	D	15,000	D
Non-S&E precollege teacher	371,000	54,000	S	41,000	36,000	D	232,000	6,000
Sales and marketing occupation	1,082,000	115,000	1,000	98,000	58,000	S	778,000	23,000

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(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Social service and related occupation	418,000	73,000	S	20,000	57,000	D	251,000	14,000
Other non-S&E occupation	2,464,000	344,000	S	228,000	275,000	4,000	1,535,000	71,000
Master's	8,624,000	661,000	24,000	1,325,000	691,000	14,000	5,724,000	186,000
S&E occupations	2,286,000	136,000	3,000	650,000	115,000	5,000	1,340,000	37,000
Science occupation	1,667,000	94,000	2,000	502,000	91,000	3,000	948,000	28,000
Biological/ life scientist	152,000	14,000	D	31,000	7,000	D	97,000	3,000
Agricultural/ food science	15,000	S	D	3,000	S	D	9,000	D
Biological/ scientist	111,000	10,000	D	24,000	6,000	D	69,000	2,000
Forestry and conservation scientist	8,000	D	D	D	D	D	7,000	D
Postsecondary teacher	19,000	1,000	D	4,000	D	D	13,000	D
Computer and information scientist	1,014,000	40,000	D	409,000	46,000	D	502,000	16,000
Computer/ information scientist	1,001,000	39,000	D	406,000	46,000	D	494,000	15,000
Postsecondary teacher	13,000	D	D	3,000	D	D	8,000	D
Mathematical scientist	154,000	8,000	D	31,000	S	D	100,000	1,000
Mathematical scientist	115,000	7,000	D	27,000	S	D	68,000	1,000
Postsecondary teacher	39,000	1,000	D	5,000	*	D	32,000	D
Physical scientist	97,000	6,000	D	10,000	6,000	D	71,000	2,000
Chemist, except biochemist	32,000	2,000	D	3,000	1,000	D	26,000	D
Earth scientist/ geologist/ oceanographer	25,000	1,000	D	1,000	D	D	22,000	S
Physicist/ astronomer	11,000	*	D	2,000	D	D	6,000	D
Other physical scientist	17,000	S	D	S	S	D	12,000	D
Postsecondary teachers	12,000	2,000	D	2,000	D	D	6,000	D
Psychologist	101,000	11,000	D	3,000	S	D	78,000	2,000
Psychologist	91,000	10,000	D	2,000	S	D	71,000	S
Postsecondary teacher	11,000	S	D	D	D	D	7,000	D
Social scientist	148,000	15,000	D	18,000	11,000	S	99,000	4,000
Economist	18,000	2,000	D	4,000	S	D	11,000	*
Political scientist	15,000	1,000	D	S	D	D	13,000	D
Sociologist/ anthropologist	5,000	*	D	D	D	D	3,000	D
Other social scientist	60,000	8,000	D	6,000	7,000	D	37,000	S
Postsecondary teacher	50,000	3,000	D	8,000	S	D	35,000	S
Engineering occupations	619,000	42,000	S	148,000	25,000	2,000	392,000	10,000
Aerospace engineer	51,000	4,000	D	7,000	S	D	37,000	S
Chemical engineer	20,000	1,000	D	3,000	S	D	14,000	D
Civil engineer	94,000	9,000	D	22,000	3,000	D	58,000	1,000
Electrical engineer	153,000	8,000	D	59,000	7,000	D	77,000	1,000
Industrial engineer	32,000	4,000	D	5,000	S	D	21,000	1,000

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## Employed scientists and engineers, by highest degree level, occupation, ethnicity, and race: 2019

(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Mechanical engineer	114,000	7,000	D	28,000	1,000	D	74,000	3,000
Other engineer	139,000	9,000	D	19,000	5,000	D	103,000	2,000
Postsecondary teacher	16,000	D	D	5,000	D	D	8,000	D
S&E-related occupations	2,332,000	175,000	S	278,000	176,000	2,000	1,641,000	52,000
Health occupations	1,213,000	70,000	S	113,000	112,000	S	871,000	39,000
S&E managers, including health	347,000	37,000	S	62,000	23,000	D	220,000	3,000
S&E pre-college teacher	493,000	46,000	*	18,000	26,000	D	399,000	4,000
S&E technician/technologist	193,000	13,000	D	64,000	14,000	D	97,000	5,000
Other S&E-related occupation	86,000	8,000	D	20,000	2,000	D	54,000	S
Non-S&E occupations <sup>c</sup>	4,005,000	351,000	12,000	397,000	400,000	6,000	2,743,000	96,000
Arts, humanities, and related occupation	123,000	11,000	D	9,000	1,000	D	94,000	8,000
Management-related occupation	907,000	90,000	2,000	129,000	111,000	S	561,000	13,000
Non-S&E manager	778,000	58,000	4,000	89,000	44,000	D	567,000	15,000
Non-S&E postsecondary teacher	61,000	8,000	D	5,000	5,000	D	43,000	1,000
Non-S&E precollege teacher	534,000	49,000	S	31,000	50,000	D	395,000	6,000
Sales and marketing occupation	320,000	24,000	D	41,000	20,000	D	226,000	9,000
Social service and related occupation	582,000	56,000	S	27,000	87,000	D	386,000	21,000
Other non-S&E occupation	701,000	56,000	*	66,000	81,000	S	471,000	22,000
Doctorate	1,761,000	115,000	3,000	399,000	110,000	S	1,104,000	29,000
S&E occupations	938,000	49,000	1,000	243,000	40,000	D	596,000	10,000
Science occupation	799,000	43,000	1,000	194,000	37,000	D	517,000	8,000
Biological/ life scientist	254,000	12,000	D	86,000	5,000	D	149,000	2,000
Agricultural/ food science	13,000	D	D	S	S	D	7,000	D
Biological/ scientist	174,000	7,000	D	69,000	3,000	D	92,000	2,000
Forestry and conservation scientist	3,000	D	D	D	D	D	3,000	D
Postsecondary teacher	64,000	4,000	D	11,000	2,000	D	47,000	D
Computer and information scientist	107,000	3,000	D	45,000	3,000	D	55,000	*
Computer/ information scientist	95,000	3,000	D	41,000	2,000	D	49,000	D
Postsecondary teacher	11,000	S	D	4,000	D	D	6,000	D
Mathematical scientist	82,000	S	D	23,000	S	D	50,000	S
Mathematical scientist	51,000	S	D	15,000	S	D	29,000	D
Postsecondary teacher	31,000	D	D	8,000	S	D	20,000	D
Physical scientist	121,000	6,000	D	26,000	2,000	D	86,000	1,000
Chemist, except biochemist	29,000	1,000	D	8,000	1,000	D	19,000	D

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Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Earth scientist/ geologist/ oceanographer	13,000	S	D	3,000	D	D	9,000	D
Physicist/ astronomer	24,000	S	D	6,000	D	D	17,000	D
Other physical scientist	9,000	D	D	1,000	D	D	7,000	D
Postsecondary teachers	46,000	2,000	D	9,000	1,000	D	34,000	D
Psychologist	100,000	8,000	*	3,000	6,000	D	80,000	2,000
Psychologist	75,000	7,000	*	2,000	5,000	D	60,000	D
Postsecondary teacher	25,000	1,000	D	S	1,000	D	20,000	S
Social scientist	135,000	9,000	D	10,000	16,000	D	97,000	2,000
Economist	16,000	2,000	D	3,000	*	D	11,000	D
Political scientist	4,000	D	D	D	D	D	S	D
Sociologist/ anthropologist	7,000	D	D	D	D	D	7,000	D
Other social scientist	21,000	2,000	D	2,000	D	D	14,000	D
Postsecondary teacher	87,000	6,000	D	5,000	12,000	D	64,000	S
Engineering occupations	139,000	6,000	D	49,000	3,000	D	79,000	2,000
Aerospace engineer	8,000	D	D	2,000	D	D	6,000	D
Chemical engineer	13,000	D	D	7,000	D	D	6,000	D
Civil engineer	9,000	1,000	D	1,000	D	D	7,000	D
Electrical engineer	32,000	1,000	D	15,000	D	D	16,000	D
Industrial engineer	S	D	D	*	D	D	D	D
Mechanical engineer	13,000	*	D	6,000	D	D	6,000	D
Other engineer	24,000	1,000	D	8,000	D	D	14,000	D
Postsecondary teacher	38,000	2,000	D	11,000	1,000	D	24,000	D
S&E-related occupations	387,000	35,000	D	89,000	S	D	216,000	12,000
Health occupations	259,000	23,000	D	52,000	S	D	146,000	3,000
S&E managers, including health	61,000	5,000	D	13,000	D	D	41,000	2,000
S&E pre-college teacher	27,000	2,000	D	2,000	*	D	16,000	D
S&E technician/ technologist	39,000	5,000	D	21,000	S	D	13,000	D
Other S&E-related occupation	1,000	D	D	S	D	D	D	D
Non-S&E occupations <sup>c</sup>	436,000	31,000	D	67,000	36,000	D	292,000	8,000
Arts, humanities, and related occupation	14,000	D	D	2,000	D	D	11,000	D
Management-related occupation	69,000	3,000	D	16,000	5,000	D	45,000	1,000
Non-S&E manager	137,000	8,000	D	18,000	10,000	D	100,000	1,000
Non-S&E postsecondary teacher	91,000	7,000	D	11,000	6,000	D	66,000	S
Non-S&E precollege teacher	10,000	S	D	D	D	D	7,000	D
Sales and marketing occupation	12,000	S	D	3,000	D	D	7,000	D

**Table 9-6****Employed scientists and engineers, by highest degree level, occupation, ethnicity, and race: 2019**

(Number)

Highest degree and occupation	All ethnicities and races	Hispanic or Latino <sup>a</sup>	Not Hispanic or Latino					
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race
Social service and related occupation	37,000	5,000	D	2,000	10,000	D	18,000	D
Other non-S&E occupation	66,000	4,000	D	16,000	5,000	D	38,000	D

\* = estimate < 500. D = suppressed for data confidentiality reasons. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering.

<sup>a</sup> Hispanic or Latino may be any race; race categories exclude Hispanic origin.

<sup>b</sup> All degrees includes professional degrees, which are not shown separately.

<sup>c</sup> Non-S&E occupations do not include S&E-related occupations.

**Note(s):**

Numbers are rounded to nearest 1,000. Detail may not add to total because of rounding and suppression. Scientists and engineers are individuals under the age of 76 who have a bachelor's or higher degree, are living in the United States, and have an S&E or S&E-related degree or occupation.

**Source(s):**

National Center for Science and Engineering Statistics, National Survey of College Graduates, 2019.