National Center for Science and Engineering Statistics

National Survey of College Graduates: 2019

Data Tables | NSF22-310 | February 25, 2022

Contents

Errata	2
General Notes	3
Data Tables	4
Technical Notes	132
Technical Tables	140
Notes	149
Acknowledgments and Suggested Citation	150
Contact Us	151

Errata

JUNE 2022

In table 5-1, one age group category was mislabeled as “50–59,” when it should have been labeled as “50–75.” The category has been updated, so it now shows two age groups: “50–59” and “60–75.”

General Notes

These tables were compiled using data from the 2019 National Survey of College Graduates (NSCG). The NSCG, conducted by the National Center for Science and Engineering Statistics within the National Science Foundation, is a repeated cross-sectional biennial survey that collects information on the nation's college-educated workforce. This survey is a unique source for examining the relationship between degree field and occupation, as well as examining other characteristics of college-educated individuals, including work activities, salary, and demographic information.

Data Tables

Fields of study of college graduates

Table	Title
1-1	College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019
1-2	Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019
1-3	Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019
1-4	Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019
1-5	Employed scientists and engineers, by sex, major field of highest degree, ethnicity, race, disability status, and type of disability: 2019

Occupations of college graduates

Table	Title
2-1	Employed college graduates, by level of highest degree, major occupation, sex, ethnicity, race, and disability status: 2019
2-2	Full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019
2-3	Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019
2-4	Employed college graduates, by minor occupation and major field of highest degree: 2019
2-5	Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019
2-6	Employed college graduates, by level of highest degree, major occupation, possession of a certification or license, and primary field of certification or license: 2019

Work activities and job satisfaction of employed college graduates

Table	Title
3-1	Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

Table	Title
3-2	Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019
3-3	Employed college graduates, by sex, major occupation, job satisfaction, and primary work activity: 2019
3-4	Employed college graduates, by sex, major occupation, job satisfaction, and years since highest degree: 2019

Median salaries of full-time employed college graduates

Table	Title
4-1	Median salary of full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019
4-2	Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019
4-3	Full-time employed scientists and engineers and their median salary, by major field of highest degree, employment sector, and primary work activity: 2019

Demographic characteristics of college graduates

Table	Title
5-1	College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019
5-2	College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019
5-3	College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019
5-4	Employed college graduates, by nativity, level of highest degree, major occupation, and employment sector: 2019
5-5	Employed foreign-born college graduates, by broad field of highest degree, place of birth, and broad occupation: 2019

College graduates over time

Table	Title
6-1	Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–19

Table	Title
6-2	Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19
6-3	Employed college graduates, by sex, level of highest degree, and major occupation: 2003–19
6-4	Employed college graduates, by nativity, level of highest degree, and major occupation: 2003–19

TABLE 1-1

College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019

(Number)

Level and field of highest degree	Total	Employed				Unemployed[a]	Not in labor force[b]
		Total	S&E occupations	S&E-related occupations	Non-S&E occupations		
All degrees	64,696,000	50,524,000	7,466,000	8,893,000	34,165,000	1,633,000	12,538,000
S&E fields	19,662,000	15,362,000	5,709,000	2,131,000	7,522,000	534,000	3,766,000
Biological, agricultural, and environmental life sciences	3,186,000	2,437,000	705,000	660,000	1,072,000	75,000	675,000
Agricultural and food sciences	361,000	266,000	59,000	27,000	180,000	5,000	90,000
Biological sciences	2,453,000	1,867,000	565,000	588,000	714,000	64,000	523,000
Environmental life sciences	372,000	303,000	80,000	45,000	177,000	6,000	63,000
Computer and mathematical sciences	3,498,000	2,837,000	1,670,000	366,000	801,000	121,000	540,000
Computer and information sciences	2,606,000	2,203,000	1,427,000	239,000	537,000	91,000	312,000
Mathematics and statistics	892,000	634,000	243,000	127,000	265,000	29,000	229,000
Physical and related sciences	1,125,000	889,000	422,000	176,000	291,000	36,000	200,000
Chemistry, except biochemistry	508,000	400,000	179,000	100,000	120,000	24,000	84,000
Earth, atmospheric, and ocean sciences	307,000	249,000	108,000	36,000	105,000	6,000	52,000
Physics and astronomy	280,000	220,000	131,000	35,000	54,000	6,000	54,000
Other physical sciences	31,000	20,000	4,000	5,000	11,000	D	S
Social and related sciences	7,349,000	5,474,000	754,000	367,000	4,352,000	208,000	1,667,000
Economics	1,121,000	856,000	130,000	24,000	702,000	23,000	242,000
Political and related sciences	1,284,000	971,000	107,000	52,000	812,000	55,000	257,000
Psychology	2,995,000	2,221,000	341,000	180,000	1,700,000	81,000	693,000
Sociology and anthropology	1,169,000	829,000	102,000	57,000	669,000	33,000	308,000
Other social sciences	781,000	598,000	74,000	55,000	468,000	16,000	167,000
Engineering	4,503,000	3,725,000	2,159,000	562,000	1,004,000	95,000	683,000
Aerospace, aeronautical, and astronautical engineering	180,000	142,000	81,000	13,000	48,000	S	31,000
Chemical engineering	294,000	246,000	138,000	35,000	72,000	5,000	43,000
Civil and architectural engineering	642,000	544,000	284,000	89,000	172,000	13,000	86,000
Electrical and computer engineering	1,570,000	1,289,000	849,000	204,000	236,000	36,000	245,000
Industrial engineering	279,000	214,000	86,000	35,000	93,000	4,000	62,000
Mechanical engineering	877,000	739,000	452,000	99,000	188,000	19,000	120,000
Other engineering	661,000	552,000	269,000	88,000	195,000	12,000	97,000
S&E-related fields	9,145,000	7,429,000	428,000	5,309,000	1,692,000	151,000	1,564,000
Health	7,267,000	5,979,000	164,000	4,731,000	1,084,000	107,000	1,181,000
Science and mathematics teacher education	662,000	469,000	29,000	239,000	201,000	S	186,000
Technology and technical fields	616,000	479,000	186,000	115,000	179,000	23,000	114,000
Other S&E-related fields	600,000	501,000	49,000	224,000	228,000	14,000	85,000
Non-S&E fields	35,889,000	27,734,000	1,330,000	1,453,000	24,951,000	948,000	7,207,000
Management and administration fields	12,031,000	9,499,000	666,000	442,000	8,391,000	344,000	2,188,000
Education, except science and math teacher education	7,462,000	5,285,000	76,000	444,000	4,764,000	86,000	2,092,000
Social service and related fields	1,872,000	1,413,000	77,000	53,000	1,283,000	57,000	402,000
Sales and marketing fields	1,575,000	1,299,000	53,000	S	1,213,000	41,000	236,000
Art and humanities fields	5,803,000	4,487,000	224,000	237,000	4,026,000	132,000	1,184,000
Other non-S&E fields	7,146,000	5,750,000	233,000	245,000	5,272,000	288,000	1,107,000

TABLE 1-1

College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019

(Number)

Level and field of highest degree	Total	Employed				Unemployed[a]	Not in labor force[b]
		Total	S&E occupations	S&E-related occupations	Non-S&E occupations		
Bachelor's	41,035,000	31,373,000	4,176,000	4,794,000	22,403,000	1,217,000	8,445,000
S&E fields	13,972,000	10,731,000	3,251,000	1,504,000	5,976,000	422,000	2,819,000
Biological, agricultural, and environmental life sciences	2,248,000	1,688,000	344,000	486,000	858,000	62,000	497,000
Agricultural and food sciences	280,000	207,000	31,000	21,000	155,000	4,000	69,000
Biological sciences	1,696,000	1,254,000	266,000	430,000	557,000	53,000	389,000
Environmental life sciences	273,000	228,000	47,000	35,000	146,000	S	39,000
Computer and mathematical sciences	2,360,000	1,896,000	1,032,000	250,000	614,000	96,000	369,000
Computer and information sciences	1,740,000	1,478,000	915,000	156,000	407,000	70,000	192,000
Mathematics and statistics	620,000	418,000	117,000	94,000	207,000	26,000	177,000
Physical and related sciences	682,000	520,000	194,000	117,000	209,000	25,000	136,000
Chemistry, except biochemistry	331,000	257,000	91,000	79,000	87,000	20,000	54,000
Earth, atmospheric, and ocean sciences	205,000	163,000	59,000	19,000	84,000	S	39,000
Physics and astronomy	122,000	85,000	40,000	17,000	28,000	S	34,000
Other physical sciences	25,000	16,000	S	S	11,000	D	S
Social and related sciences	5,590,000	4,097,000	327,000	269,000	3,501,000	173,000	1,320,000
Economics	939,000	709,000	79,000	20,000	610,000	20,000	210,000
Political and related sciences	1,006,000	760,000	48,000	42,000	671,000	38,000	208,000
Psychology	2,084,000	1,509,000	116,000	117,000	1,276,000	69,000	506,000
Sociology and anthropology	1,014,000	711,000	45,000	48,000	619,000	31,000	272,000
Other social sciences	546,000	407,000	39,000	42,000	326,000	14,000	124,000
Engineering	3,093,000	2,530,000	1,355,000	382,000	793,000	65,000	497,000
Aerospace, aeronautical, and astronautical engineering	114,000	88,000	47,000	8,000	34,000	S	19,000
Chemical engineering	225,000	186,000	98,000	26,000	61,000	S	35,000
Civil and architectural engineering	469,000	397,000	182,000	68,000	146,000	11,000	62,000
Electrical and computer engineering	1,045,000	840,000	523,000	137,000	179,000	24,000	182,000
Industrial engineering	192,000	141,000	54,000	19,000	68,000	S	48,000
Mechanical engineering	673,000	563,000	325,000	75,000	164,000	13,000	97,000
Other engineering	375,000	316,000	125,000	50,000	141,000	6,000	54,000
S&E-related fields	4,837,000	3,771,000	193,000	2,535,000	1,043,000	96,000	970,000
Health	3,628,000	2,844,000	36,000	2,178,000	630,000	61,000	723,000
Science and mathematics teacher education	296,000	206,000	4,000	105,000	97,000	S	87,000
Technology and technical fields	507,000	388,000	132,000	97,000	160,000	20,000	99,000
Other S&E-related fields	406,000	332,000	21,000	155,000	156,000	S	62,000
Non-S&E fields	22,226,000	16,871,000	732,000	756,000	15,384,000	699,000	4,655,000
Management and administration fields	8,129,000	6,264,000	344,000	237,000	5,683,000	233,000	1,632,000
Education, except science and math teacher education	3,130,000	2,063,000	28,000	118,000	1,917,000	39,000	1,028,000
Social service and related fields	815,000	554,000	22,000	15,000	517,000	44,000	217,000
Sales and marketing fields	1,275,000	1,057,000	37,000	S	992,000	38,000	180,000

TABLE 1-1

College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019

(Number)

Level and field of highest degree	Total	Employed				Unemployed[a]	Not in labor force[b]
		Total	S&E occupations	S&E-related occupations	Non-S&E occupations		
Art and humanities fields	4,617,000	3,581,000	189,000	185,000	3,208,000	108,000	928,000
Other non-S&E fields	4,261,000	3,352,000	112,000	171,000	3,068,000	237,000	671,000
Master's	17,801,000	14,158,000	2,286,000	2,332,000	9,540,000	331,000	3,312,000
S&E fields	4,145,000	3,350,000	1,589,000	479,000	1,281,000	89,000	706,000
Biological, agricultural, and environmental life sciences	511,000	388,000	132,000	105,000	151,000	8,000	115,000
Agricultural and food sciences	53,000	40,000	13,000	4,000	22,000	D	12,000
Biological sciences	368,000	280,000	90,000	92,000	99,000	7,000	81,000
Environmental life sciences	90,000	68,000	28,000	9,000	30,000	D	22,000
Computer and mathematical sciences	1,005,000	829,000	543,000	111,000	174,000	24,000	152,000
Computer and information sciences	800,000	668,000	463,000	82,000	124,000	21,000	110,000
Mathematics and statistics	205,000	161,000	81,000	30,000	50,000	S	42,000
Physical and related sciences	200,000	170,000	88,000	32,000	51,000	2,000	28,000
Chemistry, except biochemistry	66,000	51,000	26,000	9,000	16,000	S	14,000
Earth, atmospheric, and ocean sciences	67,000	60,000	28,000	14,000	18,000	S	6,000
Physics and astronomy	64,000	56,000	33,000	7,000	17,000	D	6,000
Other physical sciences	3,000	3,000	1,000	S	D	D	D
Social and related sciences	1,294,000	1,001,000	194,000	76,000	731,000	30,000	262,000
Economics	131,000	106,000	26,000	3,000	77,000	2,000	23,000
Political and related sciences	224,000	171,000	34,000	8,000	129,000	17,000	36,000
Psychology	659,000	507,000	92,000	46,000	369,000	S	142,000
Sociology and anthropology	94,000	67,000	19,000	7,000	41,000	S	26,000
Other social sciences	186,000	150,000	23,000	12,000	115,000	S	34,000
Engineering	1,135,000	961,000	632,000	155,000	174,000	25,000	149,000
Aerospace, aeronautical, and astronautical engineering	57,000	44,000	27,000	3,000	S	S	12,000
Chemical engineering	34,000	30,000	17,000	7,000	5,000	D	4,000
Civil and architectural engineering	148,000	126,000	85,000	18,000	23,000	2,000	20,000
Electrical and computer engineering	445,000	381,000	273,000	61,000	47,000	11,000	53,000
Industrial engineering	77,000	62,000	26,000	14,000	23,000	S	13,000
Mechanical engineering	167,000	147,000	104,000	22,000	21,000	6,000	14,000
Other engineering	207,000	171,000	101,000	29,000	41,000	4,000	32,000
S&E-related fields	2,328,000	1,920,000	172,000	1,200,000	548,000	33,000	374,000
Health	1,691,000	1,420,000	76,000	983,000	361,000	25,000	246,000
Science and mathematics teacher education	349,000	252,000	21,000	133,000	98,000	S	92,000
Technology and technical fields	97,000	82,000	49,000	16,000	17,000	S	14,000
Other S&E-related fields	190,000	166,000	27,000	68,000	71,000	2,000	22,000
Non-S&E fields	11,328,000	8,888,000	524,000	653,000	7,711,000	208,000	2,232,000
Management and administration fields	3,834,000	3,178,000	314,000	203,000	2,660,000	107,000	550,000
Education, except science and math teacher education	4,123,000	3,063,000	40,000	307,000	2,715,000	43,000	1,017,000

TABLE 1-1

College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019

(Number)

Level and field of highest degree	Total	Employed				Unemployed[a]	Not in labor force[b]
		Total	S&E occupations	S&E-related occupations	Non-S&E occupations		
Social service and related fields	932,000	769,000	40,000	37,000	692,000	5,000	158,000
Sales and marketing fields	293,000	237,000	16,000	4,000	217,000	S	53,000
Art and humanities fields	1,001,000	739,000	30,000	52,000	658,000	23,000	239,000
Other non-S&E fields	1,145,000	903,000	84,000	51,000	768,000	27,000	215,000
Doctorate	2,522,000	2,090,000	938,000	387,000	765,000	43,000	389,000
S&E fields	1,494,000	1,239,000	841,000	146,000	252,000	22,000	233,000
Biological, agricultural, and environmental life sciences	427,000	360,000	229,000	69,000	62,000	4,000	63,000
Agricultural and food sciences	29,000	20,000	15,000	1,000	3,000	D	S
Biological sciences	390,000	333,000	209,000	66,000	59,000	4,000	53,000
Environmental life sciences	9,000	7,000	5,000	S	S	D	S
Computer and mathematical sciences	132,000	112,000	94,000	5,000	13,000	1,000	19,000
Computer and information sciences	66,000	56,000	50,000	2,000	5,000	D	9,000
Mathematics and statistics	66,000	56,000	45,000	3,000	8,000	S	10,000
Physical and related sciences	244,000	199,000	140,000	28,000	31,000	8,000	37,000
Chemistry, except biochemistry	112,000	92,000	62,000	12,000	18,000	S	16,000
Earth, atmospheric, and ocean sciences	35,000	27,000	20,000	3,000	4,000	S	S
Physics and astronomy	94,000	79,000	58,000	11,000	10,000	S	13,000
Other physical sciences	2,000	2,000	*	D	D	D	S
Social and related sciences	416,000	335,000	207,000	20,000	108,000	4,000	77,000
Economics	51,000	41,000	25,000	*	16,000	D	9,000
Political and related sciences	53,000	39,000	25,000	2,000	12,000	*	13,000
Psychology	202,000	164,000	106,000	15,000	43,000	D	37,000
Sociology and anthropology	60,000	50,000	39,000	2,000	10,000	S	9,000
Other social sciences	49,000	40,000	12,000	1,000	27,000	D	9,000
Engineering	275,000	233,000	171,000	24,000	37,000	5,000	38,000
Aerospace, aeronautical, and astronautical engineering	10,000	9,000	8,000	2,000	D	D	D
Chemical engineering	35,000	30,000	23,000	2,000	6,000	S	4,000
Civil and architectural engineering	25,000	21,000	16,000	2,000	3,000	D	3,000
Electrical and computer engineering	79,000	68,000	53,000	6,000	9,000	S	10,000
Industrial engineering	10,000	10,000	6,000	S	2,000	D	D
Mechanical engineering	37,000	28,000	23,000	1,000	4,000	*	8,000
Other engineering	79,000	66,000	43,000	10,000	14,000	2,000	11,000
S&E-related fields	339,000	305,000	44,000	215,000	46,000	S	31,000
Health	307,000	283,000	33,000	212,000	38,000	S	23,000
Science and mathematics teacher education	17,000	11,000	5,000	1,000	5,000	D	6,000
Technology and technical fields	11,000	9,000	5,000	2,000	S	D	D
Other S&E-related fields	4,000	3,000	1,000	D	1,000	D	S
Non-S&E fields	688,000	546,000	53,000	26,000	468,000	17,000	125,000
Management and administration fields	68,000	58,000	9,000	S	48,000	D	6,000

TABLE 1-1

College graduates, by level of highest degree, minor field of highest degree, and labor force status: 2019

(Number)

Level and field of highest degree	Total	Employed				Unemployed[a]	Not in labor force[b]
		Total	S&E occupations	S&E-related occupations	Non-S&E occupations		
Education, except science and math teacher education	210,000	159,000	8,000	19,000	132,000	D	47,000
Social service and related fields	124,000	90,000	15,000	D	75,000	D	26,000
Sales and marketing fields	7,000	4,000	D	D	4,000	D	S
Art and humanities fields	185,000	167,000	5,000	1,000	161,000	D	17,000
Other non-S&E fields	93,000	67,000	16,000	S	47,000	D	26,000
Professional	3,338,000	2,903,000	67,000	1,380,000	1,456,000	43,000	392,000
S&E fields	51,000	42,000	28,000	2,000	12,000	D	8,000
S&E-related fields	1,641,000	1,433,000	18,000	1,359,000	56,000	19,000	189,000
Non-S&E fields	1,647,000	1,428,000	21,000	19,000	1,388,000	24,000	195,000

* = 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.

[a] Unemployed includes individuals who were not working during the survey reference week but had been seeking work in the prior 4 weeks or who were on layoff from their job.

[b] Not in the labor force includes individuals who were not working during the survey reference week and had not been seeking work in the prior 4 weeks because of family responsibilities, chronic illness, or other reasons.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
All degrees	50,524,000	7,466,000	698,000	3,774,000	409,000	663,000	1,921,000	8,893,000	34,165,000
S&E fields	15,362,000	5,709,000	579,000	2,642,000	374,000	477,000	1,637,000	2,131,000	7,522,000
Biological, agricultural, and environmental life sciences	2,437,000	705,000	488,000	94,000	87,000	17,000	19,000	660,000	1,072,000
Agricultural and food sciences	266,000	59,000	44,000	5,000	7,000	D	1,000	27,000	180,000
Biological sciences	1,867,000	565,000	411,000	75,000	58,000	10,000	10,000	588,000	714,000
Environmental life sciences	303,000	80,000	32,000	14,000	22,000	5,000	7,000	45,000	177,000
Computer and mathematical sciences	2,837,000	1,670,000	4,000	1,584,000	4,000	6,000	71,000	366,000	801,000
Computer and information sciences	2,203,000	1,427,000	3,000	1,363,000	S	4,000	55,000	239,000	537,000
Mathematics and statistics	634,000	243,000	1,000	221,000	S	2,000	16,000	127,000	265,000
Physical and related sciences	889,000	422,000	47,000	79,000	246,000	1,000	49,000	176,000	291,000
Chemistry, except biochemistry	400,000	179,000	35,000	24,000	105,000	D	15,000	100,000	120,000
Earth, atmospheric, and ocean sciences	249,000	108,000	3,000	17,000	77,000	D	10,000	36,000	105,000
Physics and astronomy	220,000	131,000	8,000	38,000	62,000	D	23,000	35,000	54,000
Other physical sciences	20,000	4,000	S	D	S	D	S	5,000	11,000
Social and related sciences	5,474,000	754,000	18,000	258,000	8,000	448,000	22,000	367,000	4,352,000
Economics	856,000	130,000	S	64,000	D	59,000	S	24,000	702,000
Political and related sciences	971,000	107,000	S	48,000	*	51,000	S	52,000	812,000
Psychology	2,221,000	341,000	5,000	73,000	D	257,000	6,000	180,000	1,700,000
Sociology and anthropology	829,000	102,000	5,000	35,000	1,000	60,000	S	57,000	669,000
Other social sciences	598,000	74,000	4,000	39,000	6,000	21,000	4,000	55,000	468,000
Engineering	3,725,000	2,159,000	22,000	628,000	28,000	5,000	1,477,000	562,000	1,004,000
Aerospace, aeronautical, and astronautical engineering	142,000	81,000	D	16,000	S	D	64,000	13,000	48,000
Chemical engineering	246,000	138,000	5,000	21,000	6,000	D	107,000	35,000	72,000
Civil and architectural engineering	544,000	284,000	*	13,000	1,000	D	269,000	89,000	172,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
Electrical and computer engineering	1,289,000	849,000	S	459,000	3,000	1,000	385,000	204,000	236,000
Industrial engineering	214,000	86,000	D	27,000	D	D	59,000	35,000	93,000
Mechanical engineering	739,000	452,000	D	51,000	2,000	D	396,000	99,000	188,000
Other engineering	552,000	269,000	14,000	42,000	14,000	S	197,000	88,000	195,000
S&E-related fields	7,429,000	428,000	77,000	186,000	S	44,000	103,000	5,309,000	1,692,000
Health	5,979,000	164,000	72,000	43,000	S	25,000	10,000	4,731,000	1,084,000
Science and mathematics teacher education	469,000	29,000	2,000	21,000	2,000	S	1,000	239,000	201,000
Technology and technical fields	479,000	186,000	2,000	99,000	*	D	81,000	115,000	179,000
Other S&E-related fields	501,000	49,000	D	22,000	S	14,000	11,000	224,000	228,000
Non-S&E fields	27,734,000	1,330,000	43,000	946,000	18,000	142,000	180,000	1,453,000	24,951,000
Management and administration fields	9,499,000	666,000	15,000	498,000	4,000	23,000	125,000	442,000	8,391,000
Education, except science and math teacher education	5,285,000	76,000	4,000	49,000	S	15,000	7,000	444,000	4,764,000
Social service and related fields	1,413,000	77,000	D	34,000	D	39,000	3,000	53,000	1,283,000
Sales and marketing fields	1,299,000	53,000	D	41,000	D	S	9,000	S	1,213,000
Art and humanities fields	4,487,000	224,000	S	186,000	2,000	S	13,000	237,000	4,026,000
Other non-S&E fields	5,750,000	233,000	19,000	138,000	11,000	42,000	23,000	245,000	5,272,000
Bachelor's	31,373,000	4,176,000	277,000	2,403,000	189,000	147,000	1,158,000	4,794,000	22,403,000
S&E fields	10,731,000	3,251,000	241,000	1,705,000	183,000	104,000	1,018,000	1,504,000	5,976,000
Biological, agricultural, and environmental life sciences	1,688,000	344,000	201,000	65,000	61,000	7,000	10,000	486,000	858,000
Agricultural and food sciences	207,000	31,000	20,000	4,000	4,000	D	*	21,000	155,000
Biological sciences	1,254,000	266,000	160,000	51,000	44,000	4,000	7,000	430,000	557,000
Environmental life sciences	228,000	47,000	20,000	9,000	13,000	S	S	35,000	146,000
Computer and mathematical sciences	1,896,000	1,032,000	S	983,000	S	4,000	41,000	250,000	614,000
Computer and information sciences	1,478,000	915,000	D	882,000	D	S	30,000	156,000	407,000
Mathematics and statistics	418,000	117,000	D	101,000	S	S	11,000	94,000	207,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
Physical and related sciences	520,000	194,000	22,000	43,000	106,000	*	23,000	117,000	209,000
Chemistry, except biochemistry	257,000	91,000	18,000	16,000	50,000	D	7,000	79,000	87,000
Earth, atmospheric, and ocean sciences	163,000	59,000	S	12,000	41,000	D	5,000	19,000	84,000
Physics and astronomy	85,000	40,000	3,000	14,000	13,000	D	10,000	17,000	28,000
Other physical sciences	16,000	S	D	D	S	D	D	S	11,000
Social and related sciences	4,097,000	327,000	10,000	210,000	S	89,000	14,000	269,000	3,501,000
Economics	709,000	79,000	*	57,000	D	19,000	S	20,000	610,000
Political and related sciences	760,000	48,000	D	38,000	D	7,000	D	42,000	671,000
Psychology	1,509,000	116,000	3,000	59,000	D	49,000	5,000	117,000	1,276,000
Sociology and anthropology	711,000	45,000	S	30,000	*	10,000	S	48,000	619,000
Other social sciences	407,000	39,000	S	26,000	S	5,000	S	42,000	326,000
Engineering	2,530,000	1,355,000	8,000	404,000	9,000	4,000	930,000	382,000	793,000
Aerospace, aeronautical, and astronautical engineering	88,000	47,000	D	11,000	D	D	35,000	8,000	34,000
Chemical engineering	186,000	98,000	2,000	15,000	3,000	D	79,000	26,000	61,000
Civil and architectural engineering	397,000	182,000	D	10,000	D	D	172,000	68,000	146,000
Electrical and computer engineering	840,000	523,000	D	299,000	1,000	D	223,000	137,000	179,000
Industrial engineering	141,000	54,000	D	14,000	D	D	40,000	19,000	68,000
Mechanical engineering	563,000	325,000	D	38,000	D	D	283,000	75,000	164,000
Other engineering	316,000	125,000	S	18,000	4,000	D	98,000	50,000	141,000
S&E-related fields	3,771,000	193,000	16,000	88,000	1,000	11,000	77,000	2,535,000	1,043,000
Health	2,844,000	36,000	15,000	15,000	S	S	3,000	2,178,000	630,000
Science and mathematics teacher education	206,000	4,000	D	3,000	D	D	D	105,000	97,000
Technology and technical fields	388,000	132,000	D	60,000	D	D	68,000	97,000	160,000
Other S&E-related fields	332,000	21,000	D	11,000	D	5,000	4,000	155,000	156,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
Non-S&E fields	16,871,000	732,000	20,000	610,000	5,000	33,000	63,000	756,000	15,384,000
Management and administration fields	6,264,000	344,000	S	296,000	1,000	9,000	32,000	237,000	5,683,000
Education, except science and math teacher education	2,063,000	28,000	D	24,000	D	D	2,000	118,000	1,917,000
Social service and related fields	554,000	22,000	D	15,000	D	6,000	D	15,000	517,000
Sales and marketing fields	1,057,000	37,000	D	29,000	D	D	S	S	992,000
Art and humanities fields	3,581,000	189,000	S	159,000	S	S	11,000	185,000	3,208,000
Other non-S&E fields	3,352,000	112,000	9,000	87,000	3,000	1,000	11,000	171,000	3,068,000
Master's	14,158,000	2,286,000	152,000	1,168,000	97,000	249,000	619,000	2,332,000	9,540,000
S&E fields	3,350,000	1,589,000	112,000	771,000	75,000	148,000	483,000	479,000	1,281,000
Biological, agricultural, and environmental life sciences	388,000	132,000	87,000	17,000	19,000	3,000	6,000	105,000	151,000
Agricultural and food sciences	40,000	13,000	11,000	D	S	D	*	4,000	22,000
Biological sciences	280,000	90,000	66,000	12,000	10,000	1,000	2,000	92,000	99,000
Environmental life sciences	68,000	28,000	11,000	5,000	8,000	S	3,000	9,000	30,000
Computer and mathematical sciences	829,000	543,000	3,000	513,000	*	2,000	25,000	111,000	174,000
Computer and information sciences	668,000	463,000	S	437,000	*	S	22,000	82,000	124,000
Mathematics and statistics	161,000	81,000	S	76,000	*	S	3,000	30,000	50,000
Physical and related sciences	170,000	88,000	11,000	17,000	48,000	D	11,000	32,000	51,000
Chemistry, except biochemistry	51,000	26,000	7,000	S	14,000	D	3,000	9,000	16,000
Earth, atmospheric, and ocean sciences	60,000	28,000	S	3,000	19,000	D	5,000	14,000	18,000
Physics and astronomy	56,000	33,000	4,000	11,000	14,000	D	4,000	7,000	17,000
Other physical sciences	3,000	1,000	D	D	D	D	D	S	D
Social and related sciences	1,001,000	194,000	3,000	37,000	3,000	143,000	7,000	76,000	731,000
Economics	106,000	26,000	D	6,000	D	17,000	D	3,000	77,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
Political and related sciences	171,000	34,000	D	8,000	D	21,000	S	8,000	129,000
Psychology	507,000	92,000	D	9,000	D	82,000	D	46,000	369,000
Sociology and anthropology	67,000	19,000	D	3,000	D	14,000	D	7,000	41,000
Other social sciences	150,000	23,000	D	11,000	2,000	9,000	D	12,000	115,000
Engineering	961,000	632,000	7,000	187,000	5,000	*	434,000	155,000	174,000
Aerospace, aeronautical, and astronautical engineering	44,000	27,000	D	4,000	D	D	23,000	3,000	S
Chemical engineering	30,000	17,000	S	2,000	*	D	14,000	7,000	5,000
Civil and architectural engineering	126,000	85,000	D	2,000	S	D	82,000	18,000	23,000
Electrical and computer engineering	381,000	273,000	D	142,000	D	D	131,000	61,000	47,000
Industrial engineering	62,000	26,000	D	8,000	D	D	17,000	14,000	23,000
Mechanical engineering	147,000	104,000	D	10,000	D	D	93,000	22,000	21,000
Other engineering	171,000	101,000	6,000	18,000	3,000	D	75,000	29,000	41,000
S&E-related fields	1,920,000	172,000	22,000	85,000	S	28,000	25,000	1,200,000	548,000
Health	1,420,000	76,000	20,000	21,000	S	18,000	S	983,000	361,000
Science and mathematics teacher education	252,000	21,000	2,000	16,000	2,000	D	S	133,000	98,000
Technology and technical fields	82,000	49,000	D	37,000	D	D	11,000	16,000	17,000
Other S&E-related fields	166,000	27,000	D	11,000	D	9,000	6,000	68,000	71,000
Non-S&E fields	8,888,000	524,000	19,000	312,000	9,000	74,000	111,000	653,000	7,711,000
Management and administration fields	3,178,000	314,000	8,000	198,000	4,000	11,000	93,000	203,000	2,660,000
Education, except science and math teacher education	3,063,000	40,000	2,000	25,000	D	8,000	S	307,000	2,715,000
Social service and related fields	769,000	40,000	D	12,000	D	26,000	2,000	37,000	692,000
Sales and marketing fields	237,000	16,000	D	11,000	D	S	4,000	4,000	217,000
Art and humanities fields	739,000	30,000	D	24,000	1,000	3,000	S	52,000	658,000
Other non-S&E fields	903,000	84,000	7,000	42,000	4,000	24,000	7,000	51,000	768,000
Doctorate	2,090,000	938,000	254,000	189,000	121,000	235,000	139,000	387,000	765,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
S&E fields	1,239,000	841,000	226,000	165,000	116,000	198,000	136,000	146,000	252,000
Biological, agricultural, and environmental life sciences	360,000	229,000	200,000	12,000	7,000	8,000	3,000	69,000	62,000
Agricultural and food sciences	20,000	15,000	13,000	D	S	D	D	1,000	3,000
Biological sciences	333,000	209,000	185,000	12,000	4,000	6,000	S	66,000	59,000
Environmental life sciences	7,000	5,000	S	D	2,000	S	D	S	S
Computer and mathematical sciences	112,000	94,000	*	88,000	S	D	5,000	5,000	13,000
Computer and information sciences	56,000	50,000	D	45,000	D	D	4,000	2,000	5,000
Mathematics and statistics	56,000	45,000	D	43,000	D	D	D	3,000	8,000
Physical and related sciences	199,000	140,000	14,000	19,000	92,000	D	14,000	28,000	31,000
Chemistry, except biochemistry	92,000	62,000	11,000	5,000	40,000	D	5,000	12,000	18,000
Earth, atmospheric, and ocean sciences	27,000	20,000	2,000	S	17,000	D	*	3,000	4,000
Physics and astronomy	79,000	58,000	2,000	12,000	35,000	D	9,000	11,000	10,000
Other physical sciences	2,000	*	D	D	D	D	D	D	D
Social and related sciences	335,000	207,000	5,000	10,000	S	190,000	D	20,000	108,000
Economics	41,000	25,000	D	1,000	D	24,000	D	*	16,000
Political and related sciences	39,000	25,000	D	S	D	23,000	D	2,000	12,000
Psychology	164,000	106,000	2,000	S	D	100,000	D	15,000	43,000
Sociology and anthropology	50,000	39,000	D	S	D	36,000	D	2,000	10,000
Other social sciences	40,000	12,000	S	S	D	7,000	D	1,000	27,000
Engineering	233,000	171,000	7,000	36,000	14,000	*	113,000	24,000	37,000
Aerospace, aeronautical, and astronautical engineering	9,000	8,000	D	S	D	D	6,000	2,000	D
Chemical engineering	30,000	23,000	2,000	S	3,000	D	14,000	2,000	6,000

TABLE 1-2

Employed college graduates, by level of highest degree, minor field of highest degree, and major occupation: 2019

(Number)

Level and field of highest degree	Total	S&E occupations						S&E-related occupations	Non-S&E occupations
		Total	Biological, agricultural, and other life scientists	Computer and mathematical scientists	Physical and related scientists	Social and related scientists	Engineers		
Civil and architectural engineering	21,000	16,000	D	S	D	D	15,000	2,000	3,000
Electrical and computer engineering	68,000	53,000	D	18,000	2,000	D	31,000	6,000	9,000
Industrial engineering	10,000	6,000	D	4,000	D	D	2,000	S	2,000
Mechanical engineering	28,000	23,000	D	2,000	D	D	20,000	1,000	4,000
Other engineering	66,000	43,000	4,000	6,000	7,000	D	24,000	10,000	14,000
S&E-related fields	305,000	44,000	25,000	8,000	3,000	6,000	2,000	215,000	46,000
Health	283,000	33,000	24,000	3,000	2,000	4,000	D	212,000	38,000
Science and mathematics teacher education	11,000	5,000	D	2,000	D	D	D	1,000	5,000
Technology and technical fields	9,000	5,000	D	S	D	D	1,000	2,000	S
Other S&E-related fields	3,000	1,000	D	D	D	*	D	D	1,000
Non-S&E fields	546,000	53,000	3,000	15,000	S	30,000	2,000	26,000	468,000
Management and administration fields	58,000	9,000	D	S	D	3,000	D	S	48,000
Education, except science and math teacher education	159,000	8,000	D	S	D	6,000	D	19,000	132,000
Social service and related fields	90,000	15,000	D	S	D	7,000	D	D	75,000
Sales and marketing fields	4,000	D	D	D	D	D	D	D	4,000
Art and humanities fields	167,000	5,000	D	D	D	S	D	1,000	161,000
Other non-S&E fields	67,000	16,000	2,000	D	D	11,000	D	S	47,000
Professional	2,903,000	67,000	14,000	14,000	2,000	32,000	5,000	1,380,000	1,456,000
S&E fields	42,000	28,000	D	D	D	26,000	D	2,000	12,000
S&E-related fields	1,433,000	18,000	13,000	S	D	D	D	1,359,000	56,000
Non-S&E fields	1,428,000	21,000	D	9,000	1,000	6,000	4,000	19,000	1,388,000

* = 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.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
All degrees	50,524,000	27,340,000	13,258,000	9,927,000	7,466,000	4,886,000	1,852,000	729,000	8,893,000	6,699,000	1,407,000	788,000	34,165,000	15,754,000	10,000,000	8,411,000
S&E fields	15,362,000	7,432,000	4,575,000	3,355,000	5,709,000	4,064,000	1,298,000	347,000	2,131,000	1,220,000	646,000	264,000	7,522,000	2,147,000	2,631,000	2,743,000
Biological, agricultural, and environmental life sciences	2,437,000	1,156,000	664,000	616,000	705,000	508,000	138,000	58,000	660,000	381,000	205,000	74,000	1,072,000	267,000	321,000	484,000
Agricultural and food sciences	266,000	122,000	68,000	76,000	59,000	47,000	9,000	4,000	27,000	8,000	11,000	7,000	180,000	67,000	48,000	65,000
Biological sciences	1,867,000	917,000	490,000	461,000	565,000	416,000	103,000	46,000	588,000	352,000	182,000	54,000	714,000	149,000	205,000	360,000
Environmental life sciences	303,000	118,000	107,000	79,000	80,000	45,000	26,000	9,000	45,000	21,000	12,000	12,000	177,000	51,000	68,000	58,000
Computer and mathematical sciences	2,837,000	1,816,000	724,000	297,000	1,670,000	1,296,000	345,000	28,000	366,000	244,000	94,000	28,000	801,000	277,000	285,000	240,000
Computer and information sciences	2,203,000	1,502,000	500,000	201,000	1,427,000	1,147,000	262,000	18,000	239,000	155,000	60,000	24,000	537,000	200,000	178,000	159,000
Mathematics and statistics	634,000	314,000	224,000	96,000	243,000	148,000	84,000	11,000	127,000	89,000	34,000	4,000	265,000	77,000	107,000	81,000
Physical and related sciences	889,000	473,000	235,000	182,000	422,000	293,000	95,000	34,000	176,000	113,000	52,000	11,000	291,000	67,000	88,000	136,000
Chemistry, except biochemistry	400,000	234,000	109,000	57,000	179,000	127,000	40,000	12,000	100,000	74,000	23,000	S	120,000	32,000	46,000	42,000
Earth, atmospheric, and ocean sciences	249,000	115,000	51,000	83,000	108,000	81,000	16,000	12,000	36,000	17,000	16,000	S	105,000	17,000	19,000	69,000
Physics and astronomy	220,000	115,000	70,000	36,000	131,000	83,000	38,000	10,000	35,000	18,000	12,000	S	54,000	14,000	20,000	20,000
Other physical sciences	20,000	10,000	4,000	S	4,000	S	1,000	D	5,000	5,000	D	D	11,000	S	3,000	S
Social and related sciences	5,474,000	1,806,000	1,806,000	1,862,000	754,000	456,000	158,000	141,000	367,000	158,000	98,000	111,000	4,352,000	1,192,000	1,550,000	1,610,000
Economics	856,000	237,000	386,000	233,000	130,000	60,000	54,000	17,000	24,000	5,000	9,000	10,000	702,000	172,000	324,000	207,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Political and related sciences	971,000	224,000	325,000	422,000	107,000	53,000	21,000	33,000	52,000	19,000	15,000	17,000	812,000	152,000	289,000	371,000
Psychology	2,221,000	944,000	644,000	633,000	341,000	256,000	43,000	43,000	180,000	94,000	51,000	35,000	1,700,000	594,000	550,000	556,000
Sociology and anthropology	829,000	223,000	266,000	339,000	102,000	53,000	22,000	27,000	57,000	13,000	11,000	32,000	669,000	157,000	232,000	280,000
Other social sciences	598,000	178,000	185,000	234,000	74,000	34,000	18,000	22,000	55,000	26,000	12,000	17,000	468,000	117,000	155,000	195,000
Engineering	3,725,000	2,180,000	1,145,000	399,000	2,159,000	1,512,000	561,000	85,000	562,000	324,000	198,000	40,000	1,004,000	344,000	386,000	274,000
Aerospace, aeronautical, and astronautical engineering	142,000	87,000	40,000	14,000	81,000	55,000	23,000	3,000	13,000	6,000	4,000	D	48,000	27,000	13,000	8,000
Chemical engineering	246,000	111,000	97,000	38,000	138,000	80,000	49,000	9,000	35,000	19,000	15,000	2,000	72,000	12,000	34,000	27,000
Civil and architectural engineering	544,000	354,000	130,000	59,000	284,000	235,000	42,000	7,000	89,000	54,000	29,000	5,000	172,000	65,000	60,000	47,000
Electrical and computer engineering	1,289,000	807,000	383,000	99,000	849,000	617,000	217,000	16,000	204,000	114,000	78,000	12,000	236,000	77,000	88,000	71,000
Industrial engineering	214,000	102,000	82,000	29,000	86,000	45,000	34,000	7,000	35,000	20,000	14,000	D	93,000	37,000	35,000	21,000
Mechanical engineering	739,000	400,000	262,000	77,000	452,000	294,000	134,000	24,000	99,000	53,000	38,000	7,000	188,000	53,000	90,000	46,000
Other engineering	552,000	319,000	151,000	83,000	269,000	186,000	64,000	19,000	88,000	58,000	19,000	10,000	195,000	74,000	68,000	54,000
S&E-related fields	7,429,000	5,773,000	934,000	722,000	428,000	290,000	105,000	33,000	5,309,000	4,811,000	372,000	126,000	1,692,000	672,000	457,000	563,000
Health	5,979,000	4,888,000	610,000	482,000	164,000	123,000	31,000	10,000	4,731,000	4,344,000	288,000	99,000	1,084,000	420,000	292,000	373,000
Science and mathematics teacher education	469,000	331,000	70,000	68,000	29,000	21,000	4,000	4,000	239,000	220,000	18,000	D	201,000	90,000	47,000	64,000
Technology and technical fields	479,000	219,000	155,000	106,000	186,000	116,000	55,000	15,000	115,000	52,000	40,000	23,000	179,000	51,000	60,000	68,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Other S&E-related fields	501,000	336,000	100,000	66,000	49,000	30,000	15,000	5,000	224,000	195,000	26,000	S	228,000	111,000	59,000	58,000
Non-S&E fields	27,734,000	14,135,000	7,749,000	5,850,000	1,330,000	532,000	449,000	348,000	1,453,000	667,000	388,000	398,000	24,951,000	12,935,000	6,911,000	5,104,000
Management and administration fields	9,499,000	4,519,000	3,392,000	1,588,000	666,000	287,000	287,000	92,000	442,000	144,000	177,000	121,000	8,391,000	4,088,000	2,928,000	1,375,000
Education, except science and math teacher education	5,285,000	3,858,000	680,000	747,000	76,000	37,000	18,000	21,000	444,000	323,000	60,000	60,000	4,764,000	3,497,000	602,000	665,000
Social service and related fields	1,413,000	880,000	225,000	308,000	77,000	44,000	8,000	25,000	53,000	24,000	10,000	18,000	1,283,000	811,000	207,000	265,000
Sales and marketing fields	1,299,000	458,000	610,000	230,000	53,000	8,000	31,000	15,000	S	4,000	S	S	1,213,000	447,000	575,000	192,000
Art and humanities fields	4,487,000	1,642,000	1,279,000	1,567,000	224,000	51,000	55,000	117,000	237,000	89,000	47,000	102,000	4,026,000	1,502,000	1,177,000	1,348,000
Other non-S&E fields	5,750,000	2,778,000	1,562,000	1,410,000	233,000	105,000	50,000	78,000	245,000	84,000	90,000	72,000	5,272,000	2,590,000	1,422,000	1,260,000
Bachelor's	31,373,000	13,818,000	9,508,000	8,048,000	4,176,000	2,436,000	1,161,000	579,000	4,794,000	3,209,000	959,000	627,000	22,403,000	8,173,000	7,388,000	6,842,000
S&E fields	10,731,000	4,258,000	3,526,000	2,947,000	3,251,000	2,107,000	860,000	284,000	1,504,000	776,000	507,000	221,000	5,976,000	1,375,000	2,159,000	2,442,000
Biological, agricultural, and environmental life sciences	1,688,000	616,000	529,000	544,000	344,000	204,000	88,000	51,000	486,000	247,000	177,000	62,000	858,000	164,000	263,000	431,000
Agricultural and food sciences	207,000	81,000	60,000	66,000	31,000	21,000	7,000	3,000	21,000	5,000	10,000	S	155,000	55,000	43,000	57,000
Biological sciences	1,254,000	470,000	378,000	405,000	266,000	164,000	63,000	40,000	430,000	227,000	158,000	45,000	557,000	79,000	158,000	320,000
Environmental life sciences	228,000	65,000	91,000	72,000	47,000	19,000	19,000	9,000	35,000	15,000	10,000	10,000	146,000	30,000	62,000	54,000
Computer and mathematical sciences	1,896,000	1,116,000	543,000	237,000	1,032,000	779,000	237,000	16,000	250,000	153,000	73,000	24,000	614,000	185,000	233,000	196,000
Computer and information sciences	1,478,000	949,000	365,000	164,000	915,000	726,000	178,000	11,000	156,000	91,000	43,000	22,000	407,000	132,000	144,000	132,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Mathematics and statistics	418,000	168,000	178,000	72,000	117,000	53,000	59,000	6,000	94,000	62,000	29,000	2,000	207,000	52,000	90,000	64,000
Physical and related sciences	520,000	234,000	137,000	149,000	194,000	124,000	44,000	26,000	117,000	74,000	34,000	9,000	209,000	36,000	59,000	114,000
Chemistry, except biochemistry	257,000	139,000	70,000	47,000	91,000	59,000	22,000	S	79,000	60,000	16,000	S	87,000	20,000	32,000	35,000
Earth, atmospheric, and ocean sciences	163,000	57,000	32,000	73,000	59,000	40,000	8,000	S	19,000	6,000	S	S	84,000	S	13,000	60,000
Physics and astronomy	85,000	31,000	31,000	23,000	40,000	22,000	13,000	5,000	17,000	6,000	S	S	28,000	3,000	11,000	14,000
Other physical sciences	16,000	6,000	4,000	S	S	S	1,000	D	S	S	D	D	11,000	S	3,000	S
Social and related sciences	4,097,000	938,000	1,469,000	1,690,000	327,000	100,000	100,000	127,000	269,000	95,000	79,000	95,000	3,501,000	743,000	1,290,000	1,468,000
Economics	709,000	161,000	339,000	209,000	79,000	16,000	48,000	16,000	20,000	3,000	7,000	9,000	610,000	142,000	284,000	184,000
Political and related sciences	760,000	118,000	260,000	382,000	48,000	10,000	11,000	28,000	42,000	14,000	14,000	13,000	671,000	93,000	236,000	342,000
Psychology	1,509,000	414,000	527,000	568,000	116,000	55,000	21,000	41,000	117,000	53,000	37,000	28,000	1,276,000	307,000	470,000	500,000
Sociology and anthropology	711,000	152,000	235,000	325,000	45,000	7,000	13,000	25,000	48,000	5,000	11,000	32,000	619,000	140,000	211,000	268,000
Other social sciences	407,000	93,000	108,000	206,000	39,000	13,000	8,000	18,000	42,000	19,000	10,000	13,000	326,000	61,000	90,000	175,000
Engineering	2,530,000	1,354,000	848,000	328,000	1,355,000	900,000	391,000	63,000	382,000	206,000	145,000	31,000	793,000	247,000	312,000	234,000
Aerospace, aeronautical, and astronautical engineering	88,000	45,000	31,000	13,000	47,000	28,000	17,000	S	8,000	1,000	3,000	D	34,000	15,000	11,000	7,000
Chemical engineering	186,000	75,000	76,000	35,000	98,000	54,000	37,000	8,000	26,000	13,000	12,000	2,000	61,000	8,000	28,000	25,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Civil and architectural engineering	397,000	238,000	109,000	50,000	182,000	148,000	28,000	6,000	68,000	39,000	25,000	4,000	146,000	51,000	55,000	40,000
Electrical and computer engineering	840,000	481,000	276,000	83,000	523,000	359,000	151,000	13,000	137,000	69,000	60,000	8,000	179,000	53,000	65,000	61,000
Industrial engineering	141,000	66,000	53,000	23,000	54,000	26,000	23,000	5,000	19,000	12,000	6,000	D	68,000	28,000	24,000	17,000
Mechanical engineering	563,000	293,000	203,000	67,000	325,000	204,000	100,000	21,000	75,000	43,000	27,000	5,000	164,000	46,000	77,000	41,000
Other engineering	316,000	158,000	100,000	58,000	125,000	81,000	36,000	7,000	50,000	30,000	11,000	9,000	141,000	46,000	53,000	42,000
S&E-related fields	3,771,000	2,609,000	605,000	556,000	193,000	111,000	62,000	20,000	2,535,000	2,208,000	231,000	96,000	1,043,000	290,000	312,000	441,000
Health	2,844,000	2,098,000	382,000	364,000	36,000	24,000	9,000	4,000	2,178,000	1,929,000	173,000	76,000	630,000	146,000	200,000	284,000
Science and mathematics teacher education	206,000	141,000	23,000	42,000	4,000	2,000	S	D	105,000	100,000	5,000	D	97,000	39,000	17,000	41,000
Technology and technical fields	388,000	164,000	129,000	95,000	132,000	73,000	44,000	14,000	97,000	45,000	34,000	17,000	160,000	45,000	51,000	63,000
Other S&E-related fields	332,000	206,000	71,000	55,000	21,000	12,000	8,000	D	155,000	134,000	19,000	D	156,000	60,000	43,000	52,000
Non-S&E fields	16,871,000	6,950,000	5,376,000	4,545,000	732,000	218,000	239,000	275,000	756,000	225,000	220,000	310,000	15,384,000	6,508,000	4,917,000	3,959,000
Management and administration fields	6,264,000	2,822,000	2,199,000	1,243,000	344,000	134,000	141,000	70,000	237,000	41,000	100,000	96,000	5,683,000	2,647,000	1,959,000	1,077,000
Education, except science and math teacher education	2,063,000	1,281,000	325,000	458,000	28,000	S	5,000	15,000	118,000	67,000	15,000	37,000	1,917,000	1,207,000	305,000	405,000
Social service and related fields	554,000	234,000	119,000	201,000	22,000	5,000	S	15,000	15,000	S	D	11,000	517,000	226,000	116,000	175,000
Sales and marketing fields	1,057,000	348,000	517,000	192,000	37,000	S	20,000	11,000	S	S	D	S	992,000	341,000	494,000	157,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Art and humanities fields	3,581,000	1,132,000	1,078,000	1,371,000	189,000	42,000	45,000	102,000	185,000	60,000	40,000	85,000	3,208,000	1,029,000	994,000	1,185,000
Other non-S&E fields	3,352,000	1,134,000	1,139,000	1,080,000	112,000	24,000	26,000	62,000	171,000	52,000	63,000	56,000	3,068,000	1,058,000	1,049,000	961,000
Master's	14,158,000	9,347,000	3,206,000	1,605,000	2,286,000	1,602,000	561,000	123,000	2,332,000	1,813,000	382,000	138,000	9,540,000	5,933,000	2,263,000	1,344,000
S&E fields	3,350,000	2,154,000	842,000	354,000	1,589,000	1,211,000	332,000	46,000	479,000	328,000	112,000	40,000	1,281,000	616,000	398,000	268,000
Biological, agricultural, and environmental life sciences	388,000	240,000	88,000	60,000	132,000	100,000	27,000	4,000	105,000	77,000	18,000	10,000	151,000	63,000	43,000	45,000
Agricultural and food sciences	40,000	23,000	7,000	10,000	13,000	11,000	2,000	D	4,000	2,000	S	D	22,000	9,000	5,000	S
Biological sciences	280,000	169,000	67,000	44,000	90,000	67,000	19,000	4,000	92,000	70,000	15,000	7,000	99,000	33,000	33,000	33,000
Environmental life sciences	68,000	48,000	14,000	6,000	28,000	22,000	6,000	D	9,000	6,000	2,000	D	30,000	21,000	5,000	5,000
Computer and mathematical sciences	829,000	611,000	164,000	55,000	543,000	440,000	96,000	8,000	111,000	88,000	19,000	4,000	174,000	83,000	49,000	43,000
Computer and information sciences	668,000	509,000	126,000	34,000	463,000	382,000	77,000	4,000	82,000	63,000	16,000	S	124,000	64,000	33,000	27,000
Mathematics and statistics	161,000	102,000	38,000	21,000	81,000	58,000	19,000	S	30,000	25,000	3,000	D	50,000	19,000	15,000	16,000
Physical and related sciences	170,000	97,000	52,000	21,000	88,000	62,000	23,000	3,000	32,000	20,000	10,000	1,000	51,000	16,000	19,000	16,000
Chemistry, except biochemistry	51,000	29,000	19,000	3,000	26,000	19,000	7,000	D	9,000	6,000	3,000	D	16,000	S	9,000	2,000
Earth, atmospheric, and ocean sciences	60,000	34,000	16,000	10,000	28,000	22,000	6,000	S	14,000	8,000	S	D	18,000	4,000	5,000	9,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Physics and astronomy	56,000	31,000	17,000	7,000	33,000	21,000	9,000	2,000	7,000	4,000	S	D	17,000	7,000	6,000	5,000
Other physical sciences	3,000	3,000	D	D	1,000	*	D	D	S	S	D	D	D	D	D	D
Social and related sciences	1,001,000	564,000	281,000	156,000	194,000	142,000	40,000	12,000	76,000	45,000	16,000	15,000	731,000	377,000	225,000	129,000
Economics	106,000	42,000	42,000	22,000	26,000	20,000	5,000	S	3,000	S	D	D	77,000	20,000	36,000	20,000
Political and related sciences	171,000	76,000	58,000	36,000	34,000	21,000	8,000	5,000	8,000	4,000	S	S	129,000	51,000	49,000	29,000
Psychology	507,000	359,000	91,000	57,000	92,000	77,000	13,000	2,000	46,000	28,000	12,000	7,000	369,000	255,000	66,000	49,000
Sociology and anthropology	67,000	31,000	23,000	14,000	19,000	12,000	6,000	D	7,000	6,000	D	D	41,000	13,000	17,000	11,000
Other social sciences	150,000	55,000	67,000	28,000	23,000	12,000	S	S	12,000	6,000	2,000	S	115,000	38,000	58,000	20,000
Engineering	961,000	642,000	257,000	62,000	632,000	468,000	146,000	18,000	155,000	97,000	49,000	9,000	174,000	77,000	62,000	35,000
Aerospace, aeronautical, and astronautical engineering	44,000	34,000	9,000	1,000	27,000	20,000	6,000	*	3,000	3,000	S	D	S	S	3,000	D
Chemical engineering	30,000	13,000	14,000	2,000	17,000	7,000	9,000	D	7,000	S	2,000	D	5,000	S	2,000	1,000
Civil and architectural engineering	126,000	99,000	19,000	8,000	85,000	72,000	12,000	S	18,000	14,000	3,000	D	23,000	14,000	4,000	5,000
Electrical and computer engineering	381,000	273,000	92,000	15,000	273,000	215,000	55,000	3,000	61,000	40,000	17,000	4,000	47,000	17,000	21,000	9,000
Industrial engineering	62,000	29,000	27,000	7,000	26,000	14,000	10,000	S	14,000	6,000	8,000	D	23,000	9,000	9,000	5,000
Mechanical engineering	147,000	85,000	53,000	9,000	104,000	71,000	31,000	2,000	22,000	10,000	11,000	S	21,000	4,000	12,000	5,000
Other engineering	171,000	108,000	43,000	20,000	101,000	68,000	24,000	9,000	29,000	20,000	8,000	S	41,000	21,000	11,000	10,000
S&E-related fields	1,920,000	1,516,000	276,000	128,000	172,000	124,000	37,000	12,000	1,200,000	1,065,000	114,000	20,000	548,000	327,000	125,000	96,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Health	1,420,000	1,161,000	177,000	81,000	76,000	56,000	16,000	4,000	983,000	880,000	88,000	15,000	361,000	226,000	73,000	62,000
Science and mathematics teacher education	252,000	180,000	46,000	26,000	21,000	14,000	S	3,000	133,000	120,000	14,000	D	98,000	46,000	29,000	23,000
Technology and technical fields	82,000	48,000	24,000	10,000	49,000	38,000	11,000	D	16,000	5,000	6,000	D	17,000	5,000	8,000	5,000
Other S&E-related fields	166,000	127,000	29,000	10,000	27,000	16,000	7,000	S	68,000	61,000	7,000	D	71,000	49,000	16,000	6,000
Non-S&E fields	8,888,000	5,677,000	2,088,000	1,123,000	524,000	267,000	193,000	65,000	653,000	420,000	156,000	78,000	7,711,000	4,990,000	1,740,000	980,000
Management and administration fields	3,178,000	1,653,000	1,182,000	342,000	314,000	150,000	142,000	22,000	203,000	102,000	76,000	25,000	2,660,000	1,401,000	964,000	296,000
Education, except science and math teacher education	3,063,000	2,449,000	328,000	286,000	40,000	24,000	11,000	5,000	307,000	240,000	44,000	23,000	2,715,000	2,185,000	273,000	257,000
Social service and related fields	769,000	571,000	99,000	99,000	40,000	26,000	5,000	9,000	37,000	21,000	9,000	7,000	692,000	524,000	85,000	83,000
Sales and marketing fields	237,000	106,000	93,000	38,000	16,000	S	11,000	S	4,000	S	D	D	217,000	101,000	81,000	35,000
Art and humanities fields	739,000	378,000	174,000	188,000	30,000	7,000	7,000	15,000	52,000	28,000	S	17,000	658,000	343,000	159,000	156,000
Other non-S&E fields	903,000	520,000	212,000	170,000	84,000	57,000	17,000	10,000	51,000	27,000	17,000	6,000	768,000	436,000	178,000	154,000
Doctorate	2,090,000	1,685,000	301,000	104,000	938,000	797,000	122,000	19,000	387,000	337,000	42,000	8,000	765,000	551,000	137,000	77,000
S&E fields	1,239,000	987,000	200,000	52,000	841,000	721,000	104,000	17,000	146,000	115,000	27,000	4,000	252,000	151,000	69,000	32,000
Biological, agricultural, and environmental life sciences	360,000	300,000	47,000	13,000	229,000	203,000	22,000	3,000	69,000	57,000	10,000	2,000	62,000	40,000	15,000	8,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Agricultural and food sciences	20,000	18,000	1,000	D	15,000	15,000	D	D	1,000	1,000	D	D	3,000	2,000	1,000	D
Biological sciences	333,000	278,000	44,000	11,000	209,000	185,000	21,000	3,000	66,000	55,000	10,000	2,000	59,000	38,000	14,000	7,000
Environmental life sciences	7,000	5,000	S	D	5,000	4,000	S	D	S	D	D	D	S	D	D	D
Computer and mathematical sciences	112,000	89,000	18,000	5,000	94,000	77,000	13,000	4,000	5,000	3,000	S	D	13,000	9,000	3,000	D
Computer and information sciences	56,000	44,000	9,000	D	50,000	40,000	7,000	D	2,000	2,000	D	D	5,000	3,000	1,000	D
Mathematics and statistics	56,000	45,000	9,000	2,000	45,000	37,000	6,000	1,000	3,000	S	D	D	8,000	6,000	S	D
Physical and related sciences	199,000	142,000	45,000	12,000	140,000	107,000	28,000	5,000	28,000	19,000	8,000	D	31,000	15,000	9,000	7,000
Chemistry, except biochemistry	92,000	65,000	20,000	7,000	62,000	49,000	11,000	2,000	12,000	8,000	S	D	18,000	8,000	4,000	5,000
Earth, atmospheric, and ocean sciences	27,000	23,000	3,000	D	20,000	19,000	S	D	3,000	S	D	D	4,000	2,000	2,000	D
Physics and astronomy	79,000	52,000	22,000	5,000	58,000	39,000	16,000	3,000	11,000	S	3,000	D	10,000	5,000	3,000	2,000
Other physical sciences	2,000	2,000	D	D	*	D	D	D	D	D	D	D	D	D	D	D
Social and related sciences	335,000	272,000	50,000	13,000	207,000	189,000	17,000	S	20,000	15,000	S	D	108,000	67,000	30,000	11,000
Economics	41,000	33,000	5,000	D	25,000	24,000	1,000	D	*	D	D	D	16,000	9,000	4,000	D
Political and related sciences	39,000	30,000	7,000	3,000	25,000	22,000	S	D	2,000	D	D	D	12,000	7,000	4,000	D
Psychology	164,000	138,000	19,000	6,000	106,000	99,000	7,000	D	15,000	12,000	S	D	43,000	27,000	9,000	6,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Sociology and anthropology	50,000	41,000	9,000	S	39,000	35,000	S	D	2,000	2,000	D	D	10,000	4,000	5,000	D
Other social sciences	40,000	30,000	10,000	D	12,000	10,000	S	D	1,000	1,000	D	D	27,000	19,000	8,000	D
Engineering	233,000	184,000	40,000	9,000	171,000	144,000	23,000	S	24,000	20,000	4,000	D	37,000	20,000	13,000	5,000
Aerospace, aeronautical, and astronautical engineering	9,000	9,000	*	D	8,000	7,000	*	D	2,000	2,000	D	D	D	D	D	D
Chemical engineering	30,000	22,000	7,000	1,000	23,000	19,000	3,000	D	2,000	1,000	D	D	6,000	2,000	4,000	*
Civil and architectural engineering	21,000	17,000	3,000	S	16,000	15,000	1,000	D	2,000	1,000	D	D	3,000	1,000	S	D
Electrical and computer engineering	68,000	54,000	14,000	S	53,000	42,000	10,000	D	6,000	4,000	1,000	D	9,000	7,000	2,000	S
Industrial engineering	10,000	7,000	3,000	D	6,000	5,000	S	D	S	S	D	D	2,000	S	D	D
Mechanical engineering	28,000	23,000	5,000	S	23,000	19,000	3,000	D	1,000	S	*	D	4,000	3,000	1,000	D
Other engineering	66,000	53,000	8,000	5,000	43,000	37,000	3,000	S	10,000	9,000	S	D	14,000	7,000	4,000	2,000
S&E-related fields	305,000	272,000	21,000	12,000	44,000	39,000	5,000	D	215,000	199,000	11,000	D	46,000	34,000	4,000	8,000
Health	283,000	253,000	18,000	11,000	33,000	29,000	4,000	D	212,000	197,000	11,000	D	38,000	28,000	3,000	7,000
Science and mathematics teacher education	11,000	9,000	1,000	D	5,000	5,000	D	D	1,000	1,000	D	D	5,000	4,000	D	D
Technology and technical fields	9,000	7,000	S	D	5,000	5,000	D	D	2,000	1,000	D	D	S	D	D	D
Other S&E-related fields	3,000	3,000	D	D	1,000	1,000	D	D	D	D	D	D	1,000	1,000	D	D
Non-S&E fields	546,000	426,000	80,000	40,000	53,000	37,000	13,000	2,000	26,000	22,000	3,000	D	468,000	366,000	64,000	37,000

TABLE 1-3

Relationship of highest degree to job among employed college graduates, by level of highest degree, minor field of highest degree, and broad occupation: 2019

(Number)

Level and field of highest degree	All				S&E occupations				S&E-related occupations				Non-S&E occupations			
	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related	Total	Closely related	Somewhat related	Not related
Management and administration fields	58,000	44,000	12,000	2,000	9,000	3,000	5,000	D	S	D	D	D	48,000	40,000	S	2,000
Education, except science and math teacher education	159,000	129,000	27,000	S	8,000	6,000	2,000	D	19,000	17,000	2,000	D	132,000	106,000	23,000	S
Social service and related fields	90,000	74,000	7,000	8,000	15,000	S	D	D	D	D	D	D	75,000	62,000	S	7,000
Sales and marketing fields	4,000	4,000	D	D	D	D	D	D	D	D	D	D	4,000	4,000	D	D
Art and humanities fields	167,000	132,000	27,000	8,000	5,000	S	D	D	1,000	1,000	D	D	161,000	129,000	24,000	7,000
Other non-S&E fields	67,000	43,000	6,000	S	16,000	13,000	D	D	S	S	D	D	47,000	25,000	S	S
Professional	2,903,000	2,490,000	244,000	169,000	67,000	51,000	8,000	8,000	1,380,000	1,341,000	24,000	14,000	1,456,000	1,098,000	211,000	147,000
S&E fields	42,000	33,000	S	D	28,000	25,000	D	D	2,000	2,000	D	D	12,000	5,000	S	D
S&E-related fields	1,433,000	1,375,000	33,000	25,000	18,000	15,000	2,000	D	1,359,000	1,339,000	15,000	S	56,000	21,000	16,000	19,000
Non-S&E fields	1,428,000	1,082,000	204,000	142,000	21,000	10,000	4,000	6,000	19,000	S	9,000	9,000	1,388,000	1,071,000	190,000	127,000

* = 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.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
All degrees	50,524,000	35,125,000	26,774,000	5,086,000	3,265,000	10,335,000	3,225,000	7,110,000	5,064,000	1,995,000	3,070,000
S&E fields	15,362,000	11,353,000	9,258,000	1,224,000	871,000	2,344,000	1,315,000	1,030,000	1,665,000	750,000	914,000
Biological, agricultural, and environmental life sciences	2,437,000	1,519,000	1,086,000	264,000	169,000	589,000	379,000	210,000	329,000	131,000	197,000
Agricultural and food sciences	266,000	194,000	149,000	21,000	24,000	40,000	24,000	17,000	32,000	20,000	12,000
Biological sciences	1,867,000	1,134,000	806,000	225,000	102,000	510,000	335,000	175,000	223,000	89,000	134,000
Environmental life sciences	303,000	191,000	130,000	18,000	43,000	39,000	21,000	18,000	73,000	22,000	51,000
Computer and mathematical sciences	2,837,000	2,280,000	2,047,000	135,000	99,000	337,000	169,000	168,000	220,000	115,000	105,000
Computer and information sciences	2,203,000	1,859,000	1,678,000	104,000	77,000	163,000	99,000	65,000	181,000	96,000	85,000
Mathematics and statistics	634,000	422,000	369,000	31,000	22,000	174,000	71,000	103,000	39,000	19,000	19,000
Physical and related sciences	889,000	601,000	513,000	59,000	28,000	187,000	133,000	53,000	102,000	50,000	52,000
Chemistry, except biochemistry	400,000	301,000	265,000	24,000	11,000	75,000	53,000	23,000	24,000	14,000	9,000
Earth, atmospheric, and ocean sciences	249,000	156,000	128,000	17,000	11,000	37,000	22,000	15,000	56,000	18,000	39,000
Physics and astronomy	220,000	129,000	113,000	12,000	4,000	72,000	59,000	14,000	19,000	15,000	4,000
Other physical sciences	20,000	15,000	7,000	S	D	2,000	*	2,000	S	S	D
Social and related sciences	5,474,000	3,807,000	2,693,000	670,000	444,000	1,009,000	460,000	549,000	658,000	255,000	403,000
Economics	856,000	686,000	587,000	32,000	68,000	72,000	51,000	21,000	98,000	45,000	53,000
Political and related sciences	971,000	706,000	542,000	108,000	57,000	127,000	66,000	61,000	137,000	80,000	57,000
Psychology	2,221,000	1,483,000	906,000	367,000	211,000	505,000	182,000	323,000	233,000	70,000	162,000
Sociology and anthropology	829,000	553,000	396,000	97,000	59,000	145,000	72,000	73,000	131,000	36,000	95,000
Other social sciences	598,000	378,000	262,000	67,000	50,000	160,000	88,000	72,000	59,000	24,000	35,000
Engineering	3,725,000	3,145,000	2,920,000	96,000	130,000	222,000	173,000	49,000	357,000	200,000	157,000
Aerospace, aeronautical, and astronautical engineering	142,000	111,000	106,000	3,000	S	10,000	8,000	S	21,000	18,000	D

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Chemical engineering	246,000	218,000	201,000	8,000	10,000	18,000	12,000	6,000	10,000	7,000	3,000
Civil and architectural engineering	544,000	408,000	383,000	7,000	18,000	29,000	22,000	7,000	106,000	22,000	84,000
Electrical and computer engineering	1,289,000	1,124,000	1,044,000	42,000	37,000	73,000	58,000	14,000	92,000	67,000	25,000
Industrial engineering	214,000	197,000	177,000	7,000	13,000	11,000	5,000	7,000	6,000	4,000	S
Mechanical engineering	739,000	643,000	608,000	12,000	22,000	35,000	25,000	10,000	61,000	50,000	11,000
Other engineering	552,000	444,000	401,000	16,000	27,000	47,000	43,000	4,000	61,000	32,000	29,000
S&E-related fields	7,429,000	5,564,000	3,516,000	1,571,000	478,000	1,285,000	603,000	682,000	579,000	247,000	333,000
Health	5,979,000	4,644,000	2,737,000	1,522,000	386,000	867,000	543,000	324,000	468,000	209,000	259,000
Science and mathematics teacher education	469,000	110,000	79,000	7,000	24,000	344,000	23,000	322,000	S	D	S
Technology and technical fields	479,000	401,000	359,000	18,000	24,000	34,000	12,000	22,000	44,000	25,000	19,000
Other S&E-related fields	501,000	409,000	342,000	24,000	44,000	39,000	25,000	15,000	53,000	13,000	40,000
Non-S&E fields	27,734,000	18,208,000	14,000,000	2,291,000	1,917,000	6,706,000	1,307,000	5,398,000	2,820,000	997,000	1,823,000
Management and administration fields	9,499,000	7,895,000	6,694,000	565,000	636,000	750,000	338,000	412,000	855,000	385,000	469,000
Education, except science and math teacher education	5,285,000	1,190,000	752,000	278,000	160,000	3,968,000	244,000	3,724,000	127,000	29,000	98,000
Social service and related fields	1,413,000	1,003,000	376,000	544,000	84,000	205,000	90,000	115,000	205,000	29,000	176,000
Sales and marketing fields	1,299,000	1,158,000	1,017,000	63,000	78,000	65,000	20,000	46,000	75,000	61,000	14,000
Art and humanities fields	4,487,000	3,116,000	2,232,000	443,000	441,000	989,000	328,000	660,000	382,000	145,000	237,000
Other non-S&E fields	5,750,000	3,845,000	2,929,000	399,000	517,000	728,000	287,000	441,000	1,177,000	348,000	829,000
Bachelor's	31,373,000	23,604,000	18,459,000	3,008,000	2,137,000	4,616,000	1,249,000	3,367,000	3,154,000	1,137,000	2,017,000
S&E fields	10,731,000	8,361,000	6,838,000	865,000	658,000	1,207,000	541,000	666,000	1,163,000	466,000	696,000
Biological, agricultural, and environmental life sciences	1,688,000	1,171,000	835,000	193,000	144,000	284,000	157,000	126,000	233,000	81,000	153,000
Agricultural and food sciences	207,000	159,000	122,000	15,000	22,000	23,000	10,000	13,000	25,000	17,000	8,000
Biological sciences	1,254,000	858,000	608,000	169,000	81,000	235,000	135,000	100,000	160,000	50,000	110,000
Environmental life sciences	228,000	154,000	105,000	9,000	S	26,000	12,000	14,000	48,000	13,000	34,000

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Computer and mathematical sciences	1,896,000	1,545,000	1,381,000	87,000	77,000	188,000	70,000	118,000	162,000	89,000	73,000
Computer and information sciences	1,478,000	1,240,000	1,113,000	64,000	63,000	101,000	48,000	53,000	137,000	80,000	57,000
Mathematics and statistics	418,000	305,000	269,000	22,000	14,000	87,000	22,000	65,000	26,000	9,000	16,000
Physical and related sciences	520,000	381,000	323,000	40,000	17,000	76,000	44,000	31,000	63,000	20,000	43,000
Chemistry, except biochemistry	257,000	206,000	179,000	19,000	7,000	40,000	25,000	15,000	11,000	4,000	7,000
Earth, atmospheric, and ocean sciences	163,000	110,000	90,000	14,000	6,000	9,000	4,000	5,000	44,000	11,000	33,000
Physics and astronomy	85,000	54,000	49,000	3,000	S	25,000	15,000	10,000	7,000	4,000	S
Other physical sciences	16,000	11,000	6,000	D	D	2,000	D	S	S	D	D
Social and related sciences	4,097,000	3,061,000	2,263,000	481,000	318,000	564,000	205,000	359,000	472,000	159,000	313,000
Economics	709,000	595,000	525,000	19,000	50,000	37,000	21,000	16,000	77,000	29,000	48,000
Political and related sciences	760,000	603,000	480,000	75,000	49,000	76,000	29,000	47,000	81,000	39,000	42,000
Psychology	1,509,000	1,078,000	695,000	257,000	127,000	262,000	80,000	182,000	169,000	47,000	122,000
Sociology and anthropology	711,000	516,000	372,000	89,000	56,000	85,000	26,000	59,000	110,000	31,000	78,000
Other social sciences	407,000	269,000	190,000	41,000	37,000	103,000	49,000	55,000	35,000	13,000	23,000
Engineering	2,530,000	2,203,000	2,035,000	64,000	103,000	96,000	65,000	31,000	232,000	117,000	115,000
Aerospace, aeronautical, and astronautical engineering	88,000	74,000	70,000	3,000	S	1,000	S	D	13,000	9,000	D
Chemical engineering	186,000	172,000	159,000	7,000	S	7,000	4,000	3,000	7,000	5,000	2,000
Civil and architectural engineering	397,000	313,000	291,000	6,000	15,000	9,000	7,000	S	75,000	16,000	59,000
Electrical and computer engineering	840,000	744,000	684,000	31,000	29,000	38,000	29,000	10,000	57,000	36,000	22,000
Industrial engineering	141,000	130,000	115,000	4,000	11,000	8,000	S	5,000	3,000	2,000	D
Mechanical engineering	563,000	499,000	473,000	9,000	17,000	17,000	9,000	8,000	47,000	37,000	10,000
Other engineering	316,000	271,000	244,000	5,000	21,000	14,000	12,000	2,000	31,000	12,000	18,000

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
S&E-related fields	3,771,000	3,012,000	1,882,000	886,000	244,000	485,000	197,000	288,000	273,000	99,000	174,000
Health	2,844,000	2,353,000	1,321,000	857,000	175,000	295,000	172,000	123,000	195,000	65,000	130,000
Science and mathematics teacher education	206,000	57,000	42,000	2,000	14,000	138,000	S	136,000	S	D	S
Technology and technical fields	388,000	322,000	284,000	16,000	22,000	26,000	S	19,000	41,000	23,000	18,000
Other S&E-related fields	332,000	280,000	235,000	12,000	33,000	26,000	15,000	11,000	27,000	11,000	16,000
Non-S&E fields	16,871,000	12,231,000	9,739,000	1,257,000	1,235,000	2,923,000	511,000	2,413,000	1,717,000	571,000	1,146,000
Management and administration fields	6,264,000	5,205,000	4,421,000	356,000	428,000	461,000	186,000	275,000	597,000	248,000	349,000
Education, except science and math teacher education	2,063,000	690,000	472,000	156,000	62,000	1,319,000	S	1,290,000	55,000	S	34,000
Social service and related fields	554,000	393,000	186,000	152,000	55,000	53,000	23,000	30,000	108,000	8,000	100,000
Sales and marketing fields	1,057,000	949,000	830,000	57,000	62,000	49,000	D	39,000	59,000	47,000	11,000
Art and humanities fields	3,581,000	2,644,000	1,986,000	323,000	336,000	600,000	137,000	463,000	337,000	121,000	216,000
Other non-S&E fields	3,352,000	2,350,000	1,845,000	212,000	293,000	440,000	126,000	314,000	562,000	127,000	435,000
Master's	14,158,000	8,353,000	6,142,000	1,493,000	718,000	4,463,000	976,000	3,487,000	1,342,000	570,000	773,000
S&E fields	3,350,000	2,366,000	1,953,000	269,000	144,000	596,000	293,000	302,000	388,000	200,000	188,000
Biological, agricultural, and environmental life sciences	388,000	193,000	137,000	42,000	13,000	132,000	66,000	67,000	63,000	25,000	37,000
Agricultural and food sciences	40,000	25,000	18,000	S	S	9,000	6,000	3,000	6,000	2,000	4,000
Biological sciences	280,000	133,000	95,000	28,000	9,000	114,000	54,000	60,000	33,000	16,000	18,000
Environmental life sciences	68,000	36,000	24,000	9,000	S	9,000	5,000	4,000	23,000	8,000	16,000
Computer and mathematical sciences	829,000	678,000	613,000	44,000	21,000	98,000	51,000	46,000	53,000	22,000	31,000
Computer and information sciences	668,000	581,000	529,000	38,000	13,000	44,000	33,000	11,000	44,000	15,000	28,000
Mathematics and statistics	161,000	97,000	83,000	6,000	8,000	54,000	18,000	36,000	10,000	7,000	3,000

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Physical and related sciences	170,000	109,000	96,000	S	7,000	42,000	26,000	16,000	19,000	12,000	7,000
Chemistry, except biochemistry	51,000	37,000	34,000	*	S	10,000	5,000	4,000	5,000	3,000	2,000
Earth, atmospheric, and ocean sciences	60,000	36,000	30,000	D	S	14,000	5,000	9,000	9,000	4,000	5,000
Physics and astronomy	56,000	34,000	32,000	S	D	18,000	16,000	3,000	3,000	3,000	D
Other physical sciences	3,000	S	*	D	D	*	D	*	D	D	D
Social and related sciences	1,001,000	590,000	354,000	153,000	83,000	259,000	102,000	157,000	151,000	76,000	75,000
Economics	106,000	71,000	49,000	7,000	15,000	17,000	14,000	3,000	18,000	13,000	4,000
Political and related sciences	171,000	93,000	60,000	26,000	7,000	25,000	13,000	12,000	53,000	40,000	13,000
Psychology	507,000	302,000	161,000	93,000	48,000	163,000	44,000	119,000	42,000	9,000	33,000
Sociology and anthropology	67,000	25,000	19,000	4,000	S	24,000	15,000	9,000	19,000	3,000	15,000
Other social sciences	150,000	100,000	66,000	23,000	11,000	30,000	16,000	14,000	20,000	10,000	10,000
Engineering	961,000	796,000	752,000	24,000	21,000	64,000	48,000	16,000	101,000	65,000	37,000
Aerospace, aeronautical, and astronautical engineering	44,000	33,000	32,000	*	D	5,000	4,000	D	6,000	6,000	D
Chemical engineering	30,000	26,000	23,000	S	1,000	S	S	D	S	D	S
Civil and architectural engineering	126,000	88,000	84,000	1,000	3,000	9,000	5,000	S	29,000	5,000	24,000
Electrical and computer engineering	381,000	330,000	314,000	9,000	7,000	22,000	17,000	4,000	29,000	26,000	3,000
Industrial engineering	62,000	59,000	55,000	2,000	2,000	2,000	S	D	2,000	*	D
Mechanical engineering	147,000	125,000	118,000	3,000	S	9,000	7,000	2,000	13,000	12,000	1,000
Other engineering	171,000	136,000	125,000	7,000	3,000	13,000	12,000	1,000	22,000	15,000	7,000
S&E-related fields	1,920,000	1,197,000	730,000	358,000	110,000	522,000	151,000	371,000	201,000	79,000	122,000
Health	1,420,000	944,000	518,000	340,000	87,000	306,000	126,000	180,000	169,000	75,000	94,000
Science and mathematics teacher education	252,000	51,000	37,000	4,000	10,000	197,000	13,000	184,000	4,000	D	4,000
Technology and technical fields	82,000	73,000	69,000	S	S	7,000	4,000	S	2,000	S	S

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Other S&E-related fields	166,000	129,000	106,000	12,000	11,000	11,000	7,000	S	26,000	S	24,000
Non-S&E fields	8,888,000	4,790,000	3,460,000	866,000	464,000	3,345,000	531,000	2,814,000	753,000	291,000	462,000
Management and administration fields	3,178,000	2,674,000	2,264,000	206,000	203,000	250,000	129,000	121,000	254,000	135,000	119,000
Education, except science and math teacher education	3,063,000	472,000	276,000	105,000	92,000	2,523,000	161,000	2,362,000	68,000	9,000	58,000
Social service and related fields	769,000	558,000	183,000	347,000	28,000	121,000	42,000	78,000	90,000	20,000	70,000
Sales and marketing fields	237,000	209,000	187,000	6,000	16,000	11,000	S	6,000	S	S	S
Art and humanities fields	739,000	430,000	231,000	108,000	91,000	266,000	102,000	165,000	43,000	22,000	20,000
Other non-S&E fields	903,000	447,000	318,000	95,000	34,000	174,000	92,000	82,000	282,000	90,000	192,000
Doctorate	2,090,000	985,000	658,000	233,000	95,000	955,000	759,000	196,000	150,000	100,000	50,000
S&E fields	1,239,000	603,000	457,000	86,000	60,000	526,000	472,000	54,000	109,000	82,000	27,000
Biological, agricultural, and environmental life sciences	360,000	155,000	113,000	29,000	13,000	173,000	156,000	17,000	32,000	25,000	7,000
Agricultural and food sciences	20,000	10,000	10,000	S	D	9,000	8,000	S	1,000	S	D
Biological sciences	333,000	143,000	102,000	28,000	13,000	161,000	145,000	16,000	30,000	23,000	6,000
Environmental life sciences	7,000	2,000	1,000	*	D	3,000	3,000	D	2,000	S	1,000
Computer and mathematical sciences	112,000	57,000	53,000	4,000	S	51,000	48,000	3,000	4,000	4,000	D
Computer and information sciences	56,000	38,000	36,000	D	S	17,000	17,000	D	1,000	1,000	D
Mathematics and statistics	56,000	19,000	17,000	2,000	D	33,000	30,000	S	3,000	3,000	D
Physical and related sciences	199,000	111,000	93,000	13,000	4,000	69,000	63,000	6,000	19,000	18,000	2,000
Chemistry, except biochemistry	92,000	59,000	52,000	5,000	2,000	26,000	22,000	4,000	8,000	7,000	D
Earth, atmospheric, and ocean sciences	27,000	9,000	8,000	S	*	14,000	13,000	S	3,000	3,000	*
Physics and astronomy	79,000	41,000	33,000	S	2,000	29,000	28,000	1,000	8,000	7,000	S

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Other physical sciences	2,000	2,000	S	D	D	D	D	D	D	D	D
Social and related sciences	335,000	133,000	65,000	33,000	35,000	171,000	146,000	26,000	30,000	18,000	12,000
Economics	41,000	21,000	12,000	6,000	3,000	18,000	17,000	S	3,000	2,000	1,000
Political and related sciences	39,000	10,000	2,000	7,000	S	26,000	23,000	S	3,000	1,000	S
Psychology	164,000	81,000	39,000	13,000	28,000	65,000	51,000	14,000	17,000	13,000	5,000
Sociology and anthropology	50,000	12,000	6,000	5,000	1,000	36,000	30,000	5,000	3,000	1,000	S
Other social sciences	40,000	9,000	5,000	S	S	27,000	24,000	3,000	S	*	S
Engineering	233,000	146,000	132,000	7,000	7,000	63,000	61,000	2,000	23,000	18,000	6,000
Aerospace, aeronautical, and astronautical engineering	9,000	4,000	4,000	D	D	3,000	3,000	D	2,000	2,000	D
Chemical engineering	30,000	21,000	18,000	*	D	7,000	7,000	*	2,000	D	D
Civil and architectural engineering	21,000	8,000	8,000	D	D	11,000	10,000	D	2,000	1,000	2,000
Electrical and computer engineering	68,000	50,000	46,000	3,000	*	13,000	12,000	*	6,000	6,000	D
Industrial engineering	10,000	8,000	8,000	D	D	1,000	1,000	D	D	D	D
Mechanical engineering	28,000	18,000	17,000	D	S	9,000	9,000	*	1,000	1,000	D
Other engineering	66,000	38,000	31,000	3,000	3,000	19,000	19,000	D	8,000	5,000	S
S&E-related fields	305,000	207,000	137,000	63,000	8,000	78,000	65,000	13,000	20,000	12,000	8,000
Health	283,000	199,000	130,000	62,000	7,000	65,000	55,000	10,000	19,000	11,000	8,000
Science and mathematics teacher education	11,000	D	D	D	D	9,000	7,000	2,000	D	D	D
Technology and technical fields	9,000	6,000	6,000	D	D	2,000	2,000	D	D	D	D
Other S&E-related fields	3,000	1,000	1,000	D	D	2,000	2,000	D	D	D	D
Non-S&E fields	546,000	175,000	64,000	84,000	27,000	350,000	221,000	129,000	21,000	6,000	S
Management and administration fields	58,000	16,000	8,000	D	S	39,000	23,000	D	4,000	S	D
Education, except science and math teacher education	159,000	29,000	5,000	17,000	6,000	126,000	55,000	71,000	S	D	S

TABLE 1-4

Employed college graduates, by level of highest degree, minor field of highest degree, and detailed employment sector: 2019

(Number)

Level and field of highest degree	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Social service and related fields	90,000	52,000	7,000	44,000	D	31,000	25,000	7,000	D	D	D
Sales and marketing fields	4,000	D	D	D	D	4,000	4,000	D	D	D	D
Art and humanities fields	167,000	42,000	15,000	13,000	14,000	122,000	90,000	33,000	S	D	D
Other non-S&E fields	67,000	37,000	29,000	S	D	27,000	25,000	S	3,000	1,000	D
Professional	2,903,000	2,182,000	1,516,000	352,000	314,000	302,000	242,000	61,000	418,000	189,000	230,000
S&E fields	42,000	23,000	11,000	4,000	8,000	15,000	7,000	S	4,000	S	2,000
S&E-related fields	1,433,000	1,147,000	767,000	264,000	117,000	201,000	190,000	10,000	85,000	57,000	28,000
Non-S&E fields	1,428,000	1,012,000	738,000	84,000	190,000	87,000	44,000	43,000	329,000	130,000	200,000

* = 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.

[a] Includes medical schools and university-affiliated research institutes.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 1-5

Employed scientists and engineers, by sex, major field of highest degree, ethnicity, race, disability status, and type of disability: 2019

(Number)

Sex and field of highest degree	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	Type of disability				
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race			Hearing	Seeing	Walking	Lifting	Cognitive
Both sexes, all fields	7,466,000	564,000	S	1,543,000	379,000	17,000	4,784,000	158,000	6,795,000	671,000	222,000	303,000	51,000	61,000	174,000
S&E fields	5,709,000	453,000	9,000	1,326,000	259,000	12,000	3,537,000	114,000	5,202,000	507,000	162,000	229,000	34,000	49,000	142,000
Biological, agricultural, and environmental life sciences	705,000	68,000	1,000	131,000	24,000	S	467,000	13,000	639,000	66,000	16,000	28,000	4,000	5,000	24,000
Computer and mathematical sciences	1,670,000	99,000	D	476,000	107,000	S	943,000	41,000	1,510,000	160,000	38,000	81,000	12,000	15,000	42,000
Physical and related sciences	422,000	23,000	S	88,000	12,000	D	290,000	7,000	376,000	46,000	19,000	18,000	2,000	2,000	S
Social and related sciences	754,000	86,000	1,000	55,000	39,000	S	556,000	16,000	687,000	68,000	19,000	26,000	6,000	12,000	25,000
Engineering	2,159,000	176,000	4,000	575,000	77,000	8,000	1,281,000	37,000	1,991,000	167,000	69,000	76,000	11,000	16,000	37,000
S&E-related fields	428,000	27,000	D	94,000	26,000	S	271,000	8,000	387,000	41,000	12,000	20,000	3,000	3,000	8,000
Non-S&E fields	1,330,000	85,000	S	123,000	94,000	S	976,000	36,000	1,206,000	123,000	47,000	55,000	13,000	9,000	25,000
Female	2,193,000	182,000	4,000	488,000	135,000	3,000	1,322,000	58,000	2,006,000	187,000	36,000	93,000	16,000	31,000	49,000
S&E fields	1,595,000	148,000	4,000	414,000	77,000	2,000	918,000	33,000	1,460,000	135,000	22,000	67,000	10,000	24,000	38,000
Biological, agricultural, and environmental life sciences	332,000	33,000	*	63,000	13,000	D	215,000	6,000	298,000	34,000	S	15,000	3,000	4,000	10,000
Computer and mathematical sciences	396,000	16,000	D	171,000	28,000	D	172,000	8,000	361,000	35,000	3,000	20,000	S	8,000	9,000
Physical and related sciences	113,000	9,000	D	22,000	4,000	D	75,000	S	103,000	10,000	3,000	4,000	S	*	4,000
Social and related sciences	395,000	52,000	1,000	37,000	20,000	D	275,000	9,000	358,000	37,000	7,000	18,000	3,000	7,000	11,000
Engineering	360,000	38,000	D	121,000	12,000	S	181,000	6,000	340,000	20,000	2,000	11,000	S	S	4,000
S&E-related fields	154,000	12,000	D	35,000	10,000	D	92,000	5,000	141,000	13,000	3,000	8,000	1,000	2,000	1,000
Non-S&E fields	444,000	22,000	D	40,000	48,000	D	312,000	20,000	404,000	39,000	11,000	18,000	5,000	5,000	10,000
Male	5,274,000	382,000	S	1,055,000	244,000	14,000	3,461,000	100,000	4,789,000	484,000	185,000	210,000	35,000	30,000	125,000
S&E fields	4,114,000	305,000	5,000	912,000	183,000	10,000	2,619,000	81,000	3,742,000	372,000	140,000	162,000	24,000	25,000	104,000
Biological, agricultural, and environmental life sciences	373,000	35,000	S	68,000	10,000	D	252,000	7,000	341,000	32,000	9,000	13,000	1,000	1,000	14,000
Computer and mathematical sciences	1,274,000	84,000	D	306,000	79,000	S	771,000	33,000	1,148,000	125,000	35,000	61,000	10,000	6,000	33,000
Physical and related sciences	309,000	15,000	D	66,000	9,000	D	215,000	4,000	273,000	36,000	16,000	14,000	1,000	1,000	S
Social and related sciences	359,000	33,000	S	18,000	19,000	D	281,000	7,000	328,000	31,000	12,000	8,000	3,000	4,000	14,000
Engineering	1,799,000	138,000	3,000	454,000	66,000	7,000	1,099,000	31,000	1,651,000	148,000	68,000	66,000	9,000	12,000	32,000
S&E-related fields	274,000	15,000	D	60,000	16,000	S	179,000	S	246,000	28,000	9,000	12,000	3,000	1,000	S
Non-S&E fields	886,000	62,000	S	83,000	45,000	D	664,000	16,000	802,000	84,000	37,000	37,000	8,000	4,000	15,000

* = 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. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-1

Employed college graduates, by level of highest degree, major occupation, sex, ethnicity, race, and disability status: 2019

(Number)

Level of highest degree and occupation	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	More than one race		
All degrees	50,524,000	26,341,000	24,183,000	4,803,000	182,000	5,062,000	3,895,000	129,000	35,269,000	1,184,000	44,717,000	5,807,000
S&E occupations	7,466,000	2,193,000	5,274,000	564,000	S	1,543,000	379,000	17,000	4,784,000	158,000	6,795,000	671,000
Biological, agricultural, and other life scientists	698,000	337,000	361,000	64,000	1,000	157,000	23,000	D	439,000	14,000	642,000	56,000
Computer and mathematical scientists	3,774,000	975,000	2,799,000	238,000	S	955,000	214,000	6,000	2,259,000	88,000	3,445,000	329,000
Physical and related scientists	409,000	142,000	267,000	27,000	1,000	55,000	18,000	S	300,000	7,000	364,000	46,000
Social and related scientists	663,000	428,000	235,000	77,000	S	44,000	47,000	2,000	480,000	12,000	599,000	64,000
Engineers	1,921,000	310,000	1,612,000	159,000	5,000	331,000	77,000	7,000	1,305,000	37,000	1,745,000	177,000
S&E-related occupations	8,893,000	5,109,000	3,785,000	821,000	29,000	1,151,000	613,000	30,000	6,053,000	198,000	8,148,000	745,000
Non-S&E occupations	34,165,000	19,040,000	15,125,000	3,418,000	132,000	2,368,000	2,903,000	82,000	24,432,000	829,000	29,774,000	4,391,000
Bachelor's	31,373,000	16,021,000	15,353,000	3,252,000	86,000	2,693,000	2,394,000	100,000	22,052,000	797,000	27,533,000	3,841,000
S&E occupations	4,176,000	1,034,000	3,142,000	372,000	S	636,000	219,000	11,000	2,810,000	109,000	3,742,000	433,000
Biological, agricultural, and other life scientists	277,000	129,000	148,000	36,000	1,000	34,000	10,000	D	187,000	8,000	253,000	24,000
Computer and mathematical scientists	2,403,000	568,000	1,835,000	182,000	S	442,000	144,000	S	1,547,000	69,000	2,148,000	256,000
Physical and related scientists	189,000	78,000	112,000	15,000	*	19,000	10,000	*	141,000	4,000	160,000	29,000
Social and related scientists	147,000	95,000	52,000	29,000	D	7,000	6,000	D	104,000	2,000	134,000	14,000
Engineers	1,158,000	163,000	995,000	110,000	4,000	134,000	49,000	S	830,000	25,000	1,048,000	111,000
S&E-related occupations	4,794,000	2,845,000	1,949,000	485,000	11,000	534,000	336,000	25,000	3,298,000	105,000	4,325,000	470,000
Non-S&E occupations	22,403,000	12,142,000	10,262,000	2,395,000	57,000	1,522,000	1,838,000	64,000	15,944,000	583,000	19,466,000	2,938,000
Master's	14,158,000	8,141,000	6,017,000	1,153,000	82,000	1,606,000	1,174,000	24,000	9,829,000	290,000	12,607,000	1,551,000
S&E occupations	2,286,000	757,000	1,529,000	136,000	3,000	650,000	115,000	5,000	1,340,000	37,000	2,121,000	165,000
Biological, agricultural, and other life scientists	152,000	83,000	69,000	14,000	D	31,000	7,000	D	97,000	3,000	143,000	9,000
Computer and mathematical scientists	1,168,000	340,000	828,000	48,000	S	440,000	60,000	D	602,000	17,000	1,102,000	66,000
Physical and related scientists	97,000	37,000	60,000	6,000	D	10,000	6,000	D	71,000	2,000	89,000	8,000
Social and related scientists	249,000	171,000	78,000	26,000	D	21,000	18,000	S	177,000	6,000	222,000	27,000
Engineers	619,000	126,000	493,000	42,000	S	148,000	25,000	2,000	392,000	10,000	565,000	54,000
S&E-related occupations	2,332,000	1,469,000	864,000	175,000	S	278,000	176,000	2,000	1,641,000	52,000	2,139,000	193,000
Non-S&E occupations	9,540,000	5,915,000	3,625,000	842,000	S	678,000	883,000	17,000	6,848,000	201,000	8,347,000	1,193,000
Doctorate	2,090,000	900,000	1,190,000	138,000	3,000	424,000	159,000	2,000	1,334,000	30,000	1,925,000	165,000
S&E occupations	938,000	365,000	573,000	49,000	1,000	243,000	40,000	D	596,000	10,000	869,000	69,000

TABLE 2-1

Employed college graduates, by level of highest degree, major occupation, sex, ethnicity, race, and disability status: 2019

(Number)

Level of highest degree and occupation	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black	Native Hawaiian or Other Pacific Islander	White	More than one race		
Biological, agricultural, and other life scientists	254,000	118,000	137,000	12,000	D	86,000	5,000	D	149,000	2,000	233,000	22,000
Computer and mathematical scientists	189,000	61,000	128,000	7,000	D	68,000	8,000	D	105,000	1,000	181,000	7,000
Physical and related scientists	121,000	28,000	94,000	6,000	D	26,000	2,000	D	86,000	1,000	113,000	9,000
Social and related scientists	235,000	139,000	95,000	17,000	*	13,000	22,000	D	177,000	4,000	214,000	21,000
Engineers	139,000	20,000	119,000	6,000	D	49,000	3,000	D	79,000	2,000	129,000	10,000
S&E-related occupations	387,000	188,000	199,000	35,000	D	89,000	S	D	216,000	12,000	354,000	33,000
Non-S&E occupations	765,000	346,000	419,000	54,000	S	92,000	85,000	S	522,000	9,000	701,000	64,000
Professional	2,903,000	1,280,000	1,623,000	260,000	S	340,000	168,000	S	2,055,000	67,000	2,652,000	251,000
S&E occupations	67,000	36,000	30,000	8,000	D	14,000	S	D	38,000	2,000	62,000	5,000
Biological, agricultural, and other life scientists	14,000	7,000	7,000	1,000	D	7,000	D	D	6,000	D	13,000	1,000
Computer and mathematical scientists	14,000	6,000	8,000	D	D	S	D	D	6,000	D	14,000	D
Physical and related scientists	2,000	D	1,000	D	D	D	D	D	S	D	2,000	D
Social and related scientists	32,000	22,000	10,000	5,000	D	3,000	S	D	23,000	D	30,000	2,000
Engineers	5,000	D	5,000	D	D	D	D	D	3,000	D	3,000	D
S&E-related occupations	1,380,000	607,000	773,000	126,000	D	250,000	67,000	D	898,000	29,000	1,330,000	49,000
Non-S&E occupations	1,456,000	637,000	819,000	126,000	2,000	75,000	96,000	S	1,119,000	36,000	1,260,000	196,000

* = 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. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-2

Full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019

(Number)

Occupation and age	All degrees			Bachelor's			Master's			Doctorate			Professional		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
All occupations, all ages	41,929,000	20,577,000	21,352,000	25,906,000	12,287,000	13,619,000	11,858,000	6,570,000	5,288,000	1,814,000	755,000	1,059,000	2,351,000	965,000	1,386,000
29 and younger	6,440,000	3,665,000	2,775,000	4,931,000	2,713,000	2,218,000	1,280,000	808,000	472,000	58,000	23,000	35,000	170,000	121,000	49,000
30–39	11,610,000	5,785,000	5,825,000	6,816,000	3,146,000	3,670,000	3,582,000	2,079,000	1,503,000	503,000	212,000	291,000	709,000	349,000	360,000
40–49	10,315,000	5,089,000	5,226,000	6,076,000	2,882,000	3,194,000	3,131,000	1,707,000	1,424,000	519,000	237,000	282,000	589,000	263,000	325,000
50–75	13,564,000	6,038,000	7,526,000	8,082,000	3,546,000	4,536,000	3,865,000	1,977,000	1,889,000	734,000	283,000	450,000	883,000	232,000	651,000
S&E occupations	6,784,000	1,861,000	4,922,000	3,853,000	880,000	2,972,000	2,037,000	638,000	1,399,000	839,000	313,000	525,000	55,000	29,000	26,000
29 and younger	1,260,000	382,000	878,000	912,000	261,000	651,000	311,000	103,000	208,000	35,000	16,000	20,000	D	D	D
30–39	2,126,000	592,000	1,533,000	1,105,000	227,000	878,000	709,000	236,000	473,000	299,000	122,000	177,000	13,000	7,000	6,000
40–49	1,553,000	427,000	1,126,000	864,000	170,000	695,000	449,000	148,000	301,000	226,000	100,000	125,000	14,000	8,000	5,000
50–75	1,845,000	460,000	1,385,000	972,000	222,000	749,000	569,000	151,000	418,000	279,000	76,000	203,000	25,000	11,000	15,000
Biological, agricultural, and other life scientists	616,000	291,000	324,000	235,000	103,000	132,000	135,000	75,000	61,000	233,000	108,000	126,000	12,000	6,000	6,000
29 and younger	137,000	61,000	76,000	103,000	43,000	60,000	21,000	11,000	11,000	13,000	8,000	5,000	D	D	D
30–39	199,000	98,000	101,000	55,000	23,000	33,000	52,000	33,000	19,000	91,000	41,000	49,000	1,000	1,000	D
40–49	129,000	68,000	61,000	30,000	16,000	14,000	33,000	16,000	16,000	61,000	33,000	29,000	4,000	S	1,000
50–75	151,000	64,000	87,000	47,000	21,000	26,000	30,000	14,000	15,000	68,000	26,000	42,000	6,000	2,000	4,000
Computer and mathematical scientists	3,520,000	874,000	2,647,000	2,241,000	505,000	1,736,000	1,086,000	306,000	781,000	179,000	56,000	123,000	14,000	6,000	8,000
29 and younger	596,000	152,000	444,000	452,000	110,000	342,000	137,000	39,000	98,000	6,000	S	4,000	D	D	D
30–39	1,145,000	247,000	899,000	696,000	124,000	572,000	383,000	104,000	278,000	65,000	18,000	47,000	S	D	S
40–49	858,000	217,000	641,000	549,000	114,000	436,000	250,000	74,000	175,000	58,000	28,000	30,000	D	D	D
50–75	921,000	259,000	662,000	543,000	157,000	386,000	317,000	88,000	229,000	50,000	9,000	41,000	11,000	S	6,000
Physical and related scientists	361,000	121,000	240,000	165,000	63,000	103,000	81,000	32,000	49,000	115,000	26,000	89,000	1,000	D	D
29 and younger	88,000	36,000	52,000	57,000	26,000	31,000	25,000	9,000	S	6,000	S	6,000	D	D	D
30–39	112,000	45,000	67,000	48,000	18,000	30,000	25,000	12,000	14,000	38,000	16,000	23,000	D	D	D
40–49	66,000	21,000	44,000	26,000	9,000	17,000	14,000	6,000	7,000	26,000	6,000	20,000	D	D	D
50–75	95,000	18,000	77,000	34,000	10,000	25,000	17,000	5,000	12,000	44,000	3,000	41,000	D	D	D
Social and related scientists	477,000	293,000	184,000	106,000	60,000	46,000	167,000	112,000	54,000	181,000	104,000	76,000	24,000	16,000	7,000
29 and younger	70,000	52,000	18,000	39,000	30,000	9,000	24,000	17,000	7,000	4,000	2,000	S	D	D	D
30–39	168,000	113,000	55,000	23,000	14,000	9,000	74,000	51,000	23,000	62,000	41,000	21,000	8,000	6,000	2,000
40–49	115,000	69,000	46,000	30,000	10,000	20,000	31,000	26,000	5,000	48,000	29,000	18,000	6,000	4,000	2,000
50–75	125,000	59,000	66,000	14,000	6,000	8,000	37,000	18,000	19,000	67,000	32,000	36,000	7,000	4,000	3,000
Engineers	1,809,000	282,000	1,527,000	1,105,000	150,000	955,000	568,000	113,000	455,000	131,000	19,000	112,000	5,000	D	4,000
29 and younger	369,000	81,000	288,000	261,000	52,000	209,000	103,000	27,000	76,000	6,000	3,000	3,000	D	D	D
30–39	502,000	90,000	412,000	282,000	49,000	234,000	175,000	36,000	139,000	43,000	5,000	37,000	D	D	D
40–49	385,000	51,000	334,000	230,000	21,000	208,000	122,000	26,000	96,000	32,000	5,000	28,000	D	D	D

TABLE 2-2

Full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019

(Number)

Occupation and age	All degrees			Bachelor's			Master's			Doctorate			Professional		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
50–75	553,000	60,000	493,000	333,000	29,000	304,000	169,000	25,000	143,000	50,000	6,000	44,000	D	D	D
S&E-related occupations	7,269,000	3,870,000	3,399,000	3,840,000	2,071,000	1,769,000	1,971,000	1,173,000	798,000	348,000	161,000	187,000	1,110,000	465,000	645,000
29 and younger	1,119,000	747,000	372,000	764,000	493,000	271,000	220,000	156,000	64,000	21,000	6,000	15,000	114,000	92,000	22,000
30–39	2,064,000	1,106,000	958,000	1,043,000	550,000	492,000	581,000	357,000	223,000	103,000	41,000	62,000	337,000	157,000	180,000
40–49	1,752,000	877,000	875,000	859,000	422,000	438,000	509,000	275,000	235,000	100,000	46,000	54,000	283,000	134,000	149,000
50–75	2,335,000	1,140,000	1,195,000	1,175,000	606,000	569,000	661,000	385,000	276,000	124,000	67,000	56,000	376,000	82,000	294,000
Non-S&E occupations	27,876,000	14,846,000	13,030,000	18,213,000	9,336,000	8,877,000	7,849,000	4,759,000	3,090,000	628,000	281,000	347,000	1,186,000	471,000	716,000
29 and younger	4,061,000	2,536,000	1,525,000	3,256,000	1,959,000	1,297,000	749,000	549,000	200,000	2,000	1,000	S	54,000	26,000	27,000
30–39	7,420,000	4,087,000	3,334,000	4,669,000	2,368,000	2,300,000	2,292,000	1,485,000	807,000	101,000	49,000	52,000	359,000	184,000	174,000
40–49	7,010,000	3,785,000	3,225,000	4,353,000	2,291,000	2,062,000	2,172,000	1,284,000	889,000	193,000	90,000	103,000	292,000	121,000	171,000
50–75	9,385,000	4,438,000	4,946,000	5,936,000	2,718,000	3,218,000	2,636,000	1,441,000	1,194,000	331,000	140,000	191,000	482,000	139,000	343,000

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. Full-time employed college graduates are individuals working 35 or more hours per week on their principal job.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-3

Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Number)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
Both sexes, all occupations	41,929,000	3,942,000	163,000	4,249,000	3,345,000	113,000	29,143,000	974,000	37,280,000	4,649,000	39,709,000	2,220,000
29 and younger	6,440,000	738,000	S	699,000	409,000	8,000	4,269,000	267,000	5,883,000	557,000	6,106,000	334,000
30–39	11,610,000	1,284,000	31,000	1,311,000	838,000	22,000	7,780,000	343,000	10,766,000	844,000	10,547,000	1,062,000
40–49	10,315,000	971,000	37,000	1,157,000	1,021,000	42,000	6,873,000	214,000	9,270,000	1,044,000	9,785,000	530,000
50–75	13,564,000	949,000	47,000	1,082,000	1,077,000	39,000	10,220,000	150,000	11,361,000	2,203,000	13,271,000	293,000
S&E occupations	6,784,000	511,000	S	1,391,000	344,000	16,000	4,353,000	148,000	6,215,000	568,000	5,896,000	888,000
29 and younger	1,260,000	126,000	S	266,000	54,000	S	760,000	48,000	1,159,000	102,000	1,064,000	196,000
30–39	2,126,000	181,000	S	518,000	119,000	4,000	1,236,000	55,000	2,012,000	113,000	1,645,000	481,000
40–49	1,553,000	116,000	5,000	339,000	78,000	3,000	991,000	21,000	1,432,000	121,000	1,404,000	148,000
50–75	1,845,000	88,000	S	268,000	93,000	S	1,366,000	24,000	1,612,000	232,000	1,782,000	63,000
Biological, agricultural, and other life scientists	616,000	53,000	1,000	140,000	19,000	D	390,000	12,000	572,000	43,000	520,000	96,000
29 and younger	137,000	21,000	D	22,000	6,000	D	81,000	7,000	126,000	11,000	123,000	14,000
30–39	199,000	18,000	D	52,000	6,000	D	119,000	3,000	190,000	9,000	143,000	56,000
40–49	129,000	9,000	D	31,000	4,000	D	83,000	2,000	121,000	8,000	112,000	17,000
50–75	151,000	5,000	D	35,000	3,000	D	107,000	1,000	136,000	15,000	142,000	8,000
Computer and mathematical scientists	3,520,000	223,000	S	865,000	205,000	6,000	2,121,000	86,000	3,231,000	289,000	2,975,000	545,000
29 and younger	596,000	44,000	D	149,000	33,000	D	341,000	28,000	542,000	54,000	483,000	112,000
30–39	1,145,000	88,000	S	340,000	74,000	S	594,000	35,000	1,084,000	62,000	834,000	311,000
40–49	858,000	52,000	D	232,000	44,000	D	521,000	9,000	799,000	60,000	769,000	89,000
50–75	921,000	39,000	D	144,000	55,000	S	665,000	13,000	807,000	114,000	889,000	32,000
Physical and related scientists	361,000	23,000	1,000	49,000	18,000	S	264,000	6,000	319,000	43,000	315,000	46,000
29 and younger	88,000	4,000	D	16,000	S	D	62,000	S	74,000	S	74,000	15,000
30–39	112,000	11,000	D	18,000	9,000	D	72,000	2,000	104,000	7,000	90,000	22,000
40–49	66,000	4,000	D	7,000	S	D	52,000	S	57,000	9,000	59,000	6,000
50–75	95,000	4,000	D	8,000	6,000	D	77,000	1,000	83,000	12,000	92,000	3,000
Social and related scientists	477,000	61,000	S	33,000	30,000	S	344,000	8,000	439,000	39,000	448,000	29,000
29 and younger	70,000	S	D	7,000	3,000	D	38,000	2,000	66,000	4,000	64,000	6,000
30–39	168,000	22,000	D	13,000	13,000	D	117,000	2,000	155,000	13,000	153,000	14,000
40–49	115,000	13,000	D	6,000	6,000	S	87,000	2,000	107,000	7,000	109,000	5,000
50–75	125,000	6,000	D	6,000	8,000	D	102,000	2,000	110,000	15,000	122,000	3,000
Engineers	1,809,000	150,000	5,000	305,000	71,000	7,000	1,235,000	36,000	1,655,000	154,000	1,636,000	172,000
29 and younger	369,000	36,000	D	73,000	10,000	S	238,000	9,000	350,000	19,000	320,000	49,000

TABLE 2-3

Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Number)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
30–39	502,000	43,000	S	94,000	16,000	S	334,000	12,000	480,000	22,000	425,000	77,000
40–49	385,000	38,000	D	63,000	24,000	2,000	249,000	7,000	349,000	37,000	355,000	31,000
50–75	553,000	33,000	D	75,000	21,000	D	415,000	8,000	476,000	77,000	537,000	16,000
S&E-related occupations	7,269,000	644,000	22,000	957,000	535,000	29,000	4,921,000	161,000	6,677,000	592,000	6,857,000	412,000
29 and younger	1,119,000	103,000	2,000	161,000	63,000	S	762,000	27,000	1,067,000	52,000	1,069,000	50,000
30–39	2,064,000	181,000	4,000	259,000	139,000	3,000	1,411,000	67,000	1,967,000	96,000	1,863,000	200,000
40–49	1,752,000	145,000	5,000	305,000	153,000	S	1,088,000	33,000	1,612,000	140,000	1,647,000	105,000
50–75	2,335,000	214,000	S	232,000	180,000	S	1,661,000	34,000	2,030,000	304,000	2,278,000	57,000
Non-S&E occupations	27,876,000	2,787,000	119,000	1,901,000	2,467,000	67,000	19,868,000	665,000	24,388,000	3,488,000	26,957,000	919,000
29 and younger	4,061,000	509,000	S	272,000	292,000	S	2,747,000	192,000	3,657,000	404,000	3,972,000	88,000
30–39	7,420,000	922,000	13,000	534,000	580,000	16,000	5,133,000	221,000	6,786,000	634,000	7,039,000	381,000
40–49	7,010,000	710,000	28,000	513,000	790,000	16,000	4,795,000	159,000	6,227,000	784,000	6,734,000	276,000
50–75	9,385,000	647,000	32,000	582,000	804,000	33,000	7,194,000	92,000	7,718,000	1,666,000	9,211,000	174,000
Female, all occupations	20,577,000	2,110,000	110,000	1,939,000	1,970,000	37,000	13,848,000	562,000	18,426,000	2,151,000	19,809,000	768,000
29 and younger	3,665,000	431,000	S	343,000	274,000	3,000	2,420,000	152,000	3,356,000	309,000	3,550,000	115,000
30–39	5,785,000	715,000	15,000	602,000	496,000	9,000	3,739,000	210,000	5,388,000	398,000	5,367,000	418,000
40–49	5,089,000	531,000	27,000	540,000	580,000	12,000	3,255,000	144,000	4,593,000	496,000	4,947,000	142,000
50–75	6,038,000	434,000	27,000	453,000	620,000	14,000	4,435,000	56,000	5,089,000	949,000	5,946,000	92,000
S&E occupations	1,861,000	154,000	4,000	420,000	118,000	3,000	1,110,000	52,000	1,722,000	139,000	1,628,000	233,000
29 and younger	382,000	44,000	D	83,000	18,000	D	218,000	18,000	353,000	29,000	324,000	58,000
30–39	592,000	55,000	1,000	155,000	45,000	S	317,000	19,000	564,000	28,000	463,000	129,000
40–49	427,000	36,000	S	112,000	19,000	S	248,000	8,000	400,000	27,000	395,000	31,000
50–75	460,000	19,000	S	70,000	36,000	D	327,000	7,000	405,000	55,000	445,000	15,000
Biological, agricultural, and other life scientists	291,000	29,000	*	64,000	10,000	D	181,000	6,000	273,000	18,000	248,000	43,000
29 and younger	61,000	7,000	D	10,000	3,000	D	39,000	3,000	55,000	6,000	53,000	8,000
30–39	98,000	13,000	D	25,000	3,000	D	55,000	1,000	95,000	3,000	73,000	24,000
40–49	68,000	6,000	D	15,000	3,000	D	43,000	1,000	65,000	4,000	61,000	7,000
50–75	64,000	3,000	D	14,000	1,000	D	45,000	D	58,000	6,000	60,000	4,000
Computer and mathematical scientists	874,000	42,000	S	265,000	67,000	D	470,000	27,000	810,000	64,000	738,000	135,000
29 and younger	152,000	8,000	D	50,000	9,000	D	76,000	9,000	136,000	16,000	118,000	34,000
30–39	247,000	14,000	D	95,000	S	D	99,000	12,000	239,000	7,000	171,000	76,000
40–49	217,000	12,000	D	78,000	11,000	D	114,000	3,000	205,000	12,000	199,000	18,000

TABLE 2-3

Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Number)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
50–75	259,000	9,000	D	43,000	21,000	D	182,000	4,000	230,000	29,000	251,000	8,000
Physical and related scientists	121,000	9,000	D	13,000	7,000	D	88,000	4,000	105,000	16,000	109,000	12,000
29 and younger	36,000	3,000	D	1,000	D	D	28,000	S	32,000	4,000	33,000	4,000
30–39	45,000	4,000	D	8,000	2,000	D	31,000	S	41,000	4,000	38,000	8,000
40–49	21,000	S	D	1,000	D	D	18,000	D	18,000	3,000	21,000	1,000
50–75	18,000	1,000	D	2,000	4,000	D	11,000	D	13,000	5,000	18,000	*
Social and related scientists	293,000	44,000	*	22,000	22,000	S	197,000	6,000	270,000	23,000	277,000	16,000
29 and younger	52,000	S	D	5,000	2,000	D	28,000	2,000	51,000	2,000	50,000	3,000
30–39	113,000	15,000	D	10,000	10,000	D	77,000	2,000	102,000	11,000	104,000	9,000
40–49	69,000	11,000	D	4,000	4,000	D	47,000	2,000	65,000	4,000	66,000	3,000
50–75	59,000	3,000	D	3,000	7,000	D	45,000	S	52,000	7,000	57,000	S
Engineers	282,000	29,000	S	56,000	11,000	D	175,000	9,000	264,000	18,000	256,000	27,000
29 and younger	81,000	11,000	D	17,000	3,000	D	47,000	3,000	79,000	2,000	71,000	10,000
30–39	90,000	9,000	D	18,000	3,000	D	56,000	3,000	87,000	3,000	77,000	13,000
40–49	51,000	6,000	D	14,000	2,000	D	27,000	1,000	47,000	5,000	48,000	3,000
50–75	60,000	3,000	D	8,000	S	D	44,000	D	52,000	8,000	59,000	*
S&E-related occupations	3,870,000	358,000	9,000	494,000	296,000	7,000	2,609,000	96,000	3,637,000	233,000	3,742,000	128,000
29 and younger	747,000	59,000	S	102,000	49,000	D	515,000	20,000	720,000	27,000	721,000	26,000
30–39	1,106,000	108,000	2,000	137,000	81,000	S	734,000	44,000	1,070,000	36,000	1,047,000	60,000
40–49	877,000	82,000	D	162,000	59,000	5,000	547,000	21,000	827,000	50,000	850,000	27,000
50–75	1,140,000	109,000	S	94,000	107,000	S	814,000	S	1,020,000	120,000	1,124,000	16,000
Non-S&E occupations	14,846,000	1,599,000	97,000	1,025,000	1,556,000	27,000	10,128,000	414,000	13,068,000	1,778,000	14,440,000	406,000
29 and younger	2,536,000	328,000	S	159,000	207,000	S	1,687,000	113,000	2,283,000	252,000	2,504,000	31,000
30–39	4,087,000	552,000	12,000	310,000	370,000	7,000	2,688,000	147,000	3,754,000	333,000	3,858,000	229,000
40–49	3,785,000	413,000	24,000	266,000	502,000	6,000	2,459,000	116,000	3,366,000	419,000	3,701,000	84,000
50–75	4,438,000	306,000	21,000	290,000	477,000	12,000	3,294,000	37,000	3,665,000	774,000	4,377,000	62,000
Male, all occupations	21,352,000	1,832,000	53,000	2,311,000	1,375,000	75,000	15,294,000	412,000	18,854,000	2,498,000	19,900,000	1,452,000
29 and younger	2,775,000	307,000	S	356,000	135,000	S	1,850,000	115,000	2,527,000	248,000	2,556,000	219,000
30–39	5,825,000	569,000	S	710,000	342,000	14,000	4,041,000	133,000	5,378,000	446,000	5,180,000	645,000
40–49	5,226,000	440,000	10,000	616,000	441,000	31,000	3,619,000	70,000	4,677,000	549,000	4,838,000	387,000
50–75	7,526,000	515,000	20,000	628,000	458,000	26,000	5,785,000	94,000	6,272,000	1,254,000	7,325,000	201,000
S&E occupations	4,922,000	357,000	S	972,000	226,000	14,000	3,242,000	96,000	4,494,000	429,000	4,268,000	655,000
29 and younger	878,000	81,000	S	183,000	36,000	S	543,000	30,000	806,000	72,000	740,000	138,000
30–39	1,533,000	126,000	S	364,000	74,000	S	919,000	35,000	1,448,000	85,000	1,182,000	352,000

TABLE 2-3

Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Number)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
40–49	1,126,000	80,000	3,000	227,000	59,000	2,000	743,000	13,000	1,032,000	94,000	1,009,000	117,000
50–75	1,385,000	69,000	1,000	198,000	57,000	S	1,039,000	17,000	1,208,000	177,000	1,337,000	48,000
Biological, agricultural, and other life scientists	324,000	24,000	S	76,000	9,000	D	208,000	6,000	299,000	25,000	272,000	52,000
29 and younger	76,000	14,000	D	12,000	S	D	42,000	S	71,000	S	70,000	6,000
30–39	101,000	5,000	D	27,000	3,000	D	64,000	2,000	95,000	S	69,000	32,000
40–49	61,000	3,000	D	16,000	1,000	D	40,000	D	56,000	4,000	51,000	10,000
50–75	87,000	2,000	D	21,000	1,000	D	62,000	S	78,000	9,000	82,000	4,000
Computer and mathematical scientists	2,647,000	181,000	S	600,000	138,000	S	1,651,000	59,000	2,421,000	226,000	2,237,000	409,000
29 and younger	444,000	37,000	D	99,000	24,000	D	265,000	20,000	406,000	38,000	366,000	79,000
30–39	899,000	74,000	D	246,000	47,000	D	496,000	23,000	844,000	54,000	663,000	235,000
40–49	641,000	40,000	D	154,000	33,000	D	407,000	7,000	594,000	48,000	570,000	71,000
50–75	662,000	31,000	D	101,000	34,000	S	483,000	9,000	577,000	85,000	638,000	24,000
Physical and related scientists	240,000	14,000	*	36,000	10,000	D	176,000	2,000	214,000	26,000	207,000	34,000
29 and younger	52,000	1,000	D	14,000	D	D	34,000	S	43,000	D	41,000	11,000
30–39	67,000	7,000	D	10,000	7,000	D	42,000	1,000	63,000	4,000	53,000	14,000
40–49	44,000	3,000	D	6,000	S	D	34,000	*	38,000	6,000	39,000	6,000
50–75	77,000	3,000	D	5,000	2,000	D	66,000	*	71,000	7,000	74,000	3,000
Social and related scientists	184,000	16,000	S	10,000	8,000	D	147,000	2,000	169,000	15,000	171,000	13,000
29 and younger	18,000	4,000	D	1,000	S	D	11,000	D	15,000	2,000	14,000	3,000
30–39	55,000	7,000	D	4,000	3,000	D	40,000	1,000	53,000	2,000	49,000	6,000
40–49	46,000	2,000	D	2,000	S	D	39,000	D	42,000	4,000	43,000	3,000
50–75	66,000	3,000	D	3,000	2,000	D	58,000	1,000	58,000	7,000	64,000	2,000
Engineers	1,527,000	121,000	3,000	249,000	60,000	7,000	1,060,000	27,000	1,390,000	136,000	1,381,000	146,000
29 and younger	288,000	25,000	D	56,000	7,000	D	190,000	6,000	271,000	17,000	249,000	39,000
30–39	412,000	34,000	S	77,000	13,000	S	277,000	9,000	393,000	19,000	347,000	65,000
40–49	334,000	32,000	D	49,000	22,000	S	222,000	6,000	302,000	32,000	307,000	27,000
50–75	493,000	30,000	D	67,000	18,000	D	371,000	6,000	424,000	69,000	478,000	15,000
S&E-related occupations	3,399,000	286,000	S	463,000	239,000	S	2,312,000	65,000	3,040,000	359,000	3,115,000	284,000
29 and younger	372,000	44,000	D	59,000	14,000	D	247,000	7,000	347,000	25,000	348,000	24,000
30–39	958,000	73,000	2,000	123,000	58,000	S	677,000	23,000	898,000	60,000	817,000	141,000
40–49	875,000	63,000	3,000	143,000	94,000	S	541,000	13,000	784,000	91,000	796,000	79,000
50–75	1,195,000	105,000	S	138,000	73,000	S	847,000	22,000	1,011,000	184,000	1,154,000	41,000

TABLE 2-3

Full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Number)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
Non-S&E occupations	13,030,000	1,189,000	22,000	876,000	910,000	40,000	9,740,000	252,000	11,320,000	1,710,000	12,517,000	513,000
29 and younger	1,525,000	182,000	S	113,000	86,000	*	1,060,000	79,000	1,374,000	152,000	1,468,000	57,000
30–39	3,334,000	370,000	S	224,000	210,000	S	2,445,000	74,000	3,032,000	301,000	3,182,000	152,000
40–49	3,225,000	297,000	4,000	247,000	287,000	10,000	2,336,000	44,000	2,860,000	364,000	3,033,000	192,000
50–75	4,946,000	341,000	11,000	292,000	327,000	21,000	3,899,000	55,000	4,053,000	893,000	4,834,000	112,000

* = 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. Full-time employed college graduates are individuals working 35 or more hours per week on their principal job. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-4

Employed college graduates, by minor occupation and major field of highest degree: 2019

(Number)

Occupation	Total	S&E fields						S&E-related fields	Non-S&E fields
		Total	Biological, agricultural, and environmental life sciences	Computer and mathematical sciences	Physical and related sciences	Social and related sciences	Engineering		
All college graduates	50,524,000	15,362,000	2,437,000	2,837,000	889,000	5,474,000	3,725,000	7,429,000	27,734,000
S&E occupations	7,466,000	5,709,000	705,000	1,670,000	422,000	754,000	2,159,000	428,000	1,330,000
Biological, agricultural, and other life scientists	698,000	579,000	488,000	4,000	47,000	18,000	22,000	77,000	43,000
Agricultural and food scientists	58,000	53,000	47,000	D	S	S	1,000	S	4,000
Biological and medical scientists	500,000	404,000	328,000	4,000	42,000	11,000	19,000	67,000	29,000
Environmental life scientists	39,000	32,000	31,000	D	*	1,000	D	D	6,000
Postsecondary teachers - life and related sciences	101,000	90,000	82,000	D	2,000	4,000	1,000	8,000	4,000
Computer and mathematical scientists	3,774,000	2,642,000	94,000	1,584,000	79,000	258,000	628,000	186,000	946,000
Computer and information scientists	3,379,000	2,393,000	80,000	1,429,000	66,000	218,000	600,000	153,000	833,000
Mathematical scientists	284,000	164,000	13,000	76,000	12,000	39,000	24,000	20,000	100,000
Postsecondary teachers - computer and math sciences	111,000	85,000	2,000	78,000	S	S	3,000	13,000	13,000
Physical and related scientists	409,000	374,000	87,000	4,000	246,000	8,000	28,000	S	18,000
Chemists, except biochemists	132,000	117,000	31,000	S	78,000	D	7,000	S	5,000
Earth, atmospheric, and ocean scientists	85,000	80,000	7,000	1,000	65,000	2,000	6,000	D	4,000
Physicists	45,000	45,000	*	*	38,000	D	6,000	1,000	D
Other physical and related scientists, including astronomers	67,000	59,000	30,000	S	17,000	5,000	6,000	2,000	6,000
Postsecondary teachers - physical and related sciences	80,000	73,000	19,000	D	49,000	D	3,000	3,000	4,000
Social and related scientists	663,000	477,000	17,000	6,000	1,000	448,000	5,000	44,000	142,000
Economists	56,000	46,000	1,000	2,000	D	43,000	*	2,000	8,000
Political scientists	22,000	11,000	D	D	D	11,000	D	D	8,000
Psychologists	228,000	188,000	S	D	D	182,000	D	8,000	32,000
Anthropologists	16,000	15,000	D	D	D	15,000	D	D	*

TABLE 2-4

Employed college graduates, by minor occupation and major field of highest degree: 2019

(Number)

Occupation	Total	S&E fields						S&E-related fields	Non-S&E fields
		Total	Biological, agricultural, and environmental life sciences	Computer and mathematical sciences	Physical and related sciences	Social and related sciences	Engineering		
Other social and related scientists	142,000	78,000	7,000	3,000	S	63,000	4,000	28,000	36,000
Postsecondary teachers - social and related sciences	200,000	139,000	4,000	1,000	D	134,000	D	3,000	58,000
Engineers	1,921,000	1,637,000	19,000	71,000	49,000	22,000	1,477,000	103,000	180,000
Aerospace, aeronautical, and astronautical engineers	126,000	112,000	D	3,000	5,000	D	104,000	4,000	10,000
Chemical engineers	84,000	73,000	1,000	*	2,000	D	69,000	4,000	7,000
Civil, architectural, and sanitary engineers	294,000	271,000	2,000	1,000	S	1,000	262,000	9,000	14,000
Electrical and computer hardware engineers	412,000	371,000	S	33,000	9,000	S	327,000	18,000	23,000
Industrial engineers	95,000	59,000	S	5,000	2,000	D	46,000	15,000	21,000
Mechanical engineers	377,000	325,000	2,000	4,000	1,000	1,000	316,000	25,000	27,000
Other engineers	472,000	374,000	9,000	21,000	22,000	15,000	308,000	27,000	71,000
Postsecondary teachers - engineering	61,000	52,000	D	4,000	2,000	D	45,000	2,000	7,000
S&E-related occupations	8,893,000	2,131,000	660,000	366,000	176,000	367,000	562,000	5,309,000	1,453,000
Health-related occupations	5,728,000	696,000	389,000	27,000	52,000	211,000	17,000	4,479,000	553,000
S&E managers	999,000	517,000	68,000	106,000	37,000	57,000	249,000	260,000	221,000
S&E precollege teachers	925,000	237,000	72,000	74,000	30,000	48,000	13,000	240,000	448,000
S&E technicians and technologists	973,000	635,000	129,000	132,000	54,000	48,000	272,000	133,000	204,000
Other S&E-related occupations	270,000	46,000	2,000	27,000	3,000	4,000	10,000	196,000	27,000
Non-S&E occupations	34,165,000	7,522,000	1,072,000	801,000	291,000	4,352,000	1,004,000	1,692,000	24,951,000
Non-S&E managers	4,627,000	1,205,000	162,000	161,000	56,000	509,000	317,000	271,000	3,151,000
Management-related occupations	6,830,000	1,717,000	236,000	265,000	64,000	916,000	236,000	280,000	4,832,000
Non-S&E precollege teachers	4,268,000	405,000	67,000	22,000	11,000	289,000	14,000	158,000	3,705,000

TABLE 2-4

Employed college graduates, by minor occupation and major field of highest degree: 2019

(Number)

Occupation	Total	S&E fields						S&E-related fields	Non-S&E fields
		Total	Biological, agricultural, and environmental life sciences	Computer and mathematical sciences	Physical and related sciences	Social and related sciences	Engineering		
Non-S&E postsecondary teachers	610,000	78,000	S	4,000	5,000	61,000	2,000	30,000	501,000
Social services and related occupations	2,189,000	605,000	29,000	S	9,000	541,000	7,000	119,000	1,465,000
Sales and marketing occupations	4,646,000	996,000	131,000	87,000	41,000	602,000	134,000	233,000	3,416,000
Art, humanities, and related occupations	1,576,000	183,000	S	9,000	S	123,000	8,000	39,000	1,354,000
Other non-S&E occupations	9,418,000	2,332,000	404,000	234,000	99,000	1,309,000	285,000	560,000	6,526,000

* = 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.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-5

Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019

(Number)

Occupation, sex, ethnicity, race, and disability status	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
All occupations	50,524,000	35,125,000	26,774,000	5,086,000	3,265,000	10,335,000	3,225,000	7,110,000	5,064,000	1,995,000	3,070,000
Female	26,341,000	16,542,000	11,462,000	3,384,000	1,696,000	7,318,000	1,880,000	5,438,000	2,481,000	815,000	1,666,000
Male	24,183,000	18,582,000	15,312,000	1,701,000	1,569,000	3,017,000	1,345,000	1,672,000	2,584,000	1,180,000	1,404,000
Hispanic or Latino	4,803,000	3,043,000	2,382,000	417,000	244,000	1,119,000	315,000	804,000	641,000	242,000	399,000
Not Hispanic or Latino											
American Indian or Alaska Native	182,000	113,000	100,000	10,000	3,000	33,000	S	21,000	37,000	S	22,000
Asian	5,062,000	3,876,000	3,221,000	423,000	232,000	799,000	499,000	300,000	387,000	157,000	229,000
Black or African American	3,895,000	2,259,000	1,602,000	479,000	178,000	827,000	211,000	616,000	809,000	314,000	495,000
Native Hawaiian or Other Pacific Islander	129,000	93,000	67,000	24,000	S	14,000	9,000	5,000	23,000	3,000	19,000
White	35,269,000	24,890,000	18,775,000	3,595,000	2,520,000	7,330,000	2,134,000	5,196,000	3,049,000	1,201,000	1,848,000
More than one race	1,184,000	851,000	628,000	138,000	85,000	214,000	46,000	168,000	120,000	62,000	58,000
Without disability	44,717,000	31,246,000	23,807,000	4,630,000	2,809,000	9,141,000	2,934,000	6,208,000	4,330,000	1,683,000	2,646,000
With disability	5,807,000	3,878,000	2,967,000	456,000	456,000	1,194,000	291,000	903,000	735,000	311,000	423,000
S&E occupations	7,466,000	5,444,000	4,878,000	378,000	189,000	1,225,000	1,013,000	211,000	798,000	421,000	377,000
Female	2,193,000	1,361,000	1,118,000	171,000	72,000	559,000	450,000	109,000	273,000	128,000	145,000
Male	5,274,000	4,083,000	3,760,000	207,000	117,000	666,000	563,000	102,000	524,000	293,000	231,000
Hispanic or Latino	564,000	385,000	343,000	27,000	15,000	111,000	91,000	19,000	69,000	27,000	41,000
Not Hispanic or Latino											
American Indian or Alaska Native	S	6,000	5,000	D	D	1,000	1,000	D	S	S	S
Asian	1,543,000	1,207,000	1,121,000	65,000	21,000	239,000	226,000	14,000	97,000	42,000	54,000
Black or African American	379,000	244,000	223,000	16,000	4,000	62,000	46,000	15,000	74,000	40,000	34,000
Native Hawaiian or Other Pacific Islander	17,000	12,000	9,000	D	D	3,000	2,000	D	3,000	1,000	S
White	4,784,000	3,474,000	3,066,000	261,000	147,000	787,000	631,000	156,000	523,000	286,000	237,000
More than one race	158,000	116,000	110,000	5,000	1,000	23,000	16,000	6,000	19,000	11,000	7,000
Without disability	6,795,000	4,960,000	4,447,000	348,000	166,000	1,112,000	925,000	188,000	722,000	385,000	338,000
With disability	671,000	484,000	431,000	30,000	23,000	112,000	89,000	24,000	75,000	36,000	39,000
Biological, agricultural, and other life scientists	698,000	302,000	233,000	56,000	14,000	276,000	253,000	23,000	120,000	58,000	62,000

TABLE 2-5

Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019

(Number)

Occupation, sex, ethnicity, race, and disability status	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Female	337,000	144,000	113,000	24,000	7,000	135,000	121,000	14,000	58,000	33,000	26,000
Male	361,000	158,000	120,000	32,000	7,000	140,000	132,000	9,000	62,000	26,000	36,000
Hispanic or Latino	64,000	27,000	20,000	7,000	D	24,000	23,000	2,000	12,000	S	7,000
Not Hispanic or Latino											
American Indian or Alaska Native	1,000	S	S	D	D	D	D	D	D	D	D
Asian	157,000	72,000	57,000	12,000	3,000	72,000	70,000	S	13,000	8,000	6,000
Black or African American	23,000	9,000	8,000	D	D	9,000	8,000	D	6,000	2,000	S
Native Hawaiian or Other Pacific Islander	D	D	D	D	D	D	D	D	D	D	D
White	439,000	188,000	142,000	37,000	10,000	165,000	147,000	19,000	85,000	43,000	43,000
More than one race	14,000	6,000	5,000	S	D	5,000	5,000	D	3,000	D	S
Without disability	642,000	279,000	216,000	50,000	13,000	252,000	232,000	21,000	111,000	54,000	57,000
With disability	56,000	23,000	16,000	6,000	1,000	23,000	21,000	S	9,000	4,000	S
Computer and mathematical scientists	3,774,000	3,147,000	2,852,000	223,000	73,000	358,000	256,000	102,000	269,000	137,000	132,000
Female	975,000	762,000	637,000	104,000	21,000	121,000	77,000	44,000	92,000	37,000	55,000
Male	2,799,000	2,385,000	2,214,000	119,000	52,000	237,000	179,000	58,000	177,000	100,000	77,000
Hispanic or Latino	238,000	192,000	176,000	13,000	4,000	28,000	20,000	8,000	18,000	6,000	12,000
Not Hispanic or Latino											
American Indian or Alaska Native	S	S	S	D	D	D	D	D	S	S	D
Asian	955,000	844,000	789,000	43,000	13,000	69,000	62,000	7,000	42,000	15,000	27,000
Black or African American	214,000	163,000	151,000	11,000	2,000	17,000	11,000	6,000	35,000	20,000	15,000
Native Hawaiian or Other Pacific Islander	6,000	S	S	D	D	D	D	D	D	D	D
White	2,259,000	1,867,000	1,660,000	153,000	54,000	236,000	159,000	77,000	156,000	81,000	75,000
More than one race	88,000	74,000	70,000	4,000	D	9,000	4,000	S	6,000	4,000	2,000
Without disability	3,445,000	2,876,000	2,609,000	204,000	63,000	329,000	235,000	95,000	240,000	123,000	117,000
With disability	329,000	271,000	243,000	19,000	10,000	29,000	22,000	7,000	29,000	15,000	14,000

TABLE 2-5

Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019

(Number)

Occupation, sex, ethnicity, race, and disability status	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Physical and related scientists	409,000	189,000	169,000	8,000	12,000	136,000	127,000	9,000	85,000	43,000	42,000
Female	142,000	64,000	60,000	2,000	S	49,000	45,000	3,000	30,000	12,000	17,000
Male	267,000	125,000	109,000	6,000	10,000	87,000	81,000	6,000	55,000	31,000	24,000
Hispanic or Latino	27,000	13,000	11,000	S	D	9,000	8,000	2,000	5,000	1,000	4,000
Not Hispanic or Latino											
American Indian or Alaska Native	1,000	D	D	D	D	D	D	D	D	D	D
Asian	55,000	16,000	15,000	*	D	34,000	33,000	1,000	5,000	3,000	2,000
Black or African American	18,000	7,000	5,000	D	D	4,000	3,000	D	7,000	S	S
Native Hawaiian or Other Pacific Islander	S	*	*	D	D	D	D	D	D	D	D
White	300,000	148,000	133,000	5,000	10,000	86,000	81,000	5,000	65,000	33,000	32,000
More than one race	7,000	4,000	4,000	D	D	S	*	D	2,000	1,000	1,000
Without disability	364,000	165,000	147,000	8,000	10,000	124,000	117,000	7,000	74,000	38,000	36,000
With disability	46,000	23,000	22,000	D	S	11,000	9,000	D	11,000	5,000	6,000
Social and related scientists	663,000	230,000	121,000	56,000	53,000	337,000	270,000	67,000	97,000	54,000	43,000
Female	428,000	152,000	80,000	36,000	36,000	225,000	178,000	47,000	51,000	25,000	26,000
Male	235,000	78,000	42,000	19,000	17,000	112,000	92,000	19,000	46,000	29,000	17,000
Hispanic or Latino	77,000	22,000	12,000	6,000	5,000	42,000	34,000	8,000	12,000	2,000	10,000
Not Hispanic or Latino											
American Indian or Alaska Native	S	S	D	D	D	D	D	D	D	D	D
Asian	44,000	13,000	7,000	4,000	2,000	27,000	23,000	4,000	5,000	3,000	2,000
Black or African American	47,000	9,000	5,000	2,000	D	27,000	22,000	5,000	11,000	6,000	S
Native Hawaiian or Other Pacific Islander	2,000	D	D	D	D	S	D	D	D	D	D
White	480,000	182,000	95,000	43,000	45,000	233,000	185,000	48,000	65,000	42,000	23,000
More than one race	12,000	4,000	3,000	*	D	6,000	5,000	1,000	2,000	1,000	S

TABLE 2-5

Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019

(Number)

Occupation, sex, ethnicity, race, and disability status	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
Without disability	599,000	207,000	106,000	52,000	49,000	301,000	241,000	60,000	91,000	51,000	40,000
With disability	64,000	22,000	15,000	4,000	4,000	36,000	29,000	7,000	5,000	3,000	3,000
Engineers	1,921,000	1,576,000	1,503,000	35,000	38,000	119,000	108,000	11,000	226,000	128,000	99,000
Female	310,000	239,000	229,000	4,000	6,000	29,000	29,000	D	42,000	21,000	21,000
Male	1,612,000	1,337,000	1,275,000	31,000	32,000	89,000	79,000	10,000	185,000	107,000	78,000
Hispanic or Latino	159,000	131,000	126,000	1,000	5,000	7,000	6,000	D	21,000	12,000	9,000
Not Hispanic or Latino											
American Indian or Alaska Native	5,000	3,000	3,000	D	D	D	D	D	D	D	D
Asian	331,000	262,000	253,000	6,000	3,000	38,000	38,000	D	31,000	14,000	17,000
Black or African American	77,000	57,000	54,000	S	D	S	2,000	D	14,000	8,000	7,000
Native Hawaiian or Other Pacific Islander	7,000	S	3,000	D	D	D	D	D	S	D	D
White	1,305,000	1,089,000	1,037,000	24,000	28,000	65,000	59,000	6,000	151,000	88,000	63,000
More than one race	37,000	29,000	28,000	D	*	2,000	2,000	D	6,000	5,000	1,000
Without disability	1,745,000	1,432,000	1,368,000	34,000	31,000	106,000	101,000	5,000	206,000	118,000	88,000
With disability	177,000	144,000	136,000	2,000	7,000	13,000	7,000	S	20,000	9,000	11,000
S&E-related occupations	8,893,000	6,470,000	4,299,000	1,757,000	414,000	1,791,000	648,000	1,144,000	632,000	299,000	332,000
Female	5,109,000	3,634,000	2,110,000	1,267,000	257,000	1,152,000	433,000	719,000	323,000	128,000	195,000
Male	3,785,000	2,837,000	2,189,000	490,000	157,000	639,000	215,000	425,000	309,000	171,000	137,000
Hispanic or Latino	821,000	564,000	430,000	112,000	22,000	174,000	60,000	113,000	83,000	34,000	49,000
Not Hispanic or Latino											
American Indian or Alaska Native	29,000	17,000	S	3,000	D	S	D	1,000	3,000	S	1,000
Asian	1,151,000	891,000	618,000	230,000	42,000	176,000	132,000	44,000	84,000	44,000	40,000
Black or African American	613,000	430,000	269,000	138,000	22,000	95,000	32,000	62,000	88,000	43,000	45,000
Native Hawaiian or Other Pacific Islander	30,000	S	5,000	S	D	4,000	S	1,000	S	D	S
White	6,053,000	4,391,000	2,877,000	1,208,000	305,000	1,301,000	402,000	900,000	361,000	174,000	188,000
More than one race	198,000	157,000	85,000	49,000	23,000	33,000	10,000	23,000	8,000	3,000	5,000
Without disability	8,148,000	5,938,000	3,930,000	1,638,000	371,000	1,646,000	625,000	1,021,000	564,000	265,000	299,000

TABLE 2-5

Employed college graduates, by major occupation, sex, ethnicity, race, disability status, and detailed employment sector: 2019

(Number)

Occupation, sex, ethnicity, race, and disability status	Total	Business or industry				Education			Government		
		Total	For profit business or industry	Nonprofit business or industry	Self employed, not-incorporated	Total	4-year educational institution[a]	2-year college or precollege educational institution	Total	Federal government	State or local government
With disability	745,000	532,000	369,000	120,000	44,000	146,000	23,000	123,000	67,000	34,000	33,000
Non-S&E occupations	34,165,000	23,210,000	17,597,000	2,951,000	2,662,000	7,319,000	1,564,000	5,755,000	3,635,000	1,274,000	2,361,000
Female	19,040,000	11,548,000	8,234,000	1,946,000	1,367,000	5,607,000	997,000	4,610,000	1,885,000	559,000	1,326,000
Male	15,125,000	11,662,000	9,363,000	1,004,000	1,295,000	1,712,000	567,000	1,145,000	1,750,000	715,000	1,035,000
Hispanic or Latino	3,418,000	2,094,000	1,608,000	278,000	208,000	835,000	163,000	671,000	489,000	180,000	308,000
Not Hispanic or Latino											
American Indian or Alaska Native	132,000	90,000	81,000	7,000	3,000	23,000	3,000	19,000	19,000	1,000	19,000
Asian	2,368,000	1,778,000	1,482,000	128,000	169,000	384,000	141,000	242,000	206,000	71,000	136,000
Black or African American	2,903,000	1,585,000	1,109,000	324,000	152,000	671,000	132,000	539,000	647,000	231,000	416,000
Native Hawaiian or Other Pacific Islander	82,000	60,000	53,000	S	S	7,000	S	4,000	15,000	S	13,000
White	24,432,000	17,025,000	12,832,000	2,125,000	2,068,000	5,242,000	1,102,000	4,141,000	2,165,000	741,000	1,424,000
More than one race	829,000	577,000	432,000	84,000	61,000	158,000	20,000	139,000	93,000	48,000	46,000
Without disability	29,774,000	20,348,000	15,431,000	2,644,000	2,273,000	6,383,000	1,384,000	4,999,000	3,043,000	1,033,000	2,010,000
With disability	4,391,000	2,862,000	2,167,000	306,000	389,000	936,000	180,000	756,000	592,000	241,000	351,000

* = 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.

[a] Includes medical schools and university-affiliated research institutes.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 2-6

Employed college graduates, by level of highest degree, major occupation, possession of a certification or license, and primary field of certification or license: 2019

(Number)

Level of highest degree and occupation	Total	Obtained a certification or license for work-related reasons	Primary field of certification or license										
			Computer applications and design	Computer networking, administration, and security	Other information technologies and computers	Mathematics, statistics, and data analytics	Life sciences	Physical sciences	Social sciences	Engineering	S&E-related	Non-S&E	Uncodeable or missing
All degree levels	50,524,000	20,383,000	182,000	318,000	159,000	38,000	107,000	95,000	255,000	625,000	5,751,000	12,522,000	330,000
S&E occupations	7,466,000	1,629,000	123,000	228,000	108,000	3,000	29,000	42,000	136,000	381,000	107,000	428,000	43,000
Biological, agricultural, and other life scientists	698,000	107,000	D	D	D	D	20,000	5,000	D	S	43,000	30,000	6,000
Computer and mathematical scientists	3,774,000	696,000	113,000	216,000	100,000	2,000	D	5,000	D	5,000	29,000	199,000	25,000
Physical and related scientists	409,000	68,000	D	D	D	D	8,000	28,000	D	2,000	15,000	15,000	*
Social and related scientists	663,000	237,000	D	D	D	D	D	D	134,000	D	8,000	90,000	2,000
Engineers	1,921,000	521,000	S	11,000	S	*	D	4,000	D	374,000	12,000	94,000	9,000
S&E-related occupations	8,893,000	6,568,000	18,000	27,000	17,000	25,000	26,000	28,000	36,000	114,000	5,007,000	1,197,000	73,000
Non-S&E occupations	34,165,000	12,186,000	42,000	63,000	35,000	10,000	52,000	25,000	82,000	130,000	637,000	10,896,000	214,000
Bachelor's	31,373,000	10,458,000	123,000	233,000	113,000	29,000	70,000	48,000	24,000	375,000	2,958,000	6,333,000	150,000
S&E occupations	4,176,000	900,000	81,000	171,000	81,000	D	18,000	19,000	8,000	234,000	65,000	201,000	22,000
Biological, agricultural, and other life scientists	277,000	54,000	D	D	D	D	12,000	S	D	D	24,000	14,000	D
Computer and mathematical scientists	2,403,000	448,000	72,000	161,000	76,000	D	D	S	D	1,000	20,000	99,000	17,000
Physical and related scientists	189,000	41,000	D	D	D	D	6,000	14,000	D	S	9,000	10,000	D
Social and related scientists	147,000	34,000	D	D	D	D	D	D	8,000	D	D	23,000	D
Engineers	1,158,000	324,000	S	9,000	S	D	D	1,000	D	232,000	9,000	55,000	4,000
S&E-related occupations	4,794,000	3,260,000	10,000	20,000	9,000	19,000	15,000	16,000	3,000	75,000	2,501,000	570,000	23,000

TABLE 2-6

Employed college graduates, by level of highest degree, major occupation, possession of a certification or license, and primary field of certification or license: 2019

(Number)

Level of highest degree and occupation	Total	Obtained a certification or license for work-related reasons	Primary field of certification or license										
			Computer applications and design	Computer networking, administration, and security	Other information technologies and computers	Mathematics, statistics, and data analytics	Life sciences	Physical sciences	Social sciences	Engineering	S&E-related	Non-S&E	Uncodeable or missing
Non-S&E occupations	22,403,000	6,298,000	32,000	42,000	24,000	9,000	37,000	14,000	14,000	66,000	392,000	5,562,000	106,000
Master's	14,158,000	6,777,000	57,000	81,000	41,000	7,000	32,000	39,000	114,000	223,000	1,222,000	4,837,000	125,000
S&E occupations	2,286,000	541,000	40,000	54,000	24,000	1,000	9,000	17,000	37,000	127,000	23,000	194,000	13,000
Biological, agricultural, and other life scientists	152,000	24,000	D	D	D	D	6,000	2,000	D	D	6,000	8,000	D
Computer and mathematical scientists	1,168,000	231,000	39,000	53,000	22,000	1,000	D	1,000	D	3,000	8,000	93,000	8,000
Physical and related scientists	97,000	21,000	D	D	D	D	S	11,000	D	*	S	3,000	D
Social and related scientists	249,000	91,000	D	D	D	D	D	D	35,000	D	1,000	53,000	*
Engineers	619,000	174,000	D	1,000	D	D	D	3,000	D	123,000	3,000	37,000	S
S&E-related occupations	2,332,000	1,745,000	7,000	6,000	5,000	S	10,000	11,000	25,000	36,000	1,021,000	585,000	32,000
Non-S&E occupations	9,540,000	4,492,000	9,000	21,000	11,000	D	12,000	11,000	52,000	59,000	178,000	4,058,000	80,000
Doctorate	2,090,000	655,000	S	4,000	2,000	D	5,000	8,000	93,000	26,000	255,000	234,000	25,000
S&E occupations	938,000	154,000	S	3,000	D	D	1,000	6,000	73,000	20,000	13,000	27,000	7,000
S&E-related occupations	387,000	262,000	D	D	D	D	*	1,000	7,000	3,000	212,000	26,000	S
Non-S&E occupations	765,000	239,000	D	D	D	D	S	D	13,000	4,000	30,000	181,000	7,000
Professional	2,903,000	2,493,000	D	D	D	D	D	D	24,000	D	1,316,000	1,118,000	30,000
S&E occupations	67,000	34,000	D	D	D	D	D	D	19,000	D	6,000	6,000	S
S&E-related occupations	1,380,000	1,301,000	D	D	D	D	D	D	2,000	D	1,273,000	16,000	S
Non-S&E occupations	1,456,000	1,158,000	D	D	D	D	D	D	4,000	D	36,000	1,096,000	21,000

* = 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.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
All degree levels	50,524,000	2,529,000	22,018,000	3,731,000	7,052,000	15,194,000
S&E occupations	7,466,000	1,995,000	1,653,000	1,688,000	427,000	1,703,000
Biological, agricultural, and other life scientists	698,000	9,000	104,000	408,000	70,000	108,000
Agricultural and food scientists	58,000	D	11,000	27,000	D	19,000
Biological and medical scientists	500,000	7,000	73,000	338,000	4,000	79,000
Environmental life scientists	39,000	D	15,000	18,000	1,000	6,000
Postsecondary teachers - life and related sciences	101,000	D	6,000	26,000	65,000	4,000
Computer and mathematical scientists	3,774,000	1,856,000	775,000	469,000	116,000	558,000
Computer and information scientists	3,379,000	1,800,000	688,000	357,000	24,000	510,000
Mathematical scientists	284,000	55,000	85,000	98,000	D	44,000
Postsecondary teachers - computer and math sciences	111,000	1,000	3,000	14,000	88,000	S
Physical and related scientists	409,000	11,000	77,000	194,000	54,000	74,000
Chemists, except biochemists	132,000	3,000	32,000	72,000	D	26,000
Earth, atmospheric, and ocean scientists	85,000	2,000	18,000	43,000	D	21,000
Physicists	45,000	3,000	2,000	33,000	D	7,000
Other physical and related scientists, including astronomers	67,000	2,000	21,000	26,000	D	18,000
Postsecondary teachers - physical and related sciences	80,000	D	4,000	21,000	53,000	D
Social and related scientists	663,000	7,000	79,000	199,000	149,000	229,000
Economists	56,000	3,000	10,000	35,000	D	7,000
Political scientists	22,000	D	4,000	16,000	D	3,000
Psychologists	228,000	D	20,000	22,000	3,000	183,000
Anthropologists	16,000	D	2,000	12,000	D	1,000
Other social and related scientists	142,000	2,000	35,000	76,000	S	28,000
Postsecondary teachers - social and related sciences	200,000	D	8,000	38,000	145,000	7,000
Engineers	1,921,000	112,000	618,000	418,000	38,000	735,000
Aerospace, aeronautical, and astronautical engineers	126,000	11,000	32,000	34,000	D	49,000
Chemical engineers	84,000	3,000	21,000	25,000	*	35,000
Civil, architectural, and sanitary engineers	294,000	5,000	113,000	32,000	D	145,000
Electrical and computer hardware engineers	412,000	60,000	87,000	111,000	D	153,000
Industrial engineers	95,000	4,000	49,000	8,000	D	35,000
Mechanical engineers	377,000	6,000	94,000	93,000	D	183,000
Other engineers	472,000	24,000	216,000	96,000	S	134,000
Postsecondary teachers - engineering	61,000	*	6,000	19,000	33,000	2,000
S&E-related occupations	8,893,000	228,000	1,632,000	515,000	1,146,000	5,372,000
Health-related occupations	5,728,000	20,000	554,000	234,000	292,000	4,628,000
S&E managers	999,000	43,000	714,000	41,000	S	198,000
S&E precollege teachers	925,000	D	51,000	7,000	848,000	18,000
S&E technicians and technologists	973,000	154,000	235,000	200,000	4,000	380,000
Other S&E-related occupations	270,000	11,000	78,000	33,000	D	147,000

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Non-S&E occupations	34,165,000	305,000	18,733,000	1,528,000	5,479,000	8,119,000
Non-S&E managers	4,627,000	82,000	3,969,000	138,000	48,000	391,000
Management-related occupations	6,830,000	81,000	5,199,000	325,000	57,000	1,169,000
Non-S&E precollege teachers	4,268,000	D	184,000	29,000	3,965,000	89,000
Non-S&E postsecondary teachers	610,000	D	39,000	65,000	482,000	23,000
Social services and related occupations	2,189,000	S	544,000	105,000	236,000	1,298,000
Sales and marketing occupations	4,646,000	27,000	3,978,000	145,000	18,000	478,000
Art, humanities, and related occupations	1,576,000	23,000	490,000	204,000	72,000	787,000
Other non-S&E occupations	9,418,000	85,000	4,331,000	518,000	600,000	3,885,000
Bachelor's	31,373,000	1,651,000	15,503,000	2,050,000	3,311,000	8,859,000
S&E occupations	4,176,000	1,264,000	1,021,000	743,000	87,000	1,061,000
Biological, agricultural, and other life scientists	277,000	2,000	53,000	144,000	15,000	63,000
Agricultural and food scientists	29,000	D	S	10,000	D	S
Biological and medical scientists	206,000	2,000	34,000	119,000	S	49,000
Environmental life scientists	28,000	D	11,000	S	D	3,000
Postsecondary teachers - life and related sciences	15,000	D	D	2,000	12,000	D
Computer and mathematical scientists	2,403,000	1,194,000	498,000	264,000	32,000	415,000
Computer and information scientists	2,271,000	1,177,000	451,000	232,000	19,000	393,000
Mathematical scientists	115,000	17,000	47,000	30,000	D	19,000
Postsecondary teachers - computer and math sciences	17,000	D	D	S	11,000	D
Physical and related scientists	189,000	2,000	39,000	84,000	S	49,000
Chemists, except biochemists	71,000	D	13,000	37,000	D	20,000
Earth, atmospheric, and ocean scientists	45,000	D	11,000	20,000	D	14,000
Physicists	10,000	D	D	8,000	D	2,000
Other physical and related scientists, including astronomers	41,000	D	14,000	15,000	D	12,000
Postsecondary teachers - physical and related sciences	21,000	D	D	5,000	S	D
Social and related scientists	147,000	3,000	28,000	58,000	18,000	40,000
Economists	22,000	S	S	S	D	1,000
Political scientists	3,000	D	S	S	D	D
Psychologists	39,000	D	S	7,000	D	22,000
Anthropologists	3,000	D	*	3,000	D	*
Other social and related scientists	59,000	S	11,000	32,000	D	15,000
Postsecondary teachers - social and related sciences	21,000	D	D	S	17,000	D
Engineers	1,158,000	63,000	403,000	192,000	7,000	493,000
Aerospace, aeronautical, and astronautical engineers	68,000	6,000	14,000	14,000	D	32,000
Chemical engineers	50,000	2,000	13,000	11,000	D	24,000
Civil, architectural, and sanitary engineers	191,000	3,000	74,000	19,000	D	95,000

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Electrical and computer hardware engineers	226,000	35,000	51,000	44,000	D	96,000
Industrial engineers	62,000	4,000	33,000	4,000	D	22,000
Mechanical engineers	247,000	2,000	62,000	52,000	D	131,000
Other engineers	308,000	12,000	156,000	47,000	D	91,000
Postsecondary teachers - engineering	7,000	D	D	S	4,000	D
S&E-related occupations	4,794,000	161,000	979,000	302,000	503,000	2,850,000
Health-related occupations	2,978,000	16,000	345,000	141,000	144,000	2,332,000
S&E managers	501,000	25,000	381,000	11,000	D	82,000
S&E precollege teachers	395,000	D	27,000	S	354,000	S
S&E technicians and technologists	738,000	111,000	175,000	125,000	S	324,000
Other S&E-related occupations	182,000	9,000	51,000	23,000	D	100,000
Non-S&E occupations	22,403,000	226,000	13,504,000	1,004,000	2,721,000	4,948,000
Non-S&E managers	2,780,000	52,000	2,401,000	63,000	24,000	240,000
Management-related occupations	4,737,000	53,000	3,614,000	211,000	32,000	827,000
Non-S&E precollege teachers	2,164,000	D	73,000	D	2,020,000	48,000
Non-S&E postsecondary teachers	91,000	D	11,000	S	56,000	2,000
Social services and related occupations	1,004,000	S	321,000	69,000	105,000	504,000
Sales and marketing occupations	3,833,000	23,000	3,279,000	128,000	16,000	387,000
Art, humanities, and related occupations	1,163,000	22,000	368,000	135,000	57,000	582,000
Other non-S&E occupations	6,632,000	70,000	3,438,000	355,000	411,000	2,358,000
Master's	14,158,000	787,000	5,686,000	973,000	3,177,000	3,535,000
S&E occupations	2,286,000	658,000	532,000	474,000	141,000	481,000
Biological, agricultural, and other life scientists	152,000	5,000	31,000	78,000	16,000	23,000
Agricultural and food scientists	15,000	D	3,000	7,000	D	5,000
Biological and medical scientists	111,000	5,000	25,000	65,000	*	15,000
Environmental life scientists	8,000	D	3,000	3,000	D	2,000
Postsecondary teachers - life and related sciences	19,000	D	D	3,000	15,000	D
Computer and mathematical scientists	1,168,000	605,000	252,000	130,000	53,000	129,000
Computer and information scientists	1,001,000	577,000	221,000	91,000	5,000	108,000
Mathematical scientists	115,000	27,000	29,000	37,000	D	20,000
Postsecondary teachers - computer and math sciences	52,000	D	D	3,000	47,000	D
Physical and related scientists	97,000	3,000	24,000	41,000	10,000	18,000
Chemists, except biochemists	32,000	D	S	14,000	D	4,000
Earth, atmospheric, and ocean scientists	25,000	1,000	5,000	13,000	D	6,000
Physicists	11,000	D	D	7,000	D	S
Other physical and related scientists, including astronomers	17,000	D	5,000	6,000	D	5,000
Postsecondary teachers - physical and related sciences	12,000	D	D	1,000	10,000	D
Social and related scientists	249,000	4,000	35,000	69,000	49,000	92,000

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Economists	18,000	2,000	4,000	8,000	D	3,000
Political scientists	15,000	D	2,000	11,000	D	2,000
Psychologists	91,000	D	8,000	10,000	S	72,000
Anthropologists	5,000	D	1,000	4,000	D	1,000
Other social and related scientists	60,000	S	19,000	28,000	D	11,000
Postsecondary teachers - social and related sciences	61,000	D	D	9,000	47,000	S
Engineers	619,000	42,000	191,000	156,000	13,000	218,000
Aerospace, aeronautical, and astronautical engineers	51,000	4,000	15,000	16,000	D	15,000
Chemical engineers	20,000	D	6,000	6,000	D	8,000
Civil, architectural, and sanitary engineers	94,000	1,000	35,000	11,000	D	47,000
Electrical and computer hardware engineers	153,000	22,000	32,000	49,000	D	49,000
Industrial engineers	32,000	D	16,000	3,000	D	12,000
Mechanical engineers	114,000	3,000	29,000	33,000	D	48,000
Other engineers	139,000	11,000	55,000	34,000	D	38,000
Postsecondary teachers - engineering	16,000	D	D	2,000	11,000	D
S&E-related occupations	2,332,000	61,000	516,000	120,000	558,000	1,077,000
Health-related occupations	1,213,000	4,000	144,000	41,000	95,000	930,000
S&E managers	347,000	16,000	274,000	13,000	D	44,000
S&E precollege teachers	493,000	D	19,000	4,000	462,000	7,000
S&E technicians and technologists	193,000	39,000	53,000	52,000	D	48,000
Other S&E-related occupations	86,000	2,000	26,000	10,000	D	47,000
Non-S&E occupations	9,540,000	68,000	4,638,000	379,000	2,478,000	1,977,000
Non-S&E managers	1,554,000	26,000	1,339,000	41,000	22,000	125,000
Management-related occupations	1,936,000	27,000	1,506,000	90,000	16,000	297,000
Non-S&E precollege teachers	2,049,000	D	105,000	7,000	1,899,000	39,000
Non-S&E postsecondary teachers	288,000	D	14,000	11,000	250,000	13,000
Social services and related occupations	1,077,000	D	198,000	30,000	112,000	737,000
Sales and marketing occupations	735,000	3,000	634,000	15,000	D	81,000
Art, humanities, and related occupations	359,000	1,000	115,000	59,000	S	172,000
Other non-S&E occupations	1,542,000	10,000	728,000	126,000	165,000	514,000
Doctorate	2,090,000	81,000	428,000	638,000	481,000	461,000
S&E occupations	938,000	66,000	90,000	455,000	190,000	136,000
Biological, agricultural, and other life scientists	254,000	S	18,000	179,000	36,000	20,000
Agricultural and food scientists	13,000	D	S	9,000	D	S
Biological and medical scientists	174,000	S	11,000	147,000	S	14,000
Environmental life scientists	3,000	D	D	S	D	D
Postsecondary teachers - life and related sciences	64,000	D	5,000	21,000	34,000	3,000
Computer and mathematical scientists	189,000	51,000	22,000	73,000	31,000	13,000
Computer and information scientists	95,000	40,000	13,000	34,000	D	9,000

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Mathematical scientists	51,000	10,000	8,000	29,000	D	4,000
Postsecondary teachers - computer and math sciences	42,000	D	1,000	9,000	31,000	D
Physical and related scientists	121,000	6,000	12,000	68,000	28,000	6,000
Chemists, except biochemists	29,000	D	5,000	20,000	D	1,000
Earth, atmospheric, and ocean scientists	13,000	S	S	10,000	D	S
Physicists	24,000	S	1,000	18,000	D	2,000
Other physical and related scientists, including astronomers	9,000	S	S	5,000	D	*
Postsecondary teachers - physical and related sciences	46,000	D	2,000	15,000	28,000	D
Social and related scientists	235,000	D	15,000	68,000	77,000	73,000
Economists	16,000	D	*	13,000	D	2,000
Political scientists	4,000	D	D	S	D	D
Psychologists	75,000	D	2,000	5,000	D	67,000
Anthropologists	7,000	D	D	5,000	D	S
Other social and related scientists	21,000	D	5,000	15,000	D	S
Postsecondary teachers - social and related sciences	111,000	D	7,000	27,000	75,000	2,000
Engineers	139,000	7,000	23,000	67,000	18,000	24,000
Aerospace, aeronautical, and astronautical engineers	8,000	D	S	4,000	D	S
Chemical engineers	13,000	D	S	8,000	D	3,000
Civil, architectural, and sanitary engineers	9,000	S	S	2,000	D	3,000
Electrical and computer hardware engineers	32,000	3,000	4,000	18,000	D	7,000
Industrial engineers	S	D	D	D	D	D
Mechanical engineers	13,000	D	2,000	6,000	D	3,000
Other engineers	24,000	*	5,000	14,000	D	5,000
Postsecondary teachers - engineering	38,000	D	5,000	15,000	17,000	D
S&E-related occupations	387,000	5,000	55,000	83,000	58,000	187,000
Health-related occupations	259,000	D	13,000	42,000	33,000	170,000
S&E managers	61,000	S	32,000	17,000	D	11,000
S&E precollege teachers	27,000	D	S	D	24,000	D
S&E technicians and technologists	39,000	4,000	8,000	22,000	D	6,000
Other S&E-related occupations	1,000	D	D	D	D	D
Non-S&E occupations	765,000	10,000	283,000	100,000	233,000	139,000
Non-S&E managers	192,000	3,000	143,000	32,000	S	14,000
Management-related occupations	77,000	1,000	43,000	14,000	2,000	16,000
Non-S&E precollege teachers	42,000	D	S	D	34,000	S
Non-S&E postsecondary teachers	205,000	D	11,000	30,000	159,000	5,000
Social services and related occupations	87,000	D	24,000	D	18,000	45,000
Sales and marketing occupations	17,000	D	13,000	1,000	D	S
Art, humanities, and related occupations	31,000	D	S	7,000	D	14,000
Other non-S&E occupations	114,000	D	38,000	15,000	15,000	41,000

TABLE 3-1

Employed college graduates, by level of highest degree, minor occupation, and primary work activity: 2019

(Number)

Level of highest degree and occupation	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Professional	2,903,000	9,000	401,000	70,000	83,000	2,339,000
S&E occupations	67,000	7,000	10,000	16,000	8,000	26,000
S&E-related occupations	1,380,000	D	82,000	10,000	28,000	1,258,000
Non-S&E occupations	1,456,000	D	309,000	44,000	47,000	1,055,000

* = 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.

[a] Management and administration includes respondents who reported the following work activities: accounting, finance, or contracts; human resources; quality or productivity management; sales and marketing; or managing and supervising.

[b] Research and development includes basic research, applied research, and development. “Design” is no longer included in the definition of “research and development”; it is now included as part of “Other work activities.”

[c] Other work activities includes the design of equipment, processes, structures, and models; production, operations, and maintenance; professional services; and other activities not broken out separately.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 3-2

Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019

(Number)

Sector and occupation	Total	Job satisfaction			
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
All sectors	50,524,000	22,664,000	22,697,000	3,910,000	1,253,000
S&E occupations	7,466,000	3,385,000	3,405,000	556,000	119,000
Biological, agricultural, and other life scientists	698,000	312,000	313,000	58,000	16,000
Agricultural and food scientists	58,000	24,000	24,000	5,000	S
Biological and medical scientists	500,000	206,000	240,000	44,000	10,000
Environmental life scientists	39,000	21,000	15,000	2,000	D
Postsecondary teachers - life and related sciences	101,000	61,000	34,000	6,000	*
Computer and mathematical scientists	3,774,000	1,655,000	1,764,000	299,000	57,000
Computer and information scientists	3,379,000	1,490,000	1,570,000	266,000	53,000
Mathematical scientists	284,000	118,000	144,000	20,000	3,000
Postsecondary teachers - computer and math sciences	111,000	48,000	50,000	13,000	D
Physical and related scientists	409,000	180,000	188,000	32,000	9,000
Chemists, except biochemists	132,000	45,000	75,000	11,000	1,000
Earth, atmospheric, and ocean scientists	85,000	44,000	35,000	4,000	S
Physicists	45,000	23,000	18,000	2,000	D
Other physical and related scientists, including astronomers	67,000	32,000	26,000	8,000	S
Postsecondary teachers - physical and related sciences	80,000	35,000	36,000	8,000	D
Social and related scientists	663,000	353,000	263,000	41,000	6,000
Economists	56,000	28,000	26,000	2,000	*
Political scientists	22,000	10,000	12,000	D	D
Psychologists	228,000	129,000	84,000	13,000	S
Anthropologists	16,000	8,000	6,000	1,000	D
Other social and related scientists	142,000	65,000	65,000	10,000	S
Postsecondary teachers - social and related sciences	200,000	112,000	71,000	15,000	2,000
Engineers	1,921,000	886,000	878,000	126,000	32,000
Aerospace, aeronautical, and astronautical engineers	126,000	64,000	50,000	11,000	D
Chemical engineers	84,000	40,000	39,000	2,000	S
Civil, architectural, and sanitary engineers	294,000	153,000	125,000	15,000	1,000
Electrical and computer hardware engineers	412,000	186,000	190,000	27,000	8,000
Industrial engineers	95,000	33,000	54,000	6,000	S
Mechanical engineers	377,000	161,000	181,000	30,000	6,000
Other engineers	472,000	220,000	212,000	31,000	10,000
Postsecondary teachers - engineering	61,000	30,000	26,000	4,000	D
S&E-related occupations	8,893,000	4,254,000	3,815,000	649,000	176,000
Health-related occupations	5,728,000	2,839,000	2,366,000	409,000	113,000
S&E managers	999,000	520,000	397,000	70,000	11,000
S&E precollege teachers	925,000	375,000	471,000	56,000	23,000
S&E technicians and technologists	973,000	388,000	461,000	98,000	25,000
Other S&E-related occupations	270,000	132,000	119,000	16,000	3,000
Non-S&E occupations	34,165,000	15,025,000	15,476,000	2,705,000	958,000
Non-S&E managers	4,627,000	2,584,000	1,706,000	251,000	87,000
Management-related occupations	6,830,000	2,984,000	3,136,000	545,000	165,000
Non-S&E precollege teachers	4,268,000	1,959,000	2,034,000	199,000	76,000
Non-S&E postsecondary teachers	610,000	271,000	271,000	50,000	17,000

TABLE 3-2

Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019

(Number)

Sector and occupation	Total	Job satisfaction			
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
Social services and related occupations	2,189,000	969,000	968,000	187,000	65,000
Sales and marketing occupations	4,646,000	1,904,000	2,118,000	446,000	179,000
Art, humanities, and related occupations	1,576,000	640,000	823,000	91,000	23,000
Other non-S&E occupations	9,418,000	3,715,000	4,421,000	935,000	347,000
Business or industry	35,125,000	15,717,000	15,655,000	2,811,000	942,000
S&E occupations	5,444,000	2,420,000	2,523,000	414,000	87,000
Biological, agricultural, and other life scientists	302,000	126,000	136,000	29,000	12,000
Agricultural and food scientists	40,000	17,000	15,000	S	S
Biological and medical scientists	252,000	104,000	117,000	23,000	7,000
Environmental life scientists	10,000	5,000	4,000	S	D
Postsecondary teachers - life and related sciences	D	D	D	D	D
Computer and mathematical scientists	3,147,000	1,367,000	1,484,000	250,000	45,000
Computer and information scientists	2,940,000	1,285,000	1,378,000	234,000	43,000
Mathematical scientists	207,000	82,000	106,000	17,000	2,000
Postsecondary teachers - computer and math sciences	D	D	D	D	D
Physical and related scientists	189,000	77,000	92,000	17,000	3,000
Chemists, except biochemists	99,000	32,000	57,000	9,000	1,000
Earth, atmospheric, and ocean scientists	51,000	23,000	24,000	3,000	D
Physicists	13,000	10,000	3,000	D	D
Other physical and related scientists, including astronomers	25,000	12,000	7,000	S	D
Postsecondary teachers - physical and related sciences	D	D	D	D	D
Social and related scientists	230,000	130,000	89,000	8,000	S
Economists	23,000	15,000	7,000	1,000	D
Political scientists	11,000	5,000	6,000	D	D
Psychologists	125,000	78,000	44,000	2,000	D
Anthropologists	10,000	5,000	4,000	*	D
Other social and related scientists	61,000	27,000	28,000	5,000	S
Postsecondary teachers - social and related sciences	D	D	D	D	D
Engineers	1,576,000	720,000	721,000	109,000	25,000
Aerospace, aeronautical, and astronautical engineers	101,000	50,000	40,000	10,000	D
Chemical engineers	74,000	38,000	33,000	2,000	S
Civil, architectural, and sanitary engineers	203,000	108,000	82,000	12,000	1,000
Electrical and computer hardware engineers	365,000	165,000	166,000	26,000	7,000
Industrial engineers	90,000	31,000	51,000	4,000	S
Mechanical engineers	336,000	140,000	162,000	29,000	6,000
Other engineers	408,000	188,000	187,000	27,000	6,000
Postsecondary teachers - engineering	D	D	D	D	D
S&E-related occupations	6,470,000	3,152,000	2,710,000	483,000	126,000
Health-related occupations	4,595,000	2,285,000	1,886,000	330,000	94,000
S&E managers	822,000	427,000	333,000	53,000	8,000
S&E precollege teachers	D	D	D	D	D
S&E technicians and technologists	808,000	322,000	379,000	86,000	22,000
Other S&E-related occupations	246,000	117,000	111,000	14,000	3,000
Non-S&E occupations	23,210,000	10,145,000	10,423,000	1,914,000	729,000

TABLE 3-2

Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019

(Number)

Sector and occupation	Total	Job satisfaction			
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
Non-S&E managers	3,653,000	2,092,000	1,279,000	204,000	79,000
Management-related occupations	5,651,000	2,443,000	2,637,000	441,000	130,000
Non-S&E precollege teachers	D	D	D	D	D
Non-S&E postsecondary teachers	D	D	D	D	D
Social services and related occupations	1,433,000	670,000	598,000	127,000	38,000
Sales and marketing occupations	4,511,000	1,840,000	2,063,000	430,000	178,000
Art, humanities, and related occupations	1,388,000	548,000	739,000	80,000	21,000
Other non-S&E occupations	6,574,000	2,552,000	3,107,000	632,000	283,000
Education	10,335,000	4,648,000	4,798,000	691,000	198,000
S&E occupations	1,225,000	567,000	536,000	102,000	20,000
Biological, agricultural, and other life scientists	276,000	123,000	126,000	24,000	2,000
Agricultural and food scientists	9,000	3,000	5,000	D	D
Biological and medical scientists	158,000	58,000	81,000	17,000	1,000
Environmental life scientists	S	S	S	D	D
Postsecondary teachers - life and related sciences	101,000	61,000	34,000	6,000	*
Computer and mathematical scientists	358,000	161,000	154,000	35,000	S
Computer and information scientists	214,000	99,000	87,000	22,000	S
Mathematical scientists	33,000	14,000	18,000	1,000	D
Postsecondary teachers - computer and math sciences	111,000	48,000	50,000	13,000	D
Physical and related scientists	136,000	56,000	65,000	10,000	4,000
Chemists, except biochemists	20,000	6,000	12,000	1,000	*
Earth, atmospheric, and ocean scientists	9,000	4,000	4,000	D	D
Physicists	23,000	9,000	11,000	1,000	D
Other physical and related scientists, including astronomers	5,000	2,000	3,000	D	D
Postsecondary teachers - physical and related sciences	80,000	35,000	36,000	8,000	D
Social and related scientists	337,000	174,000	134,000	25,000	4,000
Economists	11,000	5,000	6,000	D	D
Political scientists	4,000	S	1,000	D	D
Psychologists	82,000	41,000	33,000	S	*
Anthropologists	4,000	2,000	S	D	D
Other social and related scientists	36,000	12,000	S	S	D
Postsecondary teachers - social and related sciences	200,000	112,000	71,000	15,000	2,000
Engineers	119,000	53,000	56,000	7,000	3,000
Aerospace, aeronautical, and astronautical engineers	4,000	2,000	1,000	D	D
Chemical engineers	5,000	1,000	4,000	D	D
Civil, architectural, and sanitary engineers	6,000	3,000	3,000	D	D
Electrical and computer hardware engineers	11,000	3,000	7,000	D	D
Industrial engineers	2,000	D	D	D	D
Mechanical engineers	13,000	5,000	7,000	D	D
Other engineers	16,000	8,000	6,000	*	D
Postsecondary teachers - engineering	61,000	30,000	26,000	4,000	D
S&E-related occupations	1,791,000	819,000	810,000	120,000	41,000
Health-related occupations	756,000	391,000	294,000	57,000	14,000
S&E managers	48,000	25,000	15,000	4,000	D

TABLE 3-2

Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019

(Number)

Sector and occupation	Total	Job satisfaction			
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
S&E precollege teachers	925,000	375,000	471,000	56,000	23,000
S&E technicians and technologists	55,000	20,000	29,000	S	D
Other S&E-related occupations	9,000	8,000	D	D	D
Non-S&E occupations	7,319,000	3,261,000	3,452,000	469,000	137,000
Non-S&E managers	502,000	261,000	223,000	16,000	2,000
Management-related occupations	351,000	154,000	150,000	43,000	3,000
Non-S&E precollege teachers	4,268,000	1,959,000	2,034,000	199,000	76,000
Non-S&E postsecondary teachers	610,000	271,000	271,000	50,000	17,000
Social services and related occupations	379,000	158,000	198,000	20,000	S
Sales and marketing occupations	79,000	27,000	37,000	S	D
Art, humanities, and related occupations	131,000	S	64,000	S	D
Other non-S&E occupations	1,001,000	373,000	475,000	120,000	33,000
Government	5,064,000	2,299,000	2,243,000	409,000	113,000
S&E occupations	798,000	397,000	347,000	41,000	12,000
Biological, agricultural, and other life scientists	120,000	63,000	50,000	5,000	S
Agricultural and food scientists	8,000	S	S	D	D
Biological and medical scientists	90,000	44,000	41,000	4,000	S
Environmental life scientists	22,000	15,000	5,000	S	D
Postsecondary teachers - life and related sciences	D	D	D	D	D
Computer and mathematical scientists	269,000	127,000	125,000	13,000	4,000
Computer and information scientists	225,000	106,000	105,000	11,000	3,000
Mathematical scientists	45,000	22,000	20,000	2,000	D
Postsecondary teachers - computer and math sciences	D	D	D	D	D
Physical and related scientists	85,000	47,000	32,000	5,000	S
Chemists, except biochemists	14,000	7,000	6,000	1,000	D
Earth, atmospheric, and ocean scientists	25,000	17,000	7,000	D	D
Physicists	9,000	5,000	3,000	D	D
Other physical and related scientists, including astronomers	37,000	18,000	16,000	3,000	D
Postsecondary teachers - physical and related sciences	D	D	D	D	D
Social and related scientists	97,000	49,000	39,000	8,000	*
Economists	22,000	8,000	S	S	D
Political scientists	8,000	3,000	5,000	D	D
Psychologists	20,000	11,000	6,000	S	D
Anthropologists	2,000	1,000	1,000	D	D
Other social and related scientists	44,000	26,000	14,000	4,000	D
Postsecondary teachers - social and related sciences	D	D	D	D	D
Engineers	226,000	112,000	101,000	10,000	4,000
Aerospace, aeronautical, and astronautical engineers	22,000	11,000	9,000	D	D
Chemical engineers	4,000	1,000	3,000	D	D
Civil, architectural, and sanitary engineers	86,000	43,000	40,000	3,000	D
Electrical and computer hardware engineers	36,000	18,000	17,000	S	D
Industrial engineers	3,000	1,000	S	D	D
Mechanical engineers	28,000	15,000	12,000	S	D
Other engineers	48,000	23,000	18,000	S	S

TABLE 3-2

Employed college graduates, by employment sector, minor occupation, and job satisfaction: 2019

(Number)

Sector and occupation	Total	Job satisfaction			
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
Postsecondary teachers - engineering	D	D	D	D	D
S&E-related occupations	632,000	283,000	295,000	46,000	8,000
Health-related occupations	377,000	163,000	186,000	22,000	S
S&E managers	130,000	67,000	49,000	13,000	D
S&E precollege teachers	D	D	D	D	D
S&E technicians and technologists	110,000	45,000	54,000	S	S
Other S&E-related occupations	15,000	7,000	7,000	D	D
Non-S&E occupations	3,635,000	1,619,000	1,601,000	322,000	93,000
Non-S&E managers	473,000	231,000	204,000	32,000	D
Management-related occupations	827,000	387,000	348,000	61,000	31,000
Non-S&E precollege teachers	D	D	D	D	D
Non-S&E postsecondary teachers	D	D	D	D	D
Social services and related occupations	377,000	140,000	173,000	41,000	24,000
Sales and marketing occupations	57,000	S	18,000	S	D
Art, humanities, and related occupations	58,000	35,000	S	S	*
Other non-S&E occupations	1,843,000	790,000	839,000	183,000	31,000

* = 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. Business or industry includes self-employed individuals, nonprofit organizations, and other unspecified types of employers. Education includes 4-year colleges and universities, medical schools, university-affiliated research institutes, 2-year colleges, precollege institutions, and other educational institutions. Government includes federal (civilian), military, state, and local employers.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 3-3

Employed college graduates, by sex, major occupation, job satisfaction, and primary work activity: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
All sexes	50,524,000	2,529,000	22,018,000	3,731,000	7,052,000	15,194,000
Very satisfied	22,664,000	1,113,000	9,721,000	1,689,000	3,282,000	6,861,000
Somewhat satisfied	22,697,000	1,192,000	9,918,000	1,655,000	3,263,000	6,670,000
Somewhat dissatisfied	3,910,000	188,000	1,799,000	343,000	379,000	1,201,000
Very dissatisfied	1,253,000	36,000	581,000	45,000	129,000	462,000
S&E occupations	7,466,000	1,995,000	1,653,000	1,688,000	427,000	1,703,000
Very satisfied	3,385,000	908,000	714,000	766,000	212,000	785,000
Somewhat satisfied	3,405,000	921,000	786,000	771,000	175,000	753,000
Somewhat dissatisfied	556,000	145,000	119,000	129,000	35,000	129,000
Very dissatisfied	119,000	22,000	34,000	22,000	5,000	37,000
Biological, agricultural, and other life scientists	698,000	9,000	104,000	408,000	70,000	108,000
Very satisfied	312,000	3,000	44,000	171,000	41,000	53,000
Somewhat satisfied	313,000	4,000	49,000	196,000	24,000	40,000
Somewhat dissatisfied	58,000	D	9,000	35,000	4,000	9,000
Very dissatisfied	16,000	D	S	6,000	*	7,000
Computer and mathematical scientists	3,774,000	1,856,000	775,000	469,000	116,000	558,000
Very satisfied	1,655,000	840,000	321,000	206,000	52,000	236,000
Somewhat satisfied	1,764,000	864,000	369,000	219,000	52,000	259,000
Somewhat dissatisfied	299,000	133,000	63,000	38,000	11,000	53,000
Very dissatisfied	57,000	19,000	21,000	6,000	S	10,000
Physical and related scientists	409,000	11,000	77,000	194,000	54,000	74,000
Very satisfied	180,000	5,000	32,000	89,000	19,000	34,000
Somewhat satisfied	188,000	5,000	38,000	83,000	29,000	34,000
Somewhat dissatisfied	32,000	D	5,000	18,000	5,000	4,000
Very dissatisfied	9,000	D	S	3,000	D	2,000
Social and related scientists	663,000	7,000	79,000	199,000	149,000	229,000
Very satisfied	353,000	5,000	44,000	91,000	85,000	128,000
Somewhat satisfied	263,000	1,000	32,000	97,000	50,000	82,000
Somewhat dissatisfied	41,000	D	3,000	10,000	12,000	15,000
Very dissatisfied	6,000	D	*	1,000	2,000	3,000
Engineers	1,921,000	112,000	618,000	418,000	38,000	735,000
Very satisfied	886,000	54,000	272,000	209,000	15,000	335,000
Somewhat satisfied	878,000	47,000	297,000	176,000	20,000	337,000
Somewhat dissatisfied	126,000	10,000	39,000	28,000	2,000	48,000
Very dissatisfied	32,000	2,000	9,000	6,000	D	15,000
S&E-related occupations	8,893,000	228,000	1,632,000	515,000	1,146,000	5,372,000
Very satisfied	4,254,000	85,000	793,000	234,000	513,000	2,629,000
Somewhat satisfied	3,815,000	112,000	702,000	219,000	551,000	2,232,000
Somewhat dissatisfied	649,000	21,000	116,000	48,000	57,000	407,000
Very dissatisfied	176,000	10,000	21,000	13,000	26,000	105,000
Non-S&E occupations	34,165,000	305,000	18,733,000	1,528,000	5,479,000	8,119,000
Very satisfied	15,025,000	119,000	8,214,000	689,000	2,556,000	3,447,000
Somewhat satisfied	15,476,000	159,000	8,431,000	664,000	2,537,000	3,686,000
Somewhat dissatisfied	2,705,000	23,000	1,563,000	166,000	288,000	665,000
Very dissatisfied	958,000	S	526,000	10,000	98,000	321,000
Female	26,341,000	578,000	11,144,000	1,592,000	5,121,000	7,905,000

TABLE 3-3

Employed college graduates, by sex, major occupation, job satisfaction, and primary work activity: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Very satisfied	11,532,000	243,000	4,753,000	682,000	2,362,000	3,492,000
Somewhat satisfied	12,152,000	281,000	5,133,000	764,000	2,417,000	3,556,000
Somewhat dissatisfied	1,948,000	46,000	944,000	123,000	235,000	600,000
Very dissatisfied	709,000	9,000	314,000	23,000	107,000	256,000
S&E occupations	2,193,000	391,000	503,000	577,000	213,000	509,000
Very satisfied	966,000	170,000	198,000	258,000	109,000	231,000
Somewhat satisfied	1,021,000	183,000	260,000	270,000	82,000	225,000
Somewhat dissatisfied	167,000	31,000	36,000	38,000	20,000	41,000
Very dissatisfied	38,000	7,000	8,000	10,000	2,000	11,000
Biological, agricultural, and other life scientists	337,000	2,000	55,000	188,000	40,000	53,000
Very satisfied	160,000	S	23,000	81,000	27,000	27,000
Somewhat satisfied	145,000	S	25,000	89,000	9,000	21,000
Somewhat dissatisfied	25,000	D	6,000	13,000	4,000	3,000
Very dissatisfied	7,000	D	*	4,000	D	S
Computer and mathematical scientists	975,000	372,000	258,000	136,000	53,000	156,000
Very satisfied	392,000	159,000	88,000	58,000	28,000	60,000
Somewhat satisfied	483,000	178,000	144,000	67,000	18,000	76,000
Somewhat dissatisfied	84,000	28,000	21,000	11,000	7,000	17,000
Very dissatisfied	16,000	6,000	5,000	S	D	S
Physical and related scientists	142,000	S	30,000	59,000	24,000	28,000
Very satisfied	57,000	D	12,000	28,000	5,000	10,000
Somewhat satisfied	70,000	S	14,000	24,000	S	15,000
Somewhat dissatisfied	11,000	D	3,000	5,000	2,000	2,000
Very dissatisfied	4,000	D	*	S	D	D
Social and related scientists	428,000	2,000	50,000	116,000	88,000	171,000
Very satisfied	214,000	S	23,000	50,000	46,000	95,000
Somewhat satisfied	179,000	1,000	25,000	60,000	33,000	60,000
Somewhat dissatisfied	31,000	D	3,000	6,000	8,000	14,000
Very dissatisfied	5,000	D	*	*	2,000	S
Engineers	310,000	14,000	110,000	78,000	8,000	100,000
Very satisfied	144,000	8,000	52,000	41,000	S	40,000
Somewhat satisfied	143,000	3,000	52,000	31,000	4,000	53,000
Somewhat dissatisfied	16,000	S	4,000	3,000	*	6,000
Very dissatisfied	6,000	D	2,000	D	D	S
S&E-related occupations	5,109,000	58,000	739,000	258,000	717,000	3,337,000
Very satisfied	2,435,000	27,000	370,000	112,000	332,000	1,595,000
Somewhat satisfied	2,224,000	25,000	307,000	125,000	331,000	1,437,000
Somewhat dissatisfied	335,000	5,000	51,000	13,000	33,000	233,000
Very dissatisfied	114,000	D	12,000	8,000	21,000	73,000
Non-S&E occupations	19,040,000	130,000	9,902,000	758,000	4,191,000	4,059,000
Very satisfied	8,130,000	45,000	4,185,000	312,000	1,921,000	1,666,000
Somewhat satisfied	8,907,000	73,000	4,566,000	369,000	2,005,000	1,894,000
Somewhat dissatisfied	1,446,000	S	857,000	71,000	182,000	325,000
Very dissatisfied	557,000	D	293,000	6,000	84,000	173,000
Male	24,183,000	1,950,000	10,874,000	2,139,000	1,931,000	7,289,000
Very satisfied	11,132,000	870,000	4,967,000	1,007,000	920,000	3,368,000

TABLE 3-3

Employed college graduates, by sex, major occupation, job satisfaction, and primary work activity: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Primary work activity				
		Computer applications	Management and administration[a]	Research and development[b]	Teaching	Other[c]
Somewhat satisfied	10,545,000	911,000	4,784,000	890,000	846,000	3,114,000
Somewhat dissatisfied	1,962,000	142,000	855,000	220,000	144,000	601,000
Very dissatisfied	544,000	28,000	268,000	21,000	22,000	206,000
S&E occupations	5,274,000	1,605,000	1,150,000	1,111,000	214,000	1,195,000
Very satisfied	2,419,000	738,000	516,000	508,000	103,000	554,000
Somewhat satisfied	2,384,000	738,000	525,000	501,000	93,000	527,000
Somewhat dissatisfied	389,000	114,000	83,000	91,000	14,000	88,000
Very dissatisfied	81,000	15,000	26,000	12,000	3,000	26,000
Biological, agricultural, and other life scientists	361,000	7,000	49,000	221,000	29,000	55,000
Very satisfied	153,000	S	21,000	90,000	14,000	26,000
Somewhat satisfied	167,000	3,000	24,000	107,000	15,000	19,000
Somewhat dissatisfied	32,000	D	3,000	22,000	D	6,000
Very dissatisfied	8,000	D	S	2,000	D	D
Computer and mathematical scientists	2,799,000	1,485,000	517,000	333,000	63,000	402,000
Very satisfied	1,263,000	681,000	233,000	149,000	24,000	176,000
Somewhat satisfied	1,280,000	686,000	225,000	153,000	34,000	183,000
Somewhat dissatisfied	215,000	105,000	43,000	27,000	4,000	36,000
Very dissatisfied	41,000	13,000	16,000	5,000	D	7,000
Physical and related scientists	267,000	9,000	47,000	134,000	30,000	46,000
Very satisfied	123,000	4,000	20,000	61,000	14,000	23,000
Somewhat satisfied	118,000	4,000	23,000	59,000	12,000	19,000
Somewhat dissatisfied	21,000	D	S	13,000	3,000	3,000
Very dissatisfied	5,000	D	S	*	D	S
Social and related scientists	235,000	5,000	29,000	83,000	61,000	57,000
Very satisfied	139,000	4,000	21,000	41,000	39,000	33,000
Somewhat satisfied	84,000	S	8,000	37,000	17,000	22,000
Somewhat dissatisfied	11,000	D	*	5,000	5,000	1,000
Very dissatisfied	S	D	D	D	D	D
Engineers	1,612,000	99,000	508,000	340,000	30,000	635,000
Very satisfied	742,000	46,000	220,000	167,000	12,000	295,000
Somewhat satisfied	734,000	44,000	245,000	145,000	16,000	284,000
Somewhat dissatisfied	110,000	7,000	35,000	24,000	S	42,000
Very dissatisfied	25,000	S	7,000	4,000	D	13,000
S&E-related occupations	3,785,000	171,000	893,000	257,000	429,000	2,035,000
Very satisfied	1,818,000	58,000	423,000	122,000	181,000	1,034,000
Somewhat satisfied	1,591,000	87,000	395,000	94,000	220,000	795,000
Somewhat dissatisfied	314,000	16,000	66,000	S	24,000	174,000
Very dissatisfied	62,000	S	10,000	6,000	5,000	32,000
Non-S&E occupations	15,125,000	175,000	8,831,000	771,000	1,288,000	4,060,000
Very satisfied	6,895,000	74,000	4,028,000	376,000	636,000	1,781,000
Somewhat satisfied	6,570,000	86,000	3,864,000	296,000	532,000	1,791,000
Somewhat dissatisfied	1,259,000	12,000	706,000	94,000	106,000	340,000
Very dissatisfied	401,000	S	233,000	4,000	14,000	147,000

* = 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.

[a] Management and administration includes respondents who reported the following work activities: accounting, finance, or contracts; human resources; quality or productivity management; sales and marketing; or managing and supervising.

[b] Research and development includes basic research, applied research, and development. “Design” is no longer included in the definition of “research and development”; it is now included as part of “Other work activities.”

[c] Other work activities includes the design of equipment, processes, structures, and models; production, operations, and maintenance; professional services; and other activities not broken out separately.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 3-4

Employed college graduates, by sex, major occupation, job satisfaction, and years since highest degree: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Years since highest degree							
		< 5	5–9	10–14	15–19	20–24	25–29	30–34	≥ 35
All sexes	50,524,000	8,140,000	9,892,000	7,347,000	5,795,000	5,182,000	4,408,000	3,752,000	6,008,000
Very satisfied	22,664,000	3,193,000	3,867,000	3,043,000	2,788,000	2,348,000	2,102,000	1,960,000	3,364,000
Somewhat satisfied	22,697,000	3,902,000	4,761,000	3,470,000	2,507,000	2,369,000	1,904,000	1,525,000	2,258,000
Somewhat dissatisfied	3,910,000	834,000	948,000	580,000	402,000	352,000	287,000	197,000	311,000
Very dissatisfied	1,253,000	212,000	316,000	255,000	98,000	113,000	115,000	69,000	75,000
S&E occupations	7,466,000	1,463,000	1,570,000	1,097,000	865,000	778,000	610,000	499,000	584,000
Very satisfied	3,385,000	619,000	675,000	473,000	419,000	349,000	290,000	244,000	315,000
Somewhat satisfied	3,405,000	672,000	722,000	530,000	373,000	376,000	277,000	215,000	240,000
Somewhat dissatisfied	556,000	142,000	141,000	79,000	60,000	42,000	35,000	33,000	24,000
Very dissatisfied	119,000	30,000	31,000	14,000	13,000	11,000	8,000	7,000	4,000
Biological, agricultural, and other life scientists	698,000	171,000	177,000	82,000	72,000	66,000	39,000	38,000	53,000
Very satisfied	312,000	75,000	64,000	36,000	36,000	28,000	22,000	19,000	32,000
Somewhat satisfied	313,000	76,000	84,000	40,000	28,000	33,000	14,000	15,000	21,000
Somewhat dissatisfied	58,000	16,000	22,000	6,000	5,000	5,000	2,000	2,000	*
Very dissatisfied	16,000	4,000	6,000	*	D	*	D	S	D
Computer and mathematical scientists	3,774,000	645,000	767,000	613,000	486,000	435,000	334,000	256,000	239,000
Very satisfied	1,655,000	281,000	332,000	261,000	226,000	189,000	141,000	112,000	113,000
Somewhat satisfied	1,764,000	277,000	350,000	292,000	220,000	217,000	168,000	123,000	117,000
Somewhat dissatisfied	299,000	77,000	70,000	52,000	34,000	21,000	20,000	18,000	7,000
Very dissatisfied	57,000	11,000	15,000	8,000	6,000	7,000	5,000	S	S
Physical and related scientists	409,000	112,000	81,000	53,000	38,000	34,000	27,000	27,000	38,000
Very satisfied	180,000	31,000	34,000	23,000	19,000	15,000	17,000	15,000	25,000
Somewhat satisfied	188,000	69,000	33,000	26,000	14,000	16,000	9,000	9,000	12,000
Somewhat dissatisfied	32,000	10,000	11,000	2,000	3,000	3,000	1,000	S	1,000
Very dissatisfied	9,000	S	S	S	D	D	D	D	D
Social and related scientists	663,000	176,000	142,000	93,000	78,000	58,000	37,000	32,000	47,000
Very satisfied	353,000	75,000	68,000	50,000	49,000	36,000	23,000	22,000	30,000
Somewhat satisfied	263,000	85,000	61,000	39,000	23,000	18,000	13,000	9,000	14,000
Somewhat dissatisfied	41,000	14,000	12,000	3,000	5,000	3,000	2,000	S	S
Very dissatisfied	6,000	S	1,000	S	D	D	D	D	D
Engineers	1,921,000	359,000	404,000	256,000	192,000	185,000	173,000	146,000	207,000
Very satisfied	886,000	157,000	177,000	104,000	88,000	80,000	88,000	76,000	115,000
Somewhat satisfied	878,000	166,000	193,000	132,000	88,000	92,000	72,000	58,000	76,000
Somewhat dissatisfied	126,000	26,000	27,000	17,000	14,000	10,000	10,000	9,000	13,000
Very dissatisfied	32,000	11,000	6,000	S	S	3,000	S	2,000	S
S&E-related occupations	8,893,000	1,726,000	1,855,000	1,280,000	976,000	875,000	683,000	561,000	936,000
Very satisfied	4,254,000	773,000	860,000	525,000	488,000	391,000	370,000	314,000	533,000
Somewhat satisfied	3,815,000	783,000	801,000	609,000	406,000	409,000	261,000	210,000	336,000
Somewhat dissatisfied	649,000	132,000	151,000	113,000	69,000	57,000	33,000	31,000	62,000
Very dissatisfied	176,000	38,000	44,000	34,000	14,000	17,000	19,000	6,000	S
Non-S&E occupations	34,165,000	4,951,000	6,467,000	4,970,000	3,953,000	3,529,000	3,115,000	2,691,000	4,488,000
Very satisfied	15,025,000	1,801,000	2,332,000	2,044,000	1,881,000	1,608,000	1,441,000	1,401,000	2,516,000
Somewhat satisfied	15,476,000	2,446,000	3,238,000	2,331,000	1,728,000	1,584,000	1,366,000	1,101,000	1,681,000
Somewhat dissatisfied	2,705,000	560,000	655,000	388,000	272,000	253,000	219,000	133,000	224,000
Very dissatisfied	958,000	145,000	241,000	206,000	71,000	85,000	88,000	56,000	66,000
Female	26,341,000	4,749,000	5,611,000	4,000,000	2,992,000	2,690,000	2,088,000	1,710,000	2,502,000
Very satisfied	11,532,000	1,780,000	2,268,000	1,624,000	1,414,000	1,181,000	1,016,000	890,000	1,359,000

TABLE 3-4

Employed college graduates, by sex, major occupation, job satisfaction, and years since highest degree: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Years since highest degree							
		< 5	5–9	10–14	15–19	20–24	25–29	30–34	≥ 35
Somewhat satisfied	12,152,000	2,384,000	2,693,000	1,917,000	1,350,000	1,238,000	895,000	715,000	961,000
Somewhat dissatisfied	1,948,000	471,000	470,000	304,000	161,000	199,000	120,000	83,000	141,000
Very dissatisfied	709,000	114,000	180,000	155,000	66,000	73,000	58,000	23,000	42,000
S&E occupations	2,193,000	499,000	493,000	329,000	251,000	215,000	166,000	128,000	112,000
Very satisfied	966,000	205,000	199,000	151,000	120,000	87,000	87,000	59,000	60,000
Somewhat satisfied	1,021,000	240,000	237,000	152,000	107,000	110,000	69,000	59,000	46,000
Somewhat dissatisfied	167,000	44,000	48,000	22,000	18,000	13,000	9,000	8,000	6,000
Very dissatisfied	38,000	11,000	9,000	5,000	6,000	S	S	S	*
Biological, agricultural, and other life scientists	337,000	77,000	89,000	44,000	38,000	37,000	16,000	16,000	21,000
Very satisfied	160,000	38,000	39,000	20,000	21,000	16,000	10,000	9,000	8,000
Somewhat satisfied	145,000	29,000	40,000	21,000	13,000	19,000	4,000	6,000	13,000
Somewhat dissatisfied	25,000	8,000	8,000	2,000	2,000	S	2,000	*	D
Very dissatisfied	7,000	S	S	*	D	*	D	D	D
Computer and mathematical scientists	975,000	174,000	189,000	153,000	120,000	104,000	106,000	76,000	54,000
Very satisfied	392,000	62,000	70,000	68,000	46,000	35,000	55,000	28,000	29,000
Somewhat satisfied	483,000	88,000	98,000	69,000	61,000	59,000	44,000	41,000	22,000
Somewhat dissatisfied	84,000	20,000	19,000	13,000	10,000	7,000	6,000	S	S
Very dissatisfied	16,000	4,000	3,000	S	D	D	D	D	D
Physical and related scientists	142,000	45,000	38,000	19,000	12,000	12,000	6,000	5,000	6,000
Very satisfied	57,000	14,000	15,000	6,000	5,000	6,000	3,000	3,000	5,000
Somewhat satisfied	70,000	28,000	15,000	12,000	5,000	5,000	2,000	2,000	1,000
Somewhat dissatisfied	11,000	2,000	6,000	1,000	S	S	D	D	D
Very dissatisfied	4,000	S	S	*	D	D	D	D	D
Social and related scientists	428,000	124,000	99,000	66,000	53,000	35,000	20,000	13,000	18,000
Very satisfied	214,000	51,000	40,000	38,000	35,000	21,000	9,000	9,000	11,000
Somewhat satisfied	179,000	61,000	49,000	25,000	13,000	13,000	10,000	3,000	5,000
Somewhat dissatisfied	31,000	10,000	S	3,000	4,000	S	D	D	D
Very dissatisfied	5,000	S	1,000	D	D	D	D	D	D
Engineers	310,000	80,000	77,000	47,000	28,000	27,000	19,000	18,000	13,000
Very satisfied	144,000	40,000	34,000	18,000	13,000	10,000	10,000	11,000	7,000
Somewhat satisfied	143,000	34,000	35,000	25,000	14,000	15,000	9,000	7,000	5,000
Somewhat dissatisfied	16,000	3,000	6,000	4,000	1,000	1,000	D	D	D
Very dissatisfied	6,000	3,000	S	D	D	D	D	D	D
S&E-related occupations	5,109,000	1,134,000	1,169,000	771,000	508,000	466,000	327,000	293,000	440,000
Very satisfied	2,435,000	498,000	543,000	323,000	259,000	225,000	172,000	175,000	241,000
Somewhat satisfied	2,224,000	534,000	522,000	358,000	216,000	193,000	132,000	106,000	163,000
Somewhat dissatisfied	335,000	80,000	70,000	68,000	24,000	34,000	16,000	9,000	33,000
Very dissatisfied	114,000	21,000	34,000	21,000	9,000	15,000	7,000	S	D
Non-S&E occupations	19,040,000	3,116,000	3,949,000	2,900,000	2,233,000	2,009,000	1,595,000	1,289,000	1,949,000
Very satisfied	8,130,000	1,077,000	1,526,000	1,151,000	1,036,000	869,000	757,000	657,000	1,058,000
Somewhat satisfied	8,907,000	1,609,000	1,934,000	1,407,000	1,027,000	934,000	693,000	550,000	752,000
Somewhat dissatisfied	1,446,000	347,000	352,000	214,000	120,000	152,000	94,000	66,000	102,000
Very dissatisfied	557,000	82,000	137,000	129,000	51,000	54,000	51,000	16,000	38,000
Male	24,183,000	3,392,000	4,281,000	3,347,000	2,803,000	2,492,000	2,320,000	2,042,000	3,506,000
Very satisfied	11,132,000	1,413,000	1,600,000	1,418,000	1,374,000	1,167,000	1,086,000	1,070,000	2,005,000
Somewhat satisfied	10,545,000	1,518,000	2,068,000	1,553,000	1,157,000	1,132,000	1,010,000	811,000	1,297,000
Somewhat dissatisfied	1,962,000	363,000	478,000	276,000	241,000	153,000	167,000	115,000	170,000

TABLE 3-4

Employed college graduates, by sex, major occupation, job satisfaction, and years since highest degree: 2019

(Number)

Sex, occupation, and job satisfaction	Total	Years since highest degree							
		< 5	5–9	10–14	15–19	20–24	25–29	30–34	≥ 35
Very dissatisfied	544,000	98,000	136,000	100,000	32,000	41,000	58,000	46,000	34,000
S&E occupations	5,274,000	964,000	1,077,000	768,000	614,000	564,000	444,000	371,000	471,000
Very satisfied	2,419,000	414,000	477,000	323,000	299,000	261,000	204,000	186,000	255,000
Somewhat satisfied	2,384,000	433,000	485,000	379,000	265,000	266,000	207,000	156,000	194,000
Somewhat dissatisfied	389,000	99,000	94,000	57,000	43,000	29,000	25,000	25,000	18,000
Very dissatisfied	81,000	19,000	22,000	9,000	7,000	7,000	8,000	5,000	4,000
Biological, agricultural, and other life scientists	361,000	94,000	89,000	38,000	33,000	29,000	23,000	22,000	32,000
Very satisfied	153,000	37,000	25,000	16,000	16,000	12,000	12,000	10,000	24,000
Somewhat satisfied	167,000	47,000	44,000	19,000	15,000	14,000	10,000	10,000	8,000
Somewhat dissatisfied	32,000	7,000	14,000	3,000	3,000	2,000	S	2,000	D
Very dissatisfied	8,000	2,000	S	D	D	D	D	*	D
Computer and mathematical scientists	2,799,000	471,000	577,000	460,000	366,000	331,000	228,000	180,000	184,000
Very satisfied	1,263,000	218,000	262,000	193,000	180,000	154,000	86,000	85,000	83,000
Somewhat satisfied	1,280,000	189,000	252,000	223,000	158,000	158,000	124,000	82,000	95,000
Somewhat dissatisfied	215,000	57,000	51,000	39,000	24,000	14,000	14,000	12,000	4,000
Very dissatisfied	41,000	S	12,000	5,000	4,000	S	5,000	S	D
Physical and related scientists	267,000	67,000	42,000	34,000	26,000	22,000	22,000	22,000	32,000
Very satisfied	123,000	17,000	19,000	17,000	14,000	9,000	14,000	12,000	20,000
Somewhat satisfied	118,000	41,000	18,000	15,000	9,000	11,000	7,000	7,000	11,000
Somewhat dissatisfied	21,000	8,000	5,000	S	2,000	S	1,000	S	*
Very dissatisfied	5,000	D	S	S	D	D	D	D	D
Social and related scientists	235,000	52,000	42,000	27,000	26,000	23,000	17,000	19,000	29,000
Very satisfied	139,000	24,000	27,000	12,000	14,000	16,000	13,000	13,000	19,000
Somewhat satisfied	84,000	24,000	12,000	15,000	10,000	5,000	3,000	6,000	9,000
Somewhat dissatisfied	11,000	4,000	3,000	*	*	D	D	D	D
Very dissatisfied	S	D	D	D	D	D	D	D	D
Engineers	1,612,000	279,000	327,000	209,000	164,000	158,000	155,000	128,000	193,000
Very satisfied	742,000	117,000	143,000	86,000	75,000	70,000	78,000	66,000	108,000
Somewhat satisfied	734,000	132,000	159,000	107,000	73,000	77,000	64,000	51,000	71,000
Somewhat dissatisfied	110,000	22,000	21,000	13,000	13,000	9,000	10,000	9,000	13,000
Very dissatisfied	25,000	8,000	4,000	S	S	2,000	S	2,000	S
S&E-related occupations	3,785,000	592,000	687,000	510,000	469,000	408,000	356,000	268,000	495,000
Very satisfied	1,818,000	275,000	317,000	202,000	228,000	166,000	198,000	140,000	292,000
Somewhat satisfied	1,591,000	249,000	278,000	250,000	190,000	216,000	129,000	104,000	173,000
Somewhat dissatisfied	314,000	51,000	81,000	45,000	46,000	23,000	17,000	22,000	29,000
Very dissatisfied	62,000	17,000	10,000	13,000	4,000	2,000	12,000	S	1,000
Non-S&E occupations	15,125,000	1,836,000	2,518,000	2,070,000	1,720,000	1,520,000	1,520,000	1,402,000	2,539,000
Very satisfied	6,895,000	724,000	806,000	894,000	846,000	739,000	684,000	745,000	1,458,000
Somewhat satisfied	6,570,000	837,000	1,305,000	925,000	701,000	649,000	673,000	551,000	929,000
Somewhat dissatisfied	1,259,000	213,000	303,000	174,000	152,000	101,000	125,000	68,000	123,000
Very dissatisfied	401,000	62,000	104,000	78,000	21,000	31,000	38,000	39,000	29,000

* = 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.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 4-1

Median salary of full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019

(Dollars)

Occupation and age	All degrees			Bachelor's			Master's			Doctorate			Professional		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
All occupations, all ages	73,000	64,000	85,000	65,000	56,000	75,000	80,000	69,000	98,000	100,000	89,000	106,000	130,000	104,000	151,000
29 and younger	50,000	48,000	55,000	50,000	45,000	53,000	55,000	50,000	69,000	68,000	75,000	67,000	70,000	74,000	64,000
30–39	70,000	64,000	80,000	65,000	56,000	71,000	73,000	65,000	89,000	82,000	80,000	84,000	105,000	99,000	120,000
40–49	83,000	70,000	100,000	75,000	63,000	92,000	87,000	78,000	102,000	109,000	97,000	123,000	157,000	119,000	177,000
50–75	85,000	71,000	100,000	76,000	65,000	89,000	92,000	78,000	115,000	109,000	99,000	120,000	167,000	130,000	185,000
S&E occupations	95,000	80,000	100,000	90,000	78,000	95,000	100,000	85,000	108,000	101,000	89,000	110,000	99,000	88,000	108,000
29 and younger	67,000	57,000	71,000	65,000	54,000	68,000	75,000	66,000	78,000	75,000	75,000	68,000	D	D	D
30–39	90,000	80,000	95,000	89,000	81,000	90,000	95,000	80,000	102,000	86,000	80,000	92,000	90,000	67,000	116,000
40–49	105,000	92,000	111,000	102,000	88,000	107,000	114,000	100,000	120,000	105,000	90,000	120,000	119,000	109,000	142,000
50–75	110,000	96,000	118,000	105,000	90,000	110,000	120,000	100,000	124,000	120,000	104,000	130,000	104,000	113,000	103,000
Biological, agricultural, and other life scientists	66,000	68,000	65,000	53,000	55,000	50,000	65,000	69,000	63,000	89,000	82,000	94,000	103,000	S	130,000
29 and younger	40,000	45,000	38,000	36,000	36,000	36,000	46,000	49,000	41,000	71,000	75,000	50,000	D	D	D
30–39	61,000	62,000	60,000	55,000	54,000	55,000	60,000	62,000	52,000	70,000	68,000	74,000	S	D	D
40–49	91,000	95,000	88,000	80,000	88,000	69,000	84,000	80,000	86,000	102,000	102,000	99,000	S	S	D
50–75	98,000	81,000	101,000	73,000	67,000	84,000	82,000	80,000	84,000	115,000	99,000	120,000	103,000	64,000	127,000
Computer and mathematical scientists	100,000	88,000	105,000	95,000	83,000	100,000	109,000	97,000	115,000	120,000	99,000	130,000	114,000	124,000	78,000
29 and younger	75,000	68,000	76,000	70,000	60,000	72,000	85,000	82,000	87,000	106,000	S	99,000	D	D	D
30–39	98,000	88,000	100,000	92,000	86,000	94,000	103,000	87,000	110,000	124,000	98,000	135,000	S	D	S
40–49	110,000	96,000	116,000	105,000	87,000	111,000	119,000	109,000	123,000	120,000	88,000	149,000	D	D	D
50–75	109,000	95,000	116,000	104,000	90,000	110,000	120,000	100,000	129,000	120,000	122,000	119,000	107,000	S	78,000
Physical and related scientists	72,000	60,000	78,000	58,000	54,000	60,000	72,000	71,000	71,000	102,000	76,000	110,000	D	D	D
29 and younger	38,000	40,000	34,000	41,000	40,000	45,000	31,000	S	S	52,000	S	52,000	D	D	D
30–39	68,000	65,000	70,000	61,000	56,000	65,000	77,000	79,000	77,000	75,000	72,000	80,000	D	D	D
40–49	90,000	79,000	96,000	78,000	65,000	79,000	98,000	100,000	95,000	108,000	78,000	125,000	D	D	D
50–75	107,000	85,000	108,000	75,000	63,000	81,000	98,000	105,000	95,000	135,000	125,000	136,000	D	D	D
Social and related scientists	75,000	70,000	85,000	62,000	55,000	71,000	67,000	61,000	80,000	91,000	89,000	97,000	85,000	74,000	102,000
29 and younger	46,000	37,000	60,000	37,000	37,000	56,000	46,000	46,000	49,000	60,000	58,000	S	D	D	D
30–39	72,000	70,000	74,000	72,000	70,000	72,000	63,000	60,000	70,000	83,000	87,000	80,000	68,000	S	D
40–49	79,000	78,000	89,000	69,000	69,000	80,000	78,000	73,000	123,000	85,000	82,000	91,000	97,000	94,000	87,000
50–75	98,000	89,000	104,000	76,000	80,000	69,000	89,000	72,000	98,000	108,000	98,000	119,000	98,000	92,000	113,000
Engineers	100,000	92,000	100,000	95,000	85,000	96,000	105,000	96,000	108,000	125,000	110,000	127,000	D	D	D
29 and younger	74,000	71,000	75,000	72,000	71,000	73,000	77,000	70,000	78,000	106,000	98,000	110,000	D	D	D
30–39	96,000	94,000	97,000	91,000	90,000	92,000	100,000	99,000	100,000	103,000	98,000	105,000	D	D	D
40–49	112,000	111,000	112,000	106,000	110,000	106,000	120,000	105,000	120,000	129,000	112,000	133,000	D	D	D

TABLE 4-1

Median salary of full-time employed college graduates, by major occupation, age, level of highest degree, and sex: 2019

(Dollars)

Occupation and age	All degrees			Bachelor's			Master's			Doctorate			Professional		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
50–75	120,000	115,000	120,000	115,000	107,000	116,000	130,000	124,000	130,000	147,000	133,000	147,000	D	D	D
S&E-related occupations	80,000	74,000	93,000	70,000	65,000	75,000	85,000	80,000	96,000	100,000	99,000	104,000	149,000	119,000	198,000
29 and younger	55,000	55,000	55,000	50,000	50,000	50,000	60,000	58,000	68,000	68,000	70,000	62,000	74,000	75,000	60,000
30–39	75,000	73,000	79,000	65,000	65,000	65,000	83,000	80,000	86,000	79,000	87,000	75,000	129,000	120,000	129,000
40–49	95,000	82,000	107,000	80,000	73,000	92,000	95,000	85,000	104,000	138,000	136,000	147,000	196,000	146,000	218,000
50–75	96,000	84,000	116,000	81,000	75,000	92,000	91,000	86,000	104,000	119,000	106,000	130,000	205,000	166,000	229,000
Non-S&E occupations	65,000	60,000	78,000	60,000	52,000	70,000	72,000	65,000	90,000	95,000	87,000	98,000	114,000	94,000	134,000
29 and younger	45,000	45,000	50,000	45,000	42,000	48,000	50,000	49,000	50,000	59,000	D	S	67,000	66,000	75,000
30–39	63,000	58,000	70,000	59,000	52,000	65,000	65,000	63,000	79,000	75,000	75,000	74,000	92,000	83,000	100,000
40–49	75,000	65,000	90,000	70,000	57,000	83,000	80,000	71,000	94,000	104,000	97,000	110,000	120,000	104,000	154,000
50–75	76,000	68,000	90,000	70,000	60,000	80,000	84,000	75,000	107,000	92,000	93,000	92,000	141,000	117,000	149,000

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):
Median salaries are rounded to the nearest $1,000. Full-time employed college graduates are individuals working 35 or more hours per week on their principal job.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 4-2

Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Dollars)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
Both sexes, all occupations	73,000	65,000	50,000	90,000	59,000	95,000	75,000	65,000	75,000	68,000	73,000	83,000
29 and younger	50,000	47,000	S	67,000	46,000	57,000	50,000	50,000	50,000	50,000	50,000	70,000
30–39	70,000	65,000	50,000	90,000	54,000	75,000	70,000	65,000	71,000	56,000	70,000	90,000
40–49	83,000	74,000	80,000	110,000	59,000	99,000	84,000	77,000	85,000	74,000	82,000	100,000
50–75	85,000	80,000	63,000	97,000	70,000	106,000	87,000	84,000	87,000	77,000	85,000	69,000
S&E occupations	95,000	80,000	S	104,000	84,000	80,000	95,000	90,000	95,000	92,000	94,000	100,000
29 and younger	67,000	55,000	S	78,000	64,000	S	65,000	70,000	68,000	58,000	66,000	80,000
30–39	90,000	80,000	S	100,000	73,000	122,000	90,000	99,000	90,000	82,000	87,000	100,000
40–49	105,000	95,000	S	120,000	84,000	113,000	105,000	91,000	106,000	102,000	105,000	119,000
50–75	110,000	103,000	S	119,000	100,000	S	110,000	120,000	110,000	108,000	110,000	110,000
Biological, agricultural, and other life scientists	66,000	48,000	59,000	70,000	59,000	D	69,000	57,000	66,000	68,000	69,000	54,000
29 and younger	40,000	31,000	D	40,000	49,000	D	41,000	49,000	40,000	35,000	40,000	49,000
30–39	61,000	57,000	D	55,000	59,000	D	62,000	79,000	60,000	104,000	64,000	53,000
40–49	91,000	69,000	D	104,000	77,000	D	90,000	119,000	94,000	68,000	93,000	75,000
50–75	98,000	93,000	D	99,000	115,000	D	98,000	D	98,000	95,000	100,000	60,000
Computer and mathematical scientists	100,000	82,000	S	110,000	84,000	S	100,000	94,000	100,000	96,000	99,000	110,000
29 and younger	75,000	58,000	D	90,000	71,000	D	69,000	72,000	75,000	63,000	70,000	95,000
30–39	98,000	82,000	S	106,000	72,000	S	95,000	105,000	99,000	85,000	90,000	109,000
40–49	110,000	95,000	D	119,000	84,000	D	109,000	83,000	110,000	114,000	107,000	125,000
50–75	109,000	99,000	D	119,000	96,000	S	108,000	138,000	110,000	105,000	109,000	118,000
Physical and related scientists	72,000	55,000	D	65,000	59,000	S	75,000	55,000	73,000	60,000	74,000	58,000
29 and younger	38,000	31,000	D	30,000	S	D	39,000	S	36,000	S	39,000	31,000
30–39	68,000	54,000	D	65,000	50,000	D	75,000	57,000	68,000	78,000	70,000	60,000
40–49	90,000	49,000	D	97,000	S	D	93,000	S	93,000	80,000	90,000	117,000
50–75	107,000	98,000	D	110,000	96,000	D	107,000	D	107,000	81,000	105,000	160,000
Social and related scientists	75,000	70,000	S	79,000	82,000	S	78,000	69,000	76,000	70,000	75,000	78,000
29 and younger	46,000	S	D	49,000	57,000	D	51,000	D	46,000	S	46,000	48,000
30–39	72,000	78,000	D	64,000	82,000	D	71,000	69,000	73,000	67,000	72,000	78,000
40–49	79,000	70,000	D	128,000	82,000	S	79,000	62,000	79,000	94,000	79,000	97,000
50–75	98,000	81,000	D	100,000	91,000	D	99,000	73,000	100,000	89,000	98,000	90,000
Engineers	100,000	94,000	110,000	100,000	89,000	84,000	100,000	100,000	100,000	100,000	100,000	92,000
29 and younger	74,000	71,000	D	78,000	67,000	S	75,000	72,000	74,000	73,000	74,000	74,000
30–39	96,000	87,000	S	98,000	86,000	S	97,000	100,000	97,000	84,000	97,000	96,000

TABLE 4-2

Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Dollars)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
40–49	112,000	108,000	D	125,000	84,000	D	110,000	100,000	114,000	91,000	111,000	119,000
50–75	120,000	114,000	D	120,000	105,000	D	122,000	116,000	120,000	119,000	120,000	98,000
S&E-related occupations	80,000	90,000	99,000	95,000	66,000	98,000	80,000	69,000	80,000	80,000	80,000	80,000
29 and younger	55,000	52,000	D	60,000	50,000	S	53,000	55,000	55,000	60,000	55,000	51,000
30–39	75,000	80,000	68,000	94,000	64,000	94,000	75,000	69,000	75,000	59,000	75,000	80,000
40–49	95,000	100,000	73,000	110,000	77,000	S	90,000	98,000	95,000	92,000	94,000	110,000
50–75	96,000	100,000	S	110,000	79,000	S	92,000	66,000	99,000	85,000	97,000	70,000
Non-S&E occupations	65,000	58,000	50,000	72,000	54,000	90,000	70,000	55,000	67,000	63,000	66,000	57,000
29 and younger	45,000	41,000	S	55,000	42,000	S	46,000	40,000	45,000	46,000	45,000	44,000
30–39	63,000	62,000	S	74,000	50,000	S	64,000	55,000	65,000	52,000	63,000	55,000
40–49	75,000	68,000	79,000	100,000	55,000	98,000	78,000	70,000	75,000	70,000	75,000	68,000
50–75	76,000	64,000	54,000	62,000	64,000	107,000	80,000	81,000	79,000	70,000	78,000	49,000
Female	64,000	58,000	50,000	80,000	56,000	99,000	63,000	59,000	65,000	57,000	63,000	66,000
29 and younger	48,000	42,000	S	66,000	42,000	64,000	46,000	43,000	48,000	46,000	47,000	66,000
30–39	64,000	65,000	60,000	80,000	54,000	106,000	62,000	59,000	65,000	51,000	64,000	66,000
40–49	70,000	68,000	79,000	104,000	55,000	96,000	70,000	70,000	72,000	64,000	70,000	77,000
50–75	71,000	68,000	49,000	79,000	67,000	105,000	72,000	76,000	73,000	64,000	72,000	48,000
S&E occupations	80,000	70,000	105,000	98,000	72,000	91,000	79,000	80,000	81,000	77,000	80,000	92,000
29 and younger	57,000	37,000	D	80,000	62,000	D	55,000	53,000	58,000	52,000	55,000	82,000
30–39	80,000	70,000	D	89,000	60,000	S	78,000	98,000	80,000	70,000	80,000	91,000
40–49	92,000	80,000	S	109,000	83,000	S	85,000	86,000	92,000	102,000	90,000	117,000
50–75	96,000	80,000	S	104,000	89,000	D	95,000	115,000	100,000	82,000	96,000	89,000
Biological, agricultural, and other life scientists	68,000	54,000	*	78,000	59,000	D	69,000	56,000	69,000	59,000	70,000	57,000
29 and younger	45,000	29,000	D	53,000	29,000	D	48,000	37,000	46,000	40,000	42,000	50,000
30–39	62,000	56,000	D	60,000	59,000	D	68,000	83,000	62,000	81,000	69,000	54,000
40–49	95,000	68,000	D	107,000	72,000	D	91,000	126,000	98,000	67,000	95,000	97,000
50–75	81,000	80,000	D	98,000	117,000	D	79,000	D	80,000	84,000	85,000	43,000
Computer and mathematical scientists	88,000	81,000	S	100,000	64,000	D	81,000	86,000	88,000	88,000	85,000	100,000
29 and younger	68,000	56,000	D	91,000	64,000	D	56,000	50,000	69,000	59,000	60,000	95,000
30–39	88,000	88,000	D	97,000	S	D	82,000	97,000	88,000	72,000	80,000	99,000
40–49	96,000	87,000	D	110,000	83,000	D	83,000	84,000	93,000	109,000	92,000	119,000
50–75	95,000	70,000	D	105,000	S	D	93,000	115,000	98,000	86,000	95,000	107,000
Physical and related scientists	60,000	42,000	D	63,000	60,000	D	61,000	53,000	60,000	59,000	63,000	53,000

TABLE 4-2

Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Dollars)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
29 and younger	40,000	32,000	D	34,000	D	D	40,000	S	40,000	34,000	39,000	51,000
30–39	65,000	61,000	D	58,000	60,000	D	69,000	S	65,000	84,000	68,000	50,000
40–49	79,000	S	D	74,000	D	D	80,000	D	76,000	100,000	78,000	D
50–75	85,000	64,000	D	98,000	96,000	D	81,000	D	110,000	59,000	88,000	*
Social and related scientists	70,000	70,000	*	65,000	85,000	S	70,000	59,000	70,000	67,000	70,000	70,000
29 and younger	37,000	S	D	47,000	60,000	D	46,000	D	37,000	48,000	40,000	31,000
30–39	70,000	73,000	D	S	95,000	D	68,000	64,000	70,000	65,000	70,000	85,000
40–49	78,000	70,000	D	119,000	80,000	D	78,000	D	79,000	59,000	78,000	60,000
50–75	89,000	77,000	D	90,000	101,000	D	88,000	S	90,000	80,000	89,000	S
Engineers	92,000	84,000	S	95,000	77,000	D	91,000	99,000	92,000	84,000	92,000	91,000
29 and younger	71,000	71,000	D	78,000	70,000	D	70,000	72,000	71,000	68,000	71,000	83,000
30–39	94,000	87,000	D	94,000	89,000	D	93,000	98,000	94,000	80,000	93,000	94,000
40–49	111,000	113,000	D	101,000	87,000	D	112,000	D	112,000	100,000	111,000	100,000
50–75	115,000	111,000	D	117,000	S	D	110,000	D	118,000	81,000	115,000	*
S&E-related occupations	74,000	89,000	69,000	85,000	74,000	98,000	70,000	69,000	74,000	73,000	74,000	69,000
29 and younger	55,000	53,000	S	62,000	50,000	D	51,000	54,000	55,000	52,000	55,000	54,000
30–39	73,000	86,000	54,000	91,000	66,000	S	71,000	68,000	73,000	60,000	73,000	68,000
40–49	82,000	99,000	D	96,000	80,000	D	78,000	95,000	83,000	70,000	82,000	99,000
50–75	84,000	99,000	S	99,000	80,000	S	80,000	S	84,000	79,000	84,000	S
Non-S&E occupations	60,000	53,000	50,000	73,000	53,000	100,000	60,000	55,000	60,000	54,000	60,000	52,000
29 and younger	45,000	41,000	S	65,000	38,000	S	45,000	32,000	45,000	45,000	45,000	61,000
30–39	58,000	60,000	S	74,000	52,000	95,000	58,000	55,000	60,000	49,000	60,000	52,000
40–49	65,000	53,000	78,000	104,000	53,000	S	67,000	64,000	65,000	62,000	65,000	62,000
50–75	68,000	53,000	46,000	56,000	64,000	105,000	69,000	78,000	69,000	60,000	68,000	39,000
Male	85,000	72,000	63,000	100,000	64,000	89,000	88,000	71,000	86,000	78,000	85,000	95,000
29 and younger	55,000	50,000	S	68,000	53,000	S	55,000	53,000	55,000	60,000	55,000	72,000
30–39	80,000	67,000	S	98,000	55,000	S	80,000	75,000	80,000	64,000	76,000	100,000
40–49	100,000	88,000	84,000	116,000	70,000	99,000	100,000	98,000	100,000	87,000	100,000	105,000
50–75	100,000	94,000	S	104,000	75,000	S	100,000	110,000	100,000	89,000	100,000	74,000
S&E occupations	100,000	84,000	S	108,000	86,000	S	100,000	98,000	100,000	100,000	100,000	105,000
29 and younger	71,000	62,000	S	78,000	66,000	S	70,000	75,000	72,000	62,000	69,000	78,000
30–39	95,000	82,000	S	104,000	77,000	S	93,000	98,000	95,000	85,000	90,000	105,000
40–49	111,000	100,000	D	125,000	84,000	D	110,000	99,000	112,000	101,000	110,000	120,000
50–75	118,000	105,000	D	120,000	102,000	S	119,000	131,000	118,000	116,000	118,000	119,000

TABLE 4-2

Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Dollars)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
Biological, agricultural, and other life scientists	65,000	41,000	S	65,000	55,000	D	67,000	S	64,000	84,000	66,000	52,000
29 and younger	38,000	S	D	30,000	S	D	40,000	S	39,000	S	38,000	48,000
30–39	60,000	60,000	D	52,000	59,000	D	60,000	54,000	58,000	S	61,000	52,000
40–49	88,000	99,000	D	87,000	74,000	D	88,000	D	88,000	82,000	93,000	63,000
50–75	101,000	99,000	D	100,000	104,000	D	101,000	S	102,000	98,000	102,000	80,000
Computer and mathematical scientists	105,000	82,000	S	117,000	90,000	S	104,000	97,000	105,000	100,000	101,000	115,000
29 and younger	76,000	59,000	D	89,000	75,000	D	72,000	84,000	78,000	64,000	72,000	95,000
30–39	100,000	82,000	D	112,000	88,000	D	100,000	93,000	100,000	89,000	93,000	117,000
40–49	116,000	96,000	D	128,000	84,000	D	115,000	S	116,000	114,000	115,000	125,000
50–75	116,000	103,000	D	129,000	101,000	S	115,000	139,000	116,000	111,000	115,000	124,000
Physical and related scientists	78,000	55,000	*	69,000	57,000	D	82,000	71,000	80,000	60,000	80,000	60,000
29 and younger	34,000	27,000	D	29,000	D	D	S	S	31,000	D	37,000	30,000
30–39	70,000	54,000	D	70,000	49,000	D	75,000	73,000	70,000	64,000	72,000	64,000
40–49	96,000	51,000	D	98,000	S	D	98,000	*	98,000	73,000	95,000	116,000
50–75	108,000	105,000	D	118,000	92,000	D	108,000	*	106,000	131,000	107,000	179,000
Social and related scientists	85,000	85,000	S	103,000	75,000	D	85,000	91,000	84,000	95,000	85,000	80,000
29 and younger	60,000	57,000	D	D	S	D	56,000	D	60,000	D	56,000	56,000
30–39	74,000	86,000	D	88,000	75,000	D	72,000	70,000	74,000	67,000	74,000	75,000
40–49	89,000	154,000	D	154,000	S	D	84,000	D	84,000	117,000	84,000	155,000
50–75	104,000	81,000	D	119,000	73,000	D	105,000	D	106,000	97,000	104,000	151,000
Engineers	100,000	95,000	S	100,000	91,000	81,000	103,000	105,000	100,000	100,000	102,000	92,000
29 and younger	75,000	72,000	D	75,000	62,000	D	75,000	72,000	75,000	74,000	75,000	74,000
30–39	97,000	87,000	S	98,000	85,000	S	97,000	107,000	98,000	84,000	97,000	96,000
40–49	112,000	107,000	D	131,000	82,000	S	110,000	100,000	115,000	90,000	111,000	123,000
50–75	120,000	114,000	D	120,000	106,000	D	123,000	114,000	121,000	119,000	121,000	97,000
S&E-related occupations	93,000	94,000	S	109,000	58,000	S	94,000	74,000	94,000	86,000	93,000	90,000
29 and younger	55,000	51,000	D	60,000	54,000	D	55,000	58,000	55,000	68,000	56,000	45,000
30–39	79,000	78,000	82,000	98,000	S	S	79,000	68,000	79,000	49,000	78,000	86,000
40–49	107,000	104,000	D	145,000	60,000	S	107,000	98,000	110,000	105,000	105,000	128,000
50–75	116,000	109,000	S	129,000	62,000	S	119,000	S	120,000	96,000	119,000	70,000

TABLE 4-2

Median salary of full-time employed college graduates, by sex, major occupation, age, ethnicity, race, disability status, and citizenship status: 2019

(Dollars)

Sex, occupation, and age	Total	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability	U.S. citizen	Non-U.S. citizen
			American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race				
Non-S&E occupations	78,000	65,000	63,000	72,000	58,000	S	82,000	64,000	80,000	72,000	78,000	70,000
29 and younger	50,000	42,000	S	50,000	49,000	*	50,000	49,000	50,000	55,000	50,000	40,000
30–39	70,000	63,000	S	74,000	47,000	S	75,000	S	71,000	60,000	70,000	94,000
40–49	90,000	74,000	102,000	95,000	65,000	112,000	97,000	96,000	94,000	80,000	91,000	69,000
50–75	90,000	79,000	62,000	69,000	67,000	S	94,000	98,000	93,000	80,000	90,000	64,000

* = 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):
Median salaries are rounded to the nearest $1,000. Full-time employed college graduates are individuals working 35 or more hours per week on their principal job. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 4-3

Full-time employed scientists and engineers and their median salary, by major field of highest degree, employment sector, and primary work activity: 2019

(Number and dollars)

Field of highest degree and employment sector	Number	Salary	Primary work activity									
			Computer applications		Management and administration[a]		Research and development[b]		Teaching		Other[c]	
			Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
All fields	6,784,000	95,000	1,894,000	105,000	1,547,000	100,000	1,548,000	85,000	275,000	70,000	1,520,000	88,000
Business or industry	5,069,000	100,000	1,692,000	106,000	1,213,000	104,000	900,000	100,000	25,000	65,000	1,239,000	90,000
4-year educational institution	796,000	65,000	83,000	77,000	63,000	79,000	402,000	50,000	194,000	72,000	54,000	67,000
2-year college or precollege educational institution	155,000	64,000	16,000	59,000	16,000	71,000	23,000	63,000	49,000	66,000	51,000	62,000
Government	764,000	89,000	103,000	93,000	255,000	98,000	223,000	80,000	S	S	176,000	82,000
S&E fields	5,211,000	96,000	1,500,000	105,000	1,034,000	105,000	1,291,000	86,000	207,000	72,000	1,178,000	88,000
Business or industry	3,865,000	102,000	1,347,000	110,000	801,000	106,000	746,000	100,000	13,000	67,000	958,000	90,000
4-year educational institution	664,000	63,000	68,000	75,000	37,000	101,000	364,000	48,000	152,000	73,000	42,000	68,000
2-year college or precollege educational institution	110,000	65,000	9,000	59,000	9,000	62,000	13,000	72,000	36,000	68,000	43,000	64,000
Government	572,000	92,000	75,000	98,000	188,000	100,000	168,000	85,000	S	S	136,000	87,000
Biological, agricultural, and environmental life sciences	620,000	69,000	32,000	96,000	108,000	75,000	325,000	64,000	41,000	69,000	114,000	68,000
Business or industry	292,000	80,000	21,000	99,000	60,000	79,000	128,000	81,000	3,000	D	80,000	66,000
4-year educational institution	194,000	52,000	8,000	65,000	8,000	82,000	141,000	48,000	27,000	64,000	11,000	70,000
2-year college or precollege educational institution	14,000	71,000	D	D	D	D	D	D	11,000	71,000	D	D
Government	120,000	68,000	2,000	86,000	40,000	70,000	55,000	68,000	D	D	22,000	64,000
Computer and mathematical sciences	1,561,000	103,000	877,000	105,000	233,000	116,000	193,000	98,000	49,000	66,000	208,000	92,000
Business or industry	1,311,000	108,000	788,000	108,000	200,000	120,000	147,000	104,000	S	S	174,000	100,000
4-year educational institution	110,000	76,000	35,000	77,000	9,000	100,000	27,000	80,000	31,000	64,000	7,000	79,000
2-year college or precollege educational institution	38,000	58,000	6,000	54,000	S	S	7,000	D	12,000	65,000	10,000	54,000
Government	102,000	97,000	47,000	97,000	22,000	110,000	12,000	99,000	D	D	18,000	81,000

TABLE 4-3

Full-time employed scientists and engineers and their median salary, by major field of highest degree, employment sector, and primary work activity: 2019

(Number and dollars)

Field of highest degree and employment sector	Number	Salary	Primary work activity									
			Computer applications		Management and administration[a]		Research and development[b]		Teaching		Other[c]	
			Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Physical and related sciences	379,000	85,000	47,000	105,000	65,000	100,000	176,000	74,000	28,000	72,000	62,000	83,000
Business or industry	225,000	97,000	37,000	119,000	48,000	98,000	91,000	90,000	S	S	47,000	89,000
4-year educational institution	99,000	50,000	6,000	45,000	4,000	108,000	62,000	35,000	24,000	76,000	2,000	58,000
2-year college or precollege educational institution	4,000	64,000	D	D	D	D	D	D	3,000	64,000	D	D
Government	51,000	96,000	3,000	79,000	13,000	107,000	23,000	100,000	D	D	13,000	79,000
Social and related sciences	610,000	80,000	94,000	84,000	117,000	85,000	168,000	72,000	69,000	75,000	163,000	75,000
Business or industry	331,000	82,000	83,000	85,000	86,000	81,000	66,000	86,000	6,000	60,000	90,000	79,000
4-year educational institution	157,000	68,000	3,000	59,000	7,000	96,000	75,000	50,000	54,000	78,000	17,000	58,000
2-year college or precollege educational institution	44,000	68,000	D	D	4,000	72,000	2,000	71,000	8,000	72,000	30,000	67,000
Government	79,000	85,000	7,000	75,000	20,000	92,000	26,000	68,000	D	D	25,000	89,000
Engineering	2,041,000	103,000	451,000	112,000	511,000	110,000	429,000	100,000	20,000	89,000	631,000	93,000
Business or industry	1,706,000	105,000	417,000	113,000	407,000	110,000	314,000	108,000	1,000	90,000	566,000	94,000
4-year educational institution	105,000	75,000	16,000	75,000	7,000	103,000	60,000	50,000	16,000	90,000	6,000	S
2-year college or precollege educational institution	10,000	66,000	D	D	3,000	D	2,000	D	2,000	63,000	D	D
Government	221,000	102,000	16,000	124,000	93,000	109,000	52,000	96,000	S	S	58,000	92,000
S&E-related fields	373,000	89,000	82,000	102,000	84,000	99,000	101,000	88,000	14,000	67,000	93,000	73,000
Business or industry	272,000	95,000	72,000	104,000	67,000	99,000	57,000	98,000	D	D	75,000	74,000
4-year educational institution	40,000	62,000	2,000	58,000	4,000	53,000	24,000	60,000	7,000	71,000	S	S
2-year college or precollege educational institution	14,000	63,000	S	S	D	D	S	S	6,000	63,000	S	S
Government	47,000	91,000	6,000	90,000	12,000	102,000	18,000	87,000	D	D	11,000	73,000

TABLE 4-3

Full-time employed scientists and engineers and their median salary, by major field of highest degree, employment sector, and primary work activity: 2019

(Number and dollars)

Field of highest degree and employment sector	Number	Salary	Primary work activity									
			Computer applications		Management and administration[a]		Research and development[b]		Teaching		Other[c]	
			Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Non-S&E fields	1,200,000	90,000	312,000	92,000	430,000	95,000	156,000	83,000	54,000	65,000	249,000	90,000
Business or industry	932,000	100,000	273,000	99,000	346,000	100,000	97,000	98,000	10,000	54,000	206,000	100,000
4-year educational institution	93,000	68,000	13,000	78,000	23,000	63,000	14,000	63,000	35,000	69,000	9,000	52,000
2-year college or precollege educational institution	31,000	60,000	6,000	45,000	6,000	66,000	9,000	59,000	7,000	62,000	S	S
Government	144,000	74,000	22,000	75,000	55,000	88,000	37,000	73,000	D	D	29,000	50,000

D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering.

[a] Management and administration includes respondents who reported the following work activities: accounting, finance, or contracts; human resources; quality or productivity management; sales and marketing; or managing and supervising.

[b] Research and development includes basic research, applied research, and development. “Design” is no longer included in the definition of “research and development”; it is now included as part of “Other work activities.”

[c] Other work activities includes the design of equipment, processes, structures, and models; production, operations, and maintenance; professional services; and other activities not broken out separately.

Note(s):
Population counts are rounded to the nearest 1,000. Detail may not add to total because of rounding. Median salaries are rounded to the nearest $1,000. Scientists and engineers are bachelor's and higher degreed individuals living in the United States employed in an S&E occupation. Persons are considered to be employed full time if they are working 35 or more hours per week on their principal job. Four-year educational institution includes medical schools and university-affiliated research institutes. Government includes federal (civilian), military, state, and local employers.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
75 and younger	64,696,000	50,524,000	41,929,000	8,595,000	6,784,000	683,000	7,269,000	1,624,000	27,876,000	6,289,000	1,633,000	12,538,000	637,000	8,357,000	3,544,000	73,000
Female	34,816,000	26,341,000	20,577,000	5,764,000	1,861,000	331,000	3,870,000	1,239,000	14,846,000	4,194,000	834,000	7,641,000	377,000	4,335,000	2,929,000	64,000
Male	29,879,000	24,183,000	21,352,000	2,832,000	4,922,000	351,000	3,399,000	385,000	13,030,000	2,095,000	800,000	4,897,000	260,000	4,022,000	615,000	85,000
Hispanic or Latino	5,912,000	4,803,000	3,942,000	861,000	511,000	54,000	644,000	177,000	2,787,000	630,000	267,000	842,000	74,000	411,000	357,000	65,000
Not Hispanic or Latino																
American Indian or Alaska Native	232,000	182,000	163,000	20,000	S	D	22,000	S	119,000	13,000	2,000	47,000	S	17,000	23,000	50,000
Asian	6,305,000	5,062,000	4,249,000	813,000	1,391,000	152,000	957,000	194,000	1,901,000	467,000	187,000	1,056,000	125,000	352,000	579,000	90,000
Black or African American	4,777,000	3,895,000	3,345,000	549,000	344,000	35,000	535,000	78,000	2,467,000	436,000	228,000	654,000	52,000	428,000	173,000	59,000
Native Hawaiian or Other Pacific Islander	157,000	129,000	113,000	S	16,000	D	29,000	1,000	67,000	S	D	26,000	D	S	13,000	95,000
White	45,906,000	35,269,000	29,143,000	6,126,000	4,353,000	431,000	4,921,000	1,131,000	19,868,000	4,564,000	896,000	9,741,000	351,000	7,042,000	2,348,000	75,000
More than one race	1,406,000	1,184,000	974,000	210,000	148,000	10,000	161,000	36,000	665,000	164,000	51,000	171,000	27,000	92,000	51,000	65,000
Without disability	55,447,000	44,717,000	37,280,000	7,437,000	6,215,000	580,000	6,677,000	1,471,000	24,388,000	5,386,000	1,232,000	9,497,000	581,000	6,149,000	2,767,000	75,000
With disability	9,249,000	5,807,000	4,649,000	1,158,000	568,000	103,000	592,000	153,000	3,488,000	902,000	402,000	3,040,000	56,000	2,207,000	777,000	68,000
Age at onset of disability																
Since birth	574,000	358,000	295,000	63,000	64,000	7,000	52,000	3,000	179,000	53,000	44,000	172,000	18,000	105,000	49,000	60,000
1–9	748,000	564,000	443,000	121,000	50,000	13,000	66,000	33,000	326,000	75,000	S	110,000	S	63,000	43,000	61,000
10–19	1,449,000	1,100,000	883,000	217,000	131,000	15,000	95,000	18,000	657,000	184,000	63,000	287,000	12,000	124,000	151,000	60,000
20–29	1,071,000	781,000	678,000	104,000	74,000	6,000	88,000	23,000	515,000	74,000	68,000	222,000	9,000	106,000	107,000	63,000
30–39	837,000	542,000	472,000	70,000	47,000	6,000	55,000	13,000	370,000	51,000	50,000	245,000	D	126,000	118,000	66,000
40–49	1,652,000	1,216,000	1,042,000	173,000	102,000	18,000	126,000	20,000	814,000	136,000	37,000	399,000	D	261,000	136,000	80,000
50–59	1,533,000	866,000	624,000	241,000	85,000	19,000	90,000	23,000	450,000	200,000	58,000	609,000	D	469,000	136,000	79,000

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
60–75	1,385,000	381,000	212,000	169,000	15,000	19,000	20,000	21,000	176,000	129,000	8,000	995,000	D	952,000	37,000	59,000
29 and younger	8,580,000	7,572,000	6,440,000	1,132,000	1,260,000	157,000	1,119,000	202,000	4,061,000	773,000	262,000	746,000	418,000	D	328,000	50,000
Female	5,089,000	4,456,000	3,665,000	791,000	382,000	92,000	747,000	153,000	2,536,000	546,000	151,000	482,000	219,000	D	263,000	48,000
Male	3,491,000	3,116,000	2,775,000	341,000	878,000	65,000	372,000	49,000	1,525,000	226,000	111,000	264,000	199,000	D	65,000	55,000
Hispanic or Latino	1,130,000	928,000	738,000	190,000	126,000	16,000	103,000	34,000	509,000	140,000	93,000	109,000	46,000	D	63,000	47,000
Not Hispanic or Latino																
American Indian or Alaska Native	S	S	S	S	S	D	2,000	D	S	S	D	S	D	D	D	S
Asian	1,079,000	902,000	699,000	203,000	266,000	69,000	161,000	45,000	272,000	89,000	34,000	142,000	80,000	D	62,000	67,000
Black or African American	604,000	525,000	409,000	116,000	54,000	5,000	63,000	13,000	292,000	98,000	24,000	55,000	40,000	D	14,000	46,000
Native Hawaiian or Other Pacific Islander	10,000	9,000	8,000	S	S	D	S	D	S	D	D	D	D	D	D	57,000
White	5,313,000	4,822,000	4,269,000	553,000	760,000	63,000	762,000	103,000	2,747,000	386,000	87,000	404,000	225,000	D	179,000	50,000
More than one race	383,000	335,000	267,000	68,000	48,000	3,000	27,000	6,000	192,000	58,000	22,000	25,000	22,000	D	4,000	50,000
Without disability	7,753,000	6,887,000	5,883,000	1,004,000	1,159,000	146,000	1,067,000	183,000	3,657,000	675,000	203,000	663,000	398,000	D	265,000	50,000
With disability	827,000	685,000	557,000	128,000	102,000	11,000	52,000	19,000	404,000	97,000	S	83,000	20,000	D	63,000	50,000
Age at onset of disability																
Since birth	64,000	51,000	36,000	15,000	13,000	D	6,000	D	17,000	14,000	S	S	S	D	1,000	51,000

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
1–9	183,000	139,000	95,000	44,000	17,000	5,000	12,000	S	67,000	28,000	S	3,000	S	D	S	43,000
10–19	356,000	303,000	252,000	S	51,000	4,000	23,000	S	178,000	S	S	47,000	7,000	D	39,000	50,000
20–29	224,000	191,000	174,000	18,000	21,000	S	10,000	S	143,000	S	S	23,000	3,000	D	S	50,000
30–39	14,838,000	13,304,000	11,610,000	1,694,000	2,126,000	155,000	2,064,000	429,000	7,420,000	1,111,000	361,000	1,173,000	126,000	6,000	1,041,000	70,000
Female	8,313,000	7,089,000	5,785,000	1,303,000	592,000	91,000	1,106,000	384,000	4,087,000	828,000	191,000	1,034,000	85,000	3,000	946,000	64,000
Male	6,525,000	6,216,000	5,825,000	391,000	1,533,000	64,000	958,000	45,000	3,334,000	282,000	170,000	139,000	41,000	S	95,000	80,000
Hispanic or Latino	1,625,000	1,501,000	1,284,000	217,000	181,000	17,000	181,000	49,000	922,000	150,000	53,000	72,000	9,000	S	62,000	65,000
Not Hispanic or Latino																
American Indian or Alaska Native	41,000	38,000	31,000	S	S	D	4,000	D	13,000	D	D	S	D	D	D	50,000
Asian	1,795,000	1,481,000	1,311,000	170,000	518,000	38,000	259,000	37,000	534,000	95,000	48,000	266,000	36,000	D	229,000	90,000
Black or African American	1,040,000	942,000	838,000	104,000	119,000	9,000	139,000	26,000	580,000	68,000	62,000	37,000	S	D	27,000	54,000
Native Hawaiian or Other Pacific Islander	35,000	35,000	22,000	S	4,000	D	3,000	D	16,000	D	D	S	D	D	*	75,000
White	9,883,000	8,912,000	7,780,000	1,132,000	1,236,000	87,000	1,411,000	300,000	5,133,000	745,000	195,000	776,000	66,000	S	707,000	70,000
More than one race	418,000	396,000	343,000	53,000	55,000	3,000	67,000	10,000	221,000	40,000	3,000	19,000	S	D	14,000	65,000
Without disability	13,676,000	12,333,000	10,766,000	1,567,000	2,012,000	140,000	1,967,000	402,000	6,786,000	1,025,000	278,000	1,065,000	109,000	4,000	952,000	71,000
With disability	1,162,000	972,000	844,000	127,000	113,000	15,000	96,000	27,000	634,000	86,000	83,000	108,000	16,000	S	89,000	56,000
Age at onset of disability																

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
Since birth	121,000	91,000	85,000	6,000	20,000	S	14,000	S	51,000	4,000	S	S	D	D	S	59,000
1–9	188,000	164,000	145,000	20,000	16,000	S	33,000	S	95,000	6,000	8,000	16,000	D	D	13,000	50,000
10–19	356,000	302,000	255,000	47,000	38,000	5,000	17,000	6,000	199,000	36,000	25,000	30,000	S	D	25,000	55,000
20–29	299,000	258,000	219,000	39,000	24,000	S	19,000	S	176,000	30,000	11,000	30,000	S	D	24,000	57,000
30–39	198,000	157,000	141,000	16,000	15,000	*	13,000	D	113,000	S	20,000	21,000	D	D	18,000	64,000
40–49	13,312,000	11,964,000	10,315,000	1,649,000	1,553,000	103,000	1,752,000	315,000	7,010,000	1,232,000	334,000	1,014,000	44,000	47,000	922,000	83,000
Female	7,319,000	6,342,000	5,089,000	1,253,000	427,000	56,000	877,000	245,000	3,785,000	951,000	170,000	808,000	37,000	24,000	748,000	70,000
Male	5,992,000	5,623,000	5,226,000	397,000	1,126,000	46,000	875,000	70,000	3,225,000	280,000	164,000	206,000	8,000	23,000	175,000	100,000
Hispanic or Latino	1,320,000	1,154,000	971,000	184,000	116,000	10,000	145,000	51,000	710,000	123,000	50,000	116,000	12,000	D	101,000	74,000
Not Hispanic or Latino																
American Indian or Alaska Native	46,000	40,000	37,000	S	5,000	D	5,000	D	28,000	S	D	D	D	D	D	80,000
Asian	1,595,000	1,377,000	1,157,000	220,000	339,000	24,000	305,000	51,000	513,000	145,000	53,000	165,000	S	D	152,000	110,000
Black or African American	1,198,000	1,104,000	1,021,000	83,000	78,000	7,000	153,000	7,000	790,000	69,000	34,000	60,000	D	D	57,000	59,000
Native Hawaiian or Other Pacific Islander	52,000	44,000	42,000	D	3,000	D	S	D	16,000	D	D	D	D	D	D	99,000
White	8,811,000	8,002,000	6,873,000	1,128,000	991,000	60,000	1,088,000	197,000	4,795,000	871,000	173,000	636,000	23,000	38,000	576,000	84,000
More than one race	289,000	242,000	214,000	29,000	21,000	S	33,000	S	159,000	18,000	24,000	S	D	D	S	77,000
Without disability	11,797,000	10,718,000	9,270,000	1,448,000	1,432,000	87,000	1,612,000	296,000	6,227,000	1,064,000	255,000	824,000	42,000	35,000	747,000	85,000
With disability	1,515,000	1,246,000	1,044,000	202,000	121,000	16,000	140,000	19,000	784,000	168,000	79,000	190,000	S	12,000	176,000	74,000

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
Age at onset of disability																
Since birth	118,000	100,000	74,000	26,000	18,000	D	9,000	D	47,000	25,000	D	13,000	D	D	13,000	66,000
1–9	137,000	113,000	86,000	S	8,000	D	11,000	D	66,000	S	S	12,000	D	D	11,000	84,000
10–19	252,000	200,000	161,000	39,000	24,000	S	23,000	D	114,000	37,000	S	39,000	D	D	39,000	75,000
20–29	217,000	169,000	153,000	16,000	15,000	D	S	6,000	102,000	S	S	27,000	D	D	21,000	80,000
30–39	287,000	211,000	183,000	28,000	14,000	S	19,000	D	150,000	23,000	23,000	53,000	D	S	49,000	66,000
40–49	504,000	453,000	388,000	65,000	41,000	8,000	42,000	S	305,000	54,000	S	46,000	D	S	43,000	77,000
50–59	12,084,000	10,343,000	8,711,000	1,632,000	1,242,000	89,000	1,462,000	292,000	6,007,000	1,252,000	359,000	1,382,000	30,000	589,000	763,000	87,000
Female	6,389,000	5,258,000	4,086,000	1,172,000	329,000	46,000	754,000	238,000	3,003,000	888,000	188,000	943,000	22,000	304,000	617,000	73,000
Male	5,696,000	5,085,000	4,625,000	460,000	913,000	43,000	708,000	53,000	3,004,000	364,000	171,000	439,000	S	285,000	146,000	102,000
Hispanic or Latino	1,041,000	849,000	673,000	176,000	64,000	5,000	157,000	28,000	452,000	142,000	37,000	155,000	S	51,000	97,000	80,000
Not Hispanic or Latino																
American Indian or Alaska Native	44,000	31,000	30,000	S	S	D	S	D	25,000	S	D	S	D	D	D	63,000
Asian	1,039,000	861,000	754,000	106,000	208,000	12,000	165,000	31,000	381,000	64,000	29,000	150,000	D	45,000	105,000	100,000
Black or African American	1,020,000	869,000	756,000	113,000	68,000	6,000	121,000	8,000	567,000	99,000	53,000	99,000	D	47,000	50,000	74,000
Native Hawaiian or Other Pacific Islander	31,000	28,000	26,000	S	S	D	S	D	21,000	D	D	D	D	D	D	102,000
White	8,752,000	7,567,000	6,362,000	1,205,000	876,000	66,000	998,000	220,000	4,488,000	918,000	238,000	947,000	S	432,000	495,000	90,000
More than one race	157,000	139,000	109,000	30,000	20,000	D	16,000	D	73,000	26,000	S	17,000	D	12,000	S	85,000

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
Without disability	9,888,000	8,699,000	7,324,000	1,375,000	1,090,000	72,000	1,275,000	264,000	4,959,000	1,039,000	248,000	941,000	21,000	415,000	505,000	90,000
With disability	2,197,000	1,644,000	1,387,000	257,000	152,000	17,000	187,000	27,000	1,048,000	212,000	111,000	441,000	D	174,000	258,000	80,000
Age at onset of disability																
Since birth	112,000	80,000	72,000	8,000	9,000	D	22,000	D	41,000	S	S	24,000	D	S	12,000	50,000
1–9	116,000	93,000	80,000	13,000	7,000	D	6,000	D	68,000	10,000	D	13,000	D	S	S	74,000
10–19	226,000	182,000	139,000	43,000	13,000	S	18,000	S	108,000	39,000	17,000	27,000	D	S	25,000	74,000
20–29	171,000	119,000	105,000	14,000	10,000	D	18,000	D	77,000	10,000	D	41,000	D	S	29,000	84,000
30–39	195,000	116,000	104,000	11,000	13,000	D	16,000	D	75,000	6,000	D	78,000	D	38,000	40,000	77,000
40–49	718,000	553,000	498,000	55,000	51,000	S	56,000	S	391,000	44,000	28,000	138,000	D	70,000	67,000	85,000
50–59	660,000	502,000	389,000	112,000	48,000	9,000	51,000	7,000	290,000	97,000	37,000	120,000	D	40,000	77,000	78,000
60–75	15,882,000	7,341,000	4,853,000	2,488,000	603,000	179,000	873,000	387,000	3,378,000	1,922,000	318,000	8,223,000	19,000	7,714,000	490,000	80,000
Female	7,706,000	3,197,000	1,952,000	1,245,000	131,000	46,000	386,000	218,000	1,436,000	980,000	134,000	4,374,000	15,000	4,004,000	355,000	70,000
Male	8,176,000	4,144,000	2,901,000	1,243,000	472,000	133,000	487,000	168,000	1,942,000	941,000	184,000	3,849,000	4,000	3,710,000	135,000	94,000
Hispanic or Latino	795,000	370,000	276,000	95,000	24,000	6,000	58,000	14,000	194,000	75,000	34,000	390,000	D	357,000	33,000	85,000
Not Hispanic or Latino																
American Indian or Alaska Native	41,000	22,000	16,000	S	*	D	S	D	S	S	D	18,000	D	16,000	D	S
Asian	797,000	441,000	327,000	113,000	60,000	9,000	67,000	30,000	201,000	75,000	23,000	333,000	D	303,000	30,000	75,000
Black or African American	915,000	455,000	321,000	134,000	25,000	9,000	59,000	23,000	238,000	102,000	56,000	404,000	D	379,000	24,000	60,000

TABLE 5-1

College graduates, by age, sex, ethnicity, race, disability status, and age at onset of disability, broad occupation, labor force status, and median salary: 2019

(Number and dollars)

Age, sex, ethnicity, race, disability status, and age at onset of disability	Total	Employed in all occupations			Employed in S&E occupations		Employed in S&E-related occupations		Employed in non-S&E occupations		Unemployed[a]	Not in labor force[b]				Full-time employed salary ($)
		Employed	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time		Total	Student	Retired	Not seeking employment, all other reasons	
Native Hawaiian or Other Pacific Islander	29,000	13,000	13,000	D	D	D	D	D	S	D	D	14,000	D	S	D	S
White	13,147,000	5,967,000	3,858,000	2,109,000	489,000	155,000	663,000	311,000	2,706,000	1,643,000	203,000	6,977,000	18,000	6,569,000	391,000	82,000
More than one race	159,000	72,000	42,000	31,000	4,000	S	18,000	S	19,000	21,000	D	86,000	D	79,000	S	76,000
Without disability	12,334,000	6,081,000	4,038,000	2,043,000	522,000	135,000	756,000	326,000	2,760,000	1,583,000	248,000	6,005,000	11,000	5,696,000	298,000	83,000
With disability	3,548,000	1,260,000	816,000	444,000	81,000	44,000	117,000	61,000	618,000	339,000	70,000	2,218,000	9,000	2,018,000	191,000	69,000
Age at onset of disability																
Since birth	159,000	36,000	28,000	8,000	S	D	1,000	D	24,000	S	S	114,000	D	100,000	14,000	67,000
1–9	123,000	53,000	37,000	16,000	3,000	D	S	D	30,000	11,000	D	66,000	D	57,000	D	102,000
10–19	259,000	113,000	76,000	37,000	5,000	2,000	13,000	7,000	58,000	27,000	D	145,000	D	122,000	23,000	66,000
20–29	162,000	44,000	27,000	16,000	5,000	1,000	4,000	D	18,000	13,000	18,000	100,000	D	87,000	13,000	116,000
30–39	157,000	58,000	44,000	15,000	3,000	S	8,000	D	33,000	12,000	S	93,000	D	82,000	11,000	62,000
40–49	430,000	210,000	156,000	54,000	10,000	S	28,000	11,000	119,000	37,000	S	216,000	D	189,000	26,000	71,000
50–59	874,000	364,000	235,000	129,000	36,000	S	38,000	16,000	160,000	103,000	21,000	489,000	D	429,000	59,000	79,000
60–75	1,385,000	381,000	212,000	169,000	15,000	19,000	20,000	21,000	176,000	129,000	8,000	995,000	D	952,000	37,000	59,000

* = 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.

[a] Unemployed includes individuals who were not working during the survey reference week but had been seeking work in the prior 4 weeks or who were on layoff from their job.

[b] Not in the labor force includes individuals who were not working during the survey reference week and had not been seeking work in the prior 4 weeks because of family responsibilities, chronic illness, or other reasons.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding. Median salaries are rounded to the nearest $1,000. Designation of full-time and part-time employment status is based on principal job only, not on all jobs held in labor force. For example, an individual could work part time in his or her principal job but full time in the labor force. Full time is based on working 35 or more hours per week on one's principal job. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates, 2019.

TABLE 5-2

College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019

(Number)

Occupation and labor force status	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race		
All occupations	64,234,000	34,460,000	29,774,000	5,839,000	230,000	6,074,000	4,756,000	156,000	45,780,000	1,399,000	55,038,000	9,196,000
Full-time employment status	41,929,000	20,577,000	21,352,000	3,942,000	163,000	4,249,000	3,345,000	113,000	29,143,000	974,000	37,280,000	4,649,000
Part-time employment status	8,595,000	5,764,000	2,832,000	861,000	20,000	813,000	549,000	S	6,126,000	210,000	7,437,000	1,158,000
Preference for full-time status												
Did not want full-time employment	6,661,000	4,538,000	2,124,000	461,000	18,000	497,000	353,000	S	5,150,000	168,000	5,756,000	905,000
Wanted full-time employment	1,934,000	1,226,000	708,000	400,000	S	316,000	197,000	2,000	976,000	42,000	1,681,000	253,000
Reason for part-time status												
Reason worked part time: did not need or want to work more hours	4,261,000	2,927,000	1,335,000	209,000	S	257,000	170,000	S	3,493,000	105,000	3,736,000	525,000
Reason worked part time: family responsibilities	3,257,000	2,664,000	593,000	322,000	S	308,000	147,000	S	2,395,000	60,000	2,905,000	352,000
Reason worked part time: full-time job not available	2,114,000	1,418,000	696,000	308,000	3,000	214,000	131,000	S	1,348,000	98,000	1,756,000	358,000
Reason worked part time: held another job	1,167,000	773,000	393,000	97,000	S	69,000	68,000	D	853,000	77,000	998,000	169,000
Reason worked part time: previously retired or semi-retired	1,994,000	998,000	996,000	113,000	S	80,000	115,000	D	1,656,000	25,000	1,637,000	357,000
Reason worked part time: student	858,000	567,000	291,000	133,000	2,000	176,000	84,000	S	429,000	32,000	777,000	81,000
Reason worked part time: other	990,000	619,000	371,000	185,000	S	144,000	101,000	S	545,000	14,000	804,000	186,000
Not working, not looking for work	12,338,000	7,409,000	4,929,000	796,000	45,000	870,000	659,000	26,000	9,779,000	164,000	9,292,000	3,046,000
Not working, looking for work	1,372,000	710,000	662,000	240,000	S	142,000	202,000	D	732,000	51,000	1,029,000	343,000
Reason for not working												
Reason for not working: illness or disability	1,345,000	754,000	591,000	148,000	11,000	77,000	170,000	D	897,000	38,000	360,000	985,000
Reason for not working: did not need or want to work	2,928,000	2,024,000	903,000	166,000	10,000	181,000	125,000	12,000	2,373,000	60,000	2,379,000	549,000
Reason for not working: family responsibilities	2,471,000	2,100,000	371,000	262,000	S	332,000	137,000	S	1,659,000	57,000	2,104,000	367,000
Reason for not working: layoff	604,000	257,000	347,000	64,000	D	76,000	82,000	D	369,000	13,000	472,000	133,000
Reason for not working: retired	8,610,000	4,455,000	4,155,000	431,000	19,000	371,000	481,000	S	7,202,000	94,000	6,345,000	2,265,000
Reason for not working: student	616,000	352,000	264,000	87,000	S	102,000	64,000	D	325,000	31,000	552,000	64,000

TABLE 5-2

College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019

(Number)

Occupation and labor force status	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race		
Reason for not working: suitable job not available	1,090,000	622,000	468,000	209,000	S	144,000	113,000	D	590,000	32,000	767,000	323,000
Reason for not working: other	685,000	474,000	210,000	85,000	D	119,000	59,000	D	411,000	9,000	522,000	163,000
S&E occupations	8,978,000	2,726,000	6,252,000	644,000	25,000	1,780,000	452,000	21,000	5,878,000	178,000	7,979,000	999,000
Full-time employment status	6,784,000	1,861,000	4,922,000	511,000	S	1,391,000	344,000	16,000	4,353,000	148,000	6,215,000	568,000
Part-time employment status	683,000	331,000	351,000	54,000	D	152,000	35,000	D	431,000	10,000	580,000	103,000
Preference for full-time status												
Did not want full-time employment	487,000	250,000	237,000	25,000	D	84,000	22,000	D	347,000	9,000	409,000	79,000
Wanted full-time employment	196,000	81,000	114,000	29,000	D	68,000	13,000	D	84,000	S	171,000	25,000
Reason for part-time status												
Reason worked part time: did not need or want to work more hours	287,000	149,000	139,000	14,000	D	35,000	10,000	D	223,000	5,000	240,000	48,000
Reason worked part time: family responsibilities	211,000	133,000	78,000	15,000	D	39,000	10,000	D	145,000	2,000	182,000	29,000
Reason worked part time: full-time job not available	148,000	68,000	80,000	19,000	D	21,000	7,000	D	98,000	2,000	124,000	24,000
Reason worked part time: held another job	79,000	45,000	33,000	14,000	D	3,000	2,000	D	55,000	3,000	69,000	10,000
Reason worked part time: previously retired or semi-retired	143,000	33,000	111,000	4,000	D	6,000	8,000	D	124,000	S	106,000	38,000
Reason worked part time: student	151,000	77,000	75,000	14,000	D	49,000	8,000	D	76,000	4,000	137,000	14,000
Reason worked part time: other	103,000	47,000	55,000	9,000	D	41,000	8,000	D	43,000	S	87,000	16,000
Not working, not looking for work	1,322,000	472,000	851,000	59,000	4,000	194,000	53,000	S	990,000	17,000	1,013,000	310,000
Not working, looking for work	190,000	62,000	128,000	20,000	D	42,000	20,000	D	104,000	3,000	171,000	18,000
Reason for not working												
Reason for not working: illness or disability	115,000	50,000	65,000	7,000	D	11,000	12,000	D	82,000	S	30,000	85,000
Reason for not working: did not need or want to work	311,000	125,000	185,000	19,000	D	33,000	10,000	D	243,000	1,000	258,000	52,000

TABLE 5-2

College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019

(Number)

Occupation and labor force status	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race		
Reason for not working: family responsibilities	212,000	155,000	56,000	15,000	D	66,000	17,000	D	111,000	S	188,000	24,000
Reason for not working: layoff	110,000	19,000	91,000	9,000	D	28,000	9,000	D	62,000	S	97,000	13,000
Reason for not working: retired	946,000	239,000	707,000	36,000	2,000	82,000	23,000	D	789,000	13,000	710,000	236,000
Reason for not working: student	85,000	41,000	44,000	6,000	D	25,000	S	D	39,000	2,000	80,000	4,000
Reason for not working: suitable job not available	150,000	62,000	87,000	19,000	D	28,000	17,000	D	83,000	S	120,000	30,000
Reason for not working: other	106,000	49,000	57,000	7,000	D	44,000	S	D	47,000	D	92,000	14,000
S&E-related occupations	11,107,000	6,483,000	4,624,000	947,000	33,000	1,364,000	721,000	43,000	7,763,000	236,000	9,853,000	1,254,000
Full-time employment status	7,269,000	3,870,000	3,399,000	644,000	22,000	957,000	535,000	29,000	4,921,000	161,000	6,677,000	592,000
Part-time employment status	1,624,000	1,239,000	385,000	177,000	S	194,000	78,000	1,000	1,131,000	36,000	1,471,000	153,000
Preference for full-time status												
Did not want full-time employment	1,293,000	1,012,000	281,000	94,000	S	111,000	63,000	D	988,000	30,000	1,170,000	123,000
Wanted full-time employment	331,000	226,000	105,000	83,000	D	83,000	14,000	S	144,000	7,000	301,000	30,000
Reason for part-time status												
Reason worked part time: did not need or want to work more hours	860,000	666,000	194,000	46,000	D	66,000	42,000	D	675,000	25,000	788,000	72,000
Reason worked part time: family responsibilities	698,000	628,000	70,000	104,000	D	69,000	24,000	D	485,000	10,000	638,000	60,000
Reason worked part time: full-time job not available	320,000	259,000	61,000	57,000	D	50,000	11,000	D	195,000	6,000	289,000	31,000
Reason worked part time: held another job	194,000	147,000	46,000	20,000	D	S	19,000	D	122,000	11,000	177,000	17,000
Reason worked part time: previously retired or semi-retired	268,000	153,000	116,000	13,000	D	25,000	21,000	D	208,000	D	217,000	52,000
Reason worked part time: student	173,000	139,000	34,000	35,000	D	46,000	19,000	D	72,000	1,000	167,000	6,000
Reason worked part time: other	179,000	115,000	64,000	37,000	D	26,000	5,000	D	109,000	S	145,000	34,000
Not working, not looking for work	2,045,000	1,282,000	763,000	96,000	4,000	184,000	89,000	S	1,627,000	32,000	1,562,000	483,000

TABLE 5-2

College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019

(Number)

Occupation and labor force status	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race		
Not working, looking for work	169,000	92,000	77,000	30,000	D	29,000	20,000	D	83,000	S	143,000	26,000
Reason for not working												
Reason for not working: illness or disability	220,000	146,000	73,000	26,000	D	4,000	24,000	D	158,000	S	53,000	167,000
Reason for not working: did not need or want to work	477,000	370,000	107,000	15,000	D	33,000	19,000	D	398,000	8,000	386,000	91,000
Reason for not working: family responsibilities	327,000	299,000	28,000	27,000	D	43,000	9,000	D	244,000	S	272,000	55,000
Reason for not working: layoff	74,000	26,000	47,000	3,000	D	16,000	6,000	D	43,000	D	65,000	9,000
Reason for not working: retired	1,487,000	816,000	672,000	71,000	1,000	93,000	57,000	D	1,240,000	16,000	1,115,000	372,000
Reason for not working: student	152,000	99,000	53,000	15,000	D	28,000	10,000	D	91,000	7,000	135,000	17,000
Reason for not working: suitable job not available	136,000	81,000	55,000	16,000	D	26,000	14,000	D	72,000	S	106,000	30,000
Reason for not working: other	113,000	80,000	33,000	8,000	D	32,000	12,000	D	55,000	S	85,000	28,000
Non-S&E occupations	44,149,000	25,251,000	18,897,000	4,247,000	172,000	2,931,000	3,583,000	92,000	32,139,000	985,000	37,206,000	6,943,000
Full-time employment status	27,876,000	14,846,000	13,030,000	2,787,000	119,000	1,901,000	2,467,000	67,000	19,868,000	665,000	24,388,000	3,488,000
Part-time employment status	6,289,000	4,194,000	2,095,000	630,000	13,000	467,000	436,000	S	4,564,000	164,000	5,386,000	902,000
Preference for full-time status												
Did not want full-time employment	4,881,000	3,275,000	1,606,000	342,000	11,000	302,000	267,000	S	3,816,000	129,000	4,177,000	704,000
Wanted full-time employment	1,407,000	919,000	489,000	289,000	S	165,000	169,000	D	748,000	34,000	1,209,000	198,000
Reason for part-time status												
Reason worked part time: did not need or want to work more hours	3,114,000	2,112,000	1,002,000	150,000	8,000	156,000	118,000	S	2,595,000	74,000	2,709,000	405,000
Reason worked part time: family responsibilities	2,348,000	1,903,000	445,000	203,000	5,000	200,000	113,000	S	1,765,000	48,000	2,085,000	263,000
Reason worked part time: full-time job not available	1,646,000	1,091,000	555,000	232,000	S	142,000	112,000	D	1,055,000	90,000	1,342,000	304,000
Reason worked part time: held another job	894,000	580,000	314,000	63,000	D	44,000	47,000	D	675,000	62,000	752,000	142,000
Reason worked part time: previously retired or semi-retired	1,582,000	813,000	769,000	96,000	S	49,000	86,000	D	1,324,000	22,000	1,315,000	268,000

TABLE 5-2

College graduates, by broad occupation, labor force status, sex, ethnicity, race, and disability status: 2019

(Number)

Occupation and labor force status	Total	Female	Male	Hispanic or Latino	Not Hispanic or Latino						Without disability	With disability
					American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	More than one race		
Reason worked part time: student	533,000	351,000	182,000	84,000	S	81,000	57,000	D	282,000	27,000	472,000	61,000
Reason worked part time: other	708,000	457,000	251,000	139,000	S	76,000	88,000	D	393,000	11,000	572,000	136,000
Not working, not looking for work	8,971,000	5,655,000	3,316,000	640,000	38,000	492,000	517,000	S	7,162,000	115,000	6,717,000	2,253,000
Not working, looking for work	1,014,000	557,000	457,000	190,000	D	71,000	163,000	D	545,000	42,000	715,000	299,000
Reason for not working												
Reason for not working: illness or disability	1,010,000	558,000	452,000	115,000	8,000	63,000	135,000	D	657,000	34,000	276,000	734,000
Reason for not working: did not need or want to work	2,140,000	1,529,000	611,000	131,000	S	115,000	95,000	S	1,732,000	51,000	1,734,000	406,000
Reason for not working: family responsibilities	1,933,000	1,646,000	287,000	220,000	S	223,000	111,000	S	1,305,000	54,000	1,644,000	289,000
Reason for not working: layoff	420,000	211,000	209,000	52,000	D	31,000	67,000	D	264,000	S	310,000	111,000
Reason for not working: retired	6,177,000	3,400,000	2,777,000	323,000	16,000	196,000	400,000	S	5,174,000	64,000	4,520,000	1,657,000
Reason for not working: student	380,000	212,000	168,000	66,000	D	49,000	42,000	D	195,000	21,000	337,000	43,000
Reason for not working: suitable job not available	804,000	479,000	325,000	174,000	D	90,000	82,000	D	434,000	23,000	541,000	264,000
Reason for not working: other	466,000	346,000	120,000	69,000	D	42,000	40,000	D	309,000	3,000	345,000	121,000

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. This table does not include individuals who have never worked for pay or profit. If respondent was not employed during survey reference period, occupation when last employed was reported. Designation of full-time and part-time employment status is based on principal job only, not on all jobs held in labor force. For example, an individual could work part time in his or her principal job but full time in the labor force. Full time is based on working 35 or more hours per week on one's principal job. All individuals who report working part time on their principal job, regardless of their preference for working part time, are asked their reasons for working part time. All individuals who report not working, regardless of if they are looking for work, are asked their reasons for not working. Hispanic or Latino may be any race; race categories exclude Hispanic origin. The National Survey of College Graduates asks the degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for an activity were classified as having a disability.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
All fields	41,035,000	18,121,000	5,891,000	4,815,000	4,141,000	8,066,000	17,801,000	7,844,000	2,487,000	1,924,000	1,334,000	2,652,000	2,522,000	1,265,000	370,000	183,000	115,000	212,000	3,338,000	1,393,000	437,000	302,000	219,000	466,000
Father's education																								
Less than high school completed	4,683,000	2,151,000	981,000	523,000	370,000	657,000	2,122,000	869,000	410,000	214,000	108,000	241,000	309,000	111,000	53,000	15,000	11,000	S	303,000	109,000	44,000	11,000	14,000	66,000
High school diploma or equivalent	11,042,000	4,280,000	1,733,000	1,416,000	1,214,000	2,399,000	4,075,000	1,583,000	634,000	453,000	371,000	684,000	493,000	207,000	82,000	39,000	31,000	53,000	510,000	153,000	57,000	65,000	58,000	77,000
Some college, vocational, or trade school (including 2-year degrees)	8,155,000	3,092,000	1,214,000	932,000	1,044,000	1,872,000	3,315,000	1,177,000	482,000	475,000	338,000	637,000	370,000	186,000	67,000	39,000	13,000	22,000	537,000	194,000	113,000	59,000	35,000	77,000
Bachelor's degree (e.g., BS, BA, AB)	9,055,000	4,400,000	1,129,000	1,072,000	812,000	1,642,000	3,906,000	1,941,000	431,000	424,000	260,000	520,000	573,000	313,000	73,000	43,000	27,000	42,000	729,000	286,000	101,000	78,000	54,000	101,000
Master's degree (e.g., MS, MA, MBA)	4,277,000	2,073,000	487,000	480,000	412,000	824,000	2,320,000	1,162,000	285,000	201,000	133,000	336,000	322,000	165,000	37,000	25,000	21,000	32,000	430,000	189,000	73,000	27,000	27,000	68,000
Professional degree (e.g., JD, LLB, MD, DDS)	1,547,000	961,000	128,000	150,000	85,000	222,000	875,000	533,000	99,000	52,000	56,000	72,000	206,000	134,000	24,000	11,000	3,000	15,000	507,000	322,000	29,000	23,000	S	33,000
Doctorate (e.g., PhD, DSc, EdD)	1,325,000	747,000	97,000	152,000	116,000	213,000	872,000	464,000	113,000	76,000	49,000	88,000	223,000	134,000	32,000	12,000	8,000	11,000	251,000	114,000	19,000	38,000	19,000	31,000
Not applicable	951,000	417,000	120,000	89,000	88,000	236,000	316,000	115,000	32,000	28,000	20,000	73,000	26,000	14,000	2,000	D	D	S	69,000	26,000	S	D	D	13,000
Mother's education																								
Less than high school completed	4,522,000	2,162,000	850,000	434,000	315,000	761,000	1,942,000	881,000	278,000	195,000	108,000	187,000	312,000	135,000	49,000	17,000	7,000	11,000	280,000	86,000	37,000	11,000	15,000	45,000

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
High school diploma or equivalent	13,124,000	5,620,000	2,182,000	1,557,000	1,361,000	2,404,000	5,175,000	2,095,000	891,000	577,000	439,000	752,000	597,000	281,000	110,000	53,000	26,000	43,000	730,000	251,000	128,000	76,000	62,000	106,000
Some college, vocational, or trade school (including 2-year degrees)	9,579,000	3,656,000	1,297,000	1,301,000	1,107,000	2,219,000	4,140,000	1,737,000	563,000	529,000	346,000	707,000	521,000	254,000	69,000	45,000	31,000	54,000	691,000	299,000	102,000	80,000	36,000	98,000
Bachelor's degree (e.g., BS, BA, AB)	8,701,000	4,144,000	1,030,000	1,006,000	907,000	1,613,000	3,571,000	1,726,000	445,000	324,000	239,000	541,000	548,000	288,000	65,000	27,000	31,000	58,000	892,000	434,000	89,000	90,000	62,000	110,000
Master's degree (e.g., MS, MA, MBA)	3,641,000	1,788,000	328,000	388,000	348,000	789,000	2,272,000	1,032,000	259,000	249,000	169,000	364,000	379,000	210,000	58,000	30,000	14,000	34,000	492,000	219,000	69,000	36,000	33,000	76,000
Professional degree (e.g., JD, LLB, MD, DDS)	495,000	264,000	56,000	35,000	26,000	113,000	252,000	151,000	20,000	11,000	13,000	40,000	69,000	40,000	6,000	3,000	1,000	6,000	133,000	38,000	7,000	S	D	12,000
Doctorate (e.g., PhD, DSc, EdD)	409,000	184,000	64,000	32,000	44,000	84,000	248,000	146,000	17,000	27,000	17,000	26,000	73,000	42,000	S	S	4,000	5,000	89,000	53,000	D	S	S	S
Not applicable	563,000	303,000	83,000	60,000	34,000	83,000	200,000	75,000	14,000	14,000	4,000	35,000	23,000	15,000	S	D	D	D	32,000	12,000	D	D	D	D
S&E fields	13,972,000	6,199,000	2,061,000	1,686,000	1,380,000	2,645,000	4,145,000	1,915,000	544,000	379,000	279,000	530,000	1,494,000	820,000	191,000	103,000	60,000	93,000	51,000	24,000	6,000	3,000	4,000	11,000
Father's education																								
Less than high school completed	1,580,000	718,000	323,000	188,000	121,000	231,000	437,000	203,000	71,000	39,000	17,000	35,000	162,000	74,000	27,000	10,000	6,000	3,000	S	*	2,000	D	D	D
High school diploma or equivalent	3,464,000	1,337,000	570,000	467,000	394,000	696,000	823,000	336,000	135,000	78,000	62,000	121,000	260,000	123,000	44,000	19,000	9,000	19,000	8,000	S	S	D	D	D
Some college, vocational, or trade	2,629,000	987,000	398,000	341,000	278,000	625,000	698,000	269,000	109,000	85,000	53,000	111,000	199,000	118,000	28,000	17,000	5,000	12,000	11,000	4,000	D	D	D	S

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
school (including 2-year degrees)																								
Bachelor's degree (e.g., BS, BA, AB)	3,241,000	1,626,000	453,000	320,000	295,000	546,000	1,099,000	553,000	110,000	89,000	80,000	142,000	370,000	214,000	42,000	23,000	18,000	19,000	8,000	5,000	D	D	D	D
Master's degree (e.g., MS, MA, MBA)	1,626,000	763,000	187,000	197,000	170,000	310,000	582,000	281,000	76,000	50,000	29,000	67,000	225,000	116,000	25,000	17,000	13,000	20,000	6,000	4,000	D	D	D	D
Professional degree (e.g., JD, LLB, MD, DDS)	583,000	348,000	51,000	61,000	39,000	83,000	235,000	138,000	24,000	10,000	15,000	26,000	121,000	81,000	10,000	7,000	1,000	8,000	4,000	3,000	D	D	D	D
Doctorate (e.g., PhD, DSc, EdD)	563,000	290,000	52,000	78,000	54,000	89,000	217,000	115,000	15,000	24,000	14,000	20,000	145,000	86,000	15,000	9,000	6,000	10,000	S	D	D	D	D	D
Not applicable	286,000	130,000	28,000	35,000	29,000	65,000	54,000	19,000	5,000	3,000	7,000	8,000	13,000	8,000	1,000	D	D	D	D	D	D	D	D	D
Mother's education																								
Less than high school completed	1,532,000	714,000	282,000	164,000	122,000	249,000	513,000	234,000	70,000	44,000	25,000	42,000	196,000	96,000	31,000	9,000	5,000	4,000	S	1,000	D	D	D	D
High school diploma or equivalent	4,098,000	1,711,000	776,000	527,000	402,000	682,000	1,037,000	477,000	170,000	80,000	83,000	115,000	336,000	168,000	63,000	24,000	13,000	20,000	12,000	6,000	2,000	S	D	1,000
Some college, vocational, or trade school (including 2-year degrees)	3,222,000	1,260,000	430,000	420,000	345,000	767,000	873,000	358,000	121,000	113,000	67,000	140,000	279,000	160,000	27,000	25,000	14,000	21,000	13,000	7,000	2,000	D	D	S

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
Bachelor's degree (e.g., BS, BA, AB)	3,144,000	1,529,000	366,000	380,000	323,000	546,000	964,000	472,000	114,000	87,000	54,000	138,000	358,000	195,000	40,000	20,000	18,000	27,000	12,000	6,000	D	D	D	D
Master's degree (e.g., MS, MA, MBA)	1,383,000	677,000	131,000	153,000	140,000	283,000	533,000	258,000	58,000	40,000	39,000	65,000	217,000	129,000	25,000	16,000	8,000	15,000	7,000	3,000	D	D	D	D
Professional degree (e.g., JD, LLB, MD, DDS)	213,000	111,000	27,000	12,000	15,000	47,000	89,000	52,000	6,000	4,000	4,000	15,000	50,000	32,000	3,000	3,000	1,000	4,000	D	D	D	D	D	D
Doctorate (e.g., PhD, DSc, EdD)	205,000	94,000	29,000	14,000	19,000	49,000	73,000	42,000	3,000	7,000	5,000	7,000	45,000	30,000	2,000	S	S	2,000	D	D	D	D	D	D
Not applicable	177,000	103,000	21,000	17,000	14,000	23,000	61,000	22,000	3,000	4,000	S	9,000	13,000	9,000	S	D	D	D	D	D	D	D	D	D
S&E-related fields	4,837,000	2,041,000	684,000	505,000	482,000	1,125,000	2,328,000	917,000	308,000	264,000	199,000	416,000	339,000	136,000	48,000	28,000	25,000	32,000	1,641,000	608,000	151,000	113,000	95,000	254,000
Father's education																								
Less than high school completed	571,000	226,000	137,000	64,000	58,000	85,000	246,000	91,000	53,000	33,000	15,000	22,000	S	8,000	4,000	S	S	D	151,000	48,000	21,000	6,000	S	22,000
High school diploma or equivalent	1,294,000	495,000	191,000	145,000	134,000	329,000	571,000	160,000	78,000	69,000	65,000	131,000	88,000	36,000	7,000	8,000	10,000	14,000	243,000	48,000	26,000	20,000	36,000	43,000
Some college, vocational, or trade school (including 2-year degrees)	967,000	371,000	146,000	84,000	104,000	263,000	430,000	141,000	65,000	58,000	42,000	93,000	41,000	13,000	9,000	S	2,000	S	225,000	78,000	30,000	15,000	15,000	42,000
Bachelor's degree (e.g., BS, BA, AB)	1,128,000	518,000	109,000	129,000	102,000	270,000	509,000	235,000	48,000	52,000	41,000	96,000	93,000	38,000	17,000	11,000	6,000	7,000	353,000	124,000	37,000	31,000	8,000	54,000

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
Master's degree (e.g., MS, MA, MBA)	434,000	202,000	54,000	57,000	31,000	90,000	302,000	139,000	34,000	36,000	23,000	39,000	32,000	15,000	D	S	4,000	S	209,000	87,000	19,000	9,000	16,000	44,000
Professional degree (e.g., JD, LLB, MD, DDS)	201,000	102,000	24,000	10,000	25,000	39,000	139,000	91,000	12,000	8,000	6,000	12,000	19,000	15,000	D	S	D	D	258,000	142,000	11,000	8,000	S	18,000
Doctorate (e.g., PhD, DSc, EdD)	110,000	52,000	15,000	S	22,000	S	88,000	46,000	12,000	8,000	7,000	10,000	25,000	12,000	S	D	D	D	144,000	62,000	7,000	24,000	S	20,000
Not applicable	131,000	73,000	7,000	11,000	7,000	32,000	45,000	14,000	6,000	D	1,000	12,000	3,000	D	D	D	D	D	57,000	19,000	D	D	D	S
Mother's education																								
Less than high school completed	566,000	240,000	119,000	41,000	46,000	121,000	211,000	85,000	31,000	21,000	14,000	24,000	S	7,000	S	S	S	D	160,000	38,000	25,000	7,000	8,000	S
High school diploma or equivalent	1,528,000	650,000	241,000	166,000	145,000	326,000	674,000	234,000	103,000	89,000	66,000	121,000	90,000	49,000	11,000	7,000	7,000	5,000	338,000	103,000	38,000	33,000	32,000	59,000
Some college, vocational, or trade school (including 2-year degrees)	1,219,000	434,000	159,000	152,000	147,000	328,000	537,000	192,000	80,000	66,000	50,000	104,000	80,000	25,000	S	14,000	8,000	8,000	313,000	99,000	41,000	30,000	17,000	61,000
Bachelor's degree (e.g., BS, BA, AB)	1,044,000	466,000	109,000	117,000	114,000	238,000	515,000	226,000	52,000	51,000	47,000	88,000	56,000	29,000	5,000	*	7,000	4,000	419,000	208,000	27,000	23,000	24,000	55,000
Master's degree (e.g., MS, MA, MBA)	321,000	163,000	37,000	24,000	20,000	77,000	295,000	131,000	33,000	32,000	16,000	64,000	56,000	18,000	17,000	4,000	2,000	9,000	245,000	109,000	19,000	13,000	9,000	48,000

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
Professional degree (e.g., JD, LLB, MD, DDS)	50,000	25,000	2,000	D	4,000	18,000	33,000	14,000	S	S	S	S	3,000	S	D	D	D	D	95,000	20,000	D	D	D	S
Doctorate (e.g., PhD, DSc, EdD)	24,000	9,000	7,000	D	D	D	27,000	19,000	S	S	S	2,000	20,000	8,000	D	D	D	D	45,000	25,000	D	D	D	S
Not applicable	85,000	54,000	11,000	S	S	11,000	37,000	15,000	S	D	D	D	2,000	D	D	D	D	D	25,000	6,000	D	D	D	D
Non-S&E fields	22,226,000	9,881,000	3,146,000	2,624,000	2,280,000	4,296,000	11,328,000	5,012,000	1,634,000	1,282,000	856,000	1,706,000	688,000	309,000	131,000	52,000	30,000	87,000	1,647,000	761,000	280,000	186,000	120,000	201,000
Father's education																								
Less than high school completed	2,532,000	1,207,000	522,000	271,000	191,000	341,000	1,439,000	575,000	286,000	143,000	75,000	184,000	109,000	29,000	22,000	2,000	D	S	144,000	61,000	21,000	S	S	40,000
High school diploma or equivalent	6,284,000	2,448,000	972,000	804,000	686,000	1,374,000	2,681,000	1,086,000	421,000	306,000	244,000	433,000	145,000	48,000	31,000	11,000	12,000	S	260,000	99,000	30,000	46,000	22,000	34,000
Some college, vocational, or trade school (including 2-year degrees)	4,559,000	1,733,000	670,000	508,000	663,000	985,000	2,187,000	767,000	308,000	333,000	243,000	433,000	130,000	55,000	30,000	17,000	5,000	5,000	301,000	112,000	82,000	43,000	18,000	31,000
Bachelor's degree (e.g., BS, BA, AB)	4,686,000	2,256,000	567,000	623,000	414,000	826,000	2,299,000	1,153,000	272,000	283,000	139,000	282,000	109,000	61,000	15,000	9,000	2,000	15,000	368,000	157,000	63,000	46,000	46,000	46,000
Master's degree (e.g., MS, MA, MBA)	2,216,000	1,108,000	247,000	227,000	211,000	424,000	1,436,000	742,000	176,000	114,000	81,000	231,000	65,000	34,000	9,000	6,000	4,000	9,000	215,000	98,000	54,000	19,000	10,000	24,000
Professional degree (e.g., JD, LLB, MD, DDS)	763,000	511,000	52,000	78,000	22,000	100,000	501,000	305,000	63,000	34,000	36,000	33,000	67,000	38,000	13,000	S	D	7,000	245,000	178,000	17,000	14,000	2,000	15,000

TABLE 5-3

College graduates, by broad field of highest degree, father's education, mother's education, level of highest degree, and median amount borrowed to finance undergraduate degree: 2019

(Number)

Field of highest degree, father's education, and mother's education	Bachelor's						Master's						Doctorate						Professional					
	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over	Total	$0	$1–$10,000	$10,001–$20,000	$20,001–$30,000	$30,001 and over
Doctorate (e.g., PhD, DSc, EdD)	652,000	404,000	31,000	69,000	40,000	107,000	568,000	303,000	86,000	45,000	28,000	57,000	53,000	37,000	9,000	2,000	D	S	103,000	49,000	12,000	13,000	S	10,000
Not applicable	534,000	214,000	85,000	44,000	52,000	139,000	218,000	81,000	21,000	24,000	12,000	54,000	9,000	S	D	D	D	D	11,000	7,000	D	D	D	D
Mother's education																								
Less than high school completed	2,424,000	1,208,000	449,000	229,000	146,000	391,000	1,218,000	563,000	177,000	130,000	69,000	122,000	82,000	31,000	17,000	S	D	4,000	112,000	47,000	11,000	S	6,000	33,000
High school diploma or equivalent	7,499,000	3,259,000	1,165,000	864,000	813,000	1,397,000	3,464,000	1,385,000	618,000	408,000	290,000	516,000	171,000	65,000	36,000	22,000	7,000	S	381,000	142,000	88,000	42,000	30,000	45,000
Some college, vocational, or trade school (including 2-year degrees)	5,138,000	1,961,000	709,000	730,000	615,000	1,124,000	2,730,000	1,187,000	363,000	349,000	230,000	463,000	162,000	68,000	37,000	7,000	9,000	S	365,000	193,000	59,000	50,000	18,000	33,000
Bachelor's degree (e.g., BS, BA, AB)	4,514,000	2,149,000	555,000	510,000	471,000	829,000	2,093,000	1,028,000	279,000	186,000	138,000	316,000	134,000	65,000	21,000	7,000	7,000	27,000	461,000	220,000	61,000	66,000	36,000	53,000
Master's degree (e.g., MS, MA, MBA)	1,938,000	949,000	161,000	212,000	187,000	429,000	1,443,000	643,000	168,000	177,000	113,000	235,000	107,000	64,000	16,000	10,000	4,000	10,000	240,000	107,000	49,000	21,000	23,000	28,000
Professional degree (e.g., JD, LLB, MD, DDS)	232,000	128,000	26,000	23,000	S	48,000	130,000	85,000	S	S	S	17,000	16,000	7,000	D	D	D	D	37,000	18,000	7,000	S	D	4,000
Doctorate (e.g., PhD, DSc, EdD)	180,000	81,000	29,000	17,000	24,000	30,000	148,000	84,000	12,000	17,000	12,000	17,000	9,000	4,000	D	D	D	D	43,000	28,000	D	D	S	4,000
Not applicable	302,000	146,000	51,000	39,000	S	49,000	101,000	39,000	S	S	D	21,000	7,000	S	D	D	D	D	D	D	D	D	D	D

* = 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. Totals for master's, doctorate, and professional highest degree earners include individuals who did not earn an undergraduate degree. These are primarily individuals who earned a first degree at an international institution for which the award is not counted as an undergraduate award by U.S. standards.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 5-4

Employed college graduates, by nativity, level of highest degree, major occupation, and employment sector: 2019

(Number)

Nativity, level of highest degree, and occupation	Total	Business or industry	4-year educational institution[a]	2-year college or precollege educational institution	Government[b]
All college graduates, all degrees, all occupations	50,524,000	35,125,000	3,225,000	7,110,000	5,064,000
S&E occupations	7,466,000	5,444,000	1,013,000	211,000	798,000
Biological, agricultural, and other life scientists	698,000	302,000	253,000	23,000	120,000
Computer and mathematical scientists	3,774,000	3,147,000	256,000	102,000	269,000
Physical and related scientists	409,000	189,000	127,000	9,000	85,000
Social and related scientists	663,000	230,000	270,000	67,000	97,000
Engineers	1,921,000	1,576,000	108,000	11,000	226,000
S&E-related occupations	8,893,000	6,470,000	648,000	1,144,000	632,000
Non-S&E occupations	34,165,000	23,210,000	1,564,000	5,755,000	3,635,000
Bachelor's	31,373,000	23,604,000	1,249,000	3,367,000	3,154,000
S&E occupations	4,176,000	3,343,000	311,000	74,000	448,000
Biological, agricultural, and other life scientists	277,000	133,000	82,000	4,000	59,000
Computer and mathematical scientists	2,403,000	2,066,000	107,000	58,000	172,000
Physical and related scientists	189,000	101,000	39,000	2,000	47,000
Social and related scientists	147,000	50,000	56,000	8,000	33,000
Engineers	1,158,000	994,000	27,000	1,000	137,000
S&E-related occupations	4,794,000	3,738,000	230,000	485,000	342,000
Non-S&E occupations	22,403,000	16,523,000	708,000	2,808,000	2,364,000
Master's	14,158,000	8,353,000	976,000	3,487,000	1,342,000
S&E occupations	2,286,000	1,660,000	279,000	97,000	251,000
Biological, agricultural, and other life scientists	152,000	65,000	44,000	7,000	36,000
Computer and mathematical scientists	1,168,000	959,000	89,000	41,000	79,000
Physical and related scientists	97,000	47,000	27,000	2,000	21,000
Social and related scientists	249,000	86,000	83,000	38,000	42,000
Engineers	619,000	503,000	35,000	8,000	73,000
S&E-related occupations	2,332,000	1,381,000	159,000	607,000	186,000
Non-S&E occupations	9,540,000	5,313,000	538,000	2,784,000	905,000
Doctorate	2,090,000	985,000	759,000	196,000	150,000
S&E occupations	938,000	406,000	411,000	32,000	88,000
Biological, agricultural, and other life scientists	254,000	100,000	122,000	10,000	22,000
Computer and mathematical scientists	189,000	111,000	59,000	2,000	16,000
Physical and related scientists	121,000	41,000	60,000	5,000	16,000
Social and related scientists	235,000	78,000	124,000	14,000	18,000
Engineers	139,000	76,000	47,000	1,000	15,000
S&E-related occupations	387,000	243,000	84,000	38,000	22,000
Non-S&E occupations	765,000	336,000	263,000	126,000	40,000
Professional	2,903,000	2,182,000	242,000	61,000	418,000
S&E occupations	67,000	35,000	12,000	9,000	11,000
S&E-related occupations	1,380,000	1,108,000	175,000	15,000	82,000
Non-S&E occupations	1,456,000	1,038,000	55,000	37,000	325,000
Foreign-born college graduates, all degrees, all occupations	8,602,000	6,480,000	754,000	691,000	677,000

TABLE 5-4

Employed college graduates, by nativity, level of highest degree, major occupation, and employment sector: 2019

(Number)

Nativity, level of highest degree, and occupation	Total	Business or industry	4-year educational institution[a]	2-year college or precollege educational institution	Government[b]
S&E occupations	2,192,000	1,659,000	354,000	30,000	150,000
Biological, agricultural, and other life scientists	229,000	100,000	98,000	5,000	26,000
Computer and mathematical scientists	1,263,000	1,111,000	88,000	16,000	49,000
Physical and related scientists	93,000	30,000	52,000	2,000	9,000
Social and related scientists	112,000	32,000	59,000	7,000	14,000
Engineers	495,000	384,000	57,000	1,000	52,000
S&E-related occupations	1,802,000	1,416,000	166,000	86,000	134,000
Non-S&E occupations	4,609,000	3,406,000	235,000	575,000	393,000
Bachelor's	4,672,000	3,669,000	248,000	361,000	393,000
S&E occupations	878,000	731,000	72,000	10,000	65,000
Biological, agricultural, and other life scientists	47,000	23,000	14,000	D	9,000
Computer and mathematical scientists	591,000	534,000	27,000	8,000	23,000
Physical and related scientists	22,000	8,000	11,000	D	2,000
Social and related scientists	19,000	3,000	S	D	6,000
Engineers	199,000	162,000	11,000	D	25,000
S&E-related occupations	895,000	732,000	61,000	23,000	79,000
Non-S&E occupations	2,899,000	2,206,000	115,000	328,000	249,000
Master's	2,706,000	2,048,000	189,000	282,000	188,000
S&E occupations	873,000	716,000	97,000	13,000	47,000
Biological, agricultural, and other life scientists	46,000	22,000	20,000	S	4,000
Computer and mathematical scientists	553,000	501,000	26,000	6,000	19,000
Physical and related scientists	20,000	6,000	12,000	D	S
Social and related scientists	40,000	14,000	18,000	5,000	3,000
Engineers	214,000	173,000	21,000	S	19,000
S&E-related occupations	453,000	337,000	26,000	55,000	35,000
Non-S&E occupations	1,380,000	995,000	66,000	214,000	106,000
Doctorate	753,000	396,000	262,000	42,000	53,000
S&E occupations	420,000	200,000	180,000	6,000	34,000
Biological, agricultural, and other life scientists	127,000	51,000	62,000	3,000	12,000
Computer and mathematical scientists	114,000	72,000	34,000	1,000	6,000
Physical and related scientists	51,000	17,000	28,000	1,000	6,000
Social and related scientists	48,000	13,000	31,000	1,000	3,000
Engineers	79,000	47,000	24,000	D	7,000
S&E-related occupations	155,000	103,000	37,000	4,000	11,000
Non-S&E occupations	178,000	93,000	45,000	31,000	8,000
Professional	471,000	367,000	55,000	6,000	43,000
S&E occupations	21,000	12,000	5,000	*	3,000
S&E-related occupations	298,000	243,000	41,000	S	10,000
Non-S&E occupations	152,000	112,000	8,000	2,000	30,000
U.S.-born college graduates, all degrees, all occupations	41,922,000	28,644,000	2,471,000	6,419,000	4,388,000
S&E occupations	5,275,000	3,786,000	660,000	182,000	648,000

TABLE 5-4

Employed college graduates, by nativity, level of highest degree, major occupation, and employment sector: 2019

(Number)

Nativity, level of highest degree, and occupation	Total	Business or industry	4-year educational institution[a]	2-year college or precollege educational institution	Government[b]
Biological, agricultural, and other life scientists	469,000	202,000	155,000	18,000	94,000
Computer and mathematical scientists	2,512,000	2,036,000	169,000	86,000	221,000
Physical and related scientists	316,000	158,000	75,000	8,000	76,000
Social and related scientists	551,000	198,000	210,000	60,000	83,000
Engineers	1,427,000	1,192,000	51,000	9,000	174,000
S&E-related occupations	7,092,000	5,055,000	482,000	1,058,000	498,000
Non-S&E occupations	29,556,000	19,804,000	1,330,000	5,180,000	3,242,000
Bachelor's	26,701,000	19,935,000	1,001,000	3,005,000	2,760,000
S&E occupations	3,298,000	2,612,000	239,000	64,000	382,000
Biological, agricultural, and other life scientists	230,000	109,000	68,000	S	50,000
Computer and mathematical scientists	1,812,000	1,533,000	80,000	50,000	149,000
Physical and related scientists	168,000	92,000	28,000	2,000	45,000
Social and related scientists	128,000	46,000	48,000	8,000	26,000
Engineers	959,000	832,000	15,000	1,000	111,000
S&E-related occupations	3,899,000	3,006,000	168,000	462,000	263,000
Non-S&E occupations	19,504,000	14,317,000	593,000	2,479,000	2,116,000
Master's	11,452,000	6,305,000	787,000	3,206,000	1,154,000
S&E occupations	1,413,000	944,000	182,000	84,000	204,000
Biological, agricultural, and other life scientists	107,000	43,000	24,000	6,000	33,000
Computer and mathematical scientists	616,000	458,000	63,000	35,000	59,000
Physical and related scientists	77,000	41,000	15,000	2,000	19,000
Social and related scientists	209,000	71,000	65,000	33,000	39,000
Engineers	405,000	330,000	14,000	8,000	54,000
S&E-related occupations	1,880,000	1,043,000	134,000	551,000	151,000
Non-S&E occupations	8,160,000	4,318,000	471,000	2,571,000	799,000
Doctorate	1,337,000	589,000	497,000	154,000	97,000
S&E occupations	518,000	207,000	232,000	26,000	54,000
Biological, agricultural, and other life scientists	127,000	49,000	60,000	7,000	11,000
Computer and mathematical scientists	75,000	39,000	25,000	S	S
Physical and related scientists	70,000	24,000	31,000	4,000	11,000
Social and related scientists	186,000	65,000	93,000	13,000	14,000
Engineers	60,000	29,000	22,000	D	8,000
S&E-related occupations	231,000	140,000	47,000	33,000	11,000
Non-S&E occupations	588,000	242,000	218,000	95,000	32,000
Professional	2,432,000	1,815,000	187,000	55,000	375,000
S&E occupations	46,000	23,000	7,000	8,000	8,000
S&E-related occupations	1,082,000	865,000	133,000	11,000	72,000
Non-S&E occupations	1,304,000	927,000	47,000	35,000	295,000

* = 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.

[a] Four-year educational institution includes medical schools and university-affiliated research institutes.
[b] Government includes federal (civilian), military, state, and local employers.

Note(s):
Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 5-5

Employed foreign-born college graduates, by broad field of highest degree, place of birth, and broad occupation: 2019

(Number)

Field of highest degree and place of birth	Total	S&E occupations	S&E-related occupations	Non-S&E occupations
All foreign-born college graduates, all degree fields	8,602,000	2,192,000	1,802,000	4,609,000
India	1,334,000	632,000	239,000	463,000
China	666,000	299,000	129,000	238,000
Philippines	634,000	54,000	277,000	303,000
Mexico	468,000	59,000	71,000	338,000
Canada	364,000	68,000	53,000	243,000
Germany, not specified	287,000	44,000	44,000	198,000
South Korea	281,000	59,000	68,000	154,000
Vietnam	215,000	65,000	43,000	107,000
Taiwan	178,000	52,000	28,000	97,000
United Kingdom, not specified	161,000	36,000	26,000	100,000
Japan	143,000	25,000	24,000	93,000
Colombia	139,000	22,000	22,000	96,000
Iran	135,000	49,000	33,000	53,000
Jamaica	133,000	8,000	34,000	91,000
Cuba	127,000	12,000	37,000	78,000
Venezuela	126,000	9,000	17,000	99,000
Nigeria	125,000	21,000	44,000	60,000
Pakistan	118,000	21,000	25,000	71,000
Dominican Republic	110,000	6,000	S	73,000
France	105,000	27,000	11,000	67,000
Brazil	101,000	24,000	20,000	57,000
Peru	95,000	11,000	9,000	74,000
Thailand	87,000	6,000	S	60,000
Russia	86,000	33,000	15,000	38,000
Hong Kong	85,000	30,000	16,000	40,000
All other countries	2,302,000	520,000	466,000	1,317,000
S&E fields	3,756,000	1,828,000	560,000	1,367,000
India	841,000	551,000	109,000	181,000
China	398,000	262,000	65,000	71,000
Mexico	152,000	48,000	25,000	79,000
Philippines	149,000	40,000	20,000	88,000
Canada	127,000	58,000	7,000	62,000
South Korea	111,000	42,000	23,000	47,000
Vietnam	110,000	57,000	20,000	34,000
Germany, not specified	105,000	36,000	17,000	52,000
Iran	91,000	44,000	15,000	33,000
Taiwan	86,000	45,000	13,000	28,000
United Kingdom, not specified	74,000	31,000	7,000	36,000
Japan	57,000	21,000	5,000	31,000
Pakistan	54,000	18,000	6,000	30,000
Russia	53,000	27,000	10,000	16,000
Colombia	50,000	19,000	4,000	27,000
Nigeria	45,000	14,000	11,000	20,000
France	45,000	22,000	3,000	20,000
Brazil	42,000	19,000	S	13,000
Hong Kong	42,000	24,000	4,000	14,000
Ukraine	41,000	14,000	6,000	21,000
Cuba	41,000	7,000	10,000	23,000
Italy	33,000	16,000	4,000	13,000

TABLE 5-5

Employed foreign-born college graduates, by broad field of highest degree, place of birth, and broad occupation: 2019

(Number)

Field of highest degree and place of birth	Total	S&E occupations	S&E-related occupations	Non-S&E occupations
Poland	32,000	14,000	6,000	13,000
Bangladesh	31,000	20,000	3,000	8,000
Peru	29,000	7,000	3,000	18,000
All other countries	917,000	373,000	155,000	389,000
S&E-related fields	1,504,000	134,000	1,067,000	304,000
Philippines	280,000	4,000	245,000	30,000
India	172,000	41,000	104,000	27,000
China	93,000	24,000	59,000	11,000
Canada	50,000	S	42,000	6,000
South Korea	49,000	S	42,000	5,000
Mexico	48,000	1,000	30,000	17,000
Haiti	S	D	S	S
Cuba	34,000	D	26,000	S
Nigeria	31,000	S	24,000	S
Vietnam	29,000	S	21,000	5,000
United Kingdom, not specified	27,000	S	14,000	11,000
Jamaica	27,000	S	25,000	2,000
Germany, not specified	26,000	2,000	18,000	7,000
Peru	24,000	D	5,000	19,000
Pakistan	23,000	S	20,000	2,000
Iran	23,000	S	17,000	3,000
Japan	23,000	S	15,000	5,000
Ukraine	21,000	D	11,000	11,000
Taiwan	20,000	*	13,000	6,000
Dominican Republic	19,000	D	11,000	D
Thailand	S	D	S	S
El Salvador	18,000	D	S	S
Iraq	16,000	D	15,000	D
Colombia	15,000	S	11,000	2,000
Venezuela	14,000	S	12,000	D
All other countries	369,000	35,000	242,000	91,000
Non-S&E fields	3,342,000	230,000	174,000	2,938,000
India	321,000	40,000	27,000	255,000
Mexico	269,000	10,000	16,000	243,000
Philippines	205,000	9,000	11,000	184,000
Canada	187,000	S	S	175,000
China	175,000	13,000	5,000	157,000
Germany, not specified	156,000	7,000	9,000	139,000
South Korea	120,000	15,000	3,000	102,000
Venezuela	87,000	D	D	85,000
Jamaica	77,000	S	S	71,000
Vietnam	75,000	6,000	2,000	68,000
Colombia	75,000	1,000	7,000	66,000
Taiwan	71,000	7,000	D	63,000
Dominican Republic	67,000	D	S	49,000
Japan	63,000	S	S	57,000
United Kingdom, not specified	60,000	2,000	5,000	53,000
Cuba	52,000	D	D	48,000
France	51,000	3,000	S	46,000
Nigeria	49,000	4,000	9,000	35,000

TABLE 5-5

Employed foreign-born college graduates, by broad field of highest degree, place of birth, and broad occupation: 2019

(Number)

Field of highest degree and place of birth	Total	S&E occupations	S&E-related occupations	Non-S&E occupations
Thailand	45,000	D	*	44,000
Brazil	45,000	3,000	2,000	40,000
England	44,000	D	D	42,000
Peru	42,000	4,000	1,000	37,000
Pakistan	41,000	S	D	39,000
Nicaragua	36,000	D	D	36,000
Hong Kong	30,000	S	S	23,000
All other countries	899,000	81,000	40,000	779,000

* = 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. For each broad degree field, data are presented for the 25 countries with the largest numbers of foreign-born college graduates employed in the United States during the survey reference week. Data include non-U.S. citizens who are on permanent or temporary visas.

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–19

(Number)

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

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–19

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019
Chemistry, except biochemistry	68,000	73,000	73,000	86,000	73,000	91,000
Earth, atmospheric, and ocean sciences	42,000	38,000	40,000	39,000	39,000	59,000
Physics and astronomy	29,000	33,000	33,000	31,000	29,000	40,000
Other physical sciences	5,000	4,000	4,000	S	7,000	S
Social and related sciences	159,000	207,000	226,000	272,000	305,000	327,000
Economics	34,000	37,000	38,000	57,000	70,000	79,000
Political and related sciences	35,000	37,000	39,000	33,000	52,000	48,000
Psychology	45,000	73,000	77,000	88,000	101,000	116,000
Sociology and anthropology	26,000	26,000	38,000	42,000	50,000	45,000
Other social sciences	19,000	34,000	35,000	51,000	32,000	39,000
Engineering	880,000	973,000	1,058,000	1,197,000	1,265,000	1,355,000
Aerospace, aeronautical, and astronautical engineering	25,000	22,000	29,000	40,000	32,000	47,000
Chemical engineering	59,000	66,000	71,000	83,000	95,000	98,000
Civil and architectural engineering	157,000	163,000	154,000	150,000	169,000	182,000
Electrical and computer engineering	312,000	364,000	402,000	476,000	516,000	523,000
Industrial engineering	37,000	38,000	54,000	53,000	51,000	54,000
Mechanical engineering	205,000	229,000	247,000	297,000	284,000	325,000
Other engineering	84,000	91,000	99,000	98,000	118,000	125,000
S&E-related fields	151,000	180,000	170,000	183,000	189,000	193,000
Health	28,000	44,000	37,000	43,000	43,000	36,000
Science and mathematics teacher education	7,000	10,000	8,000	5,000	5,000	4,000
Technology and technical fields	102,000	115,000	109,000	117,000	125,000	132,000
Other S&E-related fields	13,000	12,000	16,000	18,000	16,000	21,000
Non-S&E fields	558,000	596,000	637,000	628,000	740,000	732,000
Management and administration fields	263,000	309,000	264,000	263,000	274,000	344,000
Education, except science and math teacher education	37,000	22,000	19,000	18,000	38,000	28,000
Social service and related fields	17,000	14,000	22,000	15,000	17,000	22,000
Sales and marketing fields	33,000	31,000	21,000	24,000	83,000	37,000
Art and humanities fields	123,000	149,000	164,000	191,000	197,000	189,000
Other non-S&E fields	85,000	71,000	146,000	117,000	130,000	112,000
Master's	1,406,000	1,644,000	1,689,000	2,076,000	2,069,000	2,286,000
S&E fields	929,000	1,126,000	1,192,000	1,461,000	1,442,000	1,589,000
Biological, agricultural, and environmental life sciences	82,000	123,000	119,000	175,000	123,000	132,000
Agricultural and food sciences	9,000	25,000	23,000	29,000	21,000	13,000
Biological sciences	57,000	78,000	79,000	125,000	83,000	90,000
Environmental life sciences	15,000	20,000	17,000	21,000	18,000	28,000
Computer and mathematical sciences	246,000	321,000	375,000	474,000	482,000	543,000
Computer and information sciences	194,000	255,000	308,000	401,000	411,000	463,000
Mathematics and statistics	52,000	65,000	67,000	73,000	70,000	81,000
Physical and related sciences	75,000	78,000	81,000	91,000	98,000	88,000
Chemistry, except biochemistry	26,000	24,000	26,000	25,000	32,000	26,000
Earth, atmospheric, and ocean sciences	29,000	32,000	34,000	41,000	38,000	28,000
Physics and astronomy	19,000	19,000	20,000	24,000	27,000	33,000
Other physical sciences	1,000	3,000	1,000	1,000	1,000	1,000
Social and related sciences	146,000	179,000	182,000	203,000	176,000	194,000
Economics	17,000	17,000	19,000	20,000	20,000	26,000
Political and related sciences	17,000	37,000	27,000	39,000	37,000	34,000
Psychology	84,000	82,000	99,000	102,000	87,000	92,000
Sociology and anthropology	18,000	20,000	16,000	24,000	18,000	19,000
Other social sciences	10,000	23,000	21,000	16,000	14,000	23,000

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–19

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019
Engineering	381,000	425,000	434,000	518,000	563,000	632,000
Aerospace, aeronautical, and astronautical engineering	12,000	16,000	13,000	17,000	22,000	27,000
Chemical engineering	18,000	16,000	18,000	18,000	21,000	17,000
Civil and architectural engineering	58,000	53,000	63,000	76,000	69,000	85,000
Electrical and computer engineering	152,000	183,000	179,000	227,000	257,000	273,000
Industrial engineering	18,000	22,000	17,000	21,000	28,000	26,000
Mechanical engineering	60,000	67,000	70,000	79,000	79,000	104,000
Other engineering	65,000	69,000	75,000	81,000	86,000	101,000
S&E-related fields	81,000	99,000	102,000	125,000	131,000	172,000
Health	28,000	33,000	35,000	42,000	52,000	76,000
Science and mathematics teacher education	13,000	10,000	18,000	14,000	19,000	21,000
Technology and technical fields	26,000	34,000	24,000	44,000	43,000	49,000
Other S&E-related fields	14,000	21,000	25,000	25,000	17,000	27,000
Non-S&E fields	395,000	419,000	396,000	490,000	496,000	524,000
Management and administration fields	245,000	255,000	246,000	290,000	295,000	314,000
Education, except science and math teacher education	43,000	27,000	29,000	39,000	54,000	40,000
Social service and related fields	27,000	36,000	34,000	37,000	33,000	40,000
Sales and marketing fields	19,000	11,000	12,000	19,000	20,000	16,000
Art and humanities fields	20,000	27,000	24,000	32,000	25,000	30,000
Other non-S&E fields	41,000	64,000	52,000	73,000	69,000	84,000
Doctorate	605,000	692,000	724,000	751,000	786,000	938,000
S&E fields	556,000	624,000	650,000	664,000	702,000	841,000
Biological, agricultural, and environmental life sciences	149,000	179,000	177,000	178,000	189,000	229,000
Agricultural and food sciences	14,000	11,000	10,000	9,000	12,000	15,000
Biological sciences	133,000	162,000	162,000	166,000	173,000	209,000
Environmental life sciences	2,000	6,000	5,000	3,000	4,000	5,000
Computer and mathematical sciences	51,000	63,000	63,000	68,000	76,000	94,000
Computer and information sciences	15,000	24,000	28,000	30,000	39,000	50,000
Mathematics and statistics	36,000	38,000	35,000	38,000	37,000	45,000
Physical and related sciences	111,000	128,000	128,000	136,000	121,000	140,000
Chemistry, except biochemistry	53,000	57,000	59,000	61,000	51,000	62,000
Earth, atmospheric, and ocean sciences	16,000	22,000	21,000	20,000	16,000	20,000
Physics and astronomy	40,000	48,000	47,000	54,000	52,000	58,000
Other physical sciences	2,000	S	S	D	S	*
Social and related sciences	144,000	154,000	164,000	162,000	174,000	207,000
Economics	17,000	26,000	22,000	21,000	25,000	25,000
Political and related sciences	10,000	15,000	16,000	16,000	17,000	25,000
Psychology	94,000	90,000	93,000	96,000	95,000	106,000
Sociology and anthropology	17,000	20,000	24,000	21,000	26,000	39,000
Other social sciences	6,000	3,000	9,000	8,000	11,000	12,000
Engineering	101,000	100,000	118,000	119,000	142,000	171,000
Aerospace, aeronautical, and astronautical engineering	5,000	5,000	4,000	5,000	4,000	8,000
Chemical engineering	12,000	13,000	12,000	13,000	13,000	23,000
Civil and architectural engineering	10,000	8,000	11,000	9,000	13,000	16,000
Electrical and computer engineering	33,000	33,000	40,000	36,000	46,000	53,000
Industrial engineering	2,000	3,000	2,000	6,000	4,000	6,000
Mechanical engineering	14,000	13,000	20,000	20,000	24,000	23,000
Other engineering	25,000	26,000	29,000	29,000	39,000	43,000
S&E-related fields	22,000	31,000	32,000	42,000	42,000	44,000
Health	17,000	23,000	24,000	31,000	31,000	33,000

TABLE 6-1

Employed scientists and engineers, by level of highest degree and minor field of highest degree: 2003–19

(Number)

Level and field of highest degree	2003	2010	2013	2015	2017	2019
Science and mathematics teacher education	3,000	3,000	4,000	3,000	5,000	5,000
Technology and technical fields	2,000	4,000	3,000	7,000	5,000	5,000
Other S&E-related fields	1,000	1,000	2,000	S	2,000	1,000
Non-S&E fields	27,000	36,000	42,000	45,000	41,000	53,000
Management and administration fields	3,000	3,000	3,000	S	4,000	9,000
Education, except science and math teacher education	12,000	8,000	7,000	6,000	5,000	8,000
Social service and related fields	3,000	8,000	14,000	13,000	9,000	15,000
Sales and marketing fields	D	D	D	D	D	D
Art and humanities fields	3,000	S	4,000	5,000	4,000	5,000
Other non-S&E fields	6,000	10,000	14,000	15,000	19,000	16,000
Professional	49,000	58,000	64,000	63,000	67,000	67,000
S&E fields	13,000	16,000	27,000	22,000	24,000	28,000
S&E-related fields	20,000	20,000	22,000	16,000	20,000	18,000
Non-S&E fields	15,000	22,000	15,000	24,000	24,000	21,000

* = 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.

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019
Both sexes	32,574,000	40,623,000	43,839,000	45,941,000	48,223,000	50,524,000
S&E occupations	4,588,000	5,374,000	5,766,000	6,407,000	6,769,000	7,466,000
Biological, agricultural, and other life scientists	421,000	602,000	638,000	631,000	610,000	698,000
Computer and mathematical scientists	1,930,000	2,396,000	2,653,000	3,156,000	3,419,000	3,774,000
Physical and related scientists	298,000	327,000	324,000	331,000	366,000	409,000
Social and related scientists	477,000	518,000	596,000	570,000	646,000	663,000
Engineers	1,463,000	1,531,000	1,554,000	1,719,000	1,728,000	1,921,000
S&E-related occupations	5,155,000	6,966,000	7,508,000	7,867,000	8,271,000	8,893,000
Non-S&E occupations	22,831,000	28,282,000	30,566,000	31,667,000	33,183,000	34,165,000
Hispanic or Latino	1,710,000	2,898,000	3,394,000	3,786,000	4,280,000	4,803,000
S&E occupations	199,000	274,000	357,000	387,000	505,000	564,000
Biological, agricultural, and other life scientists	19,000	28,000	42,000	37,000	38,000	64,000
Computer and mathematical scientists	72,000	106,000	146,000	159,000	200,000	238,000
Physical and related scientists	12,000	13,000	17,000	17,000	29,000	27,000
Social and related scientists	21,000	30,000	48,000	55,000	95,000	77,000
Engineers	75,000	98,000	103,000	120,000	143,000	159,000
S&E-related occupations	265,000	434,000	572,000	629,000	702,000	821,000
Non-S&E occupations	1,245,000	2,190,000	2,465,000	2,769,000	3,073,000	3,418,000
American Indian or Alaska Native	131,000	118,000	130,000	117,000	121,000	182,000
S&E occupations	14,000	11,000	10,000	10,000	14,000	S
Biological, agricultural, and other life scientists	3,000	1,000	1,000	2,000	S	1,000
Computer and mathematical scientists	3,000	2,000	2,000	2,000	4,000	S
Physical and related scientists	1,000	1,000	*	1,000	S	1,000
Social and related scientists	2,000	S	3,000	2,000	S	S
Engineers	4,000	6,000	3,000	4,000	5,000	5,000
S&E-related occupations	20,000	21,000	32,000	27,000	28,000	29,000
Non-S&E occupations	98,000	85,000	87,000	80,000	80,000	132,000
Asian	2,222,000	3,211,000	3,671,000	4,001,000	4,498,000	5,062,000
S&E occupations	624,000	968,000	996,000	1,321,000	1,338,000	1,543,000
Biological, agricultural, and other life scientists	60,000	112,000	117,000	114,000	126,000	157,000
Computer and mathematical scientists	331,000	536,000	572,000	813,000	840,000	955,000
Physical and related scientists	36,000	41,000	49,000	64,000	51,000	55,000
Social and related scientists	24,000	29,000	41,000	51,000	38,000	44,000
Engineers	173,000	251,000	217,000	279,000	283,000	331,000
S&E-related occupations	478,000	796,000	910,000	871,000	1,042,000	1,151,000
Non-S&E occupations	1,120,000	1,447,000	1,766,000	1,809,000	2,118,000	2,368,000
Black or African American	2,054,000	2,747,000	3,141,000	3,434,000	3,805,000	3,895,000
S&E occupations	200,000	251,000	275,000	308,000	382,000	379,000
Biological, agricultural, and other life scientists	12,000	20,000	19,000	16,000	20,000	23,000
Computer and mathematical scientists	102,000	141,000	162,000	162,000	242,000	214,000
Physical and related scientists	8,000	11,000	12,000	13,000	11,000	18,000
Social and related scientists	27,000	24,000	25,000	42,000	48,000	47,000
Engineers	50,000	54,000	57,000	74,000	62,000	77,000
S&E-related occupations	285,000	401,000	462,000	515,000	610,000	613,000
Non-S&E occupations	1,569,000	2,095,000	2,404,000	2,612,000	2,813,000	2,903,000
Native Hawaiian or Other Pacific Islander	90,000	119,000	133,000	182,000	137,000	129,000
S&E occupations	13,000	12,000	12,000	12,000	23,000	17,000
Biological, agricultural, and other life scientists	1,000	S	2,000	1,000	1,000	D
Computer and mathematical scientists	7,000	2,000	5,000	6,000	12,000	6,000
Physical and related scientists	D	*	*	D	S	S

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019
Social and related scientists	D	S	1,000	S	S	2,000
Engineers	5,000	5,000	4,000	4,000	8,000	7,000
S&E-related occupations	21,000	28,000	24,000	21,000	16,000	30,000
Non-S&E occupations	56,000	79,000	97,000	149,000	97,000	82,000
White	25,973,000	30,946,000	32,698,000	33,495,000	34,435,000	35,269,000
S&E occupations	3,479,000	3,789,000	4,033,000	4,267,000	4,397,000	4,784,000
Biological, agricultural, and other life scientists	321,000	428,000	449,000	449,000	415,000	439,000
Computer and mathematical scientists	1,390,000	1,575,000	1,726,000	1,965,000	2,070,000	2,259,000
Physical and related scientists	237,000	257,000	242,000	233,000	265,000	300,000
Social and related scientists	394,000	427,000	467,000	407,000	451,000	480,000
Engineers	1,138,000	1,101,000	1,149,000	1,213,000	1,196,000	1,305,000
S&E-related occupations	4,022,000	5,208,000	5,380,000	5,676,000	5,726,000	6,053,000
Non-S&E occupations	18,472,000	21,948,000	23,285,000	23,552,000	24,313,000	24,432,000
More than one race	394,000	585,000	673,000	926,000	946,000	1,184,000
S&E occupations	60,000	69,000	84,000	103,000	109,000	158,000
Biological, agricultural, and other life scientists	6,000	8,000	9,000	12,000	9,000	14,000
Computer and mathematical scientists	24,000	34,000	40,000	50,000	52,000	88,000
Physical and related scientists	4,000	4,000	3,000	3,000	7,000	7,000
Social and related scientists	8,000	7,000	11,000	11,000	10,000	12,000
Engineers	18,000	17,000	20,000	27,000	31,000	37,000
S&E-related occupations	64,000	78,000	128,000	128,000	147,000	198,000
Non-S&E occupations	270,000	437,000	462,000	695,000	689,000	829,000
Female	15,111,000	19,978,000	22,052,000	23,218,000	24,900,000	26,341,000
S&E occupations	1,203,000	1,486,000	1,681,000	1,818,000	1,966,000	2,193,000
Biological, agricultural, and other life scientists	164,000	292,000	311,000	302,000	292,000	337,000
Computer and mathematical scientists	552,000	602,000	673,000	833,000	919,000	975,000
Physical and related scientists	83,000	98,000	100,000	92,000	107,000	142,000
Social and related scientists	251,000	295,000	363,000	341,000	379,000	428,000
Engineers	154,000	200,000	235,000	250,000	269,000	310,000
S&E-related occupations	2,814,000	3,877,000	4,223,000	4,558,000	4,764,000	5,109,000
Non-S&E occupations	11,094,000	14,615,000	16,147,000	16,842,000	18,170,000	19,040,000
Hispanic or Latino	862,000	1,533,000	1,827,000	2,045,000	2,391,000	2,668,000
S&E occupations	57,000	84,000	120,000	117,000	154,000	182,000
Biological, agricultural, and other life scientists	10,000	15,000	25,000	18,000	24,000	33,000
Computer and mathematical scientists	18,000	33,000	39,000	39,000	49,000	49,000
Physical and related scientists	4,000	6,000	7,000	6,000	10,000	11,000
Social and related scientists	13,000	17,000	31,000	37,000	46,000	58,000
Engineers	12,000	13,000	18,000	17,000	26,000	31,000
S&E-related occupations	135,000	254,000	322,000	372,000	427,000	492,000
Non-S&E occupations	670,000	1,195,000	1,385,000	1,555,000	1,809,000	1,994,000
American Indian or Alaska Native	71,000	50,000	65,000	63,000	68,000	121,000
S&E occupations	4,000	3,000	3,000	1,000	5,000	4,000
Biological, agricultural, and other life scientists	D	D	S	D	D	*
Computer and mathematical scientists	2,000	*	1,000	*	S	S
Physical and related scientists	1,000	*	*	D	D	D
Social and related scientists	D	*	S	S	1,000	*
Engineers	1,000	S	*	D	D	S
S&E-related occupations	12,000	13,000	22,000	18,000	16,000	15,000
Non-S&E occupations	55,000	34,000	40,000	44,000	47,000	101,000
Asian	999,000	1,359,000	1,687,000	1,882,000	2,142,000	2,457,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019
S&E occupations	166,000	260,000	293,000	417,000	409,000	488,000
Biological, agricultural, and other life scientists	23,000	62,000	63,000	57,000	55,000	72,000
Computer and mathematical scientists	93,000	124,000	155,000	272,000	257,000	307,000
Physical and related scientists	13,000	13,000	16,000	16,000	16,000	15,000
Social and related scientists	11,000	15,000	24,000	32,000	26,000	30,000
Engineers	27,000	46,000	36,000	40,000	54,000	64,000
S&E-related occupations	260,000	382,000	437,000	467,000	537,000	625,000
Non-S&E occupations	572,000	718,000	957,000	998,000	1,196,000	1,343,000
Black or African American	1,207,000	1,616,000	1,865,000	2,077,000	2,292,000	2,344,000
S&E occupations	80,000	108,000	110,000	104,000	168,000	135,000
Biological, agricultural, and other life scientists	6,000	9,000	11,000	10,000	9,000	12,000
Computer and mathematical scientists	45,000	71,000	65,000	50,000	109,000	70,000
Physical and related scientists	2,000	4,000	5,000	4,000	5,000	7,000
Social and related scientists	17,000	14,000	18,000	24,000	34,000	33,000
Engineers	10,000	9,000	11,000	16,000	11,000	12,000
S&E-related occupations	199,000	257,000	291,000	301,000	362,000	355,000
Non-S&E occupations	928,000	1,251,000	1,465,000	1,671,000	1,762,000	1,854,000
Native Hawaiian or Other Pacific Islander	38,000	52,000	57,000	75,000	67,000	51,000
S&E occupations	3,000	4,000	2,000	2,000	5,000	3,000
Biological, agricultural, and other life scientists	D	S	*	1,000	S	D
Computer and mathematical scientists	2,000	*	D	S	S	D
Physical and related scientists	D	D	D	D	*	D
Social and related scientists	D	S	*	S	S	S
Engineers	D	D	*	D	D	D
S&E-related occupations	12,000	11,000	12,000	14,000	9,000	9,000
Non-S&E occupations	23,000	37,000	43,000	59,000	52,000	40,000
White	11,734,000	15,036,000	16,169,000	16,582,000	17,391,000	18,005,000
S&E occupations	874,000	1,009,000	1,130,000	1,144,000	1,188,000	1,322,000
Biological, agricultural, and other life scientists	122,000	200,000	207,000	209,000	196,000	212,000
Computer and mathematical scientists	386,000	365,000	407,000	461,000	486,000	519,000
Physical and related scientists	61,000	72,000	71,000	64,000	72,000	105,000
Social and related scientists	204,000	244,000	279,000	240,000	266,000	296,000
Engineers	101,000	127,000	165,000	171,000	168,000	190,000
S&E-related occupations	2,158,000	2,911,000	3,063,000	3,313,000	3,314,000	3,491,000
Non-S&E occupations	8,702,000	11,115,000	11,976,000	12,125,000	12,889,000	13,192,000
More than one race	201,000	333,000	381,000	494,000	550,000	695,000
S&E occupations	19,000	18,000	23,000	31,000	37,000	58,000
Biological, agricultural, and other life scientists	3,000	3,000	3,000	7,000	4,000	6,000
Computer and mathematical scientists	7,000	7,000	5,000	9,000	15,000	28,000
Physical and related scientists	S	S	1,000	1,000	4,000	4,000
Social and related scientists	4,000	3,000	9,000	8,000	6,000	9,000
Engineers	3,000	3,000	4,000	6,000	8,000	10,000
S&E-related occupations	38,000	50,000	76,000	73,000	99,000	121,000
Non-S&E occupations	144,000	265,000	282,000	390,000	414,000	516,000
Male	17,463,000	20,644,000	21,787,000	22,723,000	23,323,000	24,183,000
S&E occupations	3,385,000	3,888,000	4,084,000	4,590,000	4,803,000	5,274,000
Biological, agricultural, and other life scientists	257,000	310,000	328,000	329,000	319,000	361,000
Computer and mathematical scientists	1,378,000	1,795,000	1,980,000	2,323,000	2,500,000	2,799,000
Physical and related scientists	215,000	229,000	224,000	239,000	259,000	267,000
Social and related scientists	226,000	223,000	234,000	229,000	266,000	235,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019
Engineers	1,309,000	1,331,000	1,319,000	1,469,000	1,459,000	1,612,000
S&E-related occupations	2,341,000	3,089,000	3,285,000	3,309,000	3,507,000	3,785,000
Non-S&E occupations	11,736,000	13,667,000	14,418,000	14,824,000	15,013,000	15,125,000
Hispanic or Latino	847,000	1,365,000	1,566,000	1,741,000	1,889,000	2,135,000
S&E occupations	142,000	191,000	237,000	270,000	351,000	382,000
Biological, agricultural, and other life scientists	9,000	13,000	17,000	18,000	14,000	30,000
Computer and mathematical scientists	54,000	73,000	107,000	120,000	151,000	189,000
Physical and related scientists	8,000	7,000	11,000	10,000	19,000	17,000
Social and related scientists	9,000	13,000	16,000	19,000	S	19,000
Engineers	63,000	85,000	86,000	103,000	118,000	128,000
S&E-related occupations	130,000	179,000	249,000	257,000	275,000	328,000
Non-S&E occupations	576,000	995,000	1,080,000	1,214,000	1,263,000	1,424,000
American Indian or Alaska Native	61,000	68,000	65,000	55,000	53,000	62,000
S&E occupations	10,000	7,000	7,000	9,000	9,000	S
Biological, agricultural, and other life scientists	3,000	*	1,000	2,000	*	S
Computer and mathematical scientists	2,000	2,000	1,000	1,000	S	S
Physical and related scientists	D	S	*	*	S	1,000
Social and related scientists	S	D	2,000	S	S	S
Engineers	3,000	4,000	3,000	4,000	3,000	3,000
S&E-related occupations	8,000	9,000	10,000	9,000	12,000	14,000
Non-S&E occupations	43,000	52,000	48,000	37,000	32,000	31,000
Asian	1,223,000	1,852,000	1,984,000	2,118,000	2,357,000	2,605,000
S&E occupations	457,000	708,000	702,000	904,000	929,000	1,055,000
Biological, agricultural, and other life scientists	37,000	50,000	54,000	57,000	70,000	86,000
Computer and mathematical scientists	238,000	412,000	417,000	541,000	583,000	648,000
Physical and related scientists	23,000	27,000	33,000	48,000	35,000	40,000
Social and related scientists	13,000	13,000	17,000	19,000	12,000	14,000
Engineers	146,000	205,000	181,000	239,000	228,000	268,000
S&E-related occupations	218,000	414,000	472,000	404,000	505,000	525,000
Non-S&E occupations	548,000	729,000	809,000	811,000	923,000	1,025,000
Black or African American	847,000	1,131,000	1,275,000	1,358,000	1,513,000	1,551,000
S&E occupations	119,000	143,000	165,000	204,000	214,000	244,000
Biological, agricultural, and other life scientists	7,000	11,000	8,000	7,000	10,000	11,000
Computer and mathematical scientists	57,000	70,000	96,000	112,000	132,000	144,000
Physical and related scientists	6,000	7,000	7,000	9,000	6,000	11,000
Social and related scientists	10,000	10,000	8,000	19,000	14,000	14,000
Engineers	40,000	45,000	46,000	58,000	51,000	65,000
S&E-related occupations	86,000	144,000	171,000	213,000	248,000	257,000
Non-S&E occupations	641,000	844,000	939,000	941,000	1,051,000	1,049,000
Native Hawaiian or Other Pacific Islander	52,000	67,000	75,000	107,000	70,000	78,000
S&E occupations	11,000	9,000	9,000	9,000	19,000	14,000
Biological, agricultural, and other life scientists	D	S	1,000	D	*	D
Computer and mathematical scientists	6,000	2,000	4,000	5,000	9,000	S
Physical and related scientists	D	*	D	D	D	D
Social and related scientists	D	D	D	*	D	*
Engineers	4,000	4,000	4,000	4,000	8,000	7,000
S&E-related occupations	9,000	17,000	12,000	8,000	7,000	S
Non-S&E occupations	33,000	41,000	53,000	90,000	45,000	42,000
White	14,239,000	15,910,000	16,529,000	16,913,000	17,044,000	17,264,000
S&E occupations	2,605,000	2,780,000	2,902,000	3,123,000	3,209,000	3,461,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–19

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019
Biological, agricultural, and other life scientists	199,000	228,000	242,000	241,000	218,000	227,000
Computer and mathematical scientists	1,004,000	1,210,000	1,319,000	1,504,000	1,584,000	1,740,000
Physical and related scientists	176,000	184,000	170,000	169,000	194,000	196,000
Social and related scientists	190,000	183,000	188,000	168,000	186,000	185,000
Engineers	1,037,000	975,000	984,000	1,041,000	1,027,000	1,114,000
S&E-related occupations	1,864,000	2,297,000	2,317,000	2,363,000	2,412,000	2,562,000
Non-S&E occupations	9,770,000	10,833,000	11,309,000	11,427,000	11,423,000	11,240,000
More than one race	193,000	252,000	292,000	432,000	396,000	490,000
S&E occupations	41,000	51,000	61,000	72,000	73,000	100,000
Biological, agricultural, and other life scientists	3,000	5,000	6,000	5,000	5,000	7,000
Computer and mathematical scientists	18,000	26,000	35,000	41,000	38,000	60,000
Physical and related scientists	2,000	3,000	2,000	2,000	3,000	3,000
Social and related scientists	3,000	4,000	3,000	3,000	4,000	3,000
Engineers	15,000	14,000	16,000	21,000	23,000	27,000
S&E-related occupations	27,000	29,000	52,000	56,000	48,000	76,000
Non-S&E occupations	126,000	172,000	180,000	305,000	276,000	313,000

* = 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. Hispanic or Latino may be any race; race categories exclude Hispanic origin.

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

TABLE 6-3

Employed college graduates, by sex, level of highest degree, and major occupation: 2003–19

(Number)

Sex, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
Both sexes	32,574,000	40,623,000	43,839,000	45,941,000	48,223,000	50,524,000
S&E occupations	4,588,000	5,374,000	5,766,000	6,407,000	6,769,000	7,466,000
Biological, agricultural, and other life scientists	421,000	602,000	638,000	631,000	610,000	698,000
Computer and mathematical scientists	1,930,000	2,396,000	2,653,000	3,156,000	3,419,000	3,774,000
Physical and related scientists	298,000	327,000	324,000	331,000	366,000	409,000
Social and related scientists	477,000	518,000	596,000	570,000	646,000	663,000
Engineers	1,463,000	1,531,000	1,554,000	1,719,000	1,728,000	1,921,000
S&E-related occupations	5,155,000	6,966,000	7,508,000	7,867,000	8,271,000	8,893,000
Non-S&E occupations	22,831,000	28,282,000	30,566,000	31,667,000	33,183,000	34,165,000
Bachelor's	20,365,000	25,354,000	27,802,000	28,509,000	30,131,000	31,373,000
S&E occupations	2,529,000	2,980,000	3,288,000	3,518,000	3,846,000	4,176,000
Biological, agricultural, and other life scientists	146,000	233,000	264,000	241,000	230,000	277,000
Computer and mathematical scientists	1,243,000	1,564,000	1,785,000	1,978,000	2,219,000	2,403,000
Physical and related scientists	119,000	126,000	128,000	126,000	164,000	189,000
Social and related scientists	101,000	96,000	124,000	90,000	172,000	147,000
Engineers	920,000	960,000	988,000	1,083,000	1,061,000	1,158,000
S&E-related occupations	2,779,000	3,784,000	4,065,000	4,222,000	4,338,000	4,794,000
Non-S&E occupations	15,057,000	18,589,000	20,449,000	20,769,000	21,946,000	22,403,000
Master's	8,677,000	11,118,000	11,728,000	12,888,000	13,260,000	14,158,000
S&E occupations	1,406,000	1,644,000	1,689,000	2,076,000	2,069,000	2,286,000
Biological, agricultural, and other life scientists	94,000	152,000	158,000	169,000	149,000	152,000
Computer and mathematical scientists	581,000	717,000	744,000	1,048,000	1,039,000	1,168,000
Physical and related scientists	82,000	87,000	83,000	85,000	98,000	97,000
Social and related scientists	205,000	218,000	249,000	249,000	235,000	249,000
Engineers	443,000	472,000	456,000	525,000	548,000	619,000
S&E-related occupations	1,208,000	1,765,000	1,945,000	2,064,000	2,262,000	2,332,000
Non-S&E occupations	6,063,000	7,709,000	8,093,000	8,749,000	8,929,000	9,540,000
Doctorate	1,271,000	1,500,000	1,551,000	1,641,000	1,796,000	2,090,000
S&E occupations	605,000	692,000	724,000	751,000	786,000	938,000
Biological, agricultural, and other life scientists	164,000	199,000	202,000	207,000	217,000	254,000
Computer and mathematical scientists	95,000	108,000	112,000	117,000	150,000	189,000
Physical and related scientists	94,000	114,000	112,000	119,000	101,000	121,000
Social and related scientists	154,000	173,000	190,000	201,000	201,000	235,000
Engineers	97,000	97,000	108,000	107,000	116,000	139,000
S&E-related occupations	123,000	224,000	236,000	229,000	267,000	387,000
Non-S&E occupations	543,000	584,000	590,000	662,000	743,000	765,000
Professional	2,261,000	2,651,000	2,758,000	2,903,000	3,036,000	2,903,000
S&E occupations	49,000	58,000	64,000	63,000	67,000	67,000
Biological, agricultural, and other life scientists	17,000	17,000	14,000	14,000	15,000	14,000
Computer and mathematical scientists	11,000	7,000	11,000	13,000	11,000	14,000
Physical and related scientists	2,000	*	1,000	*	2,000	2,000
Social and related scientists	17,000	31,000	35,000	30,000	37,000	32,000
Engineers	2,000	1,000	2,000	5,000	2,000	5,000
S&E-related occupations	1,045,000	1,193,000	1,262,000	1,353,000	1,404,000	1,380,000
Non-S&E occupations	1,167,000	1,399,000	1,433,000	1,487,000	1,565,000	1,456,000
Female	15,111,000	19,978,000	22,052,000	23,218,000	24,900,000	26,341,000
S&E occupations	1,203,000	1,486,000	1,681,000	1,818,000	1,966,000	2,193,000
Biological, agricultural, and other life scientists	164,000	292,000	311,000	302,000	292,000	337,000
Computer and mathematical scientists	552,000	602,000	673,000	833,000	919,000	975,000
Physical and related scientists	83,000	98,000	100,000	92,000	107,000	142,000

TABLE 6-3

Employed college graduates, by sex, level of highest degree, and major occupation: 2003–19

(Number)

Sex, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
Social and related scientists	251,000	295,000	363,000	341,000	379,000	428,000
Engineers	154,000	200,000	235,000	250,000	269,000	310,000
S&E-related occupations	2,814,000	3,877,000	4,223,000	4,558,000	4,764,000	5,109,000
Non-S&E occupations	11,094,000	14,615,000	16,147,000	16,842,000	18,170,000	19,040,000
Bachelor's	9,522,000	12,592,000	13,904,000	14,206,000	15,524,000	16,021,000
S&E occupations	605,000	720,000	832,000	818,000	979,000	1,034,000
Biological, agricultural, and other life scientists	62,000	136,000	139,000	127,000	119,000	129,000
Computer and mathematical scientists	363,000	383,000	435,000	456,000	570,000	568,000
Physical and related scientists	40,000	43,000	49,000	39,000	49,000	78,000
Social and related scientists	50,000	51,000	74,000	53,000	92,000	95,000
Engineers	89,000	106,000	134,000	143,000	149,000	163,000
S&E-related occupations	1,719,000	2,335,000	2,494,000	2,567,000	2,654,000	2,845,000
Non-S&E occupations	7,198,000	9,538,000	10,579,000	10,821,000	11,891,000	12,142,000
Master's	4,431,000	5,838,000	6,479,000	7,196,000	7,359,000	8,141,000
S&E occupations	407,000	516,000	575,000	708,000	670,000	757,000
Biological, agricultural, and other life scientists	41,000	74,000	84,000	80,000	75,000	83,000
Computer and mathematical scientists	166,000	192,000	211,000	340,000	298,000	340,000
Physical and related scientists	27,000	33,000	28,000	33,000	39,000	37,000
Social and related scientists	119,000	141,000	170,000	164,000	155,000	171,000
Engineers	54,000	77,000	82,000	91,000	104,000	126,000
S&E-related occupations	729,000	1,043,000	1,156,000	1,338,000	1,405,000	1,469,000
Non-S&E occupations	3,295,000	4,279,000	4,748,000	5,150,000	5,284,000	5,915,000
Doctorate	422,000	521,000	597,000	646,000	734,000	900,000
S&E occupations	170,000	215,000	239,000	261,000	279,000	365,000
Biological, agricultural, and other life scientists	55,000	74,000	80,000	88,000	90,000	118,000
Computer and mathematical scientists	20,000	24,000	25,000	30,000	46,000	61,000
Physical and related scientists	15,000	22,000	22,000	20,000	19,000	28,000
Social and related scientists	70,000	79,000	94,000	107,000	108,000	139,000
Engineers	10,000	17,000	18,000	15,000	16,000	20,000
S&E-related occupations	51,000	86,000	100,000	107,000	126,000	188,000
Non-S&E occupations	200,000	220,000	258,000	278,000	328,000	346,000
Professional	736,000	1,027,000	1,072,000	1,170,000	1,283,000	1,280,000
S&E occupations	21,000	35,000	35,000	31,000	37,000	36,000
Biological, agricultural, and other life scientists	6,000	8,000	7,000	6,000	7,000	7,000
Computer and mathematical scientists	3,000	S	S	S	S	6,000
Physical and related scientists	D	D	D	D	D	D
Social and related scientists	11,000	23,000	24,000	17,000	25,000	22,000
Engineers	D	D	D	D	D	D
S&E-related occupations	314,000	413,000	474,000	546,000	579,000	607,000
Non-S&E occupations	401,000	578,000	563,000	594,000	667,000	637,000
Male	17,463,000	20,644,000	21,787,000	22,723,000	23,323,000	24,183,000
S&E occupations	3,385,000	3,888,000	4,084,000	4,590,000	4,803,000	5,274,000
Biological, agricultural, and other life scientists	257,000	310,000	328,000	329,000	319,000	361,000
Computer and mathematical scientists	1,378,000	1,795,000	1,980,000	2,323,000	2,500,000	2,799,000
Physical and related scientists	215,000	229,000	224,000	239,000	259,000	267,000
Social and related scientists	226,000	223,000	234,000	229,000	266,000	235,000
Engineers	1,309,000	1,331,000	1,319,000	1,469,000	1,459,000	1,612,000
S&E-related occupations	2,341,000	3,089,000	3,285,000	3,309,000	3,507,000	3,785,000
Non-S&E occupations	11,736,000	13,667,000	14,418,000	14,824,000	15,013,000	15,125,000
Bachelor's	10,843,000	12,761,000	13,898,000	14,303,000	14,606,000	15,353,000

TABLE 6-3

Employed college graduates, by sex, level of highest degree, and major occupation: 2003–19

(Number)

Sex, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
S&E occupations	1,925,000	2,260,000	2,457,000	2,700,000	2,867,000	3,142,000
Biological, agricultural, and other life scientists	84,000	98,000	125,000	114,000	110,000	148,000
Computer and mathematical scientists	880,000	1,181,000	1,350,000	1,522,000	1,649,000	1,835,000
Physical and related scientists	79,000	83,000	79,000	87,000	115,000	112,000
Social and related scientists	51,000	44,000	49,000	37,000	80,000	52,000
Engineers	831,000	854,000	853,000	940,000	912,000	995,000
S&E-related occupations	1,060,000	1,450,000	1,571,000	1,655,000	1,685,000	1,949,000
Non-S&E occupations	7,858,000	9,052,000	9,871,000	9,948,000	10,055,000	10,262,000
Master's	4,247,000	5,280,000	5,249,000	5,692,000	5,901,000	6,017,000
S&E occupations	999,000	1,129,000	1,114,000	1,367,000	1,399,000	1,529,000
Biological, agricultural, and other life scientists	54,000	78,000	74,000	88,000	74,000	69,000
Computer and mathematical scientists	415,000	525,000	533,000	708,000	741,000	828,000
Physical and related scientists	55,000	54,000	55,000	53,000	59,000	60,000
Social and related scientists	86,000	77,000	79,000	85,000	80,000	78,000
Engineers	389,000	395,000	374,000	434,000	445,000	493,000
S&E-related occupations	479,000	721,000	790,000	726,000	857,000	864,000
Non-S&E occupations	2,769,000	3,430,000	3,346,000	3,599,000	3,645,000	3,625,000
Doctorate	849,000	979,000	954,000	996,000	1,062,000	1,190,000
S&E occupations	434,000	477,000	485,000	490,000	507,000	573,000
Biological, agricultural, and other life scientists	109,000	125,000	122,000	119,000	127,000	137,000
Computer and mathematical scientists	75,000	85,000	87,000	87,000	104,000	128,000
Physical and related scientists	79,000	92,000	90,000	99,000	82,000	94,000
Social and related scientists	84,000	94,000	95,000	94,000	93,000	95,000
Engineers	88,000	81,000	90,000	92,000	101,000	119,000
S&E-related occupations	72,000	138,000	136,000	122,000	140,000	199,000
Non-S&E occupations	343,000	364,000	333,000	384,000	415,000	419,000
Professional	1,524,000	1,624,000	1,686,000	1,732,000	1,754,000	1,623,000
S&E occupations	27,000	23,000	29,000	32,000	30,000	30,000
Biological, agricultural, and other life scientists	11,000	9,000	7,000	8,000	8,000	7,000
Computer and mathematical scientists	8,000	4,000	9,000	7,000	7,000	8,000
Physical and related scientists	S	*	D	D	2,000	1,000
Social and related scientists	5,000	8,000	11,000	13,000	12,000	10,000
Engineers	1,000	S	2,000	4,000	1,000	5,000
S&E-related occupations	730,000	780,000	788,000	807,000	825,000	773,000
Non-S&E occupations	767,000	821,000	870,000	893,000	898,000	819,000

* = 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.

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

TABLE 6-4

Employed college graduates, by nativity, level of highest degree, and major occupation: 2003–19

(Number)

Nativity, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
All college graduates, all degrees, all occupations	32,574,000	40,623,000	43,839,000	45,941,000	48,223,000	50,524,000
S&E occupations	4,588,000	5,374,000	5,766,000	6,407,000	6,769,000	7,466,000
Biological, agricultural, and other life scientists	421,000	602,000	638,000	631,000	610,000	698,000
Computer and mathematical scientists	1,930,000	2,396,000	2,653,000	3,156,000	3,419,000	3,774,000
Physical and related scientists	298,000	327,000	324,000	331,000	366,000	409,000
Social and related scientists	477,000	518,000	596,000	570,000	646,000	663,000
Engineers	1,463,000	1,531,000	1,554,000	1,719,000	1,728,000	1,921,000
S&E-related occupations	5,155,000	6,966,000	7,508,000	7,867,000	8,271,000	8,893,000
Non-S&E occupations	22,831,000	28,282,000	30,566,000	31,667,000	33,183,000	34,165,000
Bachelor's	20,365,000	25,354,000	27,802,000	28,509,000	30,131,000	31,373,000
S&E occupations	2,529,000	2,980,000	3,288,000	3,518,000	3,846,000	4,176,000
Biological, agricultural, and other life scientists	146,000	233,000	264,000	241,000	230,000	277,000
Computer and mathematical scientists	1,243,000	1,564,000	1,785,000	1,978,000	2,219,000	2,403,000
Physical and related scientists	119,000	126,000	128,000	126,000	164,000	189,000
Social and related scientists	101,000	96,000	124,000	90,000	172,000	147,000
Engineers	920,000	960,000	988,000	1,083,000	1,061,000	1,158,000
S&E-related occupations	2,779,000	3,784,000	4,065,000	4,222,000	4,338,000	4,794,000
Non-S&E occupations	15,057,000	18,589,000	20,449,000	20,769,000	21,946,000	22,403,000
Master's	8,677,000	11,118,000	11,728,000	12,888,000	13,260,000	14,158,000
S&E occupations	1,406,000	1,644,000	1,689,000	2,076,000	2,069,000	2,286,000
Biological, agricultural, and other life scientists	94,000	152,000	158,000	169,000	149,000	152,000
Computer and mathematical scientists	581,000	717,000	744,000	1,048,000	1,039,000	1,168,000
Physical and related scientists	82,000	87,000	83,000	85,000	98,000	97,000
Social and related scientists	205,000	218,000	249,000	249,000	235,000	249,000
Engineers	443,000	472,000	456,000	525,000	548,000	619,000
S&E-related occupations	1,208,000	1,765,000	1,945,000	2,064,000	2,262,000	2,332,000
Non-S&E occupations	6,063,000	7,709,000	8,093,000	8,749,000	8,929,000	9,540,000
Doctorate	1,271,000	1,500,000	1,551,000	1,641,000	1,796,000	2,090,000
S&E occupations	605,000	692,000	724,000	751,000	786,000	938,000
Biological, agricultural, and other life scientists	164,000	199,000	202,000	207,000	217,000	254,000
Computer and mathematical scientists	95,000	108,000	112,000	117,000	150,000	189,000
Physical and related scientists	94,000	114,000	112,000	119,000	101,000	121,000
Social and related scientists	154,000	173,000	190,000	201,000	201,000	235,000
Engineers	97,000	97,000	108,000	107,000	116,000	139,000
S&E-related occupations	123,000	224,000	236,000	229,000	267,000	387,000
Non-S&E occupations	543,000	584,000	590,000	662,000	743,000	765,000
Professional	2,261,000	2,651,000	2,758,000	2,903,000	3,036,000	2,903,000
S&E occupations	49,000	58,000	64,000	63,000	67,000	67,000
Biological, agricultural, and other life scientists	17,000	17,000	14,000	14,000	15,000	14,000
Computer and mathematical scientists	11,000	7,000	11,000	13,000	11,000	14,000
Physical and related scientists	2,000	*	1,000	*	2,000	2,000
Social and related scientists	17,000	31,000	35,000	30,000	37,000	32,000
Engineers	2,000	1,000	2,000	5,000	2,000	5,000
S&E-related occupations	1,045,000	1,193,000	1,262,000	1,353,000	1,404,000	1,380,000
Non-S&E occupations	1,167,000	1,399,000	1,433,000	1,487,000	1,565,000	1,456,000
Foreign-born college graduates, all degrees, all occupations	4,347,000	5,990,000	6,704,000	7,371,000	8,126,000	8,602,000
S&E occupations	1,032,000	1,467,000	1,528,000	1,923,000	1,998,000	2,192,000
Biological, agricultural, and other life scientists	105,000	178,000	184,000	189,000	199,000	229,000
Computer and mathematical scientists	490,000	731,000	804,000	1,078,000	1,135,000	1,263,000
Physical and related scientists	65,000	82,000	85,000	101,000	108,000	93,000

TABLE 6-4

Employed college graduates, by nativity, level of highest degree, and major occupation: 2003–19

(Number)

Nativity, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
Social and related scientists	61,000	80,000	97,000	117,000	102,000	112,000
Engineers	312,000	395,000	358,000	438,000	454,000	495,000
S&E-related occupations	842,000	1,302,000	1,467,000	1,356,000	1,630,000	1,802,000
Non-S&E occupations	2,472,000	3,221,000	3,709,000	4,092,000	4,499,000	4,609,000
Bachelor's	2,418,000	3,294,000	3,807,000	4,072,000	4,464,000	4,672,000
S&E occupations	408,000	609,000	621,000	745,000	829,000	878,000
Biological, agricultural, and other life scientists	16,000	36,000	35,000	37,000	38,000	47,000
Computer and mathematical scientists	226,000	363,000	397,000	476,000	539,000	591,000
Physical and related scientists	17,000	16,000	19,000	22,000	45,000	22,000
Social and related scientists	10,000	18,000	15,000	13,000	22,000	19,000
Engineers	139,000	175,000	154,000	197,000	184,000	199,000
S&E-related occupations	422,000	671,000	764,000	656,000	768,000	895,000
Non-S&E occupations	1,588,000	2,014,000	2,422,000	2,672,000	2,867,000	2,899,000
Master's	1,237,000	1,826,000	1,964,000	2,291,000	2,559,000	2,706,000
S&E occupations	399,000	562,000	580,000	842,000	811,000	873,000
Biological, agricultural, and other life scientists	16,000	43,000	42,000	46,000	46,000	46,000
Computer and mathematical scientists	217,000	310,000	343,000	533,000	505,000	553,000
Physical and related scientists	16,000	20,000	21,000	24,000	23,000	20,000
Social and related scientists	24,000	28,000	33,000	58,000	32,000	40,000
Engineers	126,000	162,000	141,000	182,000	203,000	214,000
S&E-related occupations	157,000	273,000	340,000	336,000	443,000	453,000
Non-S&E occupations	681,000	991,000	1,044,000	1,113,000	1,306,000	1,380,000
Doctorate	351,000	499,000	498,000	536,000	599,000	753,000
S&E occupations	213,000	279,000	300,000	318,000	339,000	420,000
Biological, agricultural, and other life scientists	65,000	90,000	98,000	97,000	105,000	127,000
Computer and mathematical scientists	45,000	55,000	59,000	68,000	88,000	114,000
Physical and related scientists	31,000	46,000	44,000	55,000	40,000	51,000
Social and related scientists	25,000	32,000	37,000	39,000	41,000	48,000
Engineers	47,000	57,000	62,000	58,000	65,000	79,000
S&E-related occupations	34,000	86,000	79,000	87,000	103,000	155,000
Non-S&E occupations	104,000	133,000	119,000	131,000	157,000	178,000
Professional	340,000	371,000	435,000	472,000	504,000	471,000
S&E occupations	12,000	17,000	27,000	18,000	19,000	21,000
Biological, agricultural, and other life scientists	7,000	10,000	10,000	9,000	9,000	8,000
Computer and mathematical scientists	2,000	S	4,000	2,000	S	5,000
Physical and related scientists	D	D	D	D	D	D
Social and related scientists	2,000	3,000	11,000	6,000	7,000	5,000
Engineers	D	D	D	D	D	D
S&E-related occupations	230,000	271,000	283,000	277,000	316,000	298,000
Non-S&E occupations	99,000	83,000	124,000	177,000	169,000	152,000
U.S.-born college graduates, all degrees, all occupations	28,228,000	34,633,000	37,136,000	38,570,000	40,097,000	41,922,000
S&E occupations	3,556,000	3,907,000	4,238,000	4,484,000	4,771,000	5,275,000
Biological, agricultural, and other life scientists	316,000	423,000	454,000	442,000	412,000	469,000
Computer and mathematical scientists	1,440,000	1,665,000	1,849,000	2,078,000	2,284,000	2,512,000
Physical and related scientists	233,000	245,000	239,000	230,000	258,000	316,000
Social and related scientists	416,000	438,000	499,000	453,000	544,000	551,000
Engineers	1,150,000	1,136,000	1,196,000	1,281,000	1,274,000	1,427,000
S&E-related occupations	4,313,000	5,665,000	6,041,000	6,511,000	6,642,000	7,092,000
Non-S&E occupations	20,358,000	25,061,000	26,857,000	27,574,000	28,684,000	29,556,000
Bachelor's	17,947,000	22,060,000	23,995,000	24,437,000	25,667,000	26,701,000

TABLE 6-4

Employed college graduates, by nativity, level of highest degree, and major occupation: 2003–19

(Number)

Nativity, level of highest degree, and occupation	2003	2010	2013	2015	2017	2019
S&E occupations	2,121,000	2,372,000	2,667,000	2,773,000	3,018,000	3,298,000
Biological, agricultural, and other life scientists	130,000	198,000	229,000	204,000	192,000	230,000
Computer and mathematical scientists	1,017,000	1,201,000	1,388,000	1,502,000	1,680,000	1,812,000
Physical and related scientists	102,000	110,000	108,000	104,000	119,000	168,000
Social and related scientists	92,000	78,000	109,000	77,000	150,000	128,000
Engineers	781,000	785,000	833,000	886,000	876,000	959,000
S&E-related occupations	2,358,000	3,113,000	3,301,000	3,566,000	3,570,000	3,899,000
Non-S&E occupations	13,469,000	16,575,000	18,028,000	18,098,000	19,079,000	19,504,000
Master's	7,440,000	9,292,000	9,764,000	10,597,000	10,701,000	11,452,000
S&E occupations	1,006,000	1,082,000	1,110,000	1,233,000	1,258,000	1,413,000
Biological, agricultural, and other life scientists	78,000	109,000	116,000	123,000	102,000	107,000
Computer and mathematical scientists	364,000	406,000	402,000	515,000	533,000	616,000
Physical and related scientists	66,000	67,000	62,000	61,000	75,000	77,000
Social and related scientists	181,000	190,000	215,000	191,000	203,000	209,000
Engineers	317,000	310,000	315,000	343,000	345,000	405,000
S&E-related occupations	1,052,000	1,492,000	1,605,000	1,728,000	1,820,000	1,880,000
Non-S&E occupations	5,382,000	6,718,000	7,049,000	7,635,000	7,623,000	8,160,000
Doctorate	920,000	1,001,000	1,053,000	1,105,000	1,197,000	1,337,000
S&E occupations	392,000	412,000	424,000	433,000	447,000	518,000
Biological, agricultural, and other life scientists	99,000	109,000	105,000	110,000	112,000	127,000
Computer and mathematical scientists	50,000	53,000	53,000	49,000	62,000	75,000
Physical and related scientists	63,000	68,000	68,000	64,000	61,000	70,000
Social and related scientists	129,000	142,000	152,000	162,000	160,000	186,000
Engineers	51,000	40,000	47,000	49,000	51,000	60,000
S&E-related occupations	89,000	138,000	157,000	141,000	164,000	231,000
Non-S&E occupations	439,000	451,000	472,000	531,000	586,000	588,000
Professional	1,920,000	2,280,000	2,323,000	2,431,000	2,532,000	2,432,000
S&E occupations	37,000	41,000	37,000	45,000	48,000	46,000
Biological, agricultural, and other life scientists	10,000	7,000	4,000	6,000	6,000	6,000
Computer and mathematical scientists	10,000	5,000	7,000	12,000	8,000	9,000
Physical and related scientists	S	D	D	*	2,000	2,000
Social and related scientists	14,000	28,000	23,000	23,000	30,000	28,000
Engineers	2,000	D	2,000	4,000	S	3,000
S&E-related occupations	815,000	922,000	978,000	1,076,000	1,088,000	1,082,000
Non-S&E occupations	1,068,000	1,317,000	1,309,000	1,310,000	1,396,000	1,304,000

* = 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.

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

Technical Notes

Survey Overview

Purpose. The National Survey of College Graduates (NSCG) provides data on the characteristics of the nation's college graduates, with a focus on those in the science and engineering (S&E) workforce. It samples individuals who are living in the United States during the survey reference week, have earned at least a bachelor's degree, and are younger than 76. By surveying college graduates in all academic disciplines, the NSCG provides data useful in understanding the relationship between college education and career opportunities, as well as the relationship between degree field and occupation.

The NSCG is designed to provide demographic, education, and career history information about college graduates and to complement another S&E-focused survey conducted by the National Center for Science and Engineering Statistics (NCSES): the Survey of Doctorate Recipients (SDR, **https://www.nsf.gov/statistics/srvydoctoratework/**). These two surveys share a common reference date, and they use similar questionnaires and data processing guidelines.

These technical notes provide an overview of the 2019 NSCG. Complete details are provided in the 2019 NSCG Methodology Report, available upon request from the NSCG Survey Manager.

Data collection authority. The information collected in the NSCG is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the America COMPETES Reauthorization Act of 2010. The Census Bureau collects the NSCG data, on behalf of NCSES, under the authority of Title 13, Section 8 of the United States Code. The Office of Management and Budget control number is 3145-0141.

Survey contractor. Census Bureau

Survey sponsor. NCSES.

Major changes to the recent survey cycle. Beginning with the 2019 cycle, the NSCG's target population was modified to exclude residents of U.S. outlying areas. This change was made to better align the survey's target population with the coverage of the NSCG sampling frame, the American Community Survey (ACS). The ACS coverage includes residents of the 50 states, the District of Columbia, and Puerto Rico. Hence, starting with the 2019 NSCG, sample members living in U.S. outlying territories other than Puerto Rico are no longer considered part of the target population.

Key Survey Information

Frequency. Biennial.

Initial survey year. 1993.

Reference period. The week of 1 February 2019.

Response unit. Individual.

Sample or census. Sample.

Population size. Approximately 64.7 million individuals.

Sample size. Approximately 147,000 individuals.

Survey Design

Target population. The NSCG target population includes individuals who meet the following criteria:

- Earned a bachelor's degree[1] or higher prior to 1 January 2018

- Are not institutionalized and reside in the United States or Puerto Rico as of 1 February 2019
- Are younger than 76 years as of 1 February 2019

Sampling frame. Using a rotating panel design, the 2019 NSCG includes new sample cases from the 2017 ACS and returning sample cases from the 2017 NSCG.

The NSCG sampling frame for new sample cases included the following eligibility requirements:

- Were residing in the United States or Puerto Rico as of the ACS interview date
- Were noninstitutionalized as of the ACS interview date
- Had earned at least a bachelor's degree as of the ACS interview date
- Would be under the age of 76 as of 1 February 2019
- Did not have an inaccurate name or incomplete address on the ACS data file

Returning sample cases from the 2017 NSCG originated from three different frames (the 2011 ACS, 2013 ACS, and 2015 ACS) and had the following eligibility requirements:

- Were a complete interview or temporarily ineligible during their initial NSCG survey cycle
- Would be under the age of 76 as of 1 February 2019
- Were not a hard refusal during the 2017 NSCG survey cycle

Sample design. The NSCG sample design is cross-sectional with a rotating panel element. As a cross-sectional study, the NSCG provides estimates of the size and characteristics of the college graduate population for a point in time. As part of the rotating panel design, every new panel receives a baseline survey interview and three biennial follow-up interviews before rotating out of the survey.

The NSCG uses a stratified sampling design to select its sample from the eligible sampling frame. In the new sample, cases in the S&E strata were selected using systematic sampling, and cases in the non-S&E strata were selected with probability proportional to size (PPS) sampling.[2]

Among the returning sample, all eligible cases were selected. The sampling strata were defined by the cross classification of the following four variables:

- Young graduate oversample group eligibility indicator (2 levels)
- Demographic group (9 levels)
- Highest degree type (3 levels)
- Detailed occupation group (25 levels, with over half in S&E)

As was the case in the 2017 NSCG, the 2019 NSCG includes an oversample of young graduates to improve the precision of estimates for this important population. The 2019 NSCG includes approximately 147,000 sample cases drawn from the following:

- Returning sample from the 2013 NSCG who were originally selected from the 2011 ACS
- Returning sample from the 2015 NSCG who were originally selected from the 2013 ACS
- Returning sample from the 2017 NSCG who were originally selected from the 2015 ACS
- New sample selected from the 2017 ACS

Approximately 81,000 cases were selected from the returning sample members for one of the three biennial follow-up interviews that are part of the rotating panel design. For the baseline survey interview, about 66,000 new sample cases were selected from the 2017 ACS.

Data Collection and Processing Methods

Data collection. The data collection period lasted approximately 7 months (25 April 2019 to 22 November 2019). The NSCG used a trimodal data collection approach: self-administered online survey (Web), self-administered paper questionnaire (via mail), and computer-assisted telephone interview (CATI). Individuals in the sample generally were started in the Web mode, depending on their available contact information and past preference. After an initial survey invitation, the data collection protocol included sequential contacts by postal mail, e-mail, and telephone that ran throughout the data collection period. At any time during data collection, sample members could choose to complete the survey using any of the three modes. Nonrespondents to the initial survey invitation received follow-up contacts via alternate modes.

Quality assurance procedures were in place at each data collection step (e.g., address updating, printing, package assembly and mailing, questionnaire receipt, data entry, CATI, coding, and post-data collection processing).

Mode. About 85% of the participants completed the survey by Web, 10% by mail, and 5% by CATI.

Response rates. Response rates were calculated on complete responses, that is, from instruments with responses to all critical items. Critical items are those containing information needed to report labor force participation (including employment status, job title, and job description), college education (including degree type, degree date, and field of study), and location of residency on the reference date. The overall unweighted response rate was 65%; the weighted response rate was 68%. Of the roughly 147,000 persons in the 2019 NSCG sample, 92,537 completed the survey.

Data editing. Response data had initial editing rules applied relative to the specific mode of capture to check internal consistency and valid range of response. The Web survey captured most of the survey responses and had internal editing controls where appropriate. A computer-assisted data entry (CADE) system was used to process the mailed paper forms. Responses from the three separate modes were merged for subsequent coding, editing, and cleaning necessary to create an analytical database.

Following established NCSES guidelines for coding NSCG survey data, including verbatim responses, staff were trained in conducting a standardized review and coding of occupation and education information, certifications, “other/specify” verbatim responses, state and country geographical information, and postsecondary institution information. For standardized coding of occupation (including auto-coding), the respondent's reported job title, duties and responsibilities, and other work-related information from the questionnaire were reviewed by specially trained coders who corrected respondents’ self-reporting errors to obtain the best occupation codes. (See **technical table A-2** for a list and classification of coded occupations reported in the NSCG.) For standardized coding of field of study associated with any reported degree (including auto-coding), the respondent’s reported department, degree level, and field of study information from the questionnaire were reviewed by specially trained coders who corrected respondents’ self-reporting errors to obtain the best field of study codes. (See **technical table A-1** for a list and classification of coded fields of study reported in the NSCG.)

Imputation. Logical imputation was primarily accomplished as part of editing. In the editing phase, the answer to a question with missing data was sometimes determined by the answer to another question. In some circumstances, editing procedures found inconsistent data that were blanked out and therefore subject to statistical imputation.

The item nonresponse rates reflect data missing after logical imputation or editing but before statistical imputation. For key employment items—such as employment status, sector of employment, and primary work activity—the item nonresponse rates ranged from 0.0% to 0.6%. Nonresponse to questions deemed sensitive was higher: nonresponse to salary and earned income was 4.9% and 7.2%, respectively, for the new sample members and 4.6% and 7.3%, respectively, for the returning members. Personal demographic data of the new sample members had variable item nonresponse rates, with sex at 0.00%, birth year at 0.03%, marital status at 0.3%, citizenship at 0.3%, ethnicity at 1.1%, and race at 2.8%. The nonresponse rates for returning sample members were 0.7% for marital status and 0.8% for citizenship.

Item nonresponse was typically addressed using statistical imputation methods. Most NSCG variables were subjected to hot-deck imputation, with each variable having its own class and sort variables chosen by regression modeling to identify nearest neighbors for imputed information. For some variables, there was no set of class and sort variables that was reliably related to or suitable for predicting the missing value, such as day of birth. In these instances, random imputation was used, so that the distribution of imputed values was similar to the distribution of reported values without using class or sort variables.

Imputation was not performed on critical items or on verbatim-based variables. In addition, for some missing demographic information, the NSCG imported the corresponding data from the ACS, which had performed its own imputation.

Weighting. Because the NSCG is based on a complex sampling design and subject to nonresponse bias, sampling weights were created for each respondent to support unbiased population estimates. The final analysis weights account for several factors, including the following:

- Adjustments to account for undercoverage of recent immigrants and undercoverage of recent degree-earners
- Adjustment for incorrect names or incomplete address information on the sampling frame
- Differential sampling rates
- Adjustments to account for non-locatability and unit nonresponse
- Adjustments to align the sample distribution with population controls
- Trimming of extreme weights
- Overlap procedures to convert weights that reflect the population of each individual frame (2011 ACS, 2013 ACS, 2015 ACS, and 2017 ACS) into a final sample weight that reflects the 2019 NSCG target population

The final sample weights enable data users to derive survey-based estimates of the NSCG target population. The variable name on the NSCG public use data files for the NSCG final sample weight is WTSURVY.

Variance estimation. The successive difference replication method (SDRM) was used to develop replicate weights for variance estimation. The theoretical basis for the SDRM is described in Wolter (1984) and in Fay and Train (1995). As with any replication method, successive difference replication involves constructing numerous subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around their corresponding full sample estimate provides an estimate of the sampling variance of the statistic of interest. The 2019 NSCG produced 320 sets of replicate weights.

Disclosure protection. To protect against the disclosure of confidential information provided by NSCG respondents, the estimates presented in NSCG data tables are rounded to the nearest 1,000.

Data table cell values based on counts of respondents that fall below a predetermined threshold are deemed to be sensitive to potential disclosure, and the letter “D” indicates this type of suppression in a table cell.

Survey Quality Measures

Sampling error. NSCG estimates are subject to sampling errors. Estimates of sampling errors associated with this survey were calculated using replicate weights and are available upon request from the NSCG Survey Manager. Data table estimates with coefficients of variation (that is, the estimate divided by the standard error) that exceed a predetermined threshold are deemed unreliable and are suppressed. The letter "S" indicates this type of suppression in a table cell.

Coverage error. Coverage error occurs in sample estimates when the sampling frame does not accurately represent the target population and is a type of nonsampling error. Any missed housing units or missed individuals within sample households in the ACS would create undercoverage in the NSCG. Additional undercoverage errors may exist because of self-reporting errors in the NSCG sampling frame that led to incorrect classification of individuals as not having a bachelor's degree or higher when in fact they held such a degree.

Nonresponse error. The weighted response rate for the 2019 NSCG was 68%; the unweighted response rate was 65%. Analyses of NSCG nonresponse trends were used to develop nonresponse weighting adjustments to minimize the potential for nonresponse bias in the NSCG estimates. A hot deck imputation method was used to compensate for item nonresponse.

Measurement error. The NSCG is subject to reporting errors from differences in interpretation of questions and by modality (Web, mail, CATI). To reduce measurement errors, the NSCG questionnaire items were pretested in focus groups and cognitive interviews.

Data Comparability and Changes

Data comparability. Year-to-year comparisons of the nation's college-educated population can be made among the 1993, 2003, 2010, 2013, 2015, 2017, and 2019 survey cycles because many of the core questions remained the same. Because the 1995, 1997, 1999, 2006, and 2008 surveys do not provide full coverage of the nation's college-educated population, comparisons between these cycles and other cycles should be limited to those individuals educated in S&E fields or employed in S&E occupations. Also, because of the use of different reference months in some survey cycles, seasonal differences may occur when making comparisons across years. Thus, use caution when interpreting cross-cycle comparisons.

There is overlap in the cases included in the 2010 NSCG through the 2017 NSCG and in the 2013 NSCG through the 2019 NSCG (see figure 1). The overlap among cases allows for longitudinal analysis of a subset of the NSCG sample using restricted use data files within NCSES' Secure Data Access Facility (SDAF). Cases can be linked across survey years using a unique identification variable and single-frame weights are available for each survey year, allowing for the evaluation of estimates from each frame independently. If you are interested in applying for a license to access restricted use NSCG data via the SDAF, please visit NCSES Restricted-Use Data Procedures Guide. Moreover, the Census Bureau offers NSCG restricted use data files that include a few additional data elements. These files can be accessed via the Federal Statistical Research Data Centers.

Changes in survey sampling

- Starting with the 2010 survey cycle, the NSCG has used a rotating panel sample design in which a new sample is selected every survey cycle from the most recent ACS and the cases are followed over four survey cycles. After the fourth cycle, the cases rotate out of the NSCG and are replaced by a newly selected panel of cases from the most recent ACS.
- Beginning in the 2013 cycle, NCSES discontinued the National Survey of Recent College Graduates (NSRCG) and expanded the sample of young college graduates in the NSCG. The 2010 NSRCG sample cases were carried forward through the 2015 NSCG survey cycle as the NSCG transitioned to a design that included a young college graduate oversample.

- Figure 1 summarizes the NSCG rotating panel design and the sample sizes for the 2010 through 2019 NSCG survey cycles. Each new NSCG survey cycle adds new cases from the most recent ACS survey year to offset the rotating out of the oldest NSCG panel.

FIGURE 1

Rotating panel design and sample sizes for the National Survey of College Graduates: 2010–19

(Returning sample and new sample)

Year	Cohort/panel			
2010	Returning sample: 2008 NSCG and NSRCG (*n* ≈ 35,000)	New sample: 2009 ACS (*n* ≈ 65,000)		
2013	Returning sample: 2010 NSRCG (*n* ≈ 13,000)	2009 ACS (*n* ≈ 47,000)	New sample: 2011 ACS (*n* ≈ 83,000)	
2015	Returning sample: 2010 NSRCG (*n* ≈ 13,000)	2009 ACS (*n* ≈ 23,000)	2011 ACS (*n* ≈ 57,000)	New sample: 2013 ACS (*n* ≈ 42,000)
2017	Returning sample: 2009 ACS (*n* ≈ 23,000)	2011 ACS (*n* ≈ 28,000)	2013 ACS (*n* ≈ 25,000)	New sample: 2015 ACS (*n* ≈ 48,000)
2019	Returning sample: 2011 ACS (*n* ≈ 27,500)	2013 ACS (*n* ≈ 24,500)	2015 ACS (*n* ≈ 29,000)	New sample: 2017 ACS (*n* ≈ 66,000)

NSCG = National Survey of College Graduates; NSRCG = National Survey of Recent College Graduates; ACS = American Community Survey

Note(s):
During a panel's second survey cycle (in which it is part of the returning sample for the first time), its members include individuals who responded or who were temporarily ineligible during the first cycle. During a panel's third and fourth cycles, its members include all respondents, nonrespondents, and temporarily ineligible cases from the preceding cycle. Beginning in 2013, the NSCG transitioned to a design that includes an oversample of young graduates to improve the precision of estimates for this important population.

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

Changes in questionnaire

- 2019. The content of the 2019 NSCG questionnaire remained unchanged from the 2017 NSCG version.
- 2017. The 2017 NSCG questionnaire added two new questions about U.S. military veteran status that are asked on the ACS.
- 2015. The 2015 NSCG questionnaire added a section on professional certifications and licenses.
- 2013. The 2013 NSCG questionnaire added questions about attendance at community colleges, amounts borrowed to finance undergraduate and graduate degrees, and sources of financial support for undergraduate and graduate degrees. The 2013 questionnaire also differed from the 2010 questionnaire by splitting the first response category for the indicator of sample member location on the survey reference date into two categories. "United States, Puerto Rico, or another U.S. territory" became "United States or Puerto Rico" and "Another U.S. territory."

- 2010. The 2010 NSCG questionnaire added items on components of job satisfaction, importance of job benefits, year of retirement, whether employer is a new business, and degree of difficulty concentrating, remembering, or making decisions.

Changes in reporting procedures

- In past years, NSCG data were combined with data from the SDR and the NSRCG to form the Scientists and Engineers Statistical Data System (SESTAT). The last series of tables produced from SESTAT used 2013 NSCG data. Since then, NSCG data have been used as a sole source in numerous tables for NCSES's two congressionally mandated reports (*Science and Engineering Indicators* and *Women, Minorities, and Persons with Disabilities in Science and Engineering*).

Changes in microdata

- NSCG public use data files can no longer be linked across cycles. The NSCG public use data files now include a case identifier (OBSNUM), which is a random number for each case in each cycle.

Definitions

Field of degree. NSCG respondents are asked to report each degree they have earned at the bachelor's level or higher, along with the major field of study for each degree. The 2019 NSCG used a taxonomy of 142 "detailed" fields of study from which respondents could select the field that best represented their major. These 142 "detailed" fields of study were aggregated into 31 "minor" fields, 7 "major" fields, and 3 "broad" fields (S&E, S&E-related, and non-S&E). *S&E fields of degree* are those included in the following five major categories: (1) computer and mathematical sciences; (2) biological, agricultural, and environmental life sciences; (3) physical sciences; (4) social sciences; and (5) engineering. *S&E-related fields of degree* are those included in the following four categories: (1) health, (2) science and mathematics teacher education, (3) technology and technical fields, and (4) other S&E-related fields. (See **technical table A-1** for a list and classification of fields of degree reported in the NSCG.)

Full-time and part-time employment. Full-time (working 35 hours or more per week) and part-time (working less than 35 hours per week) employment status is for the principal job only and not for all jobs held in the labor force. For example, an individual who works part time in his or her principal job but full time in the labor force would be tabulated as part-time.

Highest degree level. NSCG respondents report the degrees they have earned at the bachelor's level (e.g., BS, BA, AB), master's level (e.g., MS, MA, MBA), and doctorate level (e.g., PhD, DSc, EdD), as well as other professional degrees (e.g., JD, LLB, MD, DDS, DVM). Because the NSCG is focused on the S&E workforce, the sampling strategy does not include a special effort to select individuals with professional degrees. As such, there is not always sufficient data for the professional degrees to be reported separately in the tables.

Occupation data. The occupational classification of the respondent was based on his or her principal job (including job title) held during the reference week—or on his or her last job held, if not employed in the reference week (survey questions A5 and A6 as well as A16 and A17). Also used in the occupational classification was a respondent-selected job code (survey questions A7 and A18). *S&E occupations* are those included in the following five major categories: (1) computer and mathematical scientists; (2) biological, agricultural, and other life scientists; (3) physical scientists; (4) social scientists; and (5) engineers. S&E-related occupations require science and technology expertise but are not part of the five major categories of S&E occupations. *S&E-related occupations* are those included in the following five categories: (1) health-related occupations, (2) S&E managers, (3) S&E precollege teachers, (4) S&E technicians and technologists, and (5) other S&E-related occupations. (See **technical table A-2** for a list and classification of occupations reported in the NSCG.)

Race and ethnicity. Ethnicity is defined as Hispanic or Latino or not Hispanic or Latino. Values for those selecting a single race include American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. Those persons who report more than one race and who are not of Hispanic or Latino ethnicity also have a separate value.

Research and development (R&D). The definition of R&D used by NCSES changed recently to align more closely with international guidance. In NCSES publications, R&D had included the work activities of (1) basic research, (2) applied research, (3) development, and (4) the design of equipment, processes, structures, and models. Starting with the 2019 NSCG, the design activity was excluded such that R&D is now defined as including the work activities of (1) basic research, (2) applied research, and (3) development. (For details on the rationale behind changing the R&D definition and the resulting impact, see NCSES InfoBrief *Measuring R&D Workers Using NCSES Statistics*, available at **https://ncses.nsf.gov/pubs/nsf21335**.)

Salary. Median annual salaries are reported for the principal job, rounded to the nearest $1,000, and computed only for individuals employed full time. For individuals employed by educational institutions, no accommodation was made to convert academic year salaries to calendar year salaries.

Science and engineering (S&E) workforce. Individuals working in an S&E or S&E-related occupation or who earned an S&E or S&E-related degree and are working in a non-S&E occupation.

Scientists and engineers. The NSCG data tables use a narrow definition of scientists and engineers based solely on occupation: individuals employed in an S&E occupation. In other NCSES publications, the definition of scientists and engineers may be broadened to include individuals employed in S&E-related occupations, as well as individuals who may not be working in an S&E or S&E-related occupation but who earned an S&E or S&E-related degree.

Sector of employment. Employment sector is a derived variable based on responses to questionnaire items A13, A14, and A15. In the data tables, the category 4-year educational institution includes 4-year colleges or universities, medical schools (including university-affiliated hospitals or medical centers), and university-affiliated research institutes. Two-year and pre-college institutions include community colleges, technical institutes, and other educational institutions (which respondents reported verbatim in the survey questionnaire). For-profit business or industry includes respondents who were self-employed in an incorporated business. Self-employed includes respondents who were self-employed or were a business owner in a non-incorporated business.

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Wolter K. 1984. An Investigation of Some Estimators of Variance for Systematic Sampling. *Journal of the American Statistical Association* 79(388):781–90.

Technical Tables

Table	Title
A-1	Fields of study used in the NSCG data tables
A-2	Occupations used in the NSCG data tables

TABLE A-1

Fields of study used in the NSCG data tables

(Crosswalk)

Broad field (e.g., NDGMEBG)		Major field (e.g., NDGMEMG)		Minor field (e.g., NDGMENG)		Detailed field (e.g., N2DGRMED)	
Code	Label	Code	Label	Code	Label	Code	Label
1	S&E fields	1	Computer and mathematical sciences	11	Computer and information sciences	116710	Computer and information sciences
						116730	Computer science
						116740	Computer systems analysis
						116760	Information services and systems
						116770	Other computer and information sciences
				12	Mathematics and statistics	128410	Applied mathematics
						128420	Mathematics, general
						128430	Operations research
						128440	Statistics
						128450	Other mathematics
		2	Biological, agricultural, and environmental life sciences	21	Agricultural and food sciences	216050	Animal sciences
						216060	Food sciences and technology
						216070	Plant sciences
						216080	Other agricultural sciences
				22	Biological sciences	226310	Biochemistry and biophysics
						226320	Biology, general
						226330	Botany
						226340	Cell and molecular biology
						226350	Ecology
						226360	Genetics, animal and plant
						226370	Microbiological sciences and immunology
						226380	Nutritional sciences
						226390	Pharmacology, human and animal
						226400	Physiology and pathology, human and animal
						226410	Zoology, general
						226420	Other biological sciences
				23	Environmental life sciences	236800	Environmental science or studies
						236810	Forestry sciences
		3	Physical and related sciences	31	Chemistry, except biochemistry	318730	Chemistry, except biochemistry
				32	Earth, atmospheric, and ocean sciences	328720	Atmospheric sciences and meteorology
						328740	Earth sciences
						328750	Geology
						328760	Geological sciences, other (including oceanography)[a]
				33	Physics and astronomy	338710	Astronomy and astrophysics
						338780	Physics
				34	Other physical sciences	348790	Other physical sciences
		4	Social and related sciences	41	Economics	416010	Agricultural economics
						419230	Economics
				42	Political and related sciences	429020	Public policy studies
						429270	International relations
						429280	Political science and government
				43	Psychology	437040	Educational psychology
						438910	Clinical psychology
						438920	Counseling psychology
						438930	Experimental psychology

TABLE A-1

Fields of study used in the NSCG data tables

(Crosswalk)

Broad field (e.g., NDGMEBG)		Major field (e.g., NDGMEMG)		Minor field (e.g., NDGMENG)		Detailed field (e.g., N2DGRMED)	
Code	Label	Code	Label	Code	Label	Code	Label
						438940	General psychology
						438950	Industrial/ organizational psychology
						438960	Social psychology
						438970	Other psychology
				44	Sociology and anthropology	449210	Anthropology and archaeology
						449220	Criminology
						449290	Sociology
				45	Other social sciences	456200	Area and ethnic studies
						457710	Linguistics
						458610	Philosophy of science
						459240	Geography
						459300	Other social sciences, including history of science[b]
		5	Engineering	51	Aerospace, aeronautical, and astronautical engineering	517210	Aerospace, aeronautical, and astronautical/ space engineering
				52	Chemical engineering	527250	Chemical engineering
				53	Civil and architectural engineering	537230	Architectural engineering
						537260	Civil engineering
				54	Electrical and computer engineering	547270	Computer and systems engineering
						547280	Electrical, electronics, and communications engineering
				55	Industrial engineering	557330	Industrial and manufacturing engineering
				56	Mechanical engineering	567350	Mechanical engineering
				57	Other engineering	577220	Agricultural engineering
						577240	Bioengineering and biomedical engineering
						577290	Engineering sciences, mechanics and physics
						577300	Environmental engineering
						577310	Engineering, general
						577340	Materials engineering, including ceramics and textiles
						577360	Metallurgical engineering
						577390	Nuclear engineering
						577410	Other engineering, including geophysical, geological, mining, mineral, naval architecture, marine, and petroleum[c]
2	S&E-related fields	6	S&E-related fields	61	Health	617810	Audiology and speech pathology
						617820	Health services administration
						617830	Health/ medical assistants
						617840	Health/ medical technologies
						617850	Medical preparatory programs (e.g., pre-dentistry, pre-medical, pre-veterinary)
						617860	Medicine (dentistry, optometry, osteopathic, podiatry, veterinary)
						617870	Nursing (4 years or longer program)
						617880	Pharmacy
						617890	Physical therapy and other rehabilitation/ therapeutic services

TABLE A-1

Fields of study used in the NSCG data tables

(Crosswalk)

Broad field (e.g., NDGMEBG)		Major field (e.g., NDGMEMG)		Minor field (e.g., NDGMENG)		Detailed field (e.g., N2DGRMED)	
Code	Label	Code	Label	Code	Label	Code	Label
						617900	Public health (including environmental health and epidemiology)
						617910	Other health/ medical sciences
				62	Science and mathematics teacher education	627020	Computer teacher education
						627060	Mathematics teacher education
						627090	Science teacher education
						627120	Social science teacher education
				63	Technology and technical fields	636720	Computer programming
						636750	Data processing
						637510	Electrical and electronic technologies
						637520	Industrial production technologies
						637530	Mechanical engineering-related technologies
						637540	Other engineering-related technologies
				64	Other science and engineering-related fields	646100	Architecture/ environmental design
						646520	Actuarial science
3	Non-S&E fields	7	Non-S&E fields	71	Management and administration fields	716020	Other agricultural business and production
						716510	Accounting
						716530	Business administration and management
						716540	Business, general
						716550	Business and managerial economics
						716570	Financial management
						716590	Other business management/ administrative services
				72	Education, except science and math teacher education	727010	Education administration
						727030	Counselor education and guidance services
						727050	Elementary teacher education
						727070	Physical education and coaching
						727080	Pre-school/ kindergarten/ early childhood teacher education
						727100	Secondary teacher education
						727110	Special education
						727130	Other education
				73	Social service and related fields	738620	Other philosophy, religion, theology
						739100	Social work
				74	Sales and marketing fields	746560	Business marketing/ marketing management
						746580	Marketing research
				75	Art and humanities fields	757600	English language, literature and letters
						757720	Other foreign languages and literature
						758200	Liberal arts/ general studies
						759260	History, other
						759410	Dramatic arts
						759420	Fine arts, all fields
						759430	Music, all fields
						759440	Other visual and performing arts
				76	Other non-S&E fields	766610	Communications, general
						766620	Journalism

TABLE A-1

Fields of study used in the NSCG data tables

(Crosswalk)

Broad field (e.g., NDGMEBG)		Major field (e.g., NDGMEMG)		Minor field (e.g., NDGMENG)		Detailed field (e.g., N2DGRMED)	
Code	Label	Code	Label	Code	Label	Code	Label
						766630	Other communications
						766820	Other natural resources and conservation
						766900	Criminal justice/ protective services
						768000	Home economics
						768100	Law/ prelaw/ legal studies
						768300	Library science
						768500	Parks, recreation, leisure, and fitness studies
						769010	Public administration
						769030	Other public affairs
						769950	Other fields (not listed)

S&E = science and engineering; NSCG = National Survey of College Graduates.

[a] In 2019, "Oceanography" was merged with "Geological sciences, other" to form “Geological sciences, other (including oceanography)" (328760).

[b] In 2019, "History of science" was merged with "Other social sciences" to form “Other social sciences, including history of science" (459300).

[c] In 2019, four detailed fields of engineering were merged with "Other engineering" to form “Other engineering, including geophysical, geological, mining, mineral, naval architecture, marine, and petroleum” (577410).

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

TABLE A-2

Occupations used in the NSCG data tables

(Crosswalk)

Broad occupation category (N2OCPRBG, N2OCBLST)		Major occupational code and label (N2OCPRMG, N2OCMLST)		Minor occupational code and label (N3OCPRNG, N3OCNLST)		Detailed occupational code and label (N3OCPR, N3OCLST)	
Code	Label	Code	Label	Code	Label	Code	Label
1	S&E occupations	1	Computer and mathematical scientists	11	Computer and information scientists	110510	Computer and information scientists, research
						110520	Computer network architect
						110540	Computer support specialists
						110550	Computer system analysts
						110560	Database administrators
						110570	Information security analysts
						110580	Network and computer systems administrators
						110590	Software developers – applications and systems software
						110600	Web developers
						110610	Other computer and information science occupations
						110880	Computer engineers, software
				12	Mathematical scientists	121720	Mathematicians
						121730	Operations research analysts, including modeling
						121740	Statisticians
						121760	Other mathematical scientists
				18	Postsecondary teachers - computer and math sciences	182760	Postsecondary teachers - Computer sciences
						182860	Postsecondary teachers - Mathematics and statistics
		2	Biological, agricultural, and other life scientists	21	Agricultural and food scientists	210210	Agricultural and food scientists
				22	Biological and medical scientists	220220	Biochemists and biophysicists
						220230	Biological scientists
						220250	Forestry and conservation scientists
						220270	Medical scientists (excluding practitioners)
				23	Environmental life scientists	230240	Forestry and conservation scientists
				28	Postsecondary teachers - life and related sciences	282710	Postsecondary teachers - Agriculture
						282730	Postsecondary teachers - Biological sciences
						282970	Postsecondary teachers - Other natural sciences
		3	Physical and related scientists	31	Chemists, except biochemists	311930	Chemists, except biochemists
				32	Earth, atmospheric, and ocean scientists[a]	321920	Atmospheric and space scientists
						321940	Geologists, including earth scientists and oceanographers[b]
				33	Physicists[c]	331960	Physicists, except biophysicists
				34	Other physical and related scientists, including astronomers[a]	341980	Other physical scientists, including astronomers[d]
				38	Postsecondary teachers - physical and related sciences	382750	Postsecondary teachers - Chemistry
						382770	Postsecondary teachers - Earth, environmental, and marine sciences
						382890	Postsecondary teachers - Physics

TABLE A-2

Occupations used in the NSCG data tables

(Crosswalk)

Broad occupation category (N2OCPRBG, N2OCBLST)		Major occupational code and label (N2OCPRMG, N2OCMLST)		Minor occupational code and label (N3OCPRNG, N3OCNLST)		Detailed occupational code and label (N3OCPR, N3OCLST)	
Code	Label	Code	Label	Code	Label	Code	Label
		4	Social and related scientists	41	Economists	412320	Economists
				42	Political scientists	422350	Political scientists
				43	Psychologists	432360	Psychologists, including clinical
				44	Anthropologists[e]	442310	Anthropologists
				45	Other social and related scientists	452380	Other social scientists, including sociologists[f]
				48	Postsecondary teachers - social and related sciences	482780	Postsecondary teachers - Economics
						482900	Postsecondary teachers - Political science
						482910	Postsecondary teachers - Psychology
						482930	Postsecondary teachers - Sociology
						482980	Postsecondary teachers - Other social sciences
		5	Engineers	51	Aerospace, aeronautical, and astronautical engineers	510820	Aeronautical, aerospace, and astronautical engineers
				52	Chemical engineers	520850	Chemical engineers
				53	Civil, architectural, and sanitary engineers	530860	Civil engineers, including architectural and sanitary
				54	Electrical and computer hardware engineers	540870	Computer engineers, hardware
						540890	Electrical and electronics engineers
				55	Industrial engineers	550910	Industrial engineers
				56	Mechanical engineers	560940	Mechanical engineers
				57	Other engineers	570840	Bioengineers or biomedical engineers
						570900	Environmental engineers
						570920	Marine engineers and naval architects
						570930	Materials and metallurgical engineers
						570960	Nuclear engineers
						570970	Petroleum engineers
						570980	Sales engineers
						570990	Other engineers, including agricultural, mining, and geological[g]
				58	Postsecondary teachers - engineering	582800	Postsecondary teachers - Engineering
2	S&E-related occupations	6	S&E-related occupations	61	Health-related occupations	611110	Diagnosing and treating practitioners
						611120	Registered nurses, pharmacists, dieticians, therapists, physician assistants, nurse practitioners
						611130	Health technologists and technicians
						611140	Other health occupations
						612870	Postsecondary teachers - health and related sciences
				62	S&E managers	621420	Computer and information systems managers
						621430	Engineering managers
						621440	Medical and health services managers
						621450	Natural sciences managers
				63	S&E precollege teachers	632530	Teachers: Secondary - computer, math, or sciences

TABLE A-2

Occupations used in the NSCG data tables

(Crosswalk)

Broad occupation category (N2OCPRBG, N2OCBLST)		Major occupational code and label (N2OCPRMG, N2OCMLST)		Minor occupational code and label (N3OCPRNG, N3OCNLST)		Detailed occupational code and label (N3OCPR, N3OCLST)	
Code	Label	Code	Label	Code	Label	Code	Label
						632540	Teachers: Secondary - social sciences
				64	S&E technicians and technologists	640260	Technologists and technicians, biological and life sciences
						640530	Computer programmers, business, scientific, and process control
						641000	Electrical, electronic, industrial, and mechanical technicians
						641010	Drafting occupations, including computer drafting
						641020	Surveying and mapping technicians
						641030	Other engineers, technologists, and technicians
						641040	Surveyors, cartographers, and photogrammetrists
						641970	Technologists and technicians in the mathematical or physical sciences[h]
				65	Other S&E-related occupations	650810	Architects
						651710	Actuaries
3	Non-S&E occupations	7	Non-S&E occupations	71	Non-S&E managers	711410	Top-level managers, executives, and administrators
						711460	Education administrators
						711470	Other mid-level managers
				72	Management-related occupations	721510	Accountants, auditors, and other financial specialists
						721520	Personnel, training, and labor relations specialists
						721530	Other management-related occupations
				73	Non-S&E precollege teachers	732510	Teachers: Pre-kindergarten and kindergarten
						732520	Teachers: Elementary
						732550	Teachers: Secondary - other subjects
						732560	Teachers: Special education - primary and secondary
						732570	Teachers: Other precollegiate area
				74	Non-S&E postsecondary teachers	742720	Postsecondary teachers - Art, drama, and music
						742740	Postsecondary teachers - Business commerce and marketing
						742790	Postsecondary teachers - Education
						742810	Postsecondary teachers - English
						742820	Postsecondary teachers - Foreign language
						742830	Postsecondary teachers - History
						742880	Postsecondary teachers - Physical education
						742990	Postsecondary teachers - Other postsecondary fields
				75	Social services and related occupations	750400	Clergy and other religious workers
						750700	Counselors, educational, vocational, mental health, and substance abuse

TABLE A-2

Occupations used in the NSCG data tables

(Crosswalk)

Broad occupation category (N2OCPRBG, N2OCBLST)		Major occupational code and label (N2OCPRMG, N2OCMLST)		Minor occupational code and label (N3OCPRNG, N3OCNLST)		Detailed occupational code and label (N3OCPR, N3OCLST)	
Code	Label	Code	Label	Code	Label	Code	Label
						752400	Social workers
				76	Sales and marketing occupations	762000	Insurance, securities, real estate, and business services
						762010	Sales occupations, commodities, except retail
						762020	Sales occupations, retail
						762030	Other marketing and sales occupations
				77	Art, humanities, and related occupations	770100	Writers, editors, public relations specialists, artists, entertainers, and broadcasters
						772330	Historians
				78	Other non-S&E occupations	780310	Accounting clerks, and bookkeepers
						780320	Secretaries, receptionists, and typists
						780330	Other administrative occupations
						781100	Farmers, foresters, and fishermen
						781200	Lawyers and judges
						781300	Librarians, archivists, and curators
						782210	Food preparation and service occupations
						782220	Protective services
						782230	Other service occupations, except health
						783000	Other teachers and instructors
						784010	Construction and extraction occupations
						784020	Installation, maintenance, and repair occupations
						784030	Precision/ production occupations
						784050	Transportation and material moving occupations
						785000	Other occupations

S&E = science and engineering; NSCG = National Survey of College Graduates.

[a] This label was revised in 2019.

[b] "Oceanographers" were merged with “Geologists, including earth scientists” to form “Geologists, including earth scientists and oceanographers” (321940).

[c] "Astronomers" were separated from "Physicists and astronomers" to form "Physicists" (33).

[d] "Astronomers" were merged with “Other physical scientists” to form “Other physical scientists, including astronomers” (341980).

[e] "Sociologists" were separated from “Sociologists and anthropologists” to form “Anthropologists” (44).

[f] "Sociologists" were merged with “Other social scientists” to form “Other social scientists, including sociologists” (452380).

[g] "Agricultural engineers" and "Mining and geological engineers" were merged with "Other engineers" to form “Other engineers, including agricultural, mining, and geological” (570990).

[h] "Technologists and technicians in the mathematical sciences” were merged with “Technologists and technicians in the physical sciences” to form “Technologists and technicians in the mathematical or physical sciences” (641970).

Source(s):
National Center for Science and Engineering Statistics, National Survey of College Graduates: 2019.

Notes

1 “Bachelor’s degrees” include equivalent undergraduate academic degrees awarded by colleges and universities in countries that may name their degrees differently.

2 With PPS sampling, the probability of selection was proportional to the ACS final person-level weight, adjusted to account for imputed educational attainment, incomplete addresses, or invalid names.

Acknowledgments and Suggested Citation

Acknowledgments

Lynn Milan of the National Center for Science and Engineering Statistics (NCSES) developed and coordinated this report under the leadership of Emilda B. Rivers, NCSES Director; Vipin Arora, NCSES Deputy Director; and John Finamore, NCSES Chief Statistician. Jock Black (NCSES) reviewed the report.

Under NCSES contract with SRI International, the SRI International team led by Paul Liu and Claire Lecornu compiled the tables in this report. Data and publication processing support was provided by Devi Mishra, Christine Hamel, Tanya Gore, Joe Newman, and Rajinder Raut (NCSES).

NCSES thanks the college graduates who participated in the NSCG for their time and effort in generously contributing to the information included in this report.

Suggested Citation

National Center for Science and Engineering Statistics (NCSES). 2021. *National Survey of College Graduates: 2019*. NSF 22-310 Alexandria, VA: National Science Foundation. Available at https://ncses.nsf.gov/pubs/nsf22310/.

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