

TABLE 37

U.S. residing employed doctoral scientists and engineers, by occupation, ethnicity, race, and sex: 2019

(Number and SE)

Occupation	All employed						Asian ^a						Other minority ^b						White ^c					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All occupations	857,200	1,975	546,050	1,750	311,200	1,200	213,350	1,325	146,800	1,250	66,550	950	81,500	850	44,250	700	37,300	525	562,350	1,750	355,000	1,800	207,300	1,175
Science occupations	492,750	2,500	304,050	1,950	188,700	1,400	113,550	1,500	73,500	1,175	40,050	850	46,600	725	24,600	575	22,000	475	332,600	2,075	205,950	1,575	126,650	1,400
Biological, agricultural, and other life scientist	156,650	1,525	90,050	1,175	66,650	925	39,550	900	21,800	650	17,800	575	14,350	325	7,200	275	7,150	225	102,750	1,250	61,050	1,000	41,700	800
Agricultural, food scientist	11,600	450	8,100	400	3,500	225	2,650	275	1,650	225	1,000	150	1,400	125	950	125	450	75	7,550	350	5,550	325	2,000	150
Biochemists, biophysicist	16,350	675	10,650	500	5,700	425	6,350	400	3,850	300	2,500	250	750	100	400	75	350	75	9,200	500	6,350	425	2,850	300
Biological scientist	26,750	675	15,000	550	11,750	475	6,350	425	3,150	300	3,150	300	2,550	175	1,150	150	1,400	150	17,900	475	10,700	425	7,200	325
Forestry, conservation scientist	2,250	175	1,500	175	750	100	150	50	100	50	50	25	150	50	100	25	50	25	1,950	175	1,300	175	650	100
Medical scientist	42,350	1,025	22,900	750	19,450	700	12,250	600	6,900	450	5,400	400	3,500	200	1,600	150	1,950	150	26,550	775	14,450	625	12,150	525
Postsecondary teachers, agricultural, other natural sciences	5,550	350	3,550	325	2,000	175	900	150	550	125	350	100	700	100	450	100	250	50	3,950	300	2,550	275	1,400	150
Postsecondary teachers, biological sciences	32,400	775	18,400	700	14,000	475	3,950	375	2,150	275	1,800	225	3,400	200	1,700	150	1,700	150	25,050	700	14,550	625	10,450	400
Other biological, agricultural, life scientist	19,350	700	9,900	550	9,450	450	6,950	450	3,400	350	3,550	325	1,900	175	900	150	1,000	100	10,500	525	5,600	400	4,900	350
Computer and information scientist	63,000	1,100	52,650	1,000	10,350	475	28,950	850	23,850	750	5,100	350	3,350	225	2,600	175	750	125	30,700	725	26,250	700	4,450	250
Computer and information scientist	53,450	1,075	45,050	1,000	8,400	450	25,500	825	21,000	750	4,550	350	2,650	200	2,100	150	550	100	25,250	725	21,950	700	3,350	225
Postsecondary teachers, computer science	9,550	525	7,650	500	1,900	200	3,450	375	2,850	350	600	125	700	100	500	100	200	50	5,450	325	4,300	300	1,100	150
Mathematical scientist	41,400	750	28,950	725	12,450	425	14,500	575	9,200	500	5,300	325	3,200	200	2,400	200	850	100	23,700	625	17,400	550	6,300	300
Mathematical scientist	21,800	650	14,750	625	7,050	400	9,600	525	5,600	450	4,000	325	1,650	175	1,200	150	500	75	10,550	475	8,000	450	2,550	225
Postsecondary teachers, mathematics, statistics	19,600	575	14,200	500	5,400	300	4,900	375	3,600	350	1,300	150	1,550	125	1,200	125	350	75	13,150	425	9,400	400	3,750	250
Physical scientist	84,550	1,275	63,850	1,125	20,650	500	17,550	700	12,900	600	4,650	350	6,650	275	4,600	275	2,050	150	60,350	1,025	46,350	925	14,000	375
Chemists, except biochemist	21,850	725	16,550	625	5,250	350	6,250	425	4,300	300	1,950	275	1,850	175	1,200	150	650	100	13,750	575	11,100	525	2,700	200
Earth, atmospheric, ocean scientist	11,750	400	8,850	375	2,900	150	2,350	200	1,750	200	550	75	750	100	500	75	200	50	8,700	350	6,600	325	2,100	150
Physicists, astronomers	12,450	625	10,950	600	1,500	200	2,800	325	2,450	300	350	100	900	150	750	150	150	50	8,750	475	7,750	450	1,000	150
Postsecondary teachers, chemistry	16,900	625	10,900	525	6,000	300	2,750	325	1,650	250	1,100	175	1,650	150	1,000	125	650	100	12,500	575	8,200	500	4,300	225
Postsecondary teachers, physics	10,650	575	8,750	550	1,950	200	1,850	250	1,550	225	300	100	850	125	650	100	150	75	8,000	500	6,550	500	1,450	175
Postsecondary teachers, other physical science	7,300	300	5,100	275	2,200	150	850	125	600	125	200	50	500	75	300	75	150	50	5,950	275	4,150	250	1,800	125
Other physical scientist	3,650	250	2,750	250	850	125	750	150	600	125	150	75	200	50	150	50	50	25	2,650	250	2,000	225	650	100
Psychologist	77,600	950	29,800	700	47,850	850	4,400	350	1,300	225	3,100	300	9,350	325	2,600	175	6,750	300	63,850	950	25,850	700	38,000	800
Psychologist	57,500	1,000	20,900	750	36,650	825	2,700	275	650	150	2,050	250	6,650	300	1,750	150	4,900	275	48,150	950	18,500	725	29,650	775
Postsecondary teachers, psychology	20,100	625	8,900	450	11,200	475	1,700	275	650	150	1,000	200	2,750	200	900	125	1,850	175	15,700	575	7,350	425	8,350	400
Social scientist	69,500	1,025	38,750	800	30,750	625	8,600	425	4,500	350	4,100	300	9,650	375	5,150	325	4,500	225	51,250	900	29,100	725	22,150	575
Economist	9,600	500	6,500	450	3,050	250	2,300	275	1,300	200	1,050	175	950	125	600	100	300	75	6,350	400	4,650	375	1,700	175
Political scientist	1,850	275	1,250	225	600	125	S	S	D	D	D	D	200	50	150	50	50	50	1,500	225	1,000	200	450	100
Postsecondary teachers, economics	10,900	500	8,000	450	2,850	225	1,800	200	1,150	150	650	125	1,150	150	850	150	250	50	7,950	400	6,000	350	1,950	175
Postsecondary teachers, political science	11,450	450	7,500	400	3,900	300	950	175	550	125	350	100	1,850	250	1,300	225	550	125	8,650	425	5,650	375	3,000	275

TABLE 37

U.S. residing employed doctoral scientists and engineers, by occupation, ethnicity, race, and sex: 2019

(Number and SE)

Occupation	All employed						Asian ^a						Other minority ^b						White ^c					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Postsecondary teachers, sociology	7,500	350	3,200	250	4,300	275	650	125	350	100	300	75	1,400	125	700	100	700	100	5,500	325	2,150	225	3,350	250
Postsecondary teachers, other social sciences	16,550	575	8,150	450	8,400	375	1,500	200	700	150	800	125	2,400	175	1,100	150	1,300	100	12,600	525	6,300	400	6,300	325
Sociologist, anthropologist	3,500	275	1,350	175	2,150	225	200	75	S	S	150	50	450	100	100	50	350	100	2,850	250	1,200	175	1,650	175
Other social scientist	8,250	475	2,750	275	5,450	325	1,050	175	250	100	800	125	1,250	125	300	75	950	125	5,950	375	2,200	225	3,750	275
Engineering occupations	120,650	1,375	101,600	1,400	19,000	625	49,650	1,150	41,700	1,100	7,950	425	9,150	375	7,350	375	1,800	125	61,850	1,125	52,600	1,075	9,250	425
Aerospace, aeronautical, astronautical engineer	7,150	425	6,350	400	800	125	1,900	250	1,750	225	150	50	450	100	400	100	50	25	4,800	350	4,250	325	600	125
Chemical engineer	9,250	525	7,450	475	1,800	250	4,100	400	3,300	350	850	175	600	100	400	100	150	50	4,600	350	3,750	350	800	175
Civil, architectural, sanitary engineer	6,900	425	5,750	425	1,100	150	2,500	275	2,150	275	400	125	850	150	750	150	100	50	3,500	300	2,850	300	600	100
Electrical engineer	27,500	750	24,500	725	3,000	300	13,800	675	11,950	625	1,850	250	1,600	150	1,500	150	100	50	12,100	525	11,050	525	1,050	150
Industrial engineers	1,950	250	1,500	250	450	100	700	175	450	150	300	75	250	50	200	50	50	25	1,000	175	850	175	150	50
Mechanical engineer	13,450	550	12,150	525	1,300	150	6,600	425	5,900	425	700	125	900	150	750	150	150	50	5,950	300	5,500	300	450	100
Postsecondary teacher, engineering	23,950	750	19,750	700	4,200	300	8,100	525	6,950	525	1,150	200	2,100	200	1,700	175	400	75	13,750	600	11,100	550	2,700	225
Other engineer	30,500	675	24,200	675	6,300	375	11,950	550	9,300	525	2,650	300	2,400	175	1,650	150	750	100	16,150	575	13,250	550	2,900	250
S&E-related occupations	92,350	1,475	51,600	1,200	40,750	850	22,000	850	13,450	625	8,550	525	9,350	350	4,350	275	5,050	225	60,950	1,125	33,850	900	27,150	725
Health occupations, except postsecondary teachers and managers	30,800	825	15,350	625	15,450	550	8,150	500	4,300	375	3,850	350	3,650	225	1,550	200	2,050	150	19,000	650	9,500	475	9,500	450
Postsecondary teacher, health and related science	23,600	675	9,700	525	13,900	475	3,750	275	2,100	275	1,650	175	2,650	175	800	100	1,850	150	17,200	575	6,800	425	10,400	450
S&E managers, including health	24,650	850	17,200	750	7,450	400	5,850	500	4,150	400	1,700	225	2,000	175	1,300	150	700	100	16,800	625	11,750	600	5,050	325
S&E precollege teachers	5,200	400	2,950	325	2,300	225	450	175	150	100	250	100	700	100	350	75	350	75	4,050	350	2,400	300	1,650	175
S&E technicians/ technologists	7,200	475	5,800	425	1,350	200	3,300	350	2,450	300	850	175	350	75	300	50	50	25	3,550	300	3,100	300	450	100
Other S&E-related occupation	900	150	600	125	300	100	550	125	300	100	200	75	50	50	50	50	D	D	350	100	250	75	100	50
Non-S&E occupations	151,500	1,650	88,750	1,450	62,750	1,100	28,150	850	18,150	725	10,000	500	16,450	475	7,950	350	8,450	325	106,950	1,525	62,650	1,375	44,300	925
Arts, humanities-related occupation	8,900	425	2,900	300	6,000	350	1,000	150	350	100	650	125	700	100	200	75	500	75	7,200	400	2,350	275	4,850	350
Management-related occupation	33,050	1,175	19,600	925	13,500	625	7,850	500	4,900	400	2,950	325	4,050	325	2,000	250	2,000	175	21,200	875	12,650	700	8,550	450
Non-S&E managers	55,650	1,175	37,100	1,000	18,550	650	9,850	575	7,450	525	2,400	275	5,200	250	2,800	200	2,450	200	40,550	1,000	26,850	850	13,700	525
Non-S&E postsecondary teachers	19,700	650	10,900	525	8,800	375	3,050	300	1,800	250	1,250	175	2,650	175	1,200	125	1,450	125	14,000	575	7,900	475	6,100	350
Non-S&E precollege/ other teachers	4,750	375	1,700	250	3,050	275	650	150	200	100	450	125	600	100	200	50	400	75	3,500	300	1,300	200	2,200	250
Sales, marketing occupation	9,400	450	6,050	400	3,350	275	2,750	300	1,900	275	850	150	800	125	500	125	300	75	5,850	375	3,650	300	2,150	250
Social service-related occupation	6,300	400	2,700	300	3,650	300	650	150	400	125	250	100	1,200	150	350	125	850	100	4,450	350	1,950	275	2,500	275
Other non-S&E occupation	13,750	650	7,850	500	5,900	375	2,300	300	1,150	225	1,150	225	1,250	175	750	125	500	100	10,200	575	5,950	500	4,250	325

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

S&E = science and engineering; SE = standard error.

^a Asian is single race.

^b Other minority includes Hispanic or Latino; non-Hispanic or Latino American Indian or Alaska Native, Black or African American, and Native Hawaiian or Other Pacific Islander; and respondents reporting more than one race. Detail for Other minority can be found in table 38.

^c White is single race.

Note(s):

Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. Residence location is based on reported living location on 1 February 2019.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients: 2019.