

TABLE 17

U.S. residing employed doctoral scientists and engineers in 4-year educational institutions, by field of doctorate, sex, and faculty rank: 2019

(Number and SE)

Field of study and sex	All employed		Full professor		Associate professor		Assistant professor		Instructor or lecturer		All other faculty		Rank not applicable	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All fields	344,350	2,325	113,200	1,550	76,200	1,225	68,900	1,225	21,850	625	1,550	175	62,600	1,075
Male	211,850	2,075	81,300	1,350	46,400	975	38,100	925	11,450	525	1,000	175	33,550	775
Female	132,500	1,450	31,900	875	29,800	725	30,800	700	10,400	400	550	100	29,050	800
Science	277,850	1,975	91,000	1,350	61,000	1,075	53,200	1,075	18,600	600	1,150	150	52,900	1,050
Male	168,250	1,725	64,550	1,175	36,950	850	29,000	775	9,600	475	700	125	27,400	725
Female	109,600	1,225	26,450	775	24,050	625	24,200	625	9,000	375	450	100	25,500	775
Biological, agricultural, and environmental life sciences	96,250	1,175	26,800	725	17,950	675	18,200	575	5,600	375	450	100	27,250	725
Male	55,650	1,025	18,950	675	11,000	575	9,450	400	2,950	300	200	100	13,050	550
Female	40,600	775	7,800	425	6,950	375	8,750	400	2,650	200	200	75	14,200	525
Agricultural and food sciences	7,300	300	3,050	200	1,300	150	1,300	150	150	50	50	50	1,450	125
Male	5,050	275	2,400	200	1,000	125	800	100	100	50	D	D	800	125
Female	2,250	150	600	100	350	75	500	75	100	25	D	D	650	75
Biochemistry and biophysics	11,800	550	3,650	350	2,400	275	1,750	200	450	125	S	S	3,550	325
Male	7,500	450	2,750	325	1,600	225	1,050	150	300	100	S	S	1,750	250
Female	4,350	300	900	150	800	125	700	125	150	75	D	D	1,750	200
Cell, cellular biology, and molecular biology	13,100	575	2,900	350	2,600	300	2,100	250	750	150	D	D	4,700	375
Male	7,300	450	2,000	300	1,550	250	1,050	175	450	125	D	D	2,200	275
Female	5,800	400	900	150	1,050	175	1,000	150	300	100	D	D	2,500	275
Microbiological sciences and immunology	9,100	425	2,150	275	1,700	225	1,750	150	650	150	D	D	2,800	225
Male	4,850	350	1,350	225	950	175	700	125	300	125	D	D	1,450	200
Female	4,250	250	800	125	750	125	1,000	125	350	75	D	D	1,350	150
Natural resources and conservation	3,450	225	1,050	150	600	75	700	100	300	75	D	D	800	125
Male	2,300	200	850	150	350	75	350	75	200	75	D	D	500	100
Female	1,150	100	150	50	200	50	300	75	100	50	D	D	300	75
Zoology	3,900	200	1,750	150	850	125	400	100	150	50	D	D	750	150
Male	2,650	175	1,400	150	600	100	250	75	D	D	D	D	400	100
Female	1,250	125	350	75	250	75	200	75	100	50	D	D	350	100
Other biological sciences	47,550	825	12,300	500	8,550	400	10,200	450	3,100	275	200	75	13,250	550
Male	26,000	775	8,200	450	4,950	350	5,250	350	1,600	225	D	D	5,950	400
Female	21,550	525	4,100	275	3,600	275	5,000	275	1,500	150	150	75	7,300	425
Computer and information sciences	10,750	475	3,400	300	2,750	250	2,900	275	550	100	D	D	1,150	175
Male	8,350	450	2,700	275	2,250	250	2,200	250	350	100	D	D	800	150
Female	2,400	225	700	125	500	100	700	125	200	75	D	D	350	125
Mathematics and statistics	20,200	525	8,000	425	5,300	300	4,100	250	1,600	175	D	D	1,100	150
Male	15,050	475	6,700	400	3,800	300	2,800	225	900	125	D	D	750	150
Female	5,150	275	1,300	150	1,500	150	1,300	125	750	125	D	D	300	75

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Field of study and sex	All employed		Full professor		Associate professor		Assistant professor		Instructor or lecturer		All other faculty		Rank not applicable	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	47,350	850	16,100	575	8,550	400	8,100	450	3,450	300	250	100	10,900	450
Male	35,650	775	13,150	525	6,250	350	5,800	400	2,100	275	200	100	8,050	400
Female	11,700	375	2,950	250	2,300	175	2,300	175	1,350	150	50	50	2,800	200
Astronomy and astrophysics	2,900	175	950	125	600	125	550	100	150	50	D	D	650	100
Male	2,200	175	800	125	500	125	350	100	50	50	D	D	500	100
Female	700	75	150	50	100	50	200	50	50	50	D	D	200	50
Chemistry, except biochemistry	20,000	650	6,650	425	3,700	275	3,450	325	1,850	225	100	50	4,250	300
Male	14,300	575	5,150	375	2,550	250	2,450	275	1,100	200	D	D	2,900	250
Female	5,750	300	1,500	175	1,100	125	1,000	125	750	125	D	D	1,350	175
Geosciences, atmospheric sciences, and ocean sciences	10,000	325	3,400	200	1,650	175	1,700	150	600	100	50	25	2,550	175
Male	6,900	275	2,650	200	1,150	150	1,050	125	250	50	50	25	1,750	150
Female	3,100	150	750	100	500	75	650	75	350	75	*	*	800	75
Physics	14,450	550	5,100	400	2,600	275	2,400	275	900	200	D	D	3,400	325
Male	12,300	550	4,600	375	2,050	250	1,950	250	700	175	D	D	2,900	300
Female	2,200	200	500	125	550	125	450	125	200	75	D	D	500	100
Psychology	39,150	775	12,750	575	9,150	450	7,750	400	2,650	225	50	50	6,800	475
Male	15,800	575	6,600	425	3,800	325	2,500	275	800	150	D	D	2,100	275
Female	23,300	650	6,150	375	5,350	325	5,250	325	1,850	200	S	S	4,700	325
Social sciences	64,150	975	23,950	650	17,300	600	12,150	475	4,750	350	300	75	5,700	350
Male	37,750	800	16,450	600	9,900	425	6,200	350	2,450	250	150	75	2,600	250
Female	26,400	625	7,500	350	7,400	400	5,950	325	2,300	200	150	50	3,100	250
Economics	14,400	525	6,100	425	3,850	300	2,800	250	800	150	D	D	800	175
Male	10,650	500	5,000	400	2,750	250	1,850	200	550	150	D	D	500	150
Female	3,750	250	1,150	150	1,100	125	950	150	250	75	D	D	300	100
Political science and government	14,950	475	6,100	375	4,100	350	2,900	275	600	125	D	D	1,150	175
Male	9,600	450	4,550	350	2,500	300	1,550	200	300	100	D	D	700	150
Female	5,350	325	1,550	200	1,600	225	1,350	200	300	75	D	D	500	100
Sociology, demography, and population studies	10,600	350	4,000	275	3,000	275	1,900	150	750	150	D	D	900	150
Male	4,950	250	2,250	200	1,300	175	650	125	350	125	D	D	350	100
Female	5,650	275	1,750	200	1,700	200	1,250	125	400	100	D	D	550	125
Other social sciences	24,200	525	7,750	350	6,350	325	4,550	275	2,600	225	150	50	2,800	225
Male	12,550	450	4,650	300	3,300	275	2,150	175	1,300	200	100	50	1,050	125
Female	11,650	325	3,100	200	3,000	200	2,450	175	1,300	150	S	S	1,750	150
Engineering	45,250	925	16,650	675	9,150	475	9,500	525	2,400	275	350	125	7,200	425
Male	36,750	950	14,500	650	7,550	450	7,400	450	1,700	250	300	100	5,300	375
Female	8,550	400	2,150	200	1,600	175	2,100	225	750	100	50	25	1,900	200
Aerospace, aeronautical, and astronautical engineering	1,650	175	650	125	350	100	350	75	50	25	D	D	250	100
Male	1,450	175	600	125	250	100	300	75	D	D	D	D	250	100

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Female	200	50	50	25	100	50	50	25	D	D	D	D	50	25
Chemical engineering	3,850	350	1,400	250	900	175	600	125	250	100	D	D	800	200
Male	3,050	325	1,200	250	750	150	400	125	150	75	D	D	600	150
Female	800	150	200	75	150	75	150	75	D	D	D	D	200	75
Civil engineering	7,100	375	2,700	275	1,650	225	1,550	200	350	100	D	D	750	125
Male	5,700	350	2,350	275	1,400	225	1,100	200	200	75	D	D	550	125
Female	1,400	150	350	100	250	50	450	100	150	75	D	D	200	75
Electrical and computer engineering	9,950	500	4,350	350	2,100	225	1,800	250	450	125	D	D	1,200	175
Male	8,350	450	3,750	325	1,750	225	1,450	200	300	125	D	D	1,050	175
Female	1,600	175	600	125	350	100	350	125	150	50	D	D	150	50
Mechanical engineering	7,350	500	2,800	350	1,200	200	1,850	300	600	175	D	D	850	150
Male	6,400	500	2,600	350	1,050	200	1,600	275	500	175	D	D	600	150
Female	950	150	200	75	150	50	250	125	100	50	D	D	200	100
Industrial engineers	2,800	275	900	150	350	100	650	150	100	75	D	D	750	150
Male	2,150	250	800	150	300	100	500	125	D	D	D	D	450	100
Female	650	125	100	50	50	50	100	50	D	D	D	D	300	125
Other engineering	12,550	450	3,900	250	2,650	225	2,750	250	650	125	100	50	2,550	200
Male	9,600	425	3,200	225	2,100	200	2,000	225	450	100	50	50	1,750	175
Female	3,000	200	700	125	550	100	700	100	200	50	D	D	800	100
Health	21,250	550	5,550	325	6,050	350	6,200	350	850	125	100	50	2,550	200
Male	6,850	325	2,300	200	1,850	200	1,650	200	150	75	D	D	900	150
Female	14,350	475	3,300	275	4,150	325	4,550	325	650	100	S	S	1,650	175

* = suppressed when population estimate < 25. D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

SE = standard error.

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. Four-year educational institutions include 4-year colleges or universities, medical schools (including university-affiliated hospitals or medical centers), and university-affiliated research institutes. 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.