

TABLE 2

U.S. residing doctoral scientists and engineers, by field of doctorate, sex, and employment status: 2019

(Number and SE)

Field of study and sex	Total		Employed						Unemployed ^a		Retired		Not employed or not seeking work ^b	
			Total		Full time		Part time							
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All fields	1,008,950	1,450	857,200	1,975	763,350	2,000	93,900	1,525	14,100	650	120,000	1,400	17,650	625
Male	644,650	1,400	546,050	1,750	496,700	1,925	49,350	1,275	8,500	575	84,700	1,275	5,450	375
Female	364,300	1,025	311,200	1,200	266,650	1,325	44,550	925	5,600	350	35,300	650	12,200	475
Science	761,850	1,425	640,300	1,900	561,850	1,900	78,450	1,350	10,200	575	97,200	1,300	14,100	575
Male	460,650	1,500	383,900	1,700	344,350	1,775	39,550	1,075	5,850	475	67,000	1,175	3,850	325
Female	301,200	1,125	256,400	1,200	217,500	1,375	38,900	875	4,300	325	30,200	625	10,250	475
Biological, agricultural, and environmental life sciences	258,550	850	220,700	1,100	200,900	1,100	19,850	625	4,000	350	28,700	700	5,150	325
Male	147,800	975	124,550	1,025	114,500	1,075	10,050	525	2,300	325	19,850	625	1,150	175
Female	110,750	850	96,200	900	86,400	875	9,800	450	1,700	200	8,850	350	4,000	300
Agricultural and food sciences	21,700	300	17,400	350	15,800	350	1,600	175	400	125	3,550	250	350	75
Male	15,400	325	12,050	325	11,050	325	1,000	150	300	125	2,950	225	50	25
Female	6,300	225	5,350	225	4,750	225	600	75	100	50	600	100	250	75
Biochemistry and biophysics	35,350	375	29,450	425	26,700	475	2,750	300	600	150	4,650	350	700	150
Male	21,900	375	17,950	400	16,250	425	1,700	250	350	100	3,400	300	200	75
Female	13,450	325	11,500	325	10,450	375	1,050	175	250	100	1,200	175	500	125
Cell, cellular biology, and molecular biology	34,850	325	31,200	450	28,600	500	2,600	325	600	150	2,250	250	850	175
Male	18,450	425	16,800	450	15,650	450	1,200	275	250	125	1,200	225	S	S
Female	16,400	375	14,400	375	13,000	375	1,450	225	350	100	1,000	175	650	150
Microbiological sciences and immunology	27,600	300	23,800	400	21,950	425	1,900	250	450	125	2,850	275	500	125
Male	14,800	400	12,700	400	11,700	400	950	175	300	125	1,750	275	100	50
Female	12,750	375	11,150	375	10,200	375	900	175	150	50	1,100	150	400	125
Natural resources and conservation	10,950	200	8,800	225	7,750	225	1,050	150	200	75	1,800	200	200	50
Male	7,550	200	5,950	225	5,250	200	700	150	100	50	1,450	200	50	25
Female	3,450	150	2,850	125	2,550	125	350	75	50	50	350	75	150	50
Zoology	9,850	200	7,200	225	6,450	225	750	125	S	S	2,350	175	200	75
Male	6,900	200	4,950	200	4,550	200	400	100	D	D	1,750	150	S	S
Female	3,000	175	2,300	150	1,900	150	350	75	D	D	550	100	100	50
Other biological sciences	118,200	550	102,800	675	93,550	750	9,250	400	1,650	200	11,350	475	2,400	225
Male	62,800	675	54,100	700	50,050	775	4,100	325	850	150	7,350	425	450	100
Female	55,400	650	48,700	625	43,550	600	5,150	300	750	150	4,050	250	1,950	200
Computer and information sciences	33,650	375	31,100	400	29,350	450	1,750	200	300	75	1,750	200	500	125
Male	27,150	400	25,500	425	24,350	450	1,150	175	150	50	1,250	200	250	100
Female	6,500	275	5,600	300	5,000	300	600	125	100	50	500	100	250	100
Mathematics and statistics	43,800	375	36,650	450	33,450	475	3,250	300	550	125	5,900	350	700	150
Male	33,100	450	27,350	450	25,000	475	2,400	275	400	125	4,900	300	400	125
Female	10,700	325	9,300	325	8,450	350	850	125	150	50	1,000	150	300	75

TABLE 2

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(Number and SE)

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			Total		Full time		Part time							
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	161,450	825	133,750	950	121,600	1,000	12,200	500	2,450	300	22,700	650	2,500	275
Male	123,650	900	101,300	925	92,400	975	8,900	450	1,650	250	19,650	625	1,050	200
Female	37,800	550	32,500	525	29,200	525	3,300	250	850	175	3,050	225	1,400	175
Astronomy and astrophysics	6,700	150	5,850	175	5,400	175	450	100	100	50	650	100	100	50
Male	5,100	150	4,450	150	4,150	175	300	75	S	S	550	100	D	D
Female	1,550	100	1,400	100	1,200	100	150	50	D	D	50	50	S	S
Chemistry, except biochemistry	80,650	475	65,300	700	59,300	700	6,050	350	1,500	225	12,350	525	1,500	225
Male	58,200	625	46,300	675	41,950	650	4,350	325	900	175	10,400	500	600	150
Female	22,450	450	19,000	450	17,300	450	1,700	175	600	150	1,950	200	900	150
Geosciences, atmospheric sciences, and ocean sciences	26,250	275	22,050	300	19,500	300	2,550	175	350	100	3,500	175	350	75
Male	18,900	275	15,600	325	13,850	325	1,750	175	250	75	3,000	175	100	50
Female	7,300	200	6,450	175	5,650	175	850	100	100	50	500	75	250	50
Physics	47,850	550	40,550	575	37,400	600	3,150	275	500	125	6,250	425	500	125
Male	41,400	600	34,950	600	32,400	625	2,550	275	450	125	5,700	400	300	100
Female	6,450	325	5,600	325	5,000	300	600	150	100	50	550	125	200	75
Psychology	139,450	575	115,350	825	87,050	975	28,250	800	1,100	175	19,850	650	3,150	275
Male	56,250	650	45,600	800	35,600	700	10,000	575	450	100	9,750	525	450	100
Female	83,200	725	69,700	775	51,500	800	18,250	600	700	150	10,100	425	2,700	250
Social sciences	124,950	800	102,700	900	89,550	800	13,200	575	1,800	200	18,300	525	2,200	200
Male	72,700	750	59,600	825	52,550	800	7,050	500	900	150	11,600	500	550	125
Female	52,250	600	43,100	575	37,000	650	6,100	325	850	150	6,700	300	1,600	175
Economics	32,450	525	26,900	550	23,750	525	3,150	300	300	100	4,850	350	450	125
Male	23,650	500	19,300	525	17,100	500	2,200	300	250	100	3,950	300	150	75
Female	8,800	250	7,600	250	6,650	275	950	150	D	D	900	150	300	100
Political science and government	25,800	350	22,450	425	20,150	450	2,300	300	300	100	2,650	250	400	100
Male	16,450	425	14,450	450	13,100	450	1,300	250	50	50	1,850	225	100	50
Female	9,350	350	8,000	325	7,000	350	950	175	250	100	800	150	300	100
Sociology, demography, and population studies	19,850	300	15,200	325	13,150	350	2,100	225	500	125	3,900	300	300	100
Male	9,150	275	6,650	275	5,800	275	850	175	250	100	2,200	250	D	D
Female	10,700	275	8,550	275	7,350	275	1,200	175	250	100	1,650	175	250	75
Other social sciences	46,800	450	38,150	500	32,500	450	5,700	325	700	100	6,900	325	1,050	125
Male	23,400	425	19,200	450	16,500	450	2,700	225	350	75	3,550	275	300	75
Female	23,400	350	18,950	350	16,000	375	3,000	225	350	75	3,350	225	750	100
Engineering	199,500	975	176,700	1,175	166,300	1,250	10,400	575	3,350	325	16,750	725	2,750	275
Male	166,800	1,000	147,250	1,200	138,900	1,200	8,350	550	2,500	300	15,650	725	1,450	250
Female	32,700	625	29,450	575	27,450	600	2,050	225	850	175	1,100	150	1,300	150

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			Total		Full time		Part time							
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Aerospace, aeronautical, and astronautical engineering	7,900	200	7,050	225	6,750	225	300	75	150	50	650	100	50	25
Male	7,150	200	6,400	225	6,100	225	250	75	100	50	600	100	D	D
Female	750	75	700	75	650	75	50	25	D	D	D	D	D	D
Chemical engineering	24,450	400	20,800	500	19,650	500	1,150	250	550	200	2,650	300	500	125
Male	19,500	425	16,450	475	15,700	475	750	200	300	175	2,500	300	250	125
Female	5,000	275	4,350	275	3,950	250	400	125	200	100	150	75	250	75
Civil engineering	21,400	400	19,250	400	17,850	425	1,400	225	350	125	1,550	225	250	100
Male	17,200	400	15,350	425	14,300	450	1,050	200	250	125	1,450	200	150	75
Female	4,200	225	3,900	200	3,550	225	350	100	S	S	100	50	100	50
Electrical and computer engineering	53,950	525	48,550	650	46,300	675	2,250	275	950	175	3,850	425	600	175
Male	47,600	575	42,650	675	40,800	675	1,850	250	800	175	3,750	400	350	150
Female	6,350	300	5,900	300	5,500	300	350	100	100	75	150	75	200	75
Mechanical engineering	29,300	400	26,550	425	25,350	425	1,200	200	350	125	2,100	275	350	125
Male	25,850	400	23,300	450	22,250	450	1,100	200	200	100	2,050	275	250	125
Female	3,450	225	3,200	225	3,100	225	100	50	D	D	50	25	100	50
Industrial engineers	19,100	300	16,450	350	15,550	350	900	150	200	75	2,000	200	450	125
Male	15,450	300	13,300	350	12,500	350	850	150	150	75	1,750	200	250	125
Female	3,650	200	3,150	200	3,050	200	100	50	D	D	250	75	200	75
Other engineering	43,400	450	38,050	450	34,850	525	3,200	275	850	150	3,950	275	600	100
Male	34,100	475	29,750	475	27,250	550	2,500	275	600	125	3,550	275	150	50
Female	9,300	300	8,250	300	7,600	300	650	100	250	100	400	75	450	75
Health	47,600	400	40,200	475	35,150	525	5,050	325	550	125	6,050	300	750	100
Male	17,200	325	14,900	325	13,450	350	1,450	200	150	50	2,050	200	100	50
Female	30,400	400	25,300	400	21,700	450	3,600	250	450	100	4,000	250	650	100

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

SE = standard error.

^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 employed or not seeking work 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 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. 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. 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.