

TABLE 2

U.S. residing doctoral scientists and engineers, by field of doctorate, sex, and employment status: 2023

(Number and SE)

Field of study and sex	Total		Employed						Unemployed ^a		Retired		Not employed and 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	1,058,950	1,925	908,700	2,300	803,700	2,550	104,950	1,600	11,250	550	122,450	1,250	16,600	675
Male	654,750	1,675	558,900	1,850	505,100	2,100	53,800	1,200	6,850	450	83,450	1,075	5,600	450
Female	404,200	1,200	349,800	1,475	298,650	1,650	51,150	1,100	4,350	375	39,050	800	11,000	550
Science	787,000	1,825	667,950	2,050	582,450	2,200	85,500	1,375	7,950	450	97,650	1,225	13,450	675
Male	457,800	1,650	383,950	1,775	342,050	1,725	41,850	1,025	4,600	350	65,150	1,125	4,050	375
Female	329,200	1,275	284,000	1,400	240,400	1,500	43,600	975	3,300	300	32,500	725	9,400	550
Biological, agricultural, and environmental life sciences	274,850	950	235,050	1,175	212,750	1,225	22,300	850	3,100	300	31,450	675	5,250	450
Male	151,000	1,225	126,550	1,275	115,350	1,075	11,200	675	1,700	225	21,250	700	1,550	250
Female	123,850	1,100	108,500	1,075	97,400	1,125	11,100	525	1,450	175	10,200	400	3,700	350
Agricultural and food sciences	21,150	350	17,050	400	14,800	375	2,250	225	100	50	3,650	275	350	100
Male	14,450	300	11,300	350	9,700	350	1,600	225	100	50	2,950	250	S	S
Female	6,700	275	5,750	250	5,100	250	650	100	50	25	700	100	250	50
Biochemistry and biophysics	35,500	450	29,700	475	26,850	475	2,850	325	700	175	4,500	350	550	150
Male	21,100	525	17,650	475	15,950	425	1,700	250	250	100	3,050	300	200	100
Female	14,350	475	12,050	475	10,900	450	1,150	200	500	125	1,450	200	400	100
Cell, cellular biology, and molecular biology	36,950	375	32,400	525	29,550	575	2,850	350	400	125	3,200	350	950	225
Male	19,200	525	16,700	525	15,350	525	1,350	250	250	100	1,950	300	300	150
Female	17,700	475	15,750	475	14,200	475	1,500	250	150	75	1,250	175	600	175
Microbiological sciences and immunology	29,700	300	25,400	425	23,300	450	2,100	275	400	125	3,400	300	550	125
Male	15,200	450	12,700	475	11,650	475	1,050	225	250	100	2,000	275	200	100
Female	14,500	400	12,700	375	11,650	375	1,050	175	S	S	1,350	175	350	75
Natural resources and conservation	11,450	225	9,150	275	8,150	250	1,000	125	S	S	1,900	175	200	50
Male	7,250	225	5,500	200	4,900	200	650	125	S	S	1,500	175	50	25
Female	4,200	175	3,600	175	3,250	175	350	50	S	S	350	75	150	50
Zoology	8,950	175	6,400	225	5,650	225	750	125	150	75	2,350	200	50	25
Male	6,050	200	4,100	225	3,700	225	400	75	S	S	1,900	200	D	D
Female	2,900	150	2,300	150	1,950	150	350	100	D	D	450	75	50	25
Other biological sciences	131,150	675	114,900	750	104,400	750	10,500	450	1,150	150	12,500	450	2,600	275
Male	67,700	775	58,600	825	54,150	750	4,500	350	550	100	7,900	400	650	150
Female	63,450	800	56,300	750	50,250	750	6,050	325	600	100	4,600	275	1,950	250
Computer and information sciences	40,300	450	36,350	550	33,400	525	2,950	325	350	125	2,900	250	650	175
Male	32,050	500	29,250	550	27,050	575	2,200	275	300	100	2,200	225	350	150
Female	8,200	375	7,150	375	6,350	350	750	175	S	S	700	125	300	75
Mathematics and statistics	44,650	475	38,500	600	34,850	600	3,650	250	650	150	4,750	275	750	150

TABLE 2

U.S. residing doctoral scientists and engineers, by field of doctorate, sex, and employment status: 2023

(Number and SE)

Field of study and sex	Total		Employed						Unemployed ^a		Retired		Not employed and not seeking work ^b	
			Total		Full time		Part time							
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Male	33,300	525	28,750	575	25,900	575	2,850	225	550	125	3,650	275	300	100
Female	11,350	400	9,700	400	8,950	400	800	125	100	50	1,100	125	450	100
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	167,650	1,025	141,800	1,125	128,300	1,075	13,450	550	1,750	250	21,550	750	2,550	275
Male	123,800	1,025	103,750	1,100	94,000	975	9,750	550	1,200	200	17,800	725	1,050	200
Female	43,900	775	38,050	750	34,300	725	3,700	275	600	150	3,750	275	1,500	175
Astronomy and astrophysics	7,250	175	6,450	175	5,850	175	600	100	100	50	600	100	100	50
Male	5,400	175	4,800	175	4,400	175	400	100	50	50	500	100	S	S
Female	1,850	100	1,650	100	1,400	100	200	50	D	D	150	50	50	25
Chemistry, except biochemistry	82,200	725	69,150	850	62,450	825	6,700	425	800	175	10,950	525	1,300	200
Male	57,100	775	47,450	800	42,850	800	4,600	375	550	150	8,650	500	500	175
Female	25,100	625	21,700	600	19,650	550	2,100	225	250	75	2,300	225	800	150
Geosciences, atmospheric sciences, and ocean sciences	28,200	300	23,150	350	20,650	375	2,500	175	300	75	4,200	275	550	100
Male	19,000	325	15,200	375	13,600	350	1,600	150	200	75	3,400	275	200	75
Female	9,200	225	8,000	225	7,050	225	900	100	100	50	800	100	350	75
Physics	50,050	675	43,050	775	39,350	700	3,700	375	550	175	5,800	450	600	125
Male	42,300	675	36,350	750	33,150	675	3,200	375	400	125	5,250	400	300	100
Female	7,750	400	6,700	375	6,200	350	500	100	S	S	550	150	300	100
Psychology	135,750	625	112,100	900	83,050	1,100	29,050	975	800	150	20,350	700	2,450	300
Male	49,150	800	38,400	750	29,650	725	8,750	500	350	125	10,000	450	400	125
Female	86,600	800	73,700	950	53,400	975	20,350	750	450	100	10,350	475	2,050	300
Social sciences	123,800	825	104,100	875	90,100	1,000	14,000	600	1,250	150	16,650	550	1,800	225
Male	68,450	950	57,200	875	50,100	875	7,100	450	500	125	10,300	500	400	100
Female	55,350	700	46,900	675	40,000	675	6,900	375	700	125	6,350	325	1,400	200
Economics	32,600	500	27,950	550	24,750	550	3,200	325	200	75	4,150	350	300	125
Male	22,900	550	19,400	575	17,250	575	2,150	275	100	50	3,350	325	D	D
Female	9,700	400	8,550	375	7,500	350	1,050	200	D	D	800	125	250	125
Political science and government	25,050	475	21,700	500	19,150	525	2,600	275	250	75	2,800	275	300	75
Male	15,300	475	13,400	450	11,950	450	1,450	225	100	50	1,800	250	D	D
Female	9,750	325	8,350	325	7,200	325	1,150	175	150	50	1,050	175	250	75
Sociology, demography, and population studies	19,200	350	15,950	375	13,600	400	2,350	250	50	50	2,950	250	250	100
Male	8,300	275	6,800	325	5,800	300	1,000	150	D	D	1,400	175	D	D
Female	10,900	325	9,150	325	7,800	350	1,300	200	D	D	1,500	175	200	75
Other social sciences	46,950	475	38,500	525	32,600	500	5,900	350	700	150	6,750	325	950	125
Male	21,900	450	17,650	425	15,150	400	2,500	225	300	100	3,750	275	200	50

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			Total		Full time		Part time							
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Female	25,050	375	20,900	375	17,500	350	3,400	250	400	100	3,000	200	750	125
Engineering	219,400	1,125	196,750	1,300	183,150	1,400	13,600	650	2,650	300	17,650	675	2,400	275
Male	179,000	1,300	159,650	1,375	149,100	1,475	10,550	625	2,100	300	15,950	650	1,300	250
Female	40,400	725	37,100	725	34,050	725	3,050	250	550	125	1,700	225	1,050	150
Aerospace, aeronautical, and astronautical engineering	8,850	175	8,150	200	7,700	175	450	100	D	D	550	100	50	25
Male	7,800	175	7,150	200	6,750	200	400	100	D	D	550	100	D	D
Female	1,000	100	1,000	100	950	100	50	25	D	D	D	D	*	*
Chemical engineering	26,550	400	23,700	500	22,250	525	1,450	225	300	100	2,300	275	250	100
Male	20,600	450	18,250	525	17,150	550	1,100	225	200	100	2,000	275	S	S
Female	5,950	300	5,450	300	5,100	325	350	100	D	D	300	100	150	75
Civil engineering	23,600	475	21,500	475	19,850	475	1,650	225	350	150	1,500	225	250	75
Male	18,350	500	16,550	525	15,450	525	1,150	225	300	150	1,350	200	150	75
Female	5,250	275	4,950	275	4,400	275	500	100	D	D	S	S	100	50
Electrical and computer engineering	59,000	625	54,000	675	50,050	675	3,950	375	450	125	3,950	325	550	150
Male	51,450	625	47,000	675	43,700	650	3,300	325	350	100	3,650	325	400	125
Female	7,550	350	7,000	350	6,350	325	650	125	S	S	300	125	150	75
Mechanical engineering	32,500	525	28,800	625	27,050	650	1,750	275	500	150	2,750	350	450	175
Male	28,500	525	24,950	625	23,450	650	1,500	275	500	150	2,700	350	350	175
Female	4,000	250	3,850	250	3,600	225	250	75	D	D	S	S	100	50
Metallurgical and materials engineering	20,550	425	18,300	450	17,300	450	1,050	175	250	75	1,800	250	150	75
Male	16,150	425	14,350	450	13,550	450	750	175	200	75	1,600	225	D	D
Female	4,400	250	3,950	250	3,700	250	250	75	50	50	250	75	150	75
Other engineering	48,350	475	42,300	550	38,950	575	3,300	300	650	125	4,750	325	650	125
Male	36,150	525	31,350	550	29,000	575	2,350	225	400	100	4,150	325	200	75
Female	12,250	400	10,950	400	9,950	400	950	150	250	75	650	100	450	75
Health	52,600	475	44,000	600	38,150	600	5,900	400	650	150	7,150	350	750	150
Male	18,000	475	15,300	475	13,900	475	1,400	175	150	50	2,350	250	250	125
Female	34,600	500	28,700	525	24,200	550	4,500	325	500	150	4,850	275	500	100

* = 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.

^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 and 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 2023.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2023.