

TABLE 20

U.S. residing employed doctoral scientists and engineers in 4-year educational institutions, by field of doctorate, sex, and tenure status: 2023

(Number and SE)

Field of study and sex	All employed		Tenured		Not tenured				Tenure not applicable	
	Number	SE	Number	SE	On tenure track		Not on tenure track		Number	SE
					Number	SE	Number	SE		
All fields	341,350	2,475	155,100	1,900	48,750	1,025	51,250	1,200	86,250	1,250
Male	199,700	2,000	101,850	1,725	26,300	875	26,300	925	45,300	975
Female	141,650	1,600	53,300	1,050	22,450	600	24,950	725	40,950	925
Science	272,100	2,250	124,200	1,625	37,050	875	40,750	1,075	70,100	1,075
Male	156,000	1,775	80,050	1,500	19,800	750	20,500	825	35,650	850
Female	116,100	1,475	44,150	1,000	17,250	525	20,250	675	34,450	850
Biological, agricultural, and environmental life sciences	94,000	1,250	34,100	950	13,050	550	16,650	750	30,200	675
Male	51,000	1,050	21,850	850	7,050	450	8,050	525	14,100	575
Female	43,000	900	12,200	500	6,000	375	8,650	450	16,100	550
Agricultural and food sciences	7,200	325	3,450	275	950	150	1,250	200	1,500	125
Male	4,750	300	2,500	250	550	125	900	200	800	125
Female	2,400	175	900	150	400	100	400	100	700	75
Biochemistry and biophysics	10,550	550	4,300	400	1,050	200	1,950	250	3,250	300
Male	6,350	425	2,950	325	600	175	1,150	200	1,700	250
Female	4,200	350	1,400	175	450	100	850	150	1,550	200
Cell, cellular biology, and molecular biology	12,200	575	3,700	350	1,650	275	2,250	375	4,600	325
Male	6,400	450	2,050	275	1,150	250	1,000	225	2,200	250
Female	5,850	400	1,700	200	500	125	1,250	250	2,400	275
Microbiological sciences and immunology	8,900	450	2,900	300	1,350	200	1,600	225	3,000	250
Male	4,400	400	1,750	250	700	200	750	175	1,250	175
Female	4,450	250	1,150	175	650	125	850	150	1,750	175
Natural resources and conservation	3,350	175	1,450	150	450	75	550	100	950	100
Male	2,050	150	1,000	125	200	50	300	75	500	100
Female	1,300	100	450	75	200	50	200	50	450	75
Zoology	3,150	225	1,800	175	300	75	350	100	650	125
Male	2,000	175	1,400	175	150	50	200	75	250	75
Female	1,150	125	400	75	150	75	150	75	400	75
Other biological sciences	48,650	850	16,450	650	7,300	375	8,700	475	16,200	500
Male	25,050	725	10,250	575	3,650	300	3,800	325	7,350	450
Female	23,650	550	6,200	325	3,600	275	4,950	325	8,850	375
Computer and information sciences	12,400	550	6,300	425	2,950	250	1,150	175	2,000	225
Male	9,100	500	4,900	375	2,100	250	850	150	1,300	175
Female	3,300	250	1,400	175	850	125	350	100	700	175
Mathematics and statistics	19,900	725	11,600	550	2,950	250	2,200	225	3,100	225

TABLE 20

U.S. residing employed doctoral scientists and engineers in 4-year educational institutions, by field of doctorate, sex, and tenure status: 2023

(Number and SE)

Field of study and sex	All employed		Tenured		Not tenured				Tenure not applicable	
	Number	SE	Number	SE	On tenure track		Not on tenure track		Number	SE
					Number	SE	Number	SE		
Male	14,450	550	9,100	450	1,950	225	1,350	175	2,050	200
Female	5,450	350	2,550	200	1,000	150	850	150	1,050	125
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	46,050	950	21,150	775	4,650	350	6,500	400	13,750	525
Male	32,650	950	15,850	700	2,900	300	4,300	350	9,600	450
Female	13,400	450	5,300	375	1,750	200	2,200	200	4,150	275
Astronomy and astrophysics	2,900	200	1,250	150	350	75	550	100	750	100
Male	2,100	175	1,000	150	150	50	350	100	550	100
Female	800	100	250	50	150	50	150	50	250	50
Chemistry, except biochemistry	19,800	725	9,500	500	2,000	250	2,600	250	5,750	375
Male	13,250	625	6,700	450	1,250	225	1,600	225	3,700	300
Female	6,550	375	2,750	275	750	150	1,000	125	2,050	225
Geosciences, atmospheric sciences, and ocean sciences	10,100	275	4,350	225	1,200	125	1,700	150	2,850	175
Male	6,400	250	3,150	225	600	100	950	125	1,700	150
Female	3,750	175	1,200	100	650	100	750	75	1,150	125
Physics	13,250	625	6,100	475	1,100	175	1,750	250	4,350	325
Male	10,900	600	5,000	425	900	150	1,400	225	3,600	350
Female	2,300	250	1,100	200	200	75	300	125	700	125
Psychology	38,600	850	17,250	650	4,400	300	6,300	425	10,700	500
Male	14,550	475	7,850	425	1,250	175	1,950	250	3,550	300
Female	24,050	700	9,400	475	3,150	275	4,350	350	7,150	425
Social sciences	61,150	1,025	33,800	900	9,100	400	7,900	475	10,350	500
Male	34,200	800	20,550	725	4,600	325	4,000	375	5,050	425
Female	26,900	725	13,300	575	4,500	300	3,850	300	5,300	325
Economics	13,950	600	8,350	500	2,450	225	1,600	250	1,600	225
Male	10,050	525	6,600	475	1,600	225	800	200	1,050	200
Female	3,900	275	1,800	200	850	150	750	175	550	150
Political science and government	13,200	525	8,050	450	1,900	200	1,400	175	1,850	225
Male	8,450	450	5,400	375	1,000	150	900	150	1,150	200
Female	4,750	275	2,650	275	900	125	500	100	700	125
Sociology, demography, and population studies	10,600	400	5,900	325	1,500	150	1,100	200	2,100	225
Male	4,750	300	2,700	250	650	150	500	175	900	150
Female	5,850	325	3,250	250	850	125	550	125	1,200	175
Other social sciences	23,400	550	11,500	475	3,250	250	3,800	225	4,850	300
Male	10,950	375	5,850	325	1,350	175	1,750	175	2,000	225

TABLE 20

U.S. residing employed doctoral scientists and engineers in 4-year educational institutions, by field of doctorate, sex, and tenure status: 2023

(Number and SE)

Field of study and sex	All employed		Tenured		Not tenured				Tenure not applicable	
	Number	SE	Number	SE	On tenure track		Not on tenure track		Number	SE
					Number	SE	Number	SE		
Female	12,400	400	5,650	350	1,900	150	2,050	175	2,850	225
Engineering	47,200	1,100	22,550	850	7,650	450	6,050	450	10,950	550
Male	36,750	925	18,900	775	5,150	375	4,500	425	8,200	450
Female	10,400	525	3,650	275	2,500	250	1,550	175	2,750	225
Aerospace, aeronautical, and astronautical engineering	2,350	225	1,150	175	400	100	200	75	550	100
Male	2,050	200	1,000	175	350	100	200	75	450	100
Female	300	75	150	50	50	25	*	*	100	50
Chemical engineering	3,400	300	1,800	250	500	125	350	125	750	175
Male	2,450	300	1,500	250	250	100	250	100	500	150
Female	950	175	300	100	250	100	150	75	300	75
Civil engineering	6,900	425	3,350	325	1,200	200	1,000	175	1,300	200
Male	5,250	375	2,700	300	850	200	750	175	950	175
Female	1,650	175	700	125	400	100	250	75	350	75
Electrical and computer engineering	10,750	575	5,900	500	1,450	175	1,250	200	2,150	275
Male	9,050	550	5,200	475	1,050	150	900	175	1,900	275
Female	1,700	200	700	150	400	100	350	100	250	75
Mechanical engineering	7,900	550	4,050	400	1,250	225	1,050	250	1,600	225
Male	6,650	500	3,550	375	850	175	800	250	1,350	225
Female	1,300	175	450	125	350	125	250	75	200	75
Metallurgical and materials engineering	2,800	300	950	200	350	100	350	100	1,100	200
Male	2,150	300	750	200	250	75	300	100	900	175
Female	650	100	200	75	150	50	50	25	250	75
Other engineering	13,100	550	5,400	375	2,500	225	1,800	200	3,400	275
Male	9,200	475	4,200	350	1,550	200	1,300	150	2,150	225
Female	3,850	275	1,150	150	950	150	500	100	1,250	150
Health	22,100	575	8,350	425	4,050	275	4,450	300	5,250	375
Male	6,950	400	2,850	300	1,350	150	1,300	175	1,450	175
Female	15,150	475	5,500	300	2,700	200	3,150	250	3,800	300

* = suppressed when population estimate < 25.

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 2023.

Source(s):
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2023.