

TABLE 8

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

(Number and SE)

Field of study	All employed						Hispanic or Latino ^a						Not Hispanic or Latino ^b																													
													American Indian or Alaska Native						Asian						Black or African American						White						Other race ^c					
	Total		Male		Female		Total		Male		Female		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	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE						
All fields	857,200	1,975	546,050	1,750	311,200	1,200	37,250	550	21,200	450	16,050	400	1,300	125	750	100	550	75	213,350	1,325	146,800	1,250	66,550	950	31,100	400	15,750	375	15,350	375	562,350	1,750	355,000	1,800	207,300	1,175	11,950	400	6,550	325	5,350	225
Science	640,300	1,900	383,900	1,700	256,400	1,200	29,200	475	15,450	400	13,750	350	1,050	125	550	100	500	75	128,850	1,150	79,450	975	49,400	850	23,750	375	11,650	350	12,150	325	447,900	1,800	271,900	1,650	176,000	1,200	9,500	325	4,900	275	4,650	225
Biological, agricultural, and environmental life sciences	220,700	1,100	124,550	1,025	96,200	900	10,250	275	5,300	250	4,950	175	200	50	100	50	100	50	50,650	875	26,950	700	23,700	625	7,050	250	3,450	225	3,600	175	149,050	1,100	87,050	1,000	62,000	725	3,550	200	1,700	175	1,850	150
Agricultural and food sciences	17,400	350	12,050	325	5,350	225	1,050	100	600	75	450	50	D	D	D	D	D	D	4,000	275	2,550	225	1,450	150	750	75	550	75	200	25	11,400	325	8,250	275	3,150	150	200	50	100	50	50	25
Biochemistry and biophysics	29,450	425	17,950	400	11,500	325	1,050	100	550	75	450	75	D	D	D	D	D	D	8,300	375	4,600	325	3,700	250	750	100	350	75	400	75	19,000	475	12,250	425	6,750	300	300	75	200	50	150	50
Cell, cellular biology, and molecular biology	31,200	450	16,800	450	14,400	375	1,200	125	550	125	600	100	D	D	D	D	D	D	8,300	400	4,250	350	4,050	275	850	175	400	150	450	100	20,250	525	11,250	450	8,950	300	650	100	350	75	300	75
Microbiological sciences and immunology	23,800	400	12,700	400	11,150	375	1,200	125	550	100	650	75	D	D	D	D	D	D	5,150	300	2,900	275	2,300	225	850	125	400	75	500	75	16,100	350	8,550	325	7,500	275	450	75	250	75	200	50
Natural resources and conservation	8,800	225	5,950	225	2,850	125	400	50	200	50	150	25	*	*	*	*	D	D	1,350	125	850	100	500	75	350	50	250	50	100	25	6,550	225	4,550	200	2,000	100	150	50	100	50	50	25
Zoology	7,200	225	4,950	200	2,300	150	400	75	250	75	150	50	D	D	D	D	D	D	850	150	550	125	300	75	200	50	150	50	S	S	5,700	250	3,950	200	1,700	125	100	50	50	25	50	50
Other biological sciences	102,800	675	54,100	700	48,700	625	5,000	200	2,550	150	2,450	125	100	50	D	D	50	25	22,650	575	11,300	475	11,350	425	3,300	175	1,350	125	1,900	125	70,050	700	38,200	625	31,850	475	1,700	175	700	125	1,000	125
Computer and information sciences	31,100	400	25,500	425	5,600	300	950	100	750	100	200	50	D	D	D	D	D	D	13,400	400	10,850	350	2,550	250	600	75	350	50	250	50	15,800	375	13,250	375	2,600	175	350	100	300	75	50	25
Mathematics and statistics	36,650	450	27,350	450	9,300	325	1,300	100	1,050	100	250	50	D	D	D	D	D	D	11,300	400	7,850	350	3,450	250	850	100	650	75	250	50	22,750	425	17,500	375	5,250	225	400	100	300	100	100	25
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	133,750	950	101,300	925	32,500	525	4,350	200	2,950	175	1,400	100	50	25	50	25	*	*	32,900	725	24,050	625	8,850	425	3,050	225	2,200	175	850	125	91,750	975	70,900	900	20,850	400	1,650	150	1,100	125	550	75
Astronomy and astrophysics	5,850	175	4,450	150	1,400	100	200	50	150	25	50	25	D	D	D	D	D	D	750	100	550	100	200	50	50	25	50	25	D	D	4,700	150	3,650	150	1,050	100	100	25	50	25	50	25
Chemistry, except biochemistry	65,300	700	46,300	675	19,000	450	2,200	150	1,400	125	850	100	50	25	S	S	D	D	16,800	500	11,050	425	5,750	325	2,050	175	1,300	125	750	125	43,500	700	32,100	575	11,450	325	700	100	450	100	250	50
Geosciences, atmospheric sciences, and ocean sciences	22,050	300	15,600	325	6,450	175	800	75	450	50	300	50	*	*	*	*	D	D	3,700	200	2,700	175	1,050	100	300	50	250	50	50	25	17,000	300	12,000	300	5,000	150	300	50	150	50	100	25
Physics	40,550	575	34,950	600	5,600	325	1,150	150	1,000	125	200	75	D	D	D	D	D	D	11,650	475	9,800	425	1,850	225	650	125	600	125	50	25	26,550	575	23,150	600	3,350	225	550	100	400	75	150	75
Psychology	115,350	825	45,600	800	69,700	775	6,550	250	2,050	150	4,450	225	300	75	150	50	150	50	7,100	425	2,450	325	4,650	300	5,850	225	1,500	150	4,300	225	93,600	925	38,950	825	54,650	750	1,950	175	500	100	1,450	150
Social sciences	102,700	900	59,600	825	43,100	575	5,800	275	3,300	200	2,500	175	400	100	250	75	200	50	13,500	525	7,350	400	6,150	375	6,400	300	3,500	250	2,900	175	74,950	750	44,250	725	30,700	525	1,600	175	950	150	700	75
Economics	26,900	550	19,300	525	7,600	250	1,600	150	1,200	125	350	50	D	D	D	D	D	D	5,750	325	3,400	250	2,350	200	1,100	125	850	125	250	50	18,200	500	13,650	475	4,550	200	250	75	150	50	100	50
Political science and government	22,450	425	14,450	450	8,000	325	950	150	600	125	350	75	50	25	D	D	D	D	1,750	225	950	175	800	150	2,000	225	1,250	175	750	125	17,250	425	11,300	400	5,950	300	450	125	300	125	150	50
Sociology, demography, and population studies	15,200	325	6,650	275	8,550	275	1,050	125	500	75	550	100	D	D	D	D	D	D	1,350	200	650	175	700	100	1,200	100	500	75	650	75	11,250	325	4,800	250	6,450	275	250	75	200	75	100	50
Other social sciences	38,150	500	19,200	450	18,950	350	2,200	150	1,000	100	1,200	100	250	75	150	75	150	50	4,600	275	2,300	175	2,300	175	2,150	150	900	100	1,250	125	28,250	400	14,500	425	13,750	300	650	100	300	75	350	50
Engineering	176,700	1,175	147,250	1,200	29,450	575	6,650	275	5,300	250	1,350	100	150	50	150	50	*	*	75,800	1,150	63,100	1,050	12,750	475	4,150	200	3,200	200	950	100	88,050	1,050	74,050	1,050	14,000	350	1,900	225	1,500	225	400	75
Aerospace, aeronautical, and astronautical engineering	7,050	225	6,400	225	700	75	300	75	250	75	50	25	D	D	D	D	D	D	2,200	175	2,000	175	150	50	100	25	50	25	*	*	4,450	225	4,000	200	400	75	50	25	50	25	D	D
Chemical engineering	20,800	500	16,450	475	4,350	275	800	100	600	100	200	50	D	D	D	D	D	D	8,450	400	6,550	350	1,900	200	400	75	200	50	150	50	10,900	400	8,900	400	2,050	175	250	75	200	75	D	D
Civil engineering	19,250	400	15,350	425	3,900	200	1,100	150	800	125	300	50	D	D	D	D	D	D	6,950	375	5,650	375	1,300	175	800	150	700	150	100	50	10,250	375	8,050	325	2,150	175	150	50	150	50	50	25
Electrical and computer engineering	48,550	650	42,650	675	5,900	300	1,350	125	1,200	100	150	50	50	25	50	25	D	D	24,800	575	21,350	575	3,450	275	950	125	800	100	150	50	21,050	550	19,000	525	2,100	175	350	100	300	100	D	D

TABLE 8

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

(Number and SE)

Field of study	All employed						Hispanic or Latino ^a						Not Hispanic or Latino ^b																													
													American Indian or Alaska Native				Asian				Black or African American				White				Other race ^c													
	Total		Male		Female		Total		Male		Female		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	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE								
Mechanical engineering	26,550	425	23,300	450	3,200	225	900	125	850	125	50	50	50	25	D	D	D	D	12,350	475	10,850	500	1,450	175	500	75	400	75	100	50	12,400	425	10,850	425	1,550	150	350	150	300	125	50	25
Industrial engineers	16,450	350	13,300	350	3,150	200	500	75	350	75	150	50	D	D	D	D	D	D	7,450	325	5,950	325	1,500	175	350	75	300	75	50	25	7,900	325	6,550	325	1,350	125	300	75	200	75	100	50
Other engineering	38,050	450	29,750	475	8,250	300	1,650	125	1,200	100	450	75	50	25	*	*	D	D	13,650	500	10,750	425	2,900	250	1,100	100	750	75	350	50	21,100	450	16,700	425	4,400	200	450	75	350	75	100	50
Health	40,200	475	14,900	325	25,300	400	1,400	125	450	50	900	125	100	50	50	25	50	50	8,700	350	4,250	250	4,450	300	3,150	225	900	125	2,250	175	26,400	475	9,050	300	17,350	375	500	75	200	50	350	75

* = 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 Hispanic or Latino may be of any race.

^b American Indian or Alaska Native, Asian, Black or African American, and White are single race.

^c Other race includes Native Hawaiian or Other Pacific Islander and persons reporting more than one race who are not of Hispanic or Latino ethnicity.

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.