

TABLE 11-1

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and years since doctorate: 2019

(Number and SE)

Field of study	All employed		≤ 5		6–10		11–15		16–20		21–25		> 25	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All fields	857,200	1,975	142,500	625	154,750	1,025	127,000	1,150	108,700	825	104,250	825	220,000	1,575
Science	640,300	1,900	100,000	750	112,250	1,025	93,350	1,150	82,300	875	76,550	775	175,800	1,425
Biological, agricultural, and environmental life sciences	220,700	1,100	35,700	600	41,950	750	34,050	675	28,600	600	25,250	625	55,200	925
Agricultural and food sciences	17,400	350	2,100	125	2,450	175	2,350	200	2,350	175	2,400	175	5,700	300
Agricultural sciences	950	50	150	25	150	25	100	25	150	25	50	25	400	50
Animal sciences	4,550	175	500	75	650	100	600	100	650	100	600	75	1,500	150
Food sciences and technology	3,750	175	500	75	550	100	550	75	600	100	550	100	1,000	150
Plant sciences	5,900	250	700	100	850	100	800	150	650	100	850	125	2,050	175
Soil sciences	2,200	125	250	50	250	50	300	75	350	50	350	50	700	125
Biochemistry and biophysics	29,450	425	3,550	200	4,800	275	4,450	275	3,900	250	3,400	275	9,300	450
Biochemistry	24,350	400	2,750	200	3,900	250	3,600	250	3,300	250	2,850	250	8,000	400
Biophysics	5,100	175	850	100	900	125	850	125	650	100	550	100	1,300	125
Cell, cellular biology, and molecular biology	31,200	450	4,200	300	5,500	375	4,900	350	4,750	300	4,250	325	7,700	475
Microbiological sciences and immunology	23,800	400	3,800	200	5,250	300	3,700	250	2,800	250	2,550	225	5,750	350
Immunology	8,950	200	1,500	125	1,950	175	1,600	150	1,200	150	900	150	1,850	225
Microbiological sciences	14,900	325	2,300	150	3,300	225	2,100	200	1,600	200	1,650	200	3,900	275
Natural resources and conservation	8,800	225	1,700	125	1,750	125	1,500	125	1,150	125	950	125	1,750	175
Fish, fisheries, wildlife and wildlands science and management	2,200	150	250	50	350	50	450	50	350	50	250	50	550	125
Forestry	2,600	150	400	50	350	50	350	50	300	50	350	50	750	150
Natural resource conservation, research, management, and policy	4,000	150	1,050	100	1,000	100	700	100	500	100	400	100	400	100
Zoology	7,200	225	800	125	800	125	1,000	125	900	125	850	125	2,800	200
Other biological sciences	102,800	675	19,550	450	21,400	550	16,100	450	12,700	400	10,800	400	22,200	600
Biomathematics, bioinformatics, and computational biology	5,150	100	1,750	100	1,550	125	650	100	400	100	300	75	500	75
Botany and plant biology	6,150	225	700	100	800	100	800	100	600	100	900	125	2,350	175
Epidemiology, ecology, and population biology	15,950	275	3,450	150	3,900	225	2,750	225	2,150	250	1,400	150	2,350	225
Genetics	8,750	250	1,450	125	1,900	175	1,450	125	1,100	125	1,050	150	1,800	200
Neurobiology and neuroscience	16,800	275	3,900	200	4,900	250	3,100	250	2,100	175	1,250	150	1,550	150
Nutrition sciences	4,150	125	600	75	800	100	850	100	500	75	550	75	900	100

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Pharmacology and toxicology	12,700	300	1,500	150	2,100	225	2,000	225	1,650	175	1,750	200	3,750	250
Physiology, pathology, and related sciences	15,400	300	2,700	175	3,000	225	1,850	175	1,550	175	1,450	125	4,850	275
Biological and biomedical sciences, general	12,750	300	3,050	200	2,100	200	1,850	225	1,700	200	1,500	225	2,550	225
Biological and biomedical sciences, other	4,950	200	450	75	400	75	750	100	1,000	125	750	100	1,600	150
Computer and information sciences	31,100	400	7,350	325	7,650	350	5,200	300	3,300	225	3,300	225	4,300	300
Computer science	26,750	400	6,000	300	6,650	350	4,250	300	2,800	225	3,050	225	4,000	300
Information science, studies	2,600	75	550	75	600	75	550	75	300	50	250	50	300	50
Computer and information sciences, other	1,800	50	800	50	450	50	400	50	150	25	D	D	D	D
Mathematics and statistics	36,650	450	6,600	300	6,800	300	5,350	275	4,150	300	4,150	275	9,650	375
Applied mathematics	8,500	200	1,600	175	1,750	175	1,400	150	1,100	125	850	125	1,800	175
Mathematics	16,500	375	2,850	200	2,850	200	2,150	225	1,750	200	1,950	225	5,000	275
Statistics	7,450	225	1,500	150	1,400	150	1,250	150	700	150	700	125	1,900	225
Mathematics and statistics, other	4,200	125	700	75	750	100	550	100	600	75	650	100	950	100
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	133,750	950	19,800	425	21,800	575	17,650	575	16,250	550	16,900	575	41,350	775
Astronomy and astrophysics	5,850	175	950	75	1,100	100	850	100	700	100	800	100	1,450	125
Chemistry, except biochemistry	65,300	700	9,050	300	10,550	425	8,850	400	8,050	350	8,000	400	20,800	500
Inorganic chemistry	8,750	225	1,300	125	1,150	125	1,100	125	1,050	100	1,050	125	3,150	225
Organic chemistry	17,600	375	1,900	150	3,000	250	2,350	225	2,450	200	1,900	225	6,050	325
Chemistry, other, except biochemistry	39,000	575	5,850	250	6,400	325	5,450	350	4,600	275	5,100	325	11,600	425
Geosciences, atmospheric sciences, and ocean sciences	22,050	300	3,700	175	3,550	175	2,850	175	2,650	150	2,700	200	6,600	275
Atmospheric sciences and meteorology	3,900	75	850	50	800	75	550	50	450	50	450	50	850	75
Geological and earth sciences, geosciences	13,550	275	2,100	150	2,050	150	1,700	150	1,600	125	1,600	175	4,500	225
Ocean sciences and marine sciences	2,150	75	550	50	400	50	300	50	250	50	250	50	450	50
Oceanography, chemical and physical	2,450	125	200	50	300	50	300	50	400	75	400	75	800	100
Physics	40,550	575	6,150	300	6,550	325	5,100	325	4,900	375	5,400	375	12,500	575
Psychology	115,350	825	14,650	375	16,800	475	16,300	425	15,650	575	14,000	525	38,000	850

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Clinical psychology	41,100	525	4,650	275	4,700	275	5,800	350	5,700	350	4,850	300	15,450	600
Counseling and applied psychology	14,850	275	2,050	175	2,250	200	2,150	200	2,200	225	1,950	225	4,300	325
Educational and school psychology	14,100	275	1,950	150	2,000	175	2,100	175	2,000	200	1,500	150	4,500	275
Industrial and organizational psychology	4,850	150	700	100	950	100	900	100	600	100	650	75	1,100	125
Research and experimental psychology	27,800	400	3,850	175	4,750	200	3,850	200	3,600	200	3,550	225	8,200	300
Psychology, general	7,900	250	850	125	1,100	175	1,000	200	850	150	1,150	150	2,900	275
Psychology, other	4,750	175	550	75	1,000	125	550	75	700	100	400	75	1,550	150
Social sciences	102,700	900	15,900	375	17,300	475	14,850	475	14,350	500	13,000	525	27,300	700
Economics	26,900	550	4,150	250	4,050	275	3,450	275	3,250	225	3,400	275	8,650	400
Political science and government	22,450	425	3,550	225	3,750	250	3,350	275	3,400	300	3,200	300	5,250	400
Political science and government	18,350	400	2,550	225	2,750	225	2,650	250	2,950	275	2,800	275	4,650	400
Public policy analysis	4,100	175	1,000	75	1,000	100	650	125	450	75	350	75	600	100
Sociology, demography, and population studies	15,200	325	2,100	125	2,700	225	2,050	175	2,400	175	1,750	175	4,250	275
Other social sciences	38,150	500	6,150	225	6,850	275	6,000	275	5,300	300	4,700	275	9,150	375
Anthropology	11,400	300	1,600	125	1,950	150	1,750	175	1,700	175	1,350	125	3,000	200
Area, ethnic, cultural, gender, and group studies	3,900	125	850	75	800	100	600	75	500	75	350	50	800	100
Geography and cartography	4,750	175	850	100	900	100	900	125	600	100	600	100	900	125
International relations and national security studies	2,350	150	350	50	450	75	400	75	250	75	350	75	550	100
Linguistics	4,950	250	700	75	750	100	850	125	700	125	700	125	1,200	175
Urban studies, affairs	1,600	100	100	25	150	50	250	50	300	50	300	50	500	75
Social sciences, other	9,250	250	1,700	100	1,800	150	1,250	125	1,250	125	1,050	125	2,200	150
Engineering	176,700	1,175	33,400	700	34,400	750	27,250	650	20,750	550	23,250	625	37,700	825
Aerospace, aeronautical, and astronautical engineering	7,050	225	1,350	125	1,150	125	1,000	125	800	100	1,050	125	1,750	200
Chemical engineering	20,800	500	3,550	250	3,700	300	3,350	300	2,550	250	2,600	250	5,050	400
Civil engineering	19,250	400	4,050	225	3,400	275	2,850	275	1,900	200	2,650	300	4,400	275
Electrical and computer engineering	48,550	650	8,150	350	9,800	425	7,950	375	6,350	350	6,600	325	9,700	475
Computer engineering	7,000	175	1,350	125	1,550	150	1,350	125	800	100	750	75	1,200	125
Electrical, electronics, and communications engineering	41,550	625	6,800	325	8,200	400	6,600	350	5,550	325	5,850	350	8,500	475

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Mechanical engineering	26,550	425	5,650	300	5,150	350	3,700	300	3,150	275	3,550	300	5,350	400
Metallurgical and materials engineering	16,450	350	3,300	275	3,250	250	2,550	200	1,700	200	2,150	200	3,450	275
Other engineering	38,050	450	7,350	275	7,950	350	5,850	350	4,350	275	4,600	275	7,950	325
Agricultural engineering	1,900	75	250	50	250	50	250	50	250	50	300	50	600	75
Bioengineering and biomedical engineering	13,200	250	3,650	175	4,150	225	2,150	225	1,050	150	1,050	150	1,200	150
Engineering mechanics, physics, and science	4,400	150	550	75	600	100	600	100	500	100	850	100	1,300	125
Industrial and manufacturing engineering	8,800	275	1,350	125	1,500	175	1,650	175	1,250	200	1,050	125	2,050	200
Nuclear engineering	3,100	125	450	75	500	75	350	75	350	50	350	75	1,100	100
Engineering, other	6,600	200	1,050	100	1,000	125	900	125	950	125	1,000	150	1,700	150
Health	40,200	475	9,100	275	8,100	350	6,400	300	5,650	350	4,450	250	6,500	300
Communication disorders sciences and services	3,100	125	400	75	550	75	550	75	350	50	300	75	950	100
Hospital and medical administration services	1,550	100	200	50	350	50	300	50	200	50	150	50	300	75
Pharmacy, pharmaceutical sciences, and administration	8,050	175	1,500	150	1,400	175	1,100	125	1,000	150	1,150	150	1,950	225
Public health	8,400	225	2,800	150	1,900	175	1,250	175	1,000	175	650	125	850	150
Registered nursing, nursing administration, nursing research	9,000	250	2,050	200	2,000	175	1,500	125	1,450	200	1,050	175	900	125
Health sciences, other	10,150	225	2,150	150	1,950	175	1,750	175	1,600	150	1,150	125	1,600	175

SE = standard error.

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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.