

TABLE 12-3

**U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and sector of employment: 2021**

(Number and SE)

Field of study	All employed		Educational institution <sup>a</sup>		Business or industry <sup>b</sup>		Government <sup>c</sup>	
	Number	SE	Number	SE	Number	SE	Number	SE
All fields	872,100	2,425	368,700	2,550	431,000	2,750	72,350	1,475
Science	647,300	2,000	297,450	2,325	293,400	2,250	56,450	1,350
Biological, agricultural, and environmental life sciences	226,850	1,275	102,800	1,350	102,050	1,350	22,000	750
Agricultural and food sciences	16,600	350	7,700	350	7,300	350	1,600	175
Agricultural sciences	900	75	450	50	300	50	100	50
Animal sciences	4,650	200	2,300	200	2,100	175	200	50
Food sciences and technology	3,300	200	1,250	175	1,800	175	250	75
Plant sciences	5,800	250	2,800	225	2,500	225	500	100
Soil sciences	2,000	150	900	125	550	100	500	100
Biochemistry and biophysics	29,550	600	12,450	575	15,050	650	2,000	225
Biochemistry	24,350	550	10,300	550	12,300	625	1,750	225
Biophysics	5,200	200	2,100	175	2,800	200	250	75
Cell, cellular biology, and molecular biology	32,300	450	13,850	550	16,100	550	2,350	350
Microbiological sciences and immunology	24,750	425	9,550	450	12,550	500	2,700	250
Immunology	9,150	225	3,100	275	5,450	300	550	100
Microbiological sciences	15,650	350	6,400	350	7,100	400	2,100	250
Natural resources and conservation	9,000	225	3,950	200	2,900	200	2,100	175
Fish, fisheries, wildlife, and wildlands science and management	2,000	125	800	75	500	75	700	75
Forestry	2,550	150	1,150	125	1,000	125	400	50
Natural resource conservation, research, management, and policy	4,400	175	2,000	175	1,400	150	1,000	150
Zoology	6,850	250	3,800	225	1,750	200	1,350	150
Other biological sciences	107,800	850	51,500	1,000	46,400	950	9,900	475
Biomathematics, bioinformatics, and computational biology	6,200	150	2,050	150	3,800	200	350	75
Botany and plant biology	6,150	250	3,200	200	2,350	225	600	100
Epidemiology, ecology, and population biology	16,950	350	9,000	350	5,000	400	2,950	275
Genetics	8,750	225	4,650	250	3,550	250	600	125
Neurobiology and neuroscience	18,850	300	9,750	425	7,850	475	1,300	225
Nutrition sciences	4,100	150	2,200	175	1,700	150	200	50
Pharmacology and toxicology	13,100	300	4,500	325	6,950	375	1,650	250
Physiology, pathology, and related sciences	15,350	300	7,350	350	7,000	350	950	150
Biological and biomedical sciences, general	13,650	325	6,300	400	6,450	350	900	200
Biological and biomedical sciences, other	4,700	225	2,500	200	1,800	175	400	150
Computer and information sciences	33,600	425	12,200	450	20,400	525	1,050	200
Computer science	29,100	400	9,900	425	18,450	500	800	175
Information science, studies	2,500	125	1,450	125	850	75	150	50
Computer and information sciences, other	2,000	100	850	75	1,050	75	100	50
Mathematics and statistics	36,600	575	21,550	625	13,650	550	1,450	200
Applied mathematics	7,850	300	4,800	300	2,800	250	300	75
Mathematics	16,850	400	11,250	425	5,050	350	550	100
Statistics	7,450	325	2,900	300	4,250	325	250	75
Mathematics and statistics, other	4,450	150	2,550	150	1,600	150	300	125
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	137,050	1,025	51,300	1,075	72,900	1,275	12,800	525
Astronomy and astrophysics	6,350	175	3,200	225	2,500	200	600	125
Chemistry, except biochemistry	66,350	800	22,650	750	39,250	900	4,400	375
Inorganic chemistry	8,500	275	3,250	250	4,850	275	400	75
Organic chemistry	17,650	400	5,700	350	11,100	425	800	175
Chemistry, other, except biochemistry	40,200	625	13,750	550	23,300	700	3,200	325
Geosciences, atmospheric sciences, and ocean sciences	22,050	325	10,650	325	7,500	300	3,900	200

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	Number	SE	Number	SE	Number	SE	Number	SE
Atmospheric sciences and meteorology	4,150	100	1,700	100	1,400	100	1,000	100
Geological and earth sciences, geosciences	13,550	300	6,800	300	4,850	250	1,900	175
Ocean sciences and marine sciences	2,400	75	1,100	75	700	75	600	75
Oceanography, chemical and physical	2,000	125	1,000	100	600	100	400	75
Physics	42,300	675	14,800	625	23,650	775	3,850	325
Psychology	113,500	825	45,050	850	57,850	1,000	10,600	625
Clinical psychology	40,650	600	9,950	525	25,400	700	5,250	450
Counseling and applied psychology	14,600	300	4,550	325	8,600	350	1,450	250
Educational and school psychology	13,300	325	7,500	325	5,300	350	550	150
Industrial and organizational psychology	4,950	175	1,600	150	3,100	200	250	75
Research and experimental psychology	27,700	425	16,400	425	9,600	425	1,700	200
Psychology, general	7,600	275	2,950	275	3,700	300	950	200
Psychology, other	4,700	150	2,150	200	2,100	200	450	100
Social sciences	99,700	1,000	64,600	925	26,550	825	8,550	500
Economics	27,300	550	14,700	600	9,700	475	2,900	300
Political science and government	20,500	550	13,850	525	4,900	400	1,700	225
Political science and government	16,150	550	11,500	525	3,550	375	1,100	225
Public policy analysis	4,300	150	2,350	200	1,350	125	600	100
Sociology, demography, and population studies	15,650	375	11,450	450	3,250	300	1,000	175
Other social sciences	36,300	575	24,600	525	8,700	375	2,950	225
Anthropology	10,900	275	7,500	300	2,400	250	950	150
Area, ethnic, cultural, gender, and group studies	4,050	150	2,950	150	850	100	200	75
Geography and cartography	4,400	225	3,000	200	950	100	450	75
International relations and national security studies	2,150	125	1,300	125	650	100	150	50
Linguistics	4,500	250	3,350	225	950	150	S	S
Urban studies, affairs	1,200	100	600	75	450	75	100	50
Social sciences, other	9,150	275	5,900	275	2,400	200	850	100
Engineering	183,100	1,325	48,700	1,150	121,600	1,400	12,800	650
Aerospace, aeronautical, and astronautical engineering	7,150	250	1,700	200	4,400	275	1,050	150
Chemical engineering	21,650	500	4,050	400	15,750	600	1,850	275
Civil engineering	19,750	575	6,800	425	10,500	525	2,450	275
Electrical and computer engineering	50,400	650	11,100	525	37,650	750	1,650	225
Computer engineering	7,150	275	1,950	175	5,000	250	250	75
Electrical, electronics, and communications engineering	43,250	600	9,150	525	32,650	700	1,450	200
Mechanical engineering	27,500	450	7,950	475	17,750	525	1,800	250
Metallurgical and materials engineering	17,450	400	3,550	350	12,650	400	1,250	200
Other engineering	39,250	525	13,600	475	22,900	575	2,700	200
Agricultural engineering	1,700	100	750	75	700	75	200	50
Bioengineering and biomedical engineering	14,900	275	5,100	300	9,050	350	800	125
Engineering mechanics, physics, and science	3,900	200	1,150	150	2,450	150	300	75
Industrial and manufacturing engineering	8,700	325	3,600	275	4,750	275	350	75
Nuclear engineering	3,100	125	600	75	2,000	125	500	100
Engineering, other	6,900	250	2,450	200	3,950	250	550	100
Health	41,650	525	22,550	575	16,000	500	3,100	275
Communication disorders sciences and services	3,100	125	1,900	150	1,000	125	150	75
Hospital and medical administration services	1,300	100	700	75	450	75	150	50
Pharmacy, pharmaceutical sciences, and administration	7,850	250	2,100	225	5,150	300	550	150
Public health	9,400	225	4,650	275	3,750	225	1,000	125
Registered nursing, nursing administration, nursing research	8,550	375	5,850	350	2,350	250	400	100

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Field of study	All employed		Educational institution <sup>a</sup>		Business or industry <sup>b</sup>		Government <sup>c</sup>	
	Number	SE	Number	SE	Number	SE	Number	SE
Health sciences, other	11,500	275	7,350	275	3,300	275	850	175

S = suppressed for reliability; coefficient of variation exceeds publication standards.

SE = standard error.

<sup>a</sup> Educational institution includes 4-year colleges or universities, medical schools (including university-affiliated hospitals or medical centers), university-affiliated research institutes, 2-year colleges, community colleges, technical institutes, precollege institutions, and other educational institutions.

<sup>b</sup> Business or industry includes private for profit, private not for profit, self-employed or business owners in incorporated or nonincorporated business, non-U.S. governments, and employers not broken out separately.

<sup>c</sup> Government includes U.S. federal, state, and local government.

**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 2021.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2021.