TABLE 9

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and citizenship status: 2021

(Number and SE)

Field of study	All employed		U.S. citizen						Non-U.S. citizen					
			Total		Native born		Naturalized		Total		Permanent resident		Temporary resident	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All fields	872,100	2,425	746,850	2,200	554,050	1,850	192,800	1,675	125,250	1,425	84,250	1,300	40,950	825
Science	647,300	2,000	570,500	1,950	449,900	1,950	120,600	1,375	76,800	1,200	51,300	1,050	25,550	725
Biological, agricultural, and environmental life sciences	226,850	1,275	201,500	1,325	157,450	1,300	44,050	925	25,350	675	16,350	550	9,000	425
Agricultural and food sciences	16,600	350	14,050	375	10,250	325	3,750	225	2,550	200	1,800	200	800	125
Agricultural sciences	900	75	700	75	550	50	150	50	200	50	150	50	50	25
Animal sciences	4,650	200	4,200	200	3,450	200	750	125	400	100	350	100	50	25
Food sciences and technology	3,300	200	2,600	200	1,350	150	1,250	125	750	125	500	125	250	75
Plant sciences	5,800	250	4,850	250	3,750	225	1,100	150	900	150	550	125	350	75
Soil sciences	2,000	150	1,700	150	1,150	125	500	100	300	75	200	50	100	50
Biochemistry and biophysics	29,550	600	25,450	575	18,750	500	6,700	425	4,100	325	2,800	300	1,250	200
Biochemistry	24,350	550	21,050	525	15,600	475	5,450	400	3,250	300	2,250	275	1,050	175
Biophysics	5,200	200	4,400	200	3,150	200	1,200	150	800	125	600	125	200	75
Cell, cellular biology, and molecular biology	32,300	450	29,200	525	22,500	550	6,700	400	3,100	300	1,900	275	1,200	200
Microbiological sciences and immunology	24,750	425	23,000	450	18,300	450	4,700	350	1,800	200	1,250	175	550	125
Immunology	9,150	225	8,250	250	6,700	225	1,550	200	900	150	650	125	250	75
Microbiological sciences	15,650	350	14,750	375	11,600	375	3,150	300	900	125	600	100	300	75
Natural resources and conservation	9,000	225	8,100	225	6,750	200	1,300	100	900	100	550	75	350	75
Fish, fisheries, wildlife, and wildlands science and management	2,000	125	1,950	125	1,750	125	200	50	50	25	50	25	*	*
Forestry	2,550	150	2,300	150	1,750	125	600	75	250	50	200	50	100	50
Natural resource conservation, research, management, and policy	4,400	175	3,850	150	3,250	150	550	75	550	100	350	75	250	75
Zoology	6,850	250	6,300	250	5,450	250	850	125	550	125	500	125	50	50
Other biological sciences	107,800	850	95,450	875	75,400	950	20,050	600	12,350	500	7,550	425	4,800	325
Biomathematics, bioinformatics, and computational biology	6,200	150	4,450	175	2,850	150	1,600	175	1,750	150	950	100	750	125
Botany and plant biology	6,150	250	5,550	250	4,350	250	1,200	150	600	125	350	100	250	75

TABLE 9

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and citizenship status: 2021

(Number and SE)

Field of study	All employed		U.S. citizen						Non-U.S. citizen					
			Total		Native born		Naturalized		Total		Permanent resident		Temporary resident	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Epidemiology, ecology, and population biology	16,950	350	15,850	375	13,900	400	1,950	225	1,100	225	800	200	300	100
Genetics	8,750	225	7,600	250	6,350	275	1,300	175	1,150	150	650	125	500	100
Neurobiology and neuroscience	18,850	300	16,750	325	13,000	400	3,700	325	2,150	225	1,050	175	1,100	175
Nutrition sciences	4,100	150	3,750	175	2,900	175	850	125	350	75	250	75	100	50
Pharmacology and toxicology	13,100	300	12,100	350	9,450	325	2,650	250	1,050	175	550	125	500	125
Physiology, pathology, and related sciences	15,350	300	13,400	325	10,550	325	2,850	250	1,950	200	1,350	200	600	125
Biological and biomedical sciences, general	13,650	325	11,850	375	8,800	350	3,050	250	1,850	225	1,300	200	550	125
Biological and biomedical sciences, other	4,700	225	4,200	225	3,250	200	950	175	500	100	300	75	200	75
Computer and information sciences	33,600	425	23,050	450	13,350	400	9,700	425	10,600	450	7,400	400	3,150	300
Computer science	29,100	400	19,900	450	11,200	375	8,650	400	9,250	425	6,550	400	2,700	275
Information science, studies	2,500	125	2,000	125	1,250	100	750	100	500	100	350	75	S	S
Computer and information sciences, other	2,000	100	1,150	75	850	75	300	50	850	75	500	75	350	50
Mathematics and statistics	36,600	575	28,500	575	19,300	475	9,200	450	8,150	450	4,950	400	3,200	300
Applied mathematics	7,850	300	5,750	300	4,100	275	1,700	175	2,100	225	1,250	200	900	150
Mathematics	16,850	400	14,050	375	10,050	350	4,000	325	2,800	300	1,700	250	1,100	200
Statistics	7,450	325	5,200	275	2,850	250	2,300	275	2,250	250	1,300	225	950	175
Mathematics and statistics, other	4,450	150	3,500	150	2,300	150	1,200	150	950	125	700	100	250	50
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	137,050	1,025	117,450	1,050	86,600	1,050	30,850	775	19,600	750	12,900	650	6,700	425
Astronomy and astrophysics	6,350	175	5,700	175	4,800	175	900	100	650	100	350	75	300	75
Chemistry, except biochemistry	66,350	800	57,250	900	42,450	775	14,800	550	9,100	500	5,950	450	3,150	300
Inorganic chemistry	8,500	275	7,500	275	6,350	250	1,200	150	950	150	700	125	300	75
Organic chemistry	17,650	400	15,600	450	11,250	450	4,350	350	2,050	250	1,400	225	650	125
Chemistry, other, except biochemistry	40,200	625	34,100	675	24,850	575	9,250	475	6,100	375	3,850	325	2,250	250
Geosciences, atmospheric sciences, and ocean sciences	22,050	325	19,400	400	15,950	375	3,450	250	2,650	250	1,800	200	850	125

TABLE 9

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and citizenship status: 2021

(Number and SE)

Field of study	All employed		U.S. citizen						Non-U.S. citizen					
			Total		Native born		Naturalized		Total		Permanent resident		Temporary resident	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Atmospheric sciences and meteorology	4,150	100	3,550	125	2,650	100	900	75	600	75	400	75	200	50
Geological and earth sciences, geosciences	13,550	300	11,800	350	9,800	325	2,000	200	1,700	225	1,200	175	500	125
Ocean sciences and marine sciences	2,400	75	2,300	75	2,000	75	300	50	100	25	50	25	50	25
Oceanography, chemical and physical	2,000	125	1,750	125	1,500	100	250	50	250	75	150	75	50	25
Physics	42,300	675	35,100	675	23,400	650	11,700	600	7,150	425	4,800	400	2,400	300
Psychology	113,500	825	110,950	825	101,250	900	9,750	475	2,500	275	1,850	225	650	175
Clinical psychology	40,650	600	40,300	625	37,200	575	3,100	300	350	125	200	100	D	D
Counseling and applied psychology	14,600	300	14,400	275	13,050	300	1,350	200	200	75	200	75	D	D
Educational and school psychology	13,300	325	13,000	325	11,950	325	1,100	150	300	100	150	75	D	D
Industrial and organizational psychology	4,950	175	4,850	175	4,450	200	400	125	100	50	100	50	D	D
Research and experimental psychology	27,700	425	26,450	450	24,000	425	2,450	200	1,250	175	950	175	300	125
Psychology, general	7,600	275	7,450	300	6,500	275	950	150	D	D	D	D	D	D
Psychology, other	4,700	150	4,500	150	4,100	175	400	100	200	75	150	75	100	50
Social sciences	99,700	1,000	89,050	1,100	71,950	875	17,050	650	10,650	500	7,850	525	2,800	225
Economics	27,300	550	21,700	550	14,700	500	7,000	425	5,600	350	3,750	350	1,850	200
Political science and government	20,500	550	19,050	575	16,450	525	2,650	275	1,400	200	1,150	200	250	75
Political science and government	16,150	550	15,050	575	13,150	500	1,900	250	1,100	175	900	175	250	75
Public policy analysis	4,300	150	4,000	150	3,250	150	750	100	300	100	250	100	50	25
Sociology, demography, and population studies	15,650	375	14,600	400	12,700	375	1,900	200	1,050	225	850	200	200	75
Other social sciences	36,300	575	33,700	575	28,150	525	5,550	300	2,600	250	2,100	250	500	100
Anthropology	10,900	275	10,350	300	9,250	300	1,100	150	550	175	500	175	D	D
Area, ethnic, cultural, gender, and group studies	4,050	150	3,850	150	3,350	150	500	100	200	75	200	75	S	S
Geography and cartography	4,400	225	3,900	200	3,250	200	600	100	500	100	400	75	100	50
International relations and national security studies	2,150	125	1,900	125	1,450	100	450	75	250	50	200	50	50	25
Linguistics	4,500	250	4,100	250	3,050	225	1,000	175	450	100	300	75	100	50

TABLE 9

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and citizenship status: 2021

(Number and SE)

Field of study	All employed		U.S. citizen						Non-U.S. citizen					
			Total		Native born		Naturalized		Total		Permanent resident		Temporary resident	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Urban studies, affairs	1,200	100	1,100	100	800	75	250	50	100	25	50	25	*	*
Social sciences, other	9,150	275	8,600	275	6,950	250	1,600	175	550	100	450	100	100	50
Engineering	183,100	1,325	138,850	1,425	74,600	925	64,250	1,175	44,300	975	30,400	825	13,900	475
Aerospace, aeronautical, and astronautical engineering	7,150	250	5,900	250	3,550	175	2,350	225	1,250	175	900	175	350	100
Chemical engineering	21,650	500	17,250	500	10,150	375	7,100	475	4,400	350	2,950	325	1,450	200
Civil engineering	19,750	575	14,500	525	7,250	450	7,300	450	5,200	375	3,600	325	1,600	200
Electrical and computer engineering	50,400	650	35,800	700	15,150	500	20,650	625	14,650	550	10,350	475	4,250	350
Computer engineering	7,150	275	4,550	250	1,850	125	2,750	200	2,600	225	1,650	200	950	175
Electrical, electronics, and communications engineering	43,250	600	31,200	675	13,300	500	17,900	575	12,050	525	8,700	450	3,350	325
Mechanical engineering	27,500	450	20,500	625	11,000	400	9,550	500	7,000	475	4,600	475	2,400	275
Metallurgical and materials engineering	17,450	400	14,150	425	8,800	375	5,400	375	3,250	275	2,250	250	1,000	175
Other engineering	39,250	525	30,700	525	18,800	400	11,900	450	8,550	350	5,750	350	2,800	225
Agricultural engineering	1,700	100	1,300	100	650	75	650	75	400	50	250	50	100	50
Bioengineering and biomedical engineering	14,900	275	11,950	325	8,550	325	3,400	300	3,000	250	1,950	250	1,050	150
Engineering mechanics, physics, and science	3,900	200	2,950	175	1,350	100	1,600	150	950	125	750	100	200	75
Industrial and manufacturing engineering	8,700	325	6,600	275	3,500	250	3,100	250	2,100	200	1,550	200	550	100
Nuclear engineering	3,100	125	2,700	125	1,800	125	900	100	400	75	200	50	200	75
Engineering, other	6,900	250	5,200	250	2,950	200	2,200	200	1,700	150	1,050	125	700	100
Health	41,650	525	37,550	525	29,600	500	7,950	400	4,100	300	2,600	250	1,550	200
Communication disorders sciences and services	3,100	125	2,850	125	2,500	125	350	75	250	50	200	50	50	50
Hospital and medical administration services	1,300	100	1,150	100	900	75	250	50	150	50	100	50	S	S
Pharmacy, pharmaceutical sciences, and administration	7,850	250	6,350	275	3,350	250	3,000	275	1,500	175	850	150	650	150
Public health	9,400	225	8,400	250	7,100	250	1,300	150	1,000	150	550	125	450	100

TABLE 9

U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and citizenship status: 2021

(Number and SE)

Field of study	All employed		U.S. citizen						Non-U.S. citizen					
			Total		Native born		Naturalized		Total		Permanent resident		Temporary resident	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Registered nursing, nursing administration, nursing research	8,550	375	8,400	350	7,450	350	950	150	150	50	100	50	S	S
Health sciences, other	11,500	275	10,400	275	8,300	275	2,050	225	1,100	175	800	150	300	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.

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.