

TABLE 15-4

**U.S. residing employed doctoral scientists and engineers, by fine field of doctorate and primary work activity: 2023**

(Number and SE)

Field of study	All employed		Primary work activity <sup>a</sup>			
			Any R&D <sup>b</sup>		Other <sup>c</sup>	
	Number	SE	Number	SE	Number	SE
All fields	908,700	2,300	355,450	2,700	553,250	2,925
Science	667,950	2,050	251,550	2,250	416,400	2,525
Biological, agricultural, and environmental life sciences	235,050	1,175	106,750	1,400	128,300	1,350
Agricultural and food sciences	17,050	400	7,950	375	9,100	350
Agricultural sciences	900	75	400	50	550	50
Animal sciences	4,650	200	1,950	175	2,650	175
Food sciences and technology	3,600	200	1,800	200	1,800	175
Plant sciences	5,850	250	2,900	275	2,950	225
Soil sciences	2,050	100	900	75	1,200	125
Biochemistry and biophysics	29,700	475	13,900	525	15,800	550
Biochemistry	24,150	475	10,850	525	13,300	525
Biophysics	5,600	175	3,050	250	2,500	225
Cell, cellular biology, and molecular biology	32,400	525	13,800	625	18,600	575
Microbiological sciences and immunology	25,400	425	12,200	475	13,200	525
Immunology	9,800	225	5,150	275	4,650	300
Microbiological sciences	15,600	350	7,050	375	8,550	375
Natural resources and conservation	9,150	275	3,400	175	5,750	250
Fish, fisheries, wildlife, and wildlands science and management	1,950	100	950	75	1,000	100
Forestry	2,600	150	1,000	100	1,600	150
Natural resource conservation, research, management, and policy	4,600	200	1,450	150	3,100	200
Zoology	6,400	225	2,650	175	3,750	200
Other biological sciences	114,900	750	52,900	950	62,000	1,025
Biomathematics, bioinformatics, and computational biology	7,150	150	4,450	200	2,700	150
Botany and plant biology	6,300	225	2,650	225	3,650	225
Epidemiology, ecology, and population biology	18,600	325	8,800	400	9,800	425
Genetics	9,550	225	4,500	250	5,050	275
Neurobiology and neuroscience	20,300	350	9,650	475	10,650	450
Nutrition sciences	4,200	150	1,800	125	2,400	175
Pharmacology and toxicology	13,350	250	6,300	350	7,050	375
Physiology, pathology, and related sciences	15,600	325	6,400	375	9,200	375
Biological and biomedical sciences, general	14,950	325	6,300	400	8,650	425
Biological and biomedical sciences, other	4,900	200	2,050	200	2,850	200
Computer and information sciences	36,350	550	12,700	625	23,650	700
Computer science	31,050	525	10,850	625	20,200	675

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Information science, studies	2,750	125	850	125	1,900	125
Computer and information sciences, other	2,550	75	1,000	75	1,500	100
Mathematics and statistics	38,500	600	13,000	550	25,500	625
Applied mathematics	9,150	225	3,250	275	5,850	275
Mathematics	17,100	450	4,550	350	12,550	450
Statistics	8,100	275	3,900	300	4,200	300
Mathematics and statistics, other	4,150	150	1,300	125	2,850	150
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	141,800	1,125	60,700	1,125	81,100	1,225
Astronomy and astrophysics	6,450	175	2,400	175	4,050	200
Chemistry, except biochemistry	69,150	850	28,900	850	40,250	900
Inorganic chemistry	8,800	250	3,500	275	5,300	250
Organic chemistry	17,950	425	8,200	425	9,750	475
Chemistry, other, except biochemistry	42,350	625	17,200	625	25,150	675
Geosciences, atmospheric sciences, and ocean sciences	23,150	350	10,350	325	12,800	350
Atmospheric sciences and meteorology	4,450	100	2,300	125	2,150	100
Geological and earth sciences, geosciences	13,900	300	5,950	275	7,950	325
Ocean sciences and marine sciences	2,550	75	1,000	75	1,550	100
Oceanography, chemical and physical	2,250	100	1,100	100	1,150	100
Physics	43,050	775	19,050	700	23,950	750
Psychology	112,100	900	23,200	700	88,900	1,025
Clinical psychology	40,450	575	5,650	425	34,800	600
Counseling and applied psychology	14,500	300	900	150	13,600	350
Educational and school psychology	12,400	325	2,650	275	9,800	375
Industrial and organizational psychology	5,150	150	1,300	175	3,850	200
Research and experimental psychology	27,200	425	9,500	400	17,700	475
Psychology, general	7,750	300	1,950	225	5,800	300
Psychology, other	4,600	175	1,250	150	3,400	200
Social sciences	104,100	875	35,200	900	68,900	925
Economics	27,950	550	12,450	500	15,500	525
Political science and government	21,700	500	7,000	450	14,700	500
Political science and government	17,100	500	5,500	425	11,600	475
Public policy analysis	4,650	150	1,550	125	3,100	150
Sociology, demography, and population studies	15,950	375	5,200	350	10,700	400
Other social sciences	38,500	525	10,500	425	28,000	575

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	Number	SE	Number	SE	Number	SE
Anthropology	11,100	325	3,250	275	7,850	325
Area, ethnic, cultural, gender, and group studies	4,450	150	700	125	3,700	175
Geography and cartography	4,850	200	1,700	175	3,200	175
International relations and national security studies	2,350	150	450	75	1,900	125
Linguistics	5,100	225	1,150	125	3,950	225
Urban studies, affairs	1,350	100	500	75	850	100
Social sciences, other	9,350	250	2,750	225	6,600	275
Engineering	196,750	1,300	87,550	1,350	109,150	1,500
Aerospace, aeronautical, and astronautical engineering	8,150	200	3,750	200	4,400	225
Chemical engineering	23,700	500	10,650	550	13,050	600
Civil engineering	21,500	475	6,900	400	14,600	575
Electrical and computer engineering	54,000	675	25,250	775	28,750	775
Computer engineering	8,150	200	3,250	250	4,900	275
Electrical, electronics, and communications engineering	45,850	650	22,000	725	23,850	725
Mechanical engineering	28,800	625	13,700	650	15,100	625
Metallurgical and materials engineering	18,300	450	8,950	475	9,350	500
Other engineering	42,300	550	18,400	625	23,900	600
Agricultural engineering	1,650	100	650	75	1,000	100
Bioengineering and biomedical engineering	16,350	325	7,950	375	8,450	350
Engineering mechanics, physics, and science	4,300	200	1,850	175	2,450	175
Industrial and manufacturing engineering	9,150	300	3,350	300	5,750	300
Nuclear engineering	3,400	150	1,400	125	1,950	150
Engineering, other	7,500	225	3,150	225	4,300	250
Health	44,000	600	16,300	550	27,700	675
Communication disorders sciences and services	2,950	150	850	100	2,100	125
Hospital and medical administration services	1,300	75	500	75	800	75
Pharmacy, pharmaceutical sciences, and administration	8,550	250	4,350	300	4,200	250
Public health	10,400	250	4,650	250	5,750	275
Registered nursing, nursing administration, nursing research	9,100	325	2,250	250	6,900	325
Health sciences, other	11,650	325	3,700	250	7,950	350

SE = standard error.

<sup>a</sup> Primary work activity on principal job.

<sup>b</sup> R&D is defined as applied research, basic research, and experimental development.

<sup>c</sup> Other work activities includes all non-R&D activities.

**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. Primary and secondary work activities were self-defined by respondent in response to the question: "On which two activities...did you work the most hours during a typical week on this job?" 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.