

TABLE A-5a

Science, engineering, and health organizational units with nonfaculty researchers, by detailed field: 2018–20

(Number)

Field	2018	2019	2020
All surveyed fields ^a	4,987	5,460	5,671
Science	2,891	3,109	3,258
Agricultural and veterinary sciences	146	169	236
Agricultural sciences	146	169	169
Veterinary biomedical and clinical sciences ^b	na	na	67
Biological and biomedical sciences ^c	1,163	1,195	1,271
Biochemistry	101	103	118
Biology	129	126	139
Biomedical sciences	27	37	33
Biophysics	5	7	13
Biostatistics and bioinformatics	63	57	64
Biotechnology	12	12	14
Botany and plant biology	35	31	31
Cell, cellular biology, and anatomical sciences	87	88	83
Ecology and population biology	45	35	42
Epidemiology	20	20	28
Genetics	63	74	80
Microbiological sciences and immunology	108	115	122
Molecular biology	29	29	30
Neurobiology and neuroscience	92	96	101
Nutrition science	37	24	25
Pathology and experimental pathology	47	51	46
Pharmacology and toxicology	71	75	73
Physiology	94	107	116
Zoology and animal biology	33	35	37
Biological and biomedical sciences nec	65	73	76
Computer and information sciences	126	149	138
Artificial intelligence, informatics, and computer and information science topics	na	na	18
Computer and information sciences	45	55	28
Computer and information systems security	na	na	1
Computer science	52	56	57
Information science and studies	na	na	10
Information technology	na	na	4
Computer and information sciences nec	29	38	20
Geosciences, atmospheric sciences, and ocean sciences	206	226	219
Atmospheric sciences and meteorology	41	41	43
Geological and earth sciences	104	126	117
Ocean and marine sciences	44	42	43
Geosciences, atmospheric sciences, and ocean sciences nec	17	17	16
Mathematics and statistics	69	76	68
Applied mathematics	na	na	13
Mathematics	na	na	28
Mathematics and applied mathematics	49	53	na
Statistics	20	23	27
Multidisciplinary and interdisciplinary studies ^c	155	177	151
Biological and physical sciences	na	na	13
Computational science	na	na	6
Data science and data analytics	NA	NA	10
International and global studies	na	na	10
Multidisciplinary and interdisciplinary studies nec	na	na	112

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(Number)

Field	2018	2019	2020
Natural resources and conservation	118	133	126
Environmental science and studies	47	48	44
Forestry, natural resources, and conservation	71	85	82
Physical sciences	377	391	420
Astronomy and astrophysics	45	50	55
Chemistry	144	154	164
Materials sciences	23	21	24
Physics	150	145	155
Physical sciences nec	15	21	22
Psychology	114	129	167
Applied psychology	na	na	21
Clinical psychology	5	5	7
Counseling psychology	na	na	5
Counseling and applied psychology	23	32	na
Human development ^d	na	na	32
Psychology, general	64	73	77
Research and experimental psychology	22	19	25
Social sciences	417	464	462
Agricultural and natural resource economics	18	19	18
Anthropology	33	35	39
Area, ethnic, cultural, gender, and group studies	na	na	57
Criminal justice and safety studies	6	7	8
Criminology	na	na	3
Economics (except agricultural and natural resource)	41	43	48
Geography and cartography	30	35	32
Human development ^d	26	32	na
International relations and national security studies	9	11	11
Linguistics	15	14	14
Political science and government	23	28	27
Public policy analysis	62	63	73
Sociology	42	46	47
Urban studies and affairs	na	na	8
Social sciences, other ^e	na	na	77
History and philosophy of science ^e	1	2	na
Social sciences nec ^e	111	129	na
Engineering ^f	751	822	851
Aerospace, aeronautical, and astronautical engineering	26	24	29
Biological, biomedical, and biosystems engineering ^e	na	na	102
Bioengineering and biomedical engineering ^e	76	91	na
Biological and biosystems engineering ^e	9	11	na
Chemical, petroleum, and chemical-related engineering	83	89	86
Chemical engineering	71	79	75
Petroleum engineering	12	10	11
Civil, environmental, transportation and related engineering fields	107	120	127
Civil engineering	107	120	112
Architectural, environmental, construction and surveying engineering	na	na	15
Electrical, electronics, communications and computer engineering	120	128	139
Electrical, electronics, and communications engineering	120	128	127
Computer engineering	na	na	12

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(Number)

Field	2018	2019	2020
Industrial, manufacturing, systems engineering and operations research	39	40	43
Industrial and manufacturing engineering	39	40	22
Systems engineering and operations research	na	na	21
Mechanical engineering	98	105	99
Metallurgical, mining, materials and related engineering fields ^e	65	72	64
Metallurgical and materials engineering ^e	53	59	na
Mining engineering ^e	12	13	na
Other engineering	128	142	162
Agricultural engineering	17	16	15
Engineering mechanics, physics, and science	18	18	20
Nuclear engineering	13	11	11
Engineering, other ^e	na	na	116
Nanotechnology ^e	11	17	na
Engineering nec ^e	69	80	na
Health	1,345	1,529	1,562
Clinical medicine	1,044	1,195	1,268
Anesthesiology	38	42	38
Cardiology	33	37	34
Endocrinology	27	29	29
Gastroenterology	20	19	20
Hematology	22	28	27
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	55
Neurology	66	73	75
Obstetrics and gynecology	27	31	33
Oncology and cancer research	49	69	65
Ophthalmology	45	42	46
Otorhinolaryngology	29	27	28
Pediatrics	60	96	96
Psychiatry	52	47	51
Public health	119	135	137
Pulmonary disease	25	22	28
Radiological sciences	52	61	70
Surgery	113	127	127
Clinical medicine nec	267	310	309
Other health	301	334	294
Communication disorders sciences	25	23	24
Dental sciences	33	35	35
Kinesiology and exercise science	na	na	20
Nursing science	40	38	38
Pharmaceutical sciences	63	77	83
Veterinary biomedical and clinical sciences ^b	54	61	na
Other health nec	86	100	94

na = not applicable; data collected under different Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) codes or GSS code moved. NA = not available; GSS code contains Classification of Instructional Programs (CIP) codes added in 2020.

nec = not elsewhere classified.

^a Several field names changed in 2020; the field names listed in this table are the field names used in the GSS collection and reporting for 2020. For a complete list of field names from 2017 to 2020, see <https://ncses.nsf.gov/pubs/nsf21318/table/A-17>.

^b In 2020, veterinary biomedical and clinical sciences moved from other health to agriculture and veterinary sciences.

^c Prior to 2020, multidisciplinary and interdisciplinary studies was reported as a single broad field with no detailed fields; the detailed fields were

added in 2020.

^d In 2020, human development moved from social sciences to psychology.

^e Starting in 2020, some fields were combined for reporting. See technical table A-16 for more information.

^f In 2020, broad fields were added to engineering.

Note(s):

"Field" refers to the field of the unit that reports doctorate-holding nonfaculty researchers to the GSS. This file only contains fields where graduate students may be reported. Detailed fields listed as NA are comprised entirely of CIP codes added in 2020. For more information on the mapping of GSS fields and codes, see technical table A-17.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.