

TABLE A-5a

Science, engineering, and health organizational units with nonfaculty researchers, by detailed field: 2019–21

(Number)

Field	2019	2020	2021
All surveyed fields ^a	5,460	5,671	5,690
Science	3,109	3,258	3,326
Agricultural and veterinary sciences	169	236	241
Agricultural sciences	169	169	169
Veterinary biomedical and clinical sciences ^b	na	67	72
Biological and biomedical sciences	1,195	1,271	1,284
Biochemistry	103	118	118
Biology	126	139	147
Biomedical sciences	37	33	51
Biophysics	7	13	9
Biostatistics and bioinformatics	57	64	59
Biotechnology	12	14	14
Botany and plant biology	31	31	29
Cell, cellular biology, and anatomical sciences	88	83	79
Ecology and population biology	35	42	53
Epidemiology	20	28	26
Genetics	74	80	76
Microbiological sciences and immunology	115	122	107
Molecular biology	29	30	32
Neurobiology and neuroscience	96	101	96
Nutrition science	24	25	41
Pathology and experimental pathology	51	46	39
Pharmacology and toxicology	75	73	69
Physiology	107	116	106
Zoology and animal biology	35	37	31
Biological and biomedical sciences nec	73	76	102
Computer and information sciences	149	138	137
Artificial intelligence, informatics, and computer and information science topics	na	18	15
Computer and information sciences	55	28	29
Computer and information systems security	na	1	4
Computer science	56	57	54
Information science and studies	na	10	9
Information technology	na	4	4
Computer and information sciences nec	38	20	22
Geosciences, atmospheric sciences, and ocean sciences	226	219	235
Atmospheric sciences and meteorology	41	43	42
Geological and earth sciences	126	117	124
Ocean and marine sciences	42	43	50
Geosciences, atmospheric sciences, and ocean sciences nec	17	16	19
Mathematics and statistics	76	68	72
Applied mathematics	na	13	16
Mathematics	na	28	31
Mathematics and applied mathematics	53	na	na
Statistics	23	27	25
Multidisciplinary and interdisciplinary studies ^c	177	151	178
Biological and physical sciences	na	13	12
Computational science	na	6	7
Data science and data analytics	NA	10	8
International and global studies	na	10	7
Multidisciplinary and interdisciplinary studies nec	na	112	144

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(Number)

Field	2019	2020	2021
Natural resources and conservation	133	126	135
Environmental science and studies	48	44	48
Forestry, natural resources, and conservation	85	82	87
Physical sciences	391	420	410
Astronomy and astrophysics	50	55	53
Chemistry	154	164	161
Materials sciences	21	24	20
Physics	145	155	156
Physical sciences nec	21	22	20
Psychology	129	167	172
Applied psychology	na	21	25
Clinical psychology	5	7	7
Counseling psychology	na	5	6
Counseling and applied psychology	32	na	na
Human development ^d	na	32	29
Psychology, general	73	77	75
Research and experimental psychology	19	25	30
Social sciences	464	462	462
Agricultural and natural resource economics	19	18	15
Anthropology	35	39	39
Area, ethnic, cultural, gender, and group studies	na	57	47
Criminal justice and safety studies	7	8	7
Criminology	na	3	4
Economics (except agricultural and natural resource)	43	48	48
Geography and cartography	35	32	30
Human development ^d	32	na	na
International relations and national security studies	11	11	19
Linguistics	14	14	13
Political science and government	28	27	24
Public policy analysis	63	73	72
Sociology	46	47	49
Urban studies and affairs	na	8	10
Social sciences, other ^e	na	77	85
History and philosophy of science ^e	2	na	na
Social sciences nec ^e	129	na	na
Engineering ^f	822	851	829
Aerospace, aeronautical, and astronautical engineering	24	29	28
Biological, biomedical, and biosystems engineering ^e	na	102	102
Bioengineering and biomedical engineering ^e	91	na	na
Biological and biosystems engineering ^e	11	na	na
Chemical, petroleum, and chemical-related engineering	89	86	81
Chemical engineering	79	75	70
Petroleum engineering	10	11	11
Civil, environmental, transportation and related engineering fields	120	127	123
Civil engineering	120	112	108
Architectural, environmental, construction and surveying engineering	na	15	15
Electrical, electronics, communications and computer engineering	128	139	137
Electrical, electronics, and communications engineering	128	127	125
Computer engineering	na	12	12

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(Number)

Field	2019	2020	2021
Industrial, manufacturing, systems engineering and operations research	40	43	38
Industrial and manufacturing engineering	40	22	23
Systems engineering and operations research	na	21	15
Mechanical engineering	105	99	102
Metallurgical, mining, materials and related engineering fields ^e	72	64	59
Metallurgical and materials engineering ^e	59	na	na
Mining engineering ^e	13	na	na
Other engineering	142	162	159
Agricultural engineering	16	15	16
Engineering mechanics, physics, and science	18	20	20
Nuclear engineering	11	11	8
Engineering, other ^e	na	116	115
Nanotechnology ^e	17	na	na
Engineering nec ^e	80	na	na
Health	1,529	1,562	1,535
Clinical medicine	1,195	1,268	1,268
Anesthesiology	42	38	30
Cardiology	37	34	35
Endocrinology	29	29	27
Gastroenterology	19	20	27
Hematology	28	27	25
Medical clinical sciences and clinical and medical laboratory sciences	NA	55	45
Neurology	73	75	82
Obstetrics and gynecology	31	33	35
Oncology and cancer research	69	65	56
Ophthalmology	42	46	40
Otorhinolaryngology	27	28	29
Pediatrics	96	96	89
Psychiatry	47	51	49
Public health	135	137	141
Pulmonary disease	22	28	26
Radiological sciences	61	70	63
Surgery	127	127	133
Clinical medicine nec	310	309	336
Other health	334	294	267
Communication disorders sciences	23	24	24
Dental sciences	35	35	31
Kinesiology and exercise science	na	20	11
Nursing science	38	38	36
Pharmaceutical sciences	77	83	75
Veterinary biomedical and clinical sciences ^b	61	na	na
Other health nec	100	94	90

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.