

TABLE 4-5

## Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
All detailed fields	14,304	683	11,137	674	7,473	415	8,176	330	6,418	257
Science	10,146	664	7,655	647	5,333	379	4,800	318	3,713	249
Agricultural and veterinary sciences	345	94	299	94	220	56	329	75	292	67
Agricultural sciences	307	91	273	91	195	56	228	60	204	52
Veterinary biomedical and clinical sciences	38	27	26	22	25	17	101	42	88	33
Biological and biomedical sciences	2,743	507	1,682	487	1,863	290	1,798	267	1,340	205
Biochemistry	177	147	81	76	151	128	143	112	120	89
Biology	399	355	352	327	161	151	214	173	144	114
Biomedical sciences	189	142	124	97	110	93	80	59	55	41
Biophysics	40	34	4	4	40	34	16	14	10	9
Biostatistics and bioinformatics	204	122	146	103	128	84	89	62	84	55
Biotechnology	91	80	84	74	10	9	20	17	18	15
Botany and plant biology	61	45	55	43	54	39	47	32	33	25
Cell, cellular biology, and anatomical sciences	182	123	83	69	149	105	116	86	93	67
Ecology and population biology	107	88	72	59	79	66	64	51	47	40
Epidemiology	106	82	78	65	70	64	54	48	34	31
Genetics	100	71	48	40	75	60	103	67	76	49
Microbiological sciences and immunology	179	127	86	77	147	110	160	106	118	72
Molecular biology	48	45	19	19	35	32	41	37	27	22
Neurobiology and neuroscience	179	135	48	46	164	128	138	88	97	67
Nutrition science	121	98	103	88	61	56	44	32	24	22
Pathology and experimental pathology	45	41	14	14	36	34	70	48	48	41
Pharmacology and toxicology	141	100	60	55	124	91	93	76	68	58
Physiology	209	148	121	102	147	104	155	92	109	66
Zoology and animal biology	68	46	58	44	58	41	48	35	40	28
Biological and biomedical sciences nec	97	68	46	39	64	48	103	47	95	41
Computer and information sciences	1,115	431	1,017	427	319	196	201	132	198	97
Artificial intelligence, informatics, and computer and information science topics	98	69	88	64	25	21	27	20	25	19
Computer and information sciences	221	168	182	162	94	73	55	50	49	29
Computer and information systems security	178	136	173	135	11	10	4	4	5	5
Computer science	296	245	272	234	137	117	78	73	65	53
Information science and studies	132	96	121	91	32	29	16	14	17	13
Information technology	100	82	95	80	12	10	2	2	6	4
Computer and information sciences nec	90	64	86	62	8	7	19	16	31	25

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(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Geosciences, atmospheric, and ocean sciences	382	224	322	205	265	156	262	137	256	120
Atmospheric sciences and meteorology	49	46	39	37	43	41	38	28	41	29
Geological and earth sciences	254	197	219	179	164	134	148	116	136	93
Ocean and marine sciences	79	60	64	54	58	46	56	38	57	37
Geosciences, atmospheric, and ocean sciences nec	ne	ne	ne	ne	ne	ne	20	8	22	9
Mathematics and statistics	746	350	648	340	338	195	211	137	89	58
Applied mathematics	215	166	181	145	75	69	39	37	20	18
Mathematics	318	286	274	255	167	160	119	109	45	40
Statistics	213	169	193	163	96	87	53	50	24	20
Multidisciplinary and interdisciplinary sciences	493	257	405	235	159	113	211	96	197	91
Biological and physical sciences	43	35	34	27	17	16	11	10	12	11
Computational science	57	47	50	41	14	14	10	8	10	10
Data science and data analytics	102	91	99	89	10	9	30	22	19	16
International and global studies	33	30	31	28	6	5	11	11	9	6
Multidisciplinary and interdisciplinary sciences nec	258	160	191	133	112	85	149	76	147	68
Natural resources and conservation	377	213	329	202	160	105	177	102	140	76
Environmental science and studies	213	164	181	149	76	63	71	59	53	41
Forestry, natural resources, and conservation	164	90	148	89	84	55	106	60	87	50
Physical sciences	786	327	559	303	556	227	578	228	451	180
Astronomy and astrophysics	60	52	17	17	53	47	73	51	63	38
Chemistry	350	304	275	255	229	204	227	199	163	139
Materials sciences	62	50	38	33	48	41	25	21	29	20
Physics	286	234	209	192	212	188	234	180	171	126
Physical sciences nec	28	25	20	18	14	14	19	19	25	18
Psychology	1,145	469	809	419	509	242	263	141	217	119
Applied psychology	412	284	345	251	144	116	44	36	32	22
Clinical psychology	119	106	57	49	67	65	17	14	9	7
Counseling psychology	117	110	86	82	44	44	7	7	4	4
Human development	68	62	55	55	28	26	43	34	51	29
Psychology, general	245	226	187	175	94	90	111	100	92	79
Research and experimental psychology	184	127	79	61	132	98	41	35	29	26
Social sciences	2,014	409	1,585	395	944	210	770	164	533	134
Agricultural and natural resource economics	32	27	28	26	11	10	31	30	21	21
Anthropology	171	153	122	116	108	103	81	74	35	24

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	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Area, ethnic, cultural, gender, and group studies	302	137	236	125	123	67	156	59	57	22
Criminal justice and safety studies	117	108	115	108	21	21	12	11	9	9
Criminology	48	45	44	42	16	16	4	4	4	4
Economics (except agricultural and natural resource)	284	201	220	174	165	133	63	50	42	35
Geography and cartography	146	122	141	119	54	52	48	44	27	23
International relations and national security studies	103	81	100	79	12	12	19	15	26	15
Linguistics	105	92	81	74	63	57	26	24	21	20
Political science and government	206	192	153	148	126	123	64	53	35	31
Public policy analysis	137	106	104	88	56	48	77	53	86	52
Sociology and population studies	217	198	136	132	129	121	84	64	59	44
Urban studies and affairs	40	30	33	25	13	13	4	4	9	8
Social sciences, other	106	83	72	61	47	42	101	58	102	44
Engineering	2,562	332	2,254	326	1,460	235	1,200	218	953	179
Aerospace, aeronautical, and astronautical engineering	75	66	74	66	52	50	45	41	35	31
Biological, biomedical, and biosystems engineering	244	183	206	166	170	146	156	124	126	87
Chemical, petroleum, and chemical-related engineering	195	150	173	141	149	126	144	116	97	74
Chemical engineering	173	148	153	138	134	126	131	115	88	73
Petroleum engineering	22	20	20	20	15	15	13	9	9	7
Civil, environmental, transportation and related engineering fields	385	210	347	206	209	143	194	126	152	93
Civil engineering	250	198	229	194	148	137	168	119	131	86
Architectural, environmental, construction and surveying engineering	135	101	118	94	61	51	26	22	21	19
Electrical, electronics, communications and computer engineering	482	261	442	255	244	177	173	139	152	111
Electrical, electronics, and communications engineering	302	234	274	228	177	167	154	134	138	104
Computer engineering	180	134	168	130	67	63	19	16	14	12
Industrial, manufacturing, systems engineering and operations research	244	150	226	143	106	89	59	51	46	32
Industrial and manufacturing engineering	131	106	127	105	63	61	45	39	29	21
Systems engineering and operations research	113	78	99	71	43	36	14	12	17	14
Mechanical engineering	310	238	287	233	179	165	167	140	111	92
Metallurgical, mining, materials and related engineering fields	151	101	125	91	109	83	84	60	58	42
Other engineering	476	203	374	182	242	128	178	91	176	84
Agricultural engineering	36	28	31	28	29	24	22	22	15	14
Engineering mechanics, physics, and science	68	51	45	38	46	37	26	22	25	16
Nuclear engineering	28	27	27	27	25	25	11	10	10	9
Engineering, other	344	174	271	153	142	90	119	69	126	72

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	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Health	1,596	454	1,228	436	680	232	2,176	182	1,752	147
Clinical medicine	594	274	506	267	215	115	1,746	137	1,392	112
Medical clinical sciences and clinical and medical laboratory sciences	83	59	62	48	33	29	54	30	70	25
Public health	511	261	444	255	182	102	184	101	182	84
Anesthesiology	ne	ne	ne	ne	ne	ne	50	43	34	29
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	55	34	35	25
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	44	33	29	25
Gastroenterology	ne	ne	ne	ne	ne	ne	40	32	23	20
Hematology	ne	ne	ne	ne	ne	ne	28	22	24	19
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	128	61	87	47
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	49	30	40	31
Oncology and cancer research	ne	ne	ne	ne	ne	ne	119	50	85	33
Ophthalmology	ne	ne	ne	ne	ne	ne	67	52	45	38
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	34	33	28	27
Pediatrics	ne	ne	ne	ne	ne	ne	121	54	103	48
Psychiatry	ne	ne	ne	ne	ne	ne	83	54	56	44
Pulmonary disease	ne	ne	ne	ne	ne	ne	38	34	28	26
Radiological sciences	ne	ne	ne	ne	ne	ne	109	53	81	39
Surgery	ne	ne	ne	ne	ne	ne	180	59	141	48
Clinical medicine nec	ne	ne	ne	ne	ne	ne	363	76	301	61
Other health	1,002	403	722	373	465	207	430	141	360	109
Communication disorders sciences	270	243	250	238	74	64	32	31	36	35
Dental sciences	89	46	79	44	20	18	66	36	45	28
Kinesiology and exercise science	164	150	149	140	43	41	30	28	15	14
Nursing science	146	137	26	25	133	127	60	48	61	40
Pharmaceutical sciences	127	85	89	69	93	66	107	70	88	55
Other health nec	206	145	129	109	102	77	135	67	115	53

ne = not eligible.

nec = not elsewhere classified.

**Note(s):**

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Unit counts do not sum across columns. For more information on the mapping of GSS fields and codes, see technical table A-17. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "Technical Notes."

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.