

**Table 16****Doctorate recipients, by subfield of study and sex: 2020**

(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
All fields	55,283	29,886	25,392	45.9
Life sciences	12,561	5,553	7,007	55.8
Agricultural sciences and natural resources	1,472	746	725	49.3
Agricultural sciences	920	470	450	48.9
Agricultural economics	137	84	53	38.7
Agronomy, horticulture science, plant breeding, plant pathology, plant sciences-other	363	196	167	46.0
Animal nutrition, poultry science	75	39	36	48.0
Animal sciences, other	139	54	85	61.2
Food science, food technology-other	143	67	76	53.1
Soil chemistry and microbiology, soil sciences-other	63	30	33	52.4
Natural resources and conservation	476	238	237	49.8
Environmental science	201	87	114	56.7
Fishing and fisheries sciences and management	49	28	21	42.9
Forest biology, forest management, forestry sciences-other	92	60	31	33.7
Natural resources policy and environmental economics	66	26	40	60.6
Natural resources and conservation, wildlife and range management	68	37	31	45.6
Agricultural sciences and natural resources, aggregated	76	38	38	50.0
Biological and biomedical sciences	8,418	3,892	4,526	53.8
Anatomy, developmental biology	141	70	71	50.4
Bacteriology, parasitology, and virology	136	65	71	52.2
Biochemistry (biological sciences)	687	352	335	48.8
Bioinformatics	223	149	74	33.2
Biomedical sciences	409	168	241	58.9
Biometrics and biostatistics	241	114	127	52.7
Biophysics (biological sciences)	174	113	61	35.1
Botany, plant pathology, plant physiology	152	73	79	52.0
Cancer biology	305	138	167	54.8
Cell, cellular biology, and histology	168	81	87	51.8
Computational biology	137	76	61	44.5
Ecology	388	175	213	54.9
Endocrinology, human/ animal pathology	78	30	48	61.5
Entomology	124	68	56	45.2
Environmental toxicology	58	26	32	55.2
Epidemiology	357	111	246	68.9
Evolutionary biology	207	92	115	55.6
Genetics and genomics, human and animal	347	148	199	57.3
Immunology	389	172	217	55.8
Microbiology	478	200	278	58.2
Molecular biology	579	272	307	53.0
Molecular medicine	36	13	23	63.9
Neurosciences, neurobiology	974	484	490	50.3
Nutrition sciences	205	44	161	78.5
Pharmacology, human and animal	208	101	107	51.4
Physiology, human and animal	151	70	81	53.6
Plant genetics	61	38	23	37.7
Structural biology	54	33	21	38.9
Toxicology	63	24	39	61.9
Wildlife biology, zoology	76	32	44	57.9
Biological and biomedical sciences, general	649	286	363	55.9
Biotechnology, biology/ biomedical sciences-other	163	74	89	54.6

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(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
Health sciences	2,671	915	1,756	65.7
Environmental health	83	29	54	65.1
Health and behavior	62	15	47	75.8
Health services/ systems administration	170	56	114	67.1
Kinesiology, exercise science	291	162	129	44.3
Medical physics, radiological science	81	60	21	25.9
Nursing science	591	73	518	87.6
Pharmaceutical sciences	382	216	166	43.5
Public health	431	113	318	73.8
Rehabilitation, therapeutic services	116	38	78	67.2
Speech-language pathology and audiology	125	37	88	70.4
Health sciences, aggregated	339	116	223	65.8
Physical sciences and earth sciences	6,247	4,177	2,068	33.1
Chemistry	2,763	1,669	1,092	39.5
Analytical chemistry	364	187	177	48.6
Chemical biology	135	81	54	40.0
Inorganic chemistry	327	188	139	42.5
Medicinal chemistry	85	52	33	38.8
Organic chemistry	535	364	171	32.0
Physical chemistry	398	260	138	34.7
Polymer chemistry	128	84	44	34.4
Theoretical chemistry	87	64	23	26.4
Chemistry, general	532	296	234	44.0
Chemistry, other	172	93	79	45.9
Geosciences, atmospheric sciences, and ocean sciences	1,243	737	506	40.7
Atmospheric science and meteorology	230	160	70	30.4
Atmospheric physics, meteorology	52	40	12	23.1
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	178	120	58	32.6
Geological sciences	674	409	265	39.3
Geochemistry, mineralogy	53	29	24	45.3
Geology	167	99	68	40.7
Geomorphology, geological sciences-general, geological sciences-other	284	159	125	44.0
Geophysics and seismology	144	107	37	25.7
Paleontology, stratigraphy	26	15	11	42.3
Ocean and marine sciences	339	168	171	50.4
Marine biology and biological oceanography	74	33	41	55.4
Oceanography, chemical and physical	71	39	32	45.1
Ocean/ marine sciences, aggregated	194	96	98	50.5
Physics and astronomy	2,241	1,771	470	21.0
Astronomy and astrophysics	305	202	103	33.8
Astronomy	116	71	45	38.8
Astrophysics	174	121	53	30.5
Astronomy and astrophysics, other	15	10	5	33.3
Physics	1,936	1,569	367	19.0
Acoustics, optics/ photonics	215	178	37	17.2
Applied physics	154	125	29	18.8
Atomic physics, polymer physics	131	100	31	23.7
Biophysics (physics)	126	95	31	24.6
Condensed matter, low-temperature physics	376	329	47	12.5
Elementary particle physics	198	162	36	18.2

**Table 16****Doctorate recipients, by subfield of study and sex: 2020**

(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
Nuclear physics	98	78	20	20.4
Plasma, high-temperature physics	65	59	6	9.2
Physics, general	447	352	95	21.3
Physics, other	126	91	35	27.8
Mathematics and computer sciences	4,392	3,297	1,095	24.9
Computer and information sciences	2,361	1,859	502	21.3
Computer science	1,952	1,571	381	19.5
Information science, systems	148	97	51	34.5
Computer and information sciences, general	151	107	44	29.1
Computer and information sciences, other	110	84	26	23.6
Mathematics and statistics	2,031	1,438	593	29.2
Algebra	57	46	11	19.3
Analysis and functional analysis	57	48	9	15.8
Applied mathematics, computing theory	424	298	126	29.7
Computational mathematics	98	74	24	24.5
Geometry, geometric analysis	66	49	17	25.8
Logic, topology/ foundations	44	36	8	18.2
Number theory	51	37	14	27.5
Operations research, mathematics/ statistics-general, mathematics/ statistics-other	830	595	235	28.3
Statistics (mathematics)	404	255	149	36.9
Psychology and social sciences	8,946	3,588	5,358	59.9
Psychology	3,879	1,082	2,797	72.1
Behavioral analysis	47	12	35	74.5
Clinical psychology	1,282	286	996	77.7
Cognitive neuroscience	198	99	99	50.0
Cognitive psychology and psycholinguistics	112	41	71	63.4
Community psychology	42	9	33	78.6
Counseling	277	75	202	72.9
Developmental and child psychology	161	20	141	87.6
Educational psychology (psychology)	94	20	74	78.7
Experimental psychology	142	60	82	57.7
Family psychology, human development and family studies	166	33	133	80.1
Health, medical psychology	73	21	52	71.2
Industrial and organizational psychology	213	89	124	58.2
Marriage and family therapy, counseling	91	25	66	72.5
Neuropsychology, physiological psychology	29	12	17	58.6
School psychology (psychology)	144	21	123	85.4
Social psychology	190	67	123	64.7
Psychology, general	302	103	199	65.9
Psychology, aggregated	316	89	227	71.8
Social sciences	5,067	2,506	2,561	50.5
Anthropology	448	145	303	67.6
Anthropology, cultural	248	82	166	66.9
Anthropology, general	101	37	64	63.4
Anthropology, physical and biological	99	26	73	73.7
Economics	1,216	809	407	33.5
Econometrics, economics	1,171	785	386	33.0
Natural resources and environmental economics (social sciences)	45	24	21	46.7
Political science and government	637	388	249	39.1
Sociology	607	243	364	60.0

**Table 16****Doctorate recipients, by subfield of study and sex: 2020**

(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
Other social sciences	2,159	921	1,238	57.3
American, U.S. studies	57	23	34	59.6
Applied linguistics	95	37	58	61.1
Archaeology (social sciences)	116	45	71	61.2
Area, ethnic, and cultural studies	156	58	98	62.8
Criminal justice and corrections	135	54	81	60.0
Criminology	103	39	64	62.1
Demography, gerontology, statistics, urban affairs, social sciences- general, social sciences-other	295	111	184	62.4
Gender and women's studies	50	8	42	84.0
Geography	301	147	154	51.2
Health policy analysis	56	18	38	67.9
History, science and technology and society	61	34	27	44.3
International relations, international affairs	131	75	56	42.7
Linguistics	232	105	127	54.7
Public policy analysis	249	105	144	57.8
Urban, city, community and regional planning	122	62	60	49.2
Engineering	10,476	7,882	2,593	24.8
Aerospace, aeronautical, and astronautical engineering	399	329	70	17.5
Bioengineering and biomedical engineering	1,083	653	430	39.7
Chemical engineering	994	695	299	30.1
Civil engineering	796	586	210	26.4
Electrical, electronics, and communications engineering	1,973	1,630	343	17.4
Industrial and manufacturing engineering	304	209	95	31.3
Materials science engineering	880	638	242	27.5
Mechanical engineering	1,634	1,373	261	16.0
Other engineering	2,413	1,769	643	26.6
Computer engineering	479	377	102	21.3
Environmental, environmental health engineering	242	132	110	45.5
Nuclear engineering	169	134	35	20.7
Robotics	144	123	21	14.6
Structural engineering	113	99	14	12.4
Systems engineering	119	87	32	26.9
Other engineering, aggregated	1,147	817	329	28.7
Education	4,716	1,456	3,259	69.1
Education administration	927	346	580	62.6
Educational administration and supervision	150	68	81	54.0
Educational and human resource studies, development	44	16	28	63.6
Educational leadership	673	241	432	64.2
Urban education and leadership	60	21	39	65.0
Education research	2,279	665	1,614	70.8
Counseling education, counseling and guidance	232	60	172	74.1
Curriculum, instruction, educational assessment/ measurement	525	138	387	73.7
Educational policy analysis	123	48	75	61.0
Educational psychology (education)	190	45	145	76.3
Educational statistics, research methods	91	30	61	67.0
Educational/ instructional technology, media design	197	78	119	60.4
Higher education evaluation and research	408	162	246	60.3
Learning sciences	65	17	48	73.8
School psychology (education)	108	12	96	88.9
Social and philosophical foundations of education	67	24	43	64.2

**Table 16****Doctorate recipients, by subfield of study and sex: 2020**

(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
Special education	273	51	222	81.3
Teacher education	113	28	85	75.2
Teaching fields	940	292	648	68.9
Health education	50	13	37	74.0
Literacy and reading education	127	24	103	81.1
Mathematics education	122	49	73	59.8
Music education	84	48	36	42.9
Science education	139	34	105	75.5
Teaching fields, aggregated	418	124	294	70.3
Other education	457	125	332	72.6
Education, general	258	79	179	69.4
Other education, aggregated	199	46	153	76.9
Humanities and arts	4,939	2,516	2,423	49.1
Foreign languages and literature	564	223	341	60.5
French	89	29	60	67.4
German	49	22	27	55.1
Spanish	162	63	99	61.1
Other languages and literature, aggregated	264	109	155	58.7
History	887	512	375	42.3
American history, United States and Canada	319	195	124	38.9
Asian history	79	43	36	45.6
European history	148	80	68	45.9
Latin American history	42	24	18	42.9
Middle, Near East history	46	26	20	43.5
History, general	132	74	58	43.9
History, aggregated	121	70	51	42.1
Letters	1,392	589	803	57.7
American literature, United States and Canada	247	119	128	51.8
Classics	85	49	36	42.4
Comparative literature	175	82	93	53.1
English language	184	85	99	53.8
English literature, British and Commonwealth	335	112	223	66.6
Rhetoric and composition	206	72	134	65.0
Speech and rhetorical studies	33	16	17	51.5
Letters, aggregated	127	54	73	57.5
Other humanities and arts	2,096	1,192	904	43.1
African American studies, literature, and history	68	25	43	63.2
Art history, criticism, and conservation	223	45	178	79.8
Dance, drama	92	36	56	60.9
Film, cinema, video studies	83	40	43	51.8
Music	76	42	34	44.7
Musicology and ethnomusicology	126	56	70	55.6
Music performance	136	71	65	47.8
Music theory and composition	116	84	32	27.6
Philosophy, ethics	460	334	126	27.4
Religion/ religious studies, Jewish/ Judaic studies	227	139	88	38.8
Theology, religious education	214	163	51	23.8
Other humanities, aggregated	275	157	118	42.9
Other <sup>b</sup>	3,006	1,417	1,589	52.9
Business management and administration	1,466	851	615	42.0

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(Number and percent)

Field of study	Total <sup>a</sup>	Male	Female	% female
Accounting	157	82	75	47.8
Business administration and management	302	186	116	38.4
Finance	198	148	50	25.3
Human resources, organizational behavior	216	95	121	56.0
Management information systems, business statistics	109	65	44	40.4
Marketing management and research	109	58	51	46.8
Other aggregated business fields	375	217	158	42.1
Communication	593	230	363	61.2
Communication research	141	45	96	68.1
Mass communication, media studies	188	85	103	54.8
Communication, general	174	64	110	63.2
Communication, aggregated	90	36	54	60.0
Non-S&E fields nec	947	336	611	64.5
Architecture and environmental design	120	47	73	60.8
Family, consumer sciences and human sciences	91	26	65	71.4
Parks, sports, recreation, leisure and fitness	57	28	29	50.9
Public administration	221	93	128	57.9
Social work	310	71	239	77.1
Fields nec, aggregated	148	71	77	52.0

nec = not elsewhere classified; S&amp;E = science and engineering.

<sup>a</sup> Includes respondents who did not report sex.<sup>b</sup> Includes other non-S&E fields not shown separately.**Note(s):**

See table A-5 in the technical notes for a listing of aggregated fields and their constituent fine fields.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.