

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
All fields	52,159	57,439	57,806	58,131
Science and engineering	41,187	45,838	45,933	46,394
Agricultural sciences and natural resources	1,222	1,304	1,278	1,309
Agricultural, animal, plant, and veterinary sciences	806	857	856	866
Agronomy and crop science	69	68	76	71
Animal sciences	159	174	173	198
Food science and technology	175	156	178	158
Plant sciences	152	162	149	152
Soil sciences	79	100	86	84
Veterinary biomedical and clinical sciences	78	77	93	74
Agricultural, animal, plant, and veterinary sciences nec	94	120	101	129
Natural resources and conservation	416	447	422	443
Environmental science	117	145	132	149
Environmental/ natural resources management and policy	78	72	63	73
Forestry	74	69	69	68
Natural resources conservation and research	74	72	81	71
Natural resources and conservation nec	73	89	77	82
Biological and biomedical sciences	8,243	9,373	9,715	9,797
Biochemistry, biophysics, and molecular biology	1,346	1,554	1,508	1,515
Biochemistry	416	465	440	454
Biochemistry and molecular biology	263	325	311	339
Biophysics	234	251	254	228
Molecular biology	260	274	267	245
Biochemistry, biophysics, and molecular biology nec	173	239	236	249
Bioinformatics, biostatistics, and computational biology	562	688	735	736
Bioinformatics	136	169	181	186
Biostatistics	223	260	283	274
Computational biology	106	154	151	158
Bioinformatics, biostatistics, and computational biology nec	97	105	120	118
Biological and biomedical sciences, general	660	845	904	908
Biology/ biological sciences, general	330	471	520	534
Biomedical sciences, general	330	374	384	374
Cell/ cellular biology and anatomy	655	684	760	792
Cell/ cellular and molecular biology	480	522	582	627
Developmental biology and embryology	103	114	96	99
Cell/ cellular biology and anatomy nec	72	48	82	66
Ecology, evolutionary biology, and epidemiology	981	1,121	1,143	1,154
Ecology	227	238	246	244
Ecology and evolutionary biology	243	270	277	303
Epidemiology	296	386	381	376
Epidemiology and biostatistics	54	45	39	46
Evolutionary biology	68	83	84	82
Ecology, evolutionary biology, and epidemiology nec	93	99	116	103
Genetics and genomics	397	436	476	471
Genetics, general	121	122	128	133
Genome sciences and genomics	72	97	115	106
Human/ medical genetics	62	81	71	66
Molecular genetics	71	66	77	92
Genetics and genomics nec	71	70	85	74
Microbiology and immunology	972	1,088	1,092	1,092
Immunology	303	343	342	357
Microbiology and immunology	215	265	271	282
Microbiology, general	257	270	275	258

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Virology	107	123	111	91
Microbiology and immunology nec	90	87	93	104
Neurobiology and neurosciences	1,013	1,176	1,201	1,238
Cognitive neuroscience	102	131	114	113
Neurobiology	138	79	68	54
Neuroscience	685	823	877	904
Neurobiology and neurosciences nec	88	143	142	167
Pharmacology and toxicology	311	386	408	377
Pharmacology	131	164	185	183
Toxicology	106	125	95	91
Pharmacology and toxicology nec	74	97	128	103
Physiology, oncology, and cancer biology	711	764	819	848
Biomechanics	77	69	85	94
Exercise physiology and kinesiology	76	95	103	99
Oncology and cancer biology	314	318	336	333
Physiology, general	75	99	78	84
Physiology, oncology, and cancer biology nec	169	183	217	238
Biological and biomedical sciences, other	635	631	669	666
Botany and plant biology	62	45	58	70
Entomology	114	134	124	129
Plant pathology and phytopathology	119	98	105	83
Plant physiology and biology nec	60	70	68	71
Zoology and animal biology	96	84	88	104
Biological and biomedical sciences nec	184	200	226	209
Computer and information sciences	2,194	2,188	2,296	2,595
Computer science	1,545	1,485	1,605	1,772
Computer science	1,545	1,485	1,605	1,772
Computer and information sciences, other	649	703	691	823
Artificial intelligence	167	205	211	295
Computer and information sciences, general	109	129	108	132
Computer systems networking and telecommunications	113	116	91	93
Informatics and information technology	88	94	105	133
Information sciences/ studies	103	92	120	107
Computer and information sciences nec	69	67	56	63
Engineering	9,634	10,803	10,753	10,544
Aerospace, aeronautical, astronautical, and space engineering	372	586	584	597
Aerospace, aeronautical, astronautical, and space engineering, general	257	220	235	218
Mechanical and aerospace engineering	na	213	207	218
Aerospace, aeronautical, astronautical, and space engineering nec	115	153	142	161
Biological, biomedical, and biosystems engineering	1,070	1,235	1,312	1,295
Bioengineering and biomedical engineering	977	1,134	1,221	1,203
Biological/ biosystems engineering and biomedical technology	93	101	91	92
Chemical and petroleum engineering	1,202	1,253	1,245	1,247
Chemical and biomolecular engineering	189	205	211	217
Chemical engineering	801	883	862	850
Petroleum engineering	132	102	103	98
Chemical and petroleum engineering nec	80	63	69	82
Civil, environmental, and transportation engineering	1,011	1,314	1,277	1,247
Civil engineering	571	330	342	341
Civil and environmental engineering	na	501	505	475
Environmental/ environmental health engineering	93	65	58	60
Geotechnical and geoenvironmental engineering	76	87	81	69
Structural engineering	127	131	132	115

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Transportation and highway engineering	76	112	81	94
Civil, environmental, and transportation engineering nec	68	88	78	93
Electrical and computer engineering	2,047	2,129	2,119	2,022
Computer engineering	264	263	256	252
Electrical and computer engineering	1,205	1,358	1,360	1,311
Electrical and electronics engineering	512	433	435	400
Electrical and computer engineering nec	66	75	68	59
Engineering technologies	452	360	403	415
Electrical and electronic engineering technologies	80	55	72	98
Electromechanical technologies	59	90	90	88
Environmental control technologies	148	58	70	57
Engineering technologies nec	165	157	171	172
Industrial engineering and operations research	604	655	626	609
Industrial engineering	325	210	174	160
Industrial and systems engineering	na	128	134	168
Operations research	160	183	186	164
Systems and manufacturing engineering	119	134	132	117
Materials and mining engineering	670	925	912	853
Materials engineering	193	85	102	99
Materials science and engineering	429	783	762	710
Materials and mining engineering nec	48	57	48	44
Mechanical engineering	1,501	1,541	1,552	1,524
Mechanical engineering, general	1,413	1,436	1,472	1,391
Mechanical engineering nec	88	105	80	133
Engineering, other	705	805	723	735
Agricultural and natural resources engineering	77	70	80	79
Engineering mechanics, physics, and science	111	166	106	135
Nanotechnology, nanoscience, and nanoengineering	117	143	131	122
Nuclear engineering	155	163	162	157
Engineering nec	245	263	244	242
Geosciences, atmospheric, and ocean sciences	1,044	1,165	1,216	1,204
Geological and earth sciences	613	658	682	685
Geochemistry	60	42	47	53
Geology	109	79	91	86
Geology/ earth science, general	103	121	142	111
Geophysics and seismology	102	118	105	105
Hydrology and water resources science	81	89	96	88
Geological and earth sciences nec	158	209	201	242
Ocean, marine, and atmospheric sciences	431	507	534	519
Atmospheric sciences and meteorology, general	94	120	111	109
Atmospheric sciences and meteorology nec	47	95	123	107
Climatology, atmospheric chemistry/ physics	60	67	67	57
Marine biology and biological oceanography	89	97	92	103
Marine sciences	57	63	66	72
Oceanography, chemical/ physical	84	65	75	71
Health sciences	2,576	2,798	2,744	2,874
Nursing and nursing science	601	617	638	583
Nursing education	88	81	84	85
Nursing science	358	381	396	345
Nursing specialties and practice	155	155	158	153
Pharmacy and pharmaceutical sciences	408	459	442	472
Medicinal and pharmaceutical chemistry	64	75	74	88
Pharmaceutical sciences	243	281	262	261

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Pharmacy, pharmaceutical sciences, and administration nec	101	103	106	123
Public health	696	792	767	809
Environmental health	66	68	70	78
Health services research	86	118	105	107
Health/ medical physics	71	68	72	70
Public health education and promotion	94	111	112	96
Public health, general	179	211	204	218
Public health nec	200	216	204	240
Health sciences, other	871	930	897	1,010
Communication disorders sciences	127	134	109	126
Exercise science and kinesiology	92	102	90	134
Health sciences, general	64	61	61	71
Marriage and family therapy/ counseling	58	68	53	65
Medical clinical sciences	60	75	67	90
Medical, biomedical, and health informatics	60	75	59	69
Mental health, counseling, and therapy services and sciences	91	93	99	87
Rehabilitation and therapeutic sciences	120	149	158	158
Health sciences nec	199	173	201	210
Mathematics and statistics	1,906	2,143	2,054	2,004
Applied mathematics	475	478	488	442
Applied mathematics, general	265	275	265	235
Computational and applied mathematics	141	140	165	151
Applied mathematics nec	69	63	58	56
Mathematics	814	978	890	921
Algebra and number theory	69	75	71	79
Mathematics, general	639	763	687	728
Mathematics nec	106	140	132	114
Statistics	617	687	676	641
Applied statistics, general	55	70	58	45
Mathematics and statistics	128	101	70	95
Statistics	401	469	484	449
Statistics nec	33	47	64	52
Multidisciplinary/ interdisciplinary sciences	1,214	1,733	1,671	1,623
Interdisciplinary computer sciences	447	626	582	549
Computer science and engineering	118	230	187	218
Electrical engineering and computer science	224	276	250	213
Interdisciplinary computer sciences nec	105	120	145	118
Multidisciplinary/ interdisciplinary sciences, other	767	1,107	1,089	1,074
Behavioral and cognitive sciences	79	89	117	118
Computational science and engineering	104	111	132	105
Data mining and machine learning	na	259	234	220
Data science and data analytics	106	94	86	112
History/ philosophy of science, technology, and society	67	67	68	58
Nutrition sciences	137	129	128	125
Polymer science and engineering	na	62	63	68
Multidisciplinary/ interdisciplinary sciences nec	274	296	261	268
Physical sciences	4,807	5,427	5,439	5,367
Astronomy and astrophysics	263	289	323	340
Astronomy	71	109	107	117
Astrophysics	113	115	133	127
Astronomy and astrophysics nec	79	65	83	96
Chemistry	2,366	2,782	2,728	2,738
Analytical chemistry	320	366	344	363

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(Number)

Field of doctorate	2021	2022	2023	2024
Chemical biology	151	163	191	197
Chemistry, general	494	582	610	645
Inorganic chemistry	282	324	266	297
Organic chemistry	454	612	565	519
Physical chemistry	293	315	294	267
Polymer chemistry	121	98	81	85
Theoretical and computational chemistry	108	159	202	207
Chemistry nec	143	163	175	158
Materials sciences	429	385	388	357
Materials science	276	176	188	167
Materials chemistry and materials sciences nec	153	209	200	190
Physics	1,749	1,971	2,000	1,932
Applied physics	132	161	124	165
Atomic/ molecular physics	89	87	103	83
Condensed matter and materials physics	359	433	365	317
Elementary particle physics	166	151	164	163
Nuclear physics	79	104	91	85
Optics/ optical sciences	120	138	135	128
Physics and astronomy	193	232	280	236
Physics, general	337	400	430	421
Plasma and high-temperature physics	57	51	67	73
Theoretical and mathematical physics	99	101	117	118
Physics and physical sciences nec	118	113	124	143
Psychology	3,696	3,861	3,779	3,951
Clinical psychology	1,243	1,130	1,195	1,159
Clinical child psychology	52	55	51	60
Clinical psychology	1,191	1,075	1,144	1,099
Counseling and applied psychology	1,337	1,416	1,291	1,464
Applied behavior analysis	59	44	49	57
Counseling psychology	366	388	365	412
Educational psychology	229	245	247	240
Industrial and organizational psychology	181	197	169	200
School psychology	260	241	224	258
Counseling and applied psychology nec	242	301	237	297
Research and experimental psychology	651	852	802	816
Behavioral neuroscience	87	105	82	107
Cognitive psychology and psycholinguistics	106	100	111	99
Developmental and child psychology	78	114	103	109
Experimental psychology	98	130	111	107
Social psychology	143	221	189	185
Research and experimental psychology nec	139	182	206	209
Psychology, other	465	463	491	512
Human development	141	145	155	155
Psychology, general	256	265	279	295
Psychology nec	68	53	57	62
Social sciences	4,651	5,043	4,988	5,126
Anthropology	387	409	379	395
Anthropology, general	78	102	99	113
Cultural anthropology	187	198	161	177
Physical and biological anthropology	72	75	69	69
Anthropology nec	50	34	50	36
Area, ethnic, cultural, gender, and group studies	383	442	452	457
American studies	49	68	52	60

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Area studies	175	176	214	214
Ethnic studies	81	102	103	95
Area, ethnic, cultural, gender, and group studies nec	78	96	83	88
Economics	1,315	1,391	1,392	1,385
Agricultural economics	76	97	90	97
Applied economics	134	131	130	141
Development economics and international development	54	50	41	42
Econometrics and quantitative economics	146	179	202	227
Economics, general	801	826	814	768
Environmental/ natural resource economics	55	50	62	58
Economics nec	49	58	53	52
Political science and government	581	676	662	674
Political science and government, general	488	551	553	562
Political science and government nec	93	125	109	112
Public policy analysis	400	433	407	434
Education policy analysis	132	130	111	125
Health policy analysis	52	53	45	60
Public policy analysis, general	158	120	113	112
Public policy nec	58	130	138	137
Sociology, demography, and population studies	578	624	627	638
Sociology, general	501	553	556	555
Sociology, demography, and population studies nec	77	71	71	83
Social sciences, other	1,007	1,068	1,069	1,143
Applied linguistics	74	70	70	77
Archeology	83	105	91	91
Criminology	97	118	135	111
Geography and cartography	223	220	213	204
International relations and national security studies	104	129	115	131
Linguistics	203	192	194	220
Social sciences nec	223	234	251	309
Non-science and engineering	10,972	11,601	11,873	11,737
Business	1,344	1,398	1,507	1,356
Business administration and management	459	444	492	441
Business management and administration	235	297	312	226
Organizational leadership	117	54	67	92
Business administration and management nec	107	93	113	123
Business, other	885	954	1,015	915
Accounting and accounting-related	135	159	163	150
Finance and financial management	194	208	219	185
Management information systems	88	92	82	93
Management sciences	72	77	88	91
Marketing	119	146	145	136
Organizational behavior studies	103	94	99	81
Business nec	174	178	219	179
Education	3,698	3,882	3,980	3,941
Education leadership and administration	1,073	1,150	1,177	1,162
Educational leadership and administration, general	491	478	501	466
Higher education and community college administration	391	436	451	469
Education leadership and administration nec	191	236	225	227
Education research	1,203	1,178	1,252	1,222
Curriculum and instruction	425	407	413	405
Educational assessment, evaluation, and research methods	222	218	203	212
Educational/ instructional technology and media design	155	170	199	205

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Higher education evaluation and research	61	60	62	53
Student counseling and personnel services	266	245	283	275
Education research nec	74	78	92	72
Teacher education and teaching fields	1,007	1,094	1,096	1,110
Adult, continuing, and workforce education and development	66	64	61	59
Bilingual, multilingual, and multicultural education	76	62	72	66
Language and literacy education	na	103	102	98
Mathematics teacher education	75	49	73	53
Music teacher education	73	73	77	65
Special education and teaching	234	257	246	259
STEM educational methods	70	83	75	86
Teacher education, science and engineering	63	74	55	72
Teacher education, specific levels and methods	152	187	201	216
Teacher education, specific subject areas	198	142	134	136
Education, other	415	460	455	447
Education, general	267	323	322	319
Education nec	148	137	133	128
Humanities	3,108	3,367	3,357	3,305
English language and literature, letters	949	1,062	1,037	1,017
American literature (United States)	129	138	113	108
Creative writing	68	75	103	89
English language and literature, general	361	396	397	403
English literature (British and Commonwealth)	131	161	141	119
Rhetoric, composition, and writing studies	191	217	198	205
English language and literature nec	69	75	85	93
Foreign languages, literatures, and linguistics	505	538	572	539
Comparative literature	118	91	130	108
Hispanic/ Latin American languages, literatures, and linguistics	70	92	97	84
Romance languages, literatures, and linguistics	72	104	97	99
Spanish language and literature	79	92	97	77
Foreign languages, literatures, and linguistics nec	166	159	151	171
History	684	731	733	719
American history (United States)	222	245	240	229
European history	88	120	109	112
History, general	168	144	175	179
History, regional focus	133	145	139	126
History nec	73	77	70	73
Philosophy and religious studies	598	643	619	631
Philosophy	406	433	415	438
Religion/ religious studies	125	140	143	135
Philosophy and religious studies nec	67	70	61	58
Humanities, other	372	393	396	399
Bible/ biblical studies	71	90	99	84
Humanities and humanistic studies	62	79	99	125
Theological and ministerial studies	239	224	198	190
Visual and performing arts	770	835	824	874
Performing arts	490	489	487	518
Dance, drama, theatre arts, and stagecraft	82	85	83	92
Music performance	127	117	122	133
Music theory and composition	86	92	94	89
Musicology and ethnomusicology	116	112	109	106
Music nec	79	83	79	98
Visual arts, media studies, and design	280	346	337	356

**Table 3-1. Research doctorate recipients, by detailed field of doctorate: 2021–24**

(Number)

Field of doctorate	2021	2022	2023	2024
Art history, criticism, and conservation	167	208	185	210
Film, cinema, and media studies	62	74	84	88
Visual arts, media studies, and design nec	51	64	68	58
Other non-science and engineering	2,052	2,119	2,205	2,261
Communication and journalism	521	586	635	649
Applied communication, advertising, and public relations	94	103	87	106
Communication and media studies	161	145	167	142
Communication, general	85	166	194	190
Mass communication/ media studies	95	94	94	107
Communication and journalism nec	86	78	93	104
Multidisciplinary/ interdisciplinary studies	303	372	376	386
Classical and ancient studies	91	100	126	108
Interdisciplinary leadership/ leadership studies	na	108	106	149
Multidisciplinary/ interdisciplinary studies nec	212	164	144	129
Public administration and social services	489	467	505	534
Public administration	175	178	169	199
Social work and human services	314	289	336	335
Non-science and engineering, other	739	694	689	692
Architecture and architectural studies	133	99	118	137
City/ urban, community, and regional planning	102	103	103	90
Family, consumer, and human sciences	139	128	132	123
Homeland security and protective services	169	154	138	141
Law/ legal studies and research	79	71	73	97
Parks, recreation, leisure, fitness, and sport studies and management	87	113	93	73
Other non-science and engineering nec	30	26	32	31

na = not applicable; data were not collected at this level of detail in 2021.

nec = not elsewhere classified; STEM = science, technology, engineering, and mathematics.

**Note(s):**

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in table A-4. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

**Source(s):**

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