2020

Doctorate Recipients from U.S. Universities

Data Tables and Resources

National Center for Science and Engineering Statistics
Directorate for Social, Behavioral and Economic Sciences

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Data Tables

These tables present detailed data on the demographic characteristics, educational history, sources of financial support, and postgraduation plans of doctorate recipients. Explore the Survey of Earned Doctorates (SED) data further via the interactive data tool and the new Restricted Data Analysis System.

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Doctorate recipients from U.S. colleges and universities

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Table 1

Doctorate recipients from U.S. colleges and universities: 1958–2020

(Number and percent)

Year	Doctorate recipients	% change from previous year
1958	8,773	-
1959	9,213	5.0
1960	9,733	5.6
1961	10,413	7.0
1962	11,500	10.4
1963	12,728	10.7
1964	14,325	12.5
1965	16,340	14.1
1966	17,949	9.8
1967	20,403	13.7
1968	22,937	12.4
1969	25,743	12.2
1970	29,498	14.6
1971	31,867	8.0
1972	33,041	3.7
1973	33,755	2.2
1974	33,047	-2.1
1975	32,952	-0.3
1976	32,946	*
1977	31,716	-3.7
1978	30,875	-2.7
1979	31,238	1.2
1980	31,019	-0.7
1981	31,355	1.1
1982	31,108	-0.8
1983	31,280	0.6
1984	31,334	0.2
1985	31,295	-0.1
1986	31,897	1.9
1987	32,365	1.5
1988	33,497	3.5
1989	34,325	2.5
1990	36,065	5.1
1991	37,530	4.1
1992	38,886	3.6
1993	39,800	2.4
1994	41,034	3.1
1995	41,747	1.7
1996	42,437	1.7
1997	42,539	0.2
1998	42,636	0.2
1999	41,101	-3.6
2000	41,369	0.7
2001	40,744	-1.5
2002	40,031	-1.7
2003	40,762	1.8
2004	42,122	3.3
2005	43,385	3.0
2006	45,620	5.2
2007	48,132	5.5

Table 1

Doctorate recipients from U.S. colleges and universities: 1958–2020

(Number and percent)

Year	Doctorate recipients	% change from previous year
2008	48,776	1.3
2009	49,552	1.6
2010	48,028	-3.1
2011	48,909	1.8
2012	50,943	4.2
2013	52,703	3.5
2014	53,986	2.4
2015	54,886	1.7
2016	54,809	-0.1
2017	54,552	-0.5
2018	55,085	1.0
2019	55,614	1.0
2020	55,283	-0.6

* = value < |0.05%|.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 2

Doctorate-granting institutions and doctorate recipients per institution: 1973–2020

(Number, mean, and median)

Year	Doctorate-granting institutions	Doctorate recipients		
		Total	Mean (per institution)	Median (per institution)
1973	282	33,755	119.7	43.5
1974	288	33,047	114.7	41.0
1975	289	32,952	114.0	45.0
1976	291	32,946	113.2	45.0
1977	299	31,716	106.1	44.0
1978	303	30,875	101.9	39.0
1979	305	31,238	102.4	42.0
1980	313	31,019	99.1	38.0
1981	316	31,355	99.2	41.0
1982	322	31,108	96.6	35.0
1983	326	31,280	96.0	37.0
1984	326	31,334	96.1	39.5
1985	331	31,295	94.5	37.0
1986	333	31,897	95.8	38.0
1987	343	32,365	94.4	40.0
1988	345	33,497	97.1	36.0
1989	350	34,325	98.1	36.5
1990	348	36,065	103.6	43.0
1991	357	37,530	105.1	39.0
1992	360	38,886	108.0	43.5
1993	366	39,800	108.7	42.5
1994	368	41,034	111.5	43.0
1995	376	41,747	111.0	43.0
1996	384	42,437	110.5	44.0
1997	379	42,539	112.2	45.0
1998	382	42,636	111.6	44.5
1999	389	41,101	105.7	43.0
2000	403	41,369	102.7	41.0
2001	411	40,744	99.1	37.0
2002	410	40,031	97.6	38.0
2003	418	40,762	97.5	36.5
2004	413	42,122	102.0	39.0
2005	413	43,385	105.0	42.0
2006	413	45,620	110.5	41.0
2007	408	48,132	118.0	46.0
2008	415	48,776	117.5	43.0
2009	416	49,552	119.1	46.0
2010	411	48,028	116.9	44.0
2011	405	48,909	120.8	44.0
2012	412	50,943	123.6	46.5
2013	417	52,703	126.4	44.0
2014	422	53,986	127.9	47.0
2015	426	54,886	128.8	46.0
2016	430	54,809	127.5	48.0
2017	425	54,552	128.4	50.0
2018	428	55,085	128.7	48.5
2019	447	55,614	124.4	40.0
2020	449	55,283	123.1	41.0

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 3

Top 50 doctorate-granting institutions ranked by total number of doctorate recipients, by sex: 2020

(Number)

Institution	Rank	Total	Male	Female
Walden U.	1	867	276	591
U. Michigan, Ann Arbor	2	846	500	346
U. Illinois, Urbana-Champaign	3	821	505	316
U. California, Berkeley	4	797	475	322
Purdue U., West Lafayette	5	794	529	265
Texas A&M U., College Station and Health Science Center	6	772	466	306
Stanford U.	7	769	494	275
U. Texas, Austin	8	744	438	306
U. Wisconsin-Madison	9	724	374	350
Ohio State U., Columbus	10	704	400	304
Pennsylvania State U., University Park and Hershey Medical Center	11	688	389	299
U. Washington, Seattle	12	681	335	346
Columbia U. in the City of New York	13	673	362	311
U. Florida	14	650	345	305
U. Minnesota, Twin Cities	15	647	340	307
U. California, Los Angeles	16	632	381	251
Harvard U.	17	630	331	299
Massachusetts Institute of Technology	18	579	414	165
U. Maryland, College Park	19	568	328	240
U. North Carolina, Chapel Hill	20	556	254	302
Arizona State U.	21	536	304	232
North Carolina State U.	22	533	305	228
Michigan State U.	23	524	282	242
Cornell U.	24	514	277	237
Georgia Institute of Technology	25	512	377	135
U. California, San Diego	25	512	330	182
Virginia Polytechnic Institute and State U.	27	495	295	200
U. California, Davis	28	493	254	239
U. Arizona	29	473	252	221
U. Pennsylvania	30	469	255	214
U. Georgia	31	449	209	240
U. Southern California	32	437	244	193
Northwestern U.	33	433	237	196
Johns Hopkins U.	34	426	240	186
Yale U.	35	423	209	214
U. California, Irvine	36	420	241	179
U. Pittsburgh, Pittsburgh	36	420	211	209
New York U.	38	411	220	191
Duke U.	39	407	241	166
Iowa State U.	39	407	259	148
Indiana U., Bloomington	41	395	205	190
Rutgers, State U. New Jersey, New Brunswick	41	395	209	186
CUNY, Graduate Center	43	394	187	207
U. Tennessee, Knoxville	44	393	222	171
U. Colorado Boulder	45	392	249	143
Florida State U.	46	381	192	189
U. Chicago	47	370	245	125
SUNY, U. Buffalo	48	358	193	165
Texas Tech U.	49	356	172	182
Boston U.	50	337	176	161

Note(s):
Tied institutions are listed alphabetically.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 4

Top 20 doctorate-granting institutions ranked by total number of doctorate recipients, by broad field of study and sex: 2020

(Number)

Field and institution	Rank	Total	Male	Female
Life sciences[a]	-	12,561	5,553	7,007
From top 20 institutions	-	3,545	1,551	1,994
U. Florida	1	238	106	132
Johns Hopkins U.	2	235	102	133
Harvard U.	3	226	108	118
U. North Carolina, Chapel Hill	4	214	80	134
Texas A&M U., College Station and Health Science Center	5	210	105	105
U. Washington, Seattle	6	201	70	131
U. Wisconsin-Madison	7	197	94	103
Walden U.	8	193	67	126
U. California, Davis	9	184	72	112
Ohio State U., Columbus	10	173	86	87
U. Michigan, Ann Arbor	11	169	71	98
U. Minnesota, Twin Cities	12	167	72	95
U. Georgia	13	158	73	85
Pennsylvania State U., University Park and Hershey Medical Center	14	145	58	87
U. Illinois, Urbana-Champaign	15	143	72	71
Michigan State U.	16	142	80	62
Purdue U., West Lafayette	17	140	76	64
Cornell U.	18	139	48	91
U. Pittsburgh, Pittsburgh	19	137	54	83
Yale U.	20	134	57	77
Physical sciences and earth sciences	-	6,247	4,177	2,068
From top 20 institutions	-	1,953	1,346	607
U. Michigan, Ann Arbor	1	138	83	55
U. California, Berkeley	2	137	95	42
Stanford U.	3	124	97	27
U. Illinois, Urbana-Champaign	4	104	71	33
Massachusetts Institute of Technology	5	102	68	34
U. Washington, Seattle	6	98	59	39
Purdue U., West Lafayette	7	96	69	27
U. Texas, Austin	8	95	78	17
Harvard U.	9	93	61	32
U. Colorado Boulder	9	93	65	28
U. California, San Diego	11	91	55	36
Texas A&M U., College Station and Health Science Center	12	86	63	23
U. Wisconsin-Madison	13	84	53	31
U. Maryland, College Park	14	83	62	21
Columbia U. in the City of New York	15	78	54	24
Ohio State U., Columbus	15	78	49	29
U. Arizona	17	77	58	19
U. California, Irvine	17	77	50	27
Cornell U.	19	73	48	25
Pennsylvania State U., University Park and Hershey Medical Center	19	73	54	19
U. California, Los Angeles	19	73	54	19
Mathematics and computer sciences	-	4,392	3,297	1,095
From top 20 institutions	-	1,351	1,015	336
U. Illinois, Urbana-Champaign	1	95	63	32
U. California, Berkeley	2	88	74	14
Massachusetts Institute of Technology	3	81	62	19

Table 4

Top 20 doctorate-granting institutions ranked by total number of doctorate recipients, by broad field of study and sex: 2020

(Number)

Field and institution	Rank	Total	Male	Female
Carnegie Mellon U.	4	80	60	20
U. Michigan, Ann Arbor	4	80	64	16
U. Washington, Seattle	4	80	49	31
North Carolina State U.	7	75	41	34
Purdue U., West Lafayette	8	72	57	15
Georgia Institute of Technology	9	71	59	12
Stanford U.	10	68	54	14
U. California, Irvine	11	62	44	18
U. Maryland, College Park	11	62	43	19
Arizona State U.	13	61	41	20
U. Wisconsin-Madison	14	58	47	11
Pennsylvania State U., University Park and Hershey Medical Center	15	57	48	9
U. Texas, Austin	16	55	42	13
SUNY, Stony Brook U.	17	54	42	12
Ohio State U., Columbus	18	51	40	11
U. California, Los Angeles	18	51	43	8
U. California, San Diego	20	50	42	8
Psychology and social sciences	-	8,946	3,588	5,358
From top 20 institutions	-	2,286	962	1,324
Walden U.	1	357	103	254
CUNY, Graduate Center	2	127	45	82
Harvard U.	3	117	60	57
U. California, Los Angeles	4	114	55	59
Columbia U. in the City of New York	5	112	43	69
U. California, Berkeley	6	111	58	53
U. Minnesota, Twin Cities	7	110	49	61
Pennsylvania State U., University Park and Hershey Medical Center	8	109	52	57
U. Texas, Austin	8	109	49	60
U. Michigan, Ann Arbor	10	108	56	52
George Mason U.	11	104	47	57
U. Maryland, College Park	12	96	45	51
U. Wisconsin-Madison	13	95	43	52
U. Arizona	14	94	38	56
Michigan State U.	15	91	23	68
Arizona State U.	16	88	30	58
U. Chicago	17	87	54	33
Indiana U., Bloomington	18	86	33	53
U. Pennsylvania	18	86	43	43
Ohio State U., Columbus	20	85	36	49
Engineering	-	10,476	7,882	2,593
From top 20 institutions	-	3,947	3,025	922
Purdue U., West Lafayette	1	336	259	77
Georgia Institute of Technology	2	322	247	75
Stanford U.	3	260	184	76
Texas A&M U., College Station and Health Science Center	4	252	191	61
U. Michigan, Ann Arbor	5	245	180	65
U. Illinois, Urbana-Champaign	6	242	196	46
Massachusetts Institute of Technology	7	221	170	51
U. Texas, Austin	8	212	171	41
Virginia Polytechnic Institute and State U.	9	195	143	52

Table 4

Top 20 doctorate-granting institutions ranked by total number of doctorate recipients, by broad field of study and sex: 2020

(Number)

Field and institution	Rank	Total	Male	Female
North Carolina State U.	10	192	146	46
U. California, Berkeley	11	180	120	60
Pennsylvania State U., University Park and Hershey Medical Center	12	170	135	35
Ohio State U., Columbus	13	149	122	27
U. California, San Diego	14	148	112	36
Arizona State U.	15	143	112	31
Carnegie Mellon U.	15	143	109	34
Iowa State U.	17	141	105	36
U. California, Los Angeles	18	140	114	26
U. Florida	19	129	102	27
U. Maryland, College Park	20	127	107	20
Education	-	4,716	1,456	3,259
From top 20 institutions	-	1,322	403	919
Walden U.	1	124	24	100
Texas Tech U.	2	88	26	62
U. Georgia	3	75	26	49
Columbia U., Teachers C.	4	74	26	48
Ohio State U., Columbus	5	73	24	49
Michigan State U.	6	72	28	44
Pennsylvania State U., University Park and Hershey Medical Center	7	70	15	55
U. Wisconsin-Madison	8	67	19	48
U. Northern Colorado	9	66	22	44
U. Texas, Austin	10	63	15	48
Texas A&M U., College Station and Health Science Center	11	62	20	42
U. South Florida, Tampa	12	61	18	43
U. North Texas, Denton	13	60	15	45
U. Minnesota, Twin Cities	14	58	22	36
Indiana U., Bloomington	15	56	20	36
U. Florida	16	54	18	36
Columbia U. in the City of New York	17	53	19	34
U. Tennessee, Knoxville	18	50	16	34
Florida State U.	19	48	22	26
U. Maryland, College Park	19	48	8	40
Humanities and arts	-	4,939	2,516	2,423
From top 20 institutions	-	1,575	775	800
Columbia U. in the City of New York	1	125	69	56
CUNY, Graduate Center	2	122	64	58
U. California, Berkeley	3	98	47	51
Harvard U.	4	92	38	54
Yale U.	5	90	38	52
New York U.	6	89	44	45
U. Chicago	7	85	51	34
U. California, Los Angeles	8	80	40	40
Indiana U., Bloomington	9	78	41	37
U. Texas, Austin	10	77	31	46
U. Wisconsin-Madison	11	71	27	44
Arizona State U.	12	67	30	37
Princeton U.	12	67	34	33
Ohio State U., Columbus	14	65	29	36
U. North Carolina, Chapel Hill	14	65	27	38

Table 4

Top 20 doctorate-granting institutions ranked by total number of doctorate recipients, by broad field of study and sex: 2020

(Number)

Field and institution	Rank	Total	Male	Female
U. Illinois, Urbana-Champaign	16	62	28	34
U. Colorado Boulder	17	61	32	29
U. Notre Dame	17	61	42	19
Duke U.	19	60	29	31
U. Pennsylvania	19	60	34	26
Other[b]	-	3,006	1,417	1,589
From top 20 institutions	-	940	429	511
Walden U.	1	184	79	105
U. Texas, Austin	2	55	21	34
Texas Tech U.	3	52	32	20
U. Illinois, Urbana-Champaign	3	52	29	23
Regent U.	5	48	23	25
U. North Carolina, Chapel Hill	6	42	20	22
North Carolina State U.	7	41	13	28
U. Pennsylvania	7	41	20	21
Indiana U., Bloomington	9	40	23	17
Columbia U. in the City of New York	10	38	15	23
U. Florida	10	38	14	24
New York U.	12	36	19	17
Purdue U., West Lafayette	12	36	19	17
Michigan State U.	14	35	18	17
U. Michigan, Ann Arbor	14	35	19	16
Arizona State U.	16	34	16	18
U. Minnesota, Twin Cities	16	34	14	20
U. Southern California	18	33	10	23
U. Washington, Seattle	18	33	12	21
U. Wisconsin-Madison	18	33	13	20

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[b] Includes other non-science and engineering fields not shown separately.

Note(s):
Tied institutions are listed alphabetically.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 5

State or location of doctorate institution ranked by total number of doctorate recipients, by sex: 2020

(Number)

State or location	Rank	Total	Male	Female
California	1	5,988	3,396	2,591
Texas	2	4,201	2,324	1,875
New York	3	4,168	2,174	1,994
Massachusetts	4	2,815	1,571	1,244
Pennsylvania	5	2,602	1,433	1,169
Illinois	6	2,435	1,382	1,052
Florida	7	2,386	1,246	1,140
Michigan	8	1,967	1,093	874
Ohio	9	1,953	1,054	899
North Carolina	10	1,873	987	886
Indiana	11	1,613	970	643
Minnesota	12	1,545	626	919
Virginia	13	1,532	797	735
Georgia	14	1,484	821	663
Maryland	15	1,269	684	585
Colorado	16	1,079	630	449
Arizona	17	1,052	576	476
Tennessee	18	1,023	533	490
Washington	19	1,015	514	501
New Jersey	20	991	535	456
Wisconsin	21	976	509	467
Missouri	22	960	552	408
Connecticut	23	764	362	402
Iowa	24	727	417	310
Alabama	25	692	368	324
Louisiana	26	638	364	274
South Carolina	27	603	304	299
District of Columbia	28	579	285	294
Oregon	29	551	290	261
Kansas	30	548	306	242
Utah	31	543	326	217
Kentucky	32	504	270	234
Oklahoma	33	492	272	220
Mississippi	34	445	225	220
Nebraska	35	361	183	178
Rhode Island	36	311	150	161
New Mexico	37	300	135	165
Arkansas	38	270	159	111
Nevada	39	251	133	118
Delaware	40	218	117	101
West Virginia	41	214	119	95
New Hampshire	42	198	101	97
Hawaii	43	195	83	112
North Dakota	44	189	103	86
Puerto Rico	45	129	49	80
South Dakota	46	126	79	47
Montana	47	120	60	60
Idaho	48	114	71	43
Wyoming	49	94	62	32
Maine	50	69	31	37

Table 5

State or location of doctorate institution ranked by total number of doctorate recipients, by sex: 2020

(Number)

State or location	Rank	Total	Male	Female
Vermont	51	57	30	27
Alaska	52	54	25	29

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 6

Doctorates recipients, by state or location of doctorate institution, broad field of study, and sex: 2020

(Number)

State or location	Total[a]		Life sciences[b]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[c]	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
United States[d]	29,886	25,392	5,553	7,007	4,177	2,068	3,297	1,095	3,588	5,358	7,882	2,593	1,456	3,259	2,516	2,423	1,417	1,589
Alabama	368	324	75	111	46	17	34	10	32	52	112	23	28	82	11	11	30	18
Alaska	25	29	9	11	8	6	D	D	D	D	D	D	D	D	D	D	D	D
Arizona	576	476	81	103	93	33	59	26	73	117	159	49	29	68	52	53	30	27
Arkansas	159	111	41	38	18	6	16	5	16	18	34	10	9	19	13	10	12	5
California	3,396	2,591	528	661	591	264	452	111	445	675	911	323	92	188	301	263	76	106
Colorado	630	449	96	106	140	54	49	16	53	71	195	54	40	86	38	40	19	22
Connecticut	362	402	92	145	54	35	34	12	62	77	47	31	D	D	55	69	D	D
Delaware	117	101	16	27	21	16	D	D	19	20	38	19	D	D	5	10	0	0
District of Columbia	285	294	42	69	16	13	24	13	74	93	40	12	18	30	56	32	15	32
Florida	1,246	1,140	202	301	179	98	154	56	139	251	351	104	91	180	74	76	56	74
Georgia	821	663	160	220	92	49	100	25	82	114	259	78	34	66	56	60	38	51
Hawaii	83	112	17	27	15	16	D	D	20	26	D	D	6	22	8	12	D	D
Idaho	71	43	12	13	17	6	D	D	D	D	22	5	D	D	D	D	D	D
Illinois	1,382	1,052	210	239	195	86	162	58	174	240	370	117	47	99	147	133	77	80
Indiana	970	643	141	143	125	60	116	31	79	114	306	91	56	90	97	74	50	40
Iowa	417	310	86	95	51	24	39	23	43	46	129	42	18	44	25	23	26	13
Kansas	306	242	77	66	35	19	21	10	45	41	70	24	18	39	21	19	19	24
Kentucky	270	234	65	84	18	8	26	12	34	42	43	17	14	26	52	30	18	15
Louisiana	364	274	84	66	50	28	35	8	42	61	74	23	12	38	41	32	26	18
Maine	31	37	9	13	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Maryland	684	585	164	249	101	37	89	42	67	98	182	39	23	59	38	35	20	26
Massachusetts	1,571	1,244	325	351	256	122	166	57	216	270	389	156	39	98	122	131	58	59
Michigan	1,093	874	180	206	156	82	135	41	113	192	334	109	78	125	56	73	41	46
Minnesota	626	919	146	240	42	21	30	7	152	315	96	37	46	136	21	38	93	125
Mississippi	225	220	56	45	24	23	10	6	22	37	41	10	33	71	18	11	21	17
Missouri	552	408	118	122	68	39	46	9	61	88	148	34	20	42	70	47	21	27
Montana	60	60	26	23	11	8	D	D	8	12	D	D	D	D	D	D	D	D
Nebraska	183	178	63	62	16	12	D	D	23	44	43	14	10	21	7	12	D	D
Nevada	133	118	23	20	19	11	D	D	25	31	32	13	8	31	9	7	D	D
New Hampshire	101	97	31	50	14	12	D	D	11	10	19	14	D	D	D	D	D	D
New Jersey	535	456	84	95	78	39	71	24	66	98	121	55	22	52	70	64	23	29
New Mexico	135	165	14	28	29	11	D	D	17	39	34	15	18	37	5	20	D	D
New York	2,174	1,994	384	520	290	153	262	79	304	510	440	157	93	189	316	285	85	101

Table 6

Doctorates recipients, by state or location of doctorate institution, broad field of study, and sex: 2020

(Number)

State or location	Total[a]		Life sciences[b]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[c]	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
North Carolina	987	886	217	305	90	63	120	55	119	134	265	96	33	83	83	80	60	70
North Dakota	103	86	24	34	8	8	D	D	5	13	40	7	9	15	D	D	D	D
Ohio	1,054	899	219	239	161	80	87	31	94	160	304	81	79	161	68	80	42	67
Oklahoma	272	220	51	62	43	15	12	6	26	39	69	22	19	46	24	17	28	13
Oregon	290	261	67	85	58	24	38	16	27	67	69	16	13	22	D	D	D	D
Pennsylvania	1,433	1,169	229	330	164	77	196	57	163	218	422	143	64	127	126	124	69	93
Puerto Rico	49	80	11	18	D	D	D	D	18	50	D	D	D	D	D	D	0	0
Rhode Island	150	161	25	47	26	23	22	12	23	26	23	13	D	D	26	33	D	D
South Carolina	304	299	65	93	36	27	41	10	31	44	79	29	17	54	14	12	21	30
South Dakota	79	47	31	20	9	5	D	D	8	9	14	8	D	D	D	D	D	D
Tennessee	533	490	111	141	61	30	45	14	48	75	151	51	44	103	45	57	28	19
Texas	2,324	1,875	388	501	307	134	235	81	206	331	752	212	122	329	175	157	139	130
Utah	326	217	55	58	54	23	38	17	35	50	92	21	23	32	16	7	13	9
Vermont	30	27	8	11	D	D	D	D	5	5	D	D	D	D	D	D	0	0
Virginia	797	735	129	160	96	53	70	33	111	141	240	90	53	152	43	44	55	62
Washington	514	501	102	173	80	45	61	42	58	75	145	58	18	43	26	31	24	34
West Virginia	119	95	24	24	D	D	D	D	19	20	32	6	D	D	13	12	8	9
Wisconsin	509	467	130	147	68	34	51	13	58	71	102	50	36	67	48	59	16	26
Wyoming	62	32	10	10	20	5	D	D	6	6	15	5	D	D	0	0	D	D

D = suppressed to avoid disclosure of confidential information.

[a] Excludes doctorate recipients who did not report sex.
[b] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[c] Includes other non-science and engineering fields not shown separately.
[d] Includes the 50 states, the District of Columbia, and Puerto Rico.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																		Engineering								
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
All institutions	55,283	12,561	1,472	8,418	2,671	6,247	2,763	1,243	2,241	4,392	2,361	2,031	8,946	3,879	448	1,216	637	607	2,159	10,476	399	1,083	994	796	1,973	304	880	1,634	2,413
Alabama	692	186	19	117	50	63	21	16	26	44	23	21	84	53	1	15	5	2	8	135	6	6	8	19	19	13	14	24	26
Alabama A&M U.	9	3	3	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Alabama State U.	18	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auburn U., Auburn	269	75	15	37	23	18	8	4	6	20	6	14	28	18	0	6	3	0	1	62	2	1	6	8	7	13	4	14	7
Tuskegee U.	14	11	0	11	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
U. Alabama, Birmingham	149	84	1	61	22	10	4	0	6	5	3	2	14	12	0	0	0	2	0	19	0	3	0	5	0	0	1	1	9
U. Alabama, Huntsville	40	2	0	2	0	11	0	4	7	6	5	1	0	0	0	0	0	0	0	21	1	0	0	1	5	0	0	6	8
U. Alabama, Tuscaloosa	157	5	0	3	2	20	9	6	5	7	3	4	32	16	1	9	2	0	4	30	3	1	2	5	7	0	8	3	1
U. South Alabama	36	4	0	1	3	2	0	2	0	6	6	0	7	7	0	0	0	0	0	2	0	1	0	0	0	0	0	0	1
Alaska	54	20	9	11	0	14	1	13	0	1	0	1	12	9	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0
U. Alaska, Anchorage	5	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Alaska, Fairbanks	49	20	9	11	0	14	1	13	0	1	0	1	7	4	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0
Arizona	1,052	184	30	105	49	126	27	36	63	85	45	40	190	40	17	19	5	15	94	208	4	12	20	16	54	10	18	16	58
Arizona State U.	536	62	8	40	14	47	14	16	17	61	37	24	88	27	6	7	1	1	46	143	4	7	10	12	41	9	16	11	33
Northern Arizona U.	35	12	7	5	0	2	0	1	1	1	1	0	7	1	0	0	1	0	5	1	0	1	0	0	0	0	0	0	0
Prescott C.	8	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
U. Arizona	473	109	14	60	35	77	13	19	45	23	7	16	94	12	11	12	3	14	42	64	0	4	10	4	13	1	2	5	25
Arkansas	270	79	23	37	19	24	10	3	11	21	17	4	34	17	4	2	0	0	11	44	0	3	5	4	14	3	2	1	12
Arkansas State U., Jonesboro	9	4	2	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
U. Arkansas for Medical Sciences	25	25	0	14	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Arkansas, Fayetteville	193	47	21	20	6	15	5	3	7	9	6	3	25	11	4	2	0	0	8	36	0	3	5	4	14	3	2	1	4
U. Arkansas, Little Rock	32	1	0	1	0	9	5	0	4	12	11	1	1	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	8
U. Central Arkansas	11	2	0	0	2	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
California	5,988	1,189	83	953	153	855	357	182	316	563	318	245	1,120	518	53	158	90	76	225	1,235	37	170	96	62	291	4	140	195	240
Alliant International U., San Diego	82	0	0	0	0	0	0	0	0	0	0	0	77	76	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																	Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Azusa Pacific U.	22	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biola U.	29	0	0	0	0	0	0	0	0	0	0	0	14	11	0	0	0	0	3	0	0	0	0	0	0	0	0	0
California Institute of Integral Studies	40	0	0	0	0	1	0	0	1	0	0	0	17	13	0	0	0	0	4	0	0	0	0	0	0	0	0	0
California Institute of Technology	146	21	2	19	0	60	21	4	35	13	5	8	4	1	0	2	0	0	1	48	8	11	5	2	7	0	5	6	4
California Institute of the Arts	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chapman U.	24	2	0	0	2	0	0	0	0	9	1	8	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	11	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claremont Graduate U.	137	3	0	0	3	0	0	0	0	21	13	8	48	23	0	10	10	0	5	7	0	1	0	0	0	0	0	0	6
Claremont School of Theology	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fielding Graduate U.	79	0	0	0	0	0	0	0	0	0	0	0	65	59	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0
Frederick S. Pardee RAND Graduate School	16	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
Fuller Theological Seminary	34	0	0	0	0	0	0	0	0	0	0	0	20	19	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Graduate Theological Union	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Keck Graduate Institute	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
La Sierra U.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loma Linda U.	35	12	0	6	6	1	0	1	0	0	0	0	19	17	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0
Naval Postgraduate School	20	0	0	0	0	5	0	3	2	1	1	0	3	0	0	0	0	0	3	11	1	0	0	0	3	0	0	2	5
Pacifica Graduate Institute	42	0	0	0	0	0	0	0	0	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Palo Alto U.	68	0	0	0	0	0	0	0	0	0	0	0	68	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Diego State U., San Diego	44	13	0	8	5	8	5	3	0	7	3	4	9	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																		Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences																
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Sanford-Burnham Medical Research Institute, La Jolla	6	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara U.	4	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1
Saybrook U.	31	10	0	0	10	0	0	0	0	0	0	0	17	16	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Scripps Research Institute	40	21	0	21	0	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sofia U.	10	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stanford U.	769	127	4	123	0	124	33	26	65	68	39	29	77	14	8	17	17	7	14	260	14	31	22	17	68	0	17	50	41
U. California, Berkeley	797	122	14	99	9	137	63	19	55	88	49	39	111	12	9	29	15	9	37	180	0	15	19	8	29	1	13	38	57
U. California, Davis	493	184	42	132	10	57	29	14	14	45	21	24	70	19	3	11	8	5	24	81	4	13	6	11	18	0	5	12	12
U. California, Irvine	420	67	1	51	15	77	44	18	15	62	36	26	76	23	6	12	6	13	16	83	0	14	2	8	22	0	11	13	13
U. California, Los Angeles	632	114	1	90	23	73	35	12	26	51	20	31	114	29	13	22	12	9	29	140	2	23	16	8	33	0	25	26	7
U. California, Merced	63	17	5	11	1	12	5	1	6	7	4	3	12	7	0	0	2	2	1	11	0	2	0	0	1	0	2	3	3
U. California, Riverside	271	57	8	49	0	39	16	7	16	36	24	12	42	12	4	10	7	5	4	55	0	6	5	0	13	0	12	13	6
U. California, San Diego	512	104	0	100	4	91	30	35	26	50	35	15	64	16	5	22	5	6	10	148	1	23	3	1	29	0	24	15	52
U. California, San Francisco	133	109	0	90	19	5	5	0	0	0	0	0	6	0	2	0	0	3	1	13	0	13	0	0	0	0	0	0	0
U. California, Santa Barbara	281	27	4	23	0	51	16	9	26	35	22	13	51	18	3	8	2	6	14	61	0	1	6	0	21	0	19	5	9
U. California, Santa Cruz	150	35	2	33	0	36	6	13	17	25	10	15	26	3	0	5	4	4	10	11	0	0	0	0	8	0	1	0	2
U. of the Pacific	15	8	0	2	6	5	4	1	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
U. of the West	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. San Diego	21	13	0	0	13	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
U. San Francisco	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Southern California	437	102	0	78	24	54	26	16	12	43	33	10	50	15	0	9	2	5	19	123	7	17	12	7	38	3	5	12	22
Colorado	1,079	202	14	144	44	194	55	69	70	65	27	38	124	62	4	15	8	10	25	249	17	7	34	29	43	0	13	34	72
Colorado School of Mines	126	1	0	1	0	34	3	26	5	5	3	2	3	0	0	3	0	0	0	83	0	0	14	6	7	0	7	12	37
Colorado State U., Fort Collins	245	88	11	64	13	54	29	18	7	13	8	5	27	12	0	8	1	4	2	35	0	1	2	11	12	0	0	3	6

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																		Engineering								
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
U. Colorado Boulder	392	29	2	26	1	93	17	25	51	35	13	22	50	12	4	4	6	6	18	97	17	1	18	11	14	0	4	15	17
U. Colorado Colorado Springs	25	0	0	0	0	3	0	0	3	2	1	1	1	1	0	0	0	0	0	11	0	0	0	0	1	0	0	0	10
U. Colorado Denver	100	68	1	45	22	1	0	0	1	5	1	4	6	6	0	0	0	0	0	8	0	4	0	1	0	0	0	3	0
U. Denver	95	6	0	5	1	9	6	0	3	2	1	1	23	17	0	0	1	0	5	15	0	1	0	0	9	0	2	1	2
U. Northern Colorado	96	10	0	3	7	0	0	0	0	3	0	3	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Connecticut	764	237	16	189	32	89	39	7	43	46	18	28	139	43	9	26	24	9	28	78	0	19	7	4	13	0	12	7	16
U. Bridgeport	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Connecticut, Storrs	326	99	11	64	24	22	15	2	5	31	12	19	61	32	1	10	3	4	11	44	0	5	3	4	8	0	7	7	10
U. Hartford	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. New Haven	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Wesleyan U.	10	4	0	4	0	2	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yale U.	423	134	5	121	8	65	22	5	38	11	4	7	76	11	8	16	21	5	15	34	0	14	4	0	5	0	5	0	6
Delaware	218	43	11	22	10	37	15	12	10	20	9	11	39	8	0	10	2	4	15	57	1	1	14	6	10	0	8	7	10
Delaware State U.	7	1	0	1	0	4	2	0	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Delaware	211	42	11	21	10	33	13	12	8	18	9	9	39	8	0	10	2	4	15	57	1	1	14	6	10	0	8	7	10
District of Columbia	579	111	1	89	21	29	13	1	15	37	24	13	167	48	5	38	22	4	50	52	2	6	0	3	10	0	2	6	23
American U.	47	3	0	3	0	0	0	0	0	0	0	0	30	8	1	11	2	0	8	0	0	0	0	0	0	0	0	0	0
Catholic U. of America	104	21	0	8	13	5	0	0	5	3	3	0	8	5	0	0	2	0	1	8	0	3	0	1	0	0	0	1	3
Gallaudet U.	16	5	0	1	4	0	0	0	0	0	0	0	7	6	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
George Washington U.	186	18	0	17	1	7	2	1	4	23	16	7	43	11	4	10	5	0	13	40	2	3	0	2	7	0	2	4	20
Georgetown U.	120	35	0	35	0	13	10	0	3	2	2	0	39	2	0	11	8	0	18	0	0	0	0	0	0	0	0	0	0
Howard U.	106	29	1	25	3	4	1	0	3	9	3	6	40	16	0	6	5	4	9	4	0	0	0	0	3	0	0	1	0
Florida	2,386	503	77	275	151	277	120	57	100	210	129	81	390	193	27	19	21	22	108	455	25	30	23	56	89	23	23	69	117
Barry U.	17	4	0	0	4	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Embry-Riddle Aeronautical U., Daytona Beach	23	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	21	12	0	0	0	1	0	0	4	4
Florida A&M U.	16	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	1	3	1	1	0	0	1
Florida Atlantic U.	99	21	0	13	8	7	3	1	3	13	7	6	10	9	0	0	0	0	1	17	0	1	0	0	4	0	0	6	6
Florida Institute of Technology	79	2	0	2	0	8	4	0	4	19	9	10	12	12	0	0	0	0	0	32	5	2	1	2	7	0	0	3	12

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Florida International U.	186	33	2	25	6	20	12	5	3	8	8	0	41	15	6	3	2	0	15	43	0	4	0	6	16	0	4	5	8
Florida State U.	381	45	1	34	10	63	26	15	22	36	11	25	77	37	0	7	7	7	19	35	0	1	3	5	10	5	4	4	3
Nova Southeastern U.	134	25	0	0	25	1	0	1	0	28	28	0	66	34	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0
U. Central Florida	261	17	0	13	4	43	11	0	32	44	32	12	22	9	0	0	0	6	7	95	2	0	0	17	21	7	3	19	26
U. Florida	650	238	71	109	58	66	37	6	23	27	12	15	75	29	13	4	7	3	19	129	6	11	14	13	12	2	12	16	43
U. Miami	204	62	2	44	16	19	4	14	1	5	3	2	35	26	0	3	1	2	3	25	0	7	0	3	1	5	0	6	3
U. South Florida, Tampa	327	55	1	34	20	50	23	15	12	30	19	11	48	19	8	2	4	4	11	51	0	4	4	7	16	3	0	6	11
U. West Florida	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	1,484	380	46	281	53	141	75	20	46	125	69	56	196	96	10	14	22	10	44	337	28	38	22	18	69	11	32	44	75
Clark Atlanta U.	23	1	0	1	0	7	7	0	0	0	0	0	7	0	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0
Emory U.	233	106	0	95	11	24	20	0	4	12	6	6	38	14	8	0	5	5	6	0	0	0	0	0	0	0	0	0	0
Georgia Institute of Technology	512	24	1	21	2	52	14	13	25	71	51	20	22	9	0	2	0	0	11	322	28	35	22	18	68	11	32	43	65
Georgia Regents U.	30	30	0	29	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia State U.	193	49	0	38	11	19	9	0	10	13	6	7	49	24	0	11	3	4	7	0	0	0	0	0	0	0	0	0	0
Kennesaw State U.	27	0	0	0	0	0	0	0	0	7	0	7	5	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0
Mercer U.	6	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehouse School of Medicine	6	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Georgia	449	158	45	91	22	39	25	7	7	22	6	16	70	44	2	1	9	1	13	15	0	3	0	0	1	0	0	1	10
U. West Georgia	5	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	195	44	4	31	9	31	3	19	9	11	8	3	46	5	6	3	5	4	23	10	0	2	0	5	2	0	0	1	0
U. Hawaii, Manoa	195	44	4	31	9	31	3	19	9	11	8	3	46	5	6	3	5	4	23	10	0	2	0	5	2	0	0	1	0
Idaho	114	25	10	11	4	23	1	15	7	7	5	2	10	7	0	0	0	0	3	27	1	1	2	4	8	0	5	2	4
Boise State U.	28	3	0	3	0	8	0	8	0	3	3	0	1	0	0	0	0	0	1	10	0	0	0	0	4	0	5	0	1
Idaho State U.	33	4	0	1	3	1	0	0	1	0	0	0	7	7	0	0	0	0	0	5	0	0	0	0	1	0	0	1	3
U. Idaho	53	18	10	7	1	14	1	7	6	4	2	2	2	0	0	0	0	0	2	12	1	1	2	4	3	0	0	1	0
Illinois	2,435	449	48	306	95	281	158	17	106	220	108	112	414	152	25	96	39	37	65	487	8	48	40	47	73	16	64	91	100
Benedictine U.	11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Chicago Theological Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
DePaul U.	17	0	0	0	0	0	0	0	0	2	2	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Garrett-Evangelical Theological Seminary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois Institute of Technology	82	2	0	2	0	10	6	0	4	11	9	2	12	12	0	0	0	0	0	30	0	5	5	5	7	0	1	2	5
Illinois State U.	41	8	0	4	4	0	0	0	0	1	0	1	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institute for Clinical Social Work, Chicago	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loyola U., Chicago	70	18	0	15	3	3	3	0	0	0	0	0	19	11	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0
Lutheran School of Theology, Chicago	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
National Louis U.	7	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Illinois U.	67	14	0	7	7	9	5	0	4	7	0	7	16	12	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0
Northwestern U.	433	79	0	72	7	56	38	3	15	26	14	12	77	24	4	20	15	6	8	123	0	16	15	3	10	7	33	20	19
Roosevelt U.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rosalind Franklin U. of Medicine and Science	10	5	0	5	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rush U.	12	12	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern Illinois U., Carbondale	135	19	4	13	2	9	6	0	3	6	2	4	41	20	3	6	1	3	8	13	0	0	0	0	2	0	0	2	9
Toyota Technological Institute, Chicago	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Chicago	370	55	1	47	7	71	37	6	28	38	6	32	87	7	8	35	11	12	14	8	0	0	3	0	0	0	0	0	5
U. Illinois, Chicago	322	94	1	48	45	19	14	1	4	33	15	18	49	10	1	15	4	6	13	71	0	16	6	8	8	5	3	14	11
U. Illinois, Urbana-Champaign	821	143	42	86	15	104	49	7	48	95	59	36	82	26	9	17	5	4	21	242	8	11	11	31	46	4	27	53	51
Wheaton C., Wheaton	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indiana	1,613	284	46	189	49	185	105	28	52	147	79	68	193	64	17	21	23	16	52	397	53	19	31	31	86	19	29	58	71
Ball State U.	29	2	1	0	1	1	0	1	0	0	0	0	16	14	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Indiana State U.	52	3	0	3	0	1	0	1	0	0	0	0	3	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	2
Indiana U., Bloomington	395	54	3	36	15	44	27	7	10	36	25	11	86	20	10	9	8	8	31	1	0	0	0	0	0	0	0	0	1
Indiana U.-Purdue U., Indianapolis	106	68	0	55	13	6	4	0	2	10	5	5	8	4	0	1	0	0	3	1	0	0	0	0	1	0	0	0	0

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Purdue U., West Lafayette	794	140	41	79	20	96	59	14	23	72	38	34	44	15	2	7	4	3	13	336	45	13	22	25	71	19	29	56	56
U. Notre Dame	237	17	1	16	0	37	15	5	17	29	11	18	36	9	5	4	11	5	2	57	8	6	9	6	14	0	0	2	12
Iowa	727	181	37	106	38	75	49	7	19	62	17	45	89	46	2	19	2	7	13	171	8	5	15	20	25	10	7	36	45
Iowa State U.	407	100	37	56	7	43	28	2	13	36	8	28	46	20	0	13	0	5	8	141	8	0	11	19	24	4	7	27	41
Maharishi U. of Management	6	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Ambrose U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Iowa	304	80	0	50	30	32	21	5	6	26	9	17	39	22	2	6	2	2	5	30	0	5	4	1	1	6	0	9	4
U. Northern Iowa	8	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kansas	548	143	45	65	33	54	35	2	17	31	10	21	86	44	1	20	1	6	14	94	8	6	7	19	13	11	0	12	18
Kansas State U.	203	69	45	20	4	18	8	0	10	14	2	12	31	12	0	10	0	3	6	39	0	1	3	7	5	7	0	5	11
U. Kansas	310	72	0	45	27	32	23	2	7	9	4	5	47	24	1	10	1	3	8	43	6	5	4	12	6	0	0	3	7
Wichita State U.	35	2	0	0	2	4	4	0	0	8	4	4	8	8	0	0	0	0	0	12	2	0	0	0	2	4	0	4	0
Kentucky	504	149	16	78	55	26	17	3	6	38	15	23	76	36	4	11	2	2	21	60	0	6	11	5	9	4	5	13	7
Asbury Theological Seminary	12	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Southern Baptist Theological Seminary	22	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Kentucky	332	102	16	40	46	16	7	3	6	31	12	19	49	21	4	11	2	1	10	43	0	6	10	3	6	0	5	7	6
U. Louisville	138	47	0	38	9	10	10	0	0	7	3	4	25	14	0	0	0	1	10	17	0	0	1	2	3	4	0	6	1
Louisiana	638	150	33	88	29	78	38	18	22	43	18	25	103	43	3	17	4	12	24	97	0	13	21	8	9	0	3	6	37
Grambling State U.	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana State U., Baton Rouge	328	67	26	31	10	54	21	15	18	15	9	6	48	19	0	7	3	11	8	52	0	2	11	7	8	0	1	5	18
Louisiana State U., Health Sciences Center, New Orleans	15	15	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	8	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana Tech U.	39	4	0	4	0	1	1	0	0	7	1	6	7	7	0	0	0	0	0	14	0	4	0	1	1	0	2	1	5

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New Orleans Baptist Theological Seminary	19	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern U. and A&M C., Baton Rouge	22	13	6	5	2	0	0	0	0	0	0	0	4	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
Tulane U.	109	25	0	19	6	18	13	1	4	8	1	7	24	2	3	8	0	1	10	17	0	7	9	0	0	0	0	1
U. Louisiana, Lafayette	40	8	0	3	5	0	0	0	0	9	4	5	1	0	0	0	0	0	1	11	0	0	1	0	0	0	0	10
U. Louisiana, Monroe	14	6	0	2	4	0	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. New Orleans	39	4	1	3	0	5	3	2	0	4	3	1	8	4	0	2	1	0	1	3	0	0	0	0	0	0	0	3
Maine	69	23	11	12	0	9	3	4	2	2	2	0	11	1	1	1	0	0	8	7	0	1	1	1	1	0	2	1
U. Maine	60	23	11	12	0	9	3	4	2	2	2	0	5	1	1	1	0	0	2	7	0	1	1	1	1	0	2	1
U. Southern Maine	9	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
Maryland	1,269	413	32	271	110	138	39	32	67	131	87	44	165	54	4	22	16	11	58	221	24	29	16	18	45	2	13	44	30
Bowie State U.	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johns Hopkins U.	426	235	0	173	62	43	15	7	21	27	16	11	32	6	3	7	5	4	7	66	0	17	6	3	10	0	6	15	9
Loyola U., Maryland	6	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morgan State U.	48	15	2	1	12	1	1	0	0	2	0	2	1	1	0	0	0	0	0	11	0	0	0	2	2	2	0	0	5
Notre Dame of Maryland U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Towson U.	16	0	0	0	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Maryland, Baltimore	64	51	0	36	15	1	1	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
U. Maryland, Baltimore County	85	10	0	10	0	9	7	1	1	21	16	5	20	14	0	0	0	0	6	17	0	0	4	0	3	0	0	7	3
U. Maryland, College Park	568	80	26	33	21	83	15	23	45	62	36	26	96	22	1	15	11	7	40	127	24	12	6	13	30	0	7	22	13
U. Maryland, Eastern Shore	13	7	4	3	0	1	0	1	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Uniformed Services U. of the Health Sciences	24	15	0	15	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Massachusetts	2,815	676	37	529	110	378	155	56	167	223	138	85	486	130	14	100	41	32	169	545	18	67	62	15	92	7	33	108	143
Bentley U.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston C.	116	9	0	4	5	24	14	1	9	4	0	4	26	8	0	11	1	4	2	0	0	0	0	0	0	0	0	0	0
Boston U.	337	94	4	82	8	42	20	5	17	15	10	5	58	20	3	18	4	4	9	66	0	20	0	0	12	0	5	13	16
Brandeis U.	77	18	0	17	1	10	3	0	7	7	2	5	24	5	0	4	1	1	13	0	0	0	0	0	0	0	0	0	0

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																	Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Clark U.	37	4	0	4	0	5	1	1	3	0	0	0	25	3	0	8	0	0	14	0	0	0	0	0	0	0	0	0
Harvard U.	630	226	2	187	37	93	25	11	57	30	11	19	117	14	8	25	17	11	42	21	0	8	0	0	3	0	0	2	8
Massachusetts C. of Pharmacy and Health Sciences	9	6	0	1	5	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Massachusetts Institute of Technology	579	72	2	64	6	102	39	23	40	81	46	35	66	5	1	19	13	0	28	221	15	15	33	6	39	0	18	54	41
New England Conservatory	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northeastern U.	174	21	0	10	11	22	12	2	8	17	14	3	40	20	0	4	2	4	10	67	0	4	6	3	18	5	3	11	17
Simmons C.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smith C.	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Springfield C.	5	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk U.	14	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tufts U., Medford	138	60	0	56	4	13	8	2	3	8	5	3	19	12	1	0	0	0	6	24	0	4	4	2	3	0	1	5	5
U. Massachusetts, Amherst	313	77	24	38	15	43	19	8	16	36	27	9	38	10	1	11	2	3	11	53	1	0	9	2	6	0	1	7	27
U. Massachusetts, Boston	90	14	4	5	5	3	1	2	0	8	8	0	41	12	0	0	1	5	23	2	0	2	0	0	0	0	0	0	0
U. Massachusetts, Dartmouth	25	5	1	2	2	1	0	1	0	0	0	0	1	0	0	0	0	0	1	12	0	3	0	0	3	0	0	0	6
U. Massachusetts, Lowell	135	16	0	9	7	13	10	0	3	9	9	0	12	3	0	0	0	0	9	44	0	5	5	0	5	1	1	13	14
U. Massachusetts, Medical School	45	45	0	44	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western New England U.	9	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Worcester Polytechnic Institute	54	6	0	6	0	4	0	0	4	8	6	2	0	0	0	0	0	0	0	33	2	6	5	2	3	1	4	3	7
Michigan	1,967	386	55	250	81	238	110	27	101	176	97	79	305	145	18	41	24	21	56	443	18	38	28	25	80	17	34	106	97
Andrews U.	25	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calvin Theological Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Central Michigan U.	39	2	0	2	0	4	0	2	2	7	0	7	17	16	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0

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(Number)

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Eastern Michigan U.	39	0	0	0	0	0	0	0	0	1	1	0	4	4	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Lawrence Technological U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Michigan State U.	524	142	39	78	25	49	22	4	23	29	14	15	91	33	3	10	8	5	32	74	0	2	5	11	20	0	9	22	5
Michigan Technological U.	85	13	10	3	0	14	7	3	4	7	1	6	3	1	0	0	0	0	2	45	1	5	2	3	7	0	2	19	6
Oakland U.	51	4	0	4	0	1	1	0	0	16	13	3	2	2	0	0	0	0	0	13	0	0	0	0	1	0	0	5	7
U. Detroit Mercy	7	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Michigan, Ann Arbor	846	169	6	128	35	138	65	16	57	80	40	40	108	32	14	23	14	7	18	245	17	21	14	6	41	6	20	51	69
U. Michigan, Dearborn	9	0	0	0	0	1	0	0	1	2	2	0	0	0	0	0	0	0	0	6	0	0	0	0	2	0	0	1	3
Van Andel Institute	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wayne State U.	202	43	0	29	14	20	11	0	9	21	17	4	35	19	1	7	1	6	1	38	0	10	6	4	5	7	1	2	3
Western Michigan U.	134	10	0	3	7	11	4	2	5	13	9	4	31	24	0	1	1	3	2	18	0	0	1	1	4	3	0	6	3
Minnesota	1,545	386	32	138	216	63	34	7	22	37	20	17	467	281	4	26	9	11	136	133	13	21	21	4	22	1	9	29	13
Mayo Clinic, Mayo Graduate School	31	26	0	23	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0
U. Minnesota, Twin Cities	647	167	32	94	41	63	34	7	22	37	20	17	110	43	4	26	8	11	18	126	13	16	21	4	22	1	9	29	11
Walden U.	867	193	0	21	172	0	0	0	0	0	0	0	357	238	0	0	1	0	118	2	0	0	0	0	0	0	0	0	2
Mississippi	445	101	26	49	26	47	34	9	4	16	8	8	59	40	0	3	1	2	13	51	5	1	6	6	6	5	1	5	16
Jackson State U.	65	4	3	1	0	7	7	0	0	3	1	2	9	6	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
Mississippi State U.	159	44	23	16	5	18	11	6	1	7	4	3	7	5	0	0	0	2	0	39	5	1	4	5	5	5	1	5	8
U. Mississippi, Oxford	111	44	0	25	19	14	10	1	3	4	2	2	17	12	0	3	1	0	1	4	0	0	2	1	1	0	0	0	0
U. Southern Mississippi	110	9	0	7	2	8	6	2	0	2	1	1	26	17	0	0	0	0	9	5	0	0	0	0	0	0	0	0	5
Missouri	960	240	15	175	50	107	53	24	30	55	26	29	149	87	11	14	17	6	14	182	6	25	21	11	22	2	9	23	63
Concordia Seminary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midwestern Baptist Theological Seminary	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri U. of Science and Technology	117	0	0	0	0	23	13	9	1	10	4	6	0	0	0	0	0	0	0	84	5	0	9	5	15	0	5	8	37
Saint Louis U.	118	36	0	23	13	12	7	5	0	2	0	2	21	18	0	0	0	0	3	4	1	1	0	1	0	0	0	1	0
U. Missouri, Columbia	287	76	14	47	15	21	10	3	8	19	11	8	51	30	2	1	7	5	6	45	0	7	2	4	0	2	2	12	16

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(Number)

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
U. Missouri, Kansas City	62	15	0	1	14	8	3	3	2	5	2	3	15	9	0	4	1	1	0	6	0	0	0	1	3	0	0	0	2
U. Missouri, Saint Louis	51	10	0	6	4	7	5	0	2	4	1	3	18	15	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
Washington U., Saint Louis	289	103	1	98	4	36	15	4	17	15	8	7	44	15	9	9	7	0	4	43	0	17	10	0	4	0	2	2	8
Montana	120	49	8	39	2	19	8	5	6	10	3	7	20	8	5	0	0	0	7	5	0	0	1	0	0	1	3	0	0
Montana State U., Bozeman	69	29	2	26	1	16	6	4	6	6	3	3	6	0	0	0	0	0	6	3	0	0	1	0	0	1	1	0	0
Montana Tech of U. Montana	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
U. Montana, Missoula	50	20	6	13	1	3	2	1	0	4	0	4	14	8	5	0	0	0	1	1	0	0	0	0	0	0	1	0	0
Nebraska	361	125	32	70	23	28	14	5	9	19	7	12	67	46	0	4	3	2	12	57	0	7	5	5	8	1	5	7	19
Creighton U.	9	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Nebraska, Lincoln	268	61	32	24	5	27	13	5	9	17	5	12	45	27	0	4	3	2	9	56	0	6	5	5	8	1	5	7	19
U. Nebraska, Medical Center	64	51	0	35	16	1	1	0	0	0	0	0	11	11	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
U. Nebraska, Omaha	20	4	0	3	1	0	0	0	0	2	2	0	11	8	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Nevada	251	43	3	22	18	30	12	16	2	16	11	5	56	25	8	2	7	4	10	45	0	1	1	12	9	0	4	9	9
U. Nevada, Las Vegas	140	23	0	8	15	11	6	3	2	9	4	5	33	11	5	0	6	4	7	21	0	0	0	7	5	0	1	7	1
U. Nevada, Reno	111	20	3	14	3	19	6	13	0	7	7	0	23	14	3	2	1	0	3	24	0	1	1	5	4	0	3	2	8
New Hampshire	198	81	24	54	3	26	6	6	14	24	13	11	21	11	0	4	0	4	2	33	0	5	0	3	0	0	6	4	15
Antioch U., Keene	16	12	10	2	0	0	0	0	0	0	0	0	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Dartmouth C.	108	50	2	45	3	9	1	2	6	19	11	8	8	7	0	0	0	0	1	22	0	4	0	0	0	0	5	1	12
Southern New Hampshire U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. New Hampshire, Durham	70	19	12	7	0	17	5	4	8	5	2	3	9	1	0	3	0	4	1	11	0	1	0	3	0	0	1	3	3
New Jersey	991	179	18	131	30	117	46	24	47	95	45	50	164	54	5	21	32	13	39	176	6	25	18	12	36	2	12	26	39
Caldwell U.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drew U.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairleigh Dickinson U., Teaneck	10	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Montclair State U.	30	3	3	0	0	0	0	0	0	0	0	0	11	10	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
New Jersey Institute of Technology	54	6	2	4	0	3	1	0	2	10	5	5	2	0	0	0	0	0	2	32	0	7	6	4	8	0	2	2	3
Princeton Theological Seminary	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Princeton U.	318	32	1	31	0	60	20	14	26	43	18	25	66	8	4	10	25	7	12	45	4	1	4	4	11	0	0	11	10
Rowan U.	4	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, Camden	10	4	0	4	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, New Brunswick	395	98	10	75	13	37	12	10	15	33	18	15	52	15	1	10	6	6	14	66	2	11	6	4	12	2	4	9	16
Rutgers, State U. New Jersey, Newark	61	15	2	8	5	8	8	0	0	0	0	0	12	0	0	0	1	0	11	0	0	0	0	0	0	0	0	0	0
Seton Hall U.	37	15	0	3	12	2	2	0	0	0	0	0	5	5	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Stevens Institute of Technology	54	2	0	2	0	7	3	0	4	9	4	5	0	0	0	0	0	0	0	31	0	6	2	0	5	0	5	4	9
New Mexico	300	42	7	27	8	40	8	7	25	19	15	4	56	19	12	7	3	0	15	49	0	3	5	7	8	1	2	8	15
New Mexico Institute of Mining and Technology	11	1	0	1	0	5	3	1	1	3	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1
New Mexico State U., Las Cruces	101	16	7	6	3	4	0	2	2	8	5	3	8	8	0	0	0	0	0	14	0	0	3	2	3	1	0	3	2
U. New Mexico, Albuquerque	188	25	0	20	5	31	5	4	22	8	7	1	48	11	12	7	3	0	15	33	0	3	2	5	5	0	1	5	12
New York	4,168	904	68	731	105	443	176	82	185	341	197	144	814	353	45	138	59	76	143	597	15	80	69	34	120	19	46	91	123
Adelphi U.	25	0	0	0	0	0	0	0	0	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Albany Medical C.	9	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Albert Einstein College of Medicine	32	32	0	31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alfred U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Bard C.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clarkson U.	22	4	2	2	0	3	1	0	2	3	0	3	0	0	0	0	0	0	0	12	0	0	1	1	3	0	2	5	0
Cold Spring Harbor Laboratory	7	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Columbia U. in the City of New York	673	123	3	106	14	78	29	22	27	47	20	27	112	36	8	31	15	13	9	97	0	16	9	7	26	0	2	9	28

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Columbia U., Teachers C.	93	6	0	0	6	0	0	0	0	0	0	0	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
Cornell U.	514	139	46	93	0	73	22	8	43	47	29	18	69	13	4	25	3	8	16	115	4	19	21	1	14	0	11	19	26
Cornell U., Weill Cornell Medical College	60	55	0	54	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNY, City C.	30	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	29	0	5	9	6	1	0	0	2	6
CUNY, Graduate Center	394	58	5	43	10	31	9	6	16	21	6	15	127	59	11	15	6	10	26	1	0	0	0	0	0	0	1	0	0
Elmezzi Graduate School of Molecular Medicine	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Five Towns C.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fordham U.	90	5	0	5	0	0	0	0	0	0	0	0	38	36	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Hebrew Union C.-Jewish Institute of Religion, New York City	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hofstra U.	21	0	0	0	0	0	0	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Icahn School of Medicine at Mt. Sinai	45	45	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jewish Theological Seminary of America	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Juilliard School	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long Island U., Brooklyn	16	3	0	0	3	0	0	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long Island U., Brookville	3	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Memorial Sloan Kettering Cancer Center	8	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molloy C.	4	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New School	47	0	0	0	0	0	0	0	0	0	0	0	37	10	1	8	6	10	2	0	0	0	0	0	0	0	0	0	0
New York Medical C.	8	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York U.	411	76	0	57	19	32	16	2	14	43	29	14	80	18	10	24	11	10	7	38	0	2	4	2	20	0	2	4	4
Pace U.	13	0	0	0	0	0	0	0	0	2	2	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Rensselaer Polytechnic Institute, Troy	130	5	0	5	0	16	6	1	9	22	15	7	6	2	0	0	0	0	4	66	6	5	10	0	12	1	5	13	14
Rochester Institute of Technology	48	19	5	14	0	7	0	0	7	9	9	0	0	0	0	0	0	0	0	13	0	2	0	0	0	1	1	1	8
Rockefeller U.	30	27	0	27	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. John's U., Queens	38	12	0	3	9	1	1	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY, Binghamton U.	174	14	0	6	8	12	8	1	3	15	9	6	36	8	3	2	4	10	9	50	0	3	0	0	10	11	2	13	11
SUNY, C. of Environmental Science and Forestry	20	12	6	6	0	4	3	1	0	0	0	0	0	0	0	0	0	0	0	4	0	2	1	0	0	0	0	0	1
SUNY, C. of Optometry	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY, Downstate Medical Center	11	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0
SUNY, Stony Brook U.	287	51	0	44	7	50	16	17	17	54	28	26	45	16	1	8	2	4	14	44	0	9	0	1	9	0	15	8	2
SUNY, U. Albany	142	16	0	15	1	23	10	10	3	15	9	6	46	21	2	8	1	5	9	8	0	0	0	0	0	0	2	0	6
SUNY, U. Buffalo	358	67	1	49	17	48	25	6	17	25	21	4	59	23	1	4	1	4	26	69	3	7	11	11	8	6	2	11	10
SUNY, Upstate Medical U.	16	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syracuse U.	138	6	0	5	1	18	6	3	9	14	9	5	40	13	4	3	6	2	12	24	2	2	2	5	5	0	0	5	3
Union Theological Seminary	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Rochester	207	65	0	60	5	38	16	4	18	21	9	12	25	12	0	8	4	0	1	24	0	6	1	0	12	0	1	1	3
Yeshiva U.	23	0	0	0	0	0	0	0	0	1	0	1	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Carolina	1,873	522	53	347	122	153	86	22	45	175	80	95	253	95	15	39	17	29	58	361	10	50	19	16	72	17	31	42	104
Duke U.	407	110	3	93	14	34	17	8	9	32	11	21	74	13	10	21	10	10	10	75	1	24	0	1	17	0	5	9	18
East Carolina U.	39	27	4	16	7	1	1	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Carolina Agricultural and Technical State U.	55	2	1	1	0	0	0	0	0	4	3	1	6	5	0	0	0	0	1	24	0	0	0	0	7	6	1	3	7
North Carolina State U.	533	99	40	56	3	36	19	3	14	75	28	47	43	24	0	9	0	9	1	192	9	5	19	12	41	11	20	21	54
Piedmont Baptist C. and Graduate School	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Southeastern Baptist Theological Seminary	24	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
U. North Carolina, Chapel Hill	556	214	4	144	66	65	41	7	17	40	23	17	84	23	5	7	7	10	32	26	0	12	0	0	0	0	4	0	10
U. North Carolina, Charlotte	111	14	1	9	4	7	1	2	4	23	15	8	16	7	0	0	0	0	9	28	0	0	0	3	7	0	0	9	9
U. North Carolina, Greensboro	115	39	0	12	27	4	4	0	0	1	0	1	22	16	0	2	0	0	4	7	0	0	0	0	0	0	1	0	6
U. North Carolina, Wilmington	2	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wake Forest U.	30	17	0	16	1	4	3	0	1	0	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0
North Dakota	189	58	19	29	10	16	10	2	4	13	9	4	18	17	0	0	0	0	1	47	2	0	2	7	6	4	3	2	21
North Dakota State U.	118	42	19	16	7	9	7	0	2	12	8	4	8	8	0	0	0	0	0	32	0	0	0	6	4	4	3	2	13
U. North Dakota	71	16	0	13	3	7	3	2	2	1	1	0	10	9	0	0	0	0	1	15	2	0	2	1	2	0	0	0	8
Ohio	1,953	458	35	317	106	241	129	19	93	118	54	64	254	127	13	15	10	22	67	385	16	32	36	10	97	6	40	63	85
Air Force Institute of Technology	27	0	0	0	0	4	0	0	4	5	1	4	0	0	0	0	0	0	0	17	5	0	0	0	5	0	0	0	7
Bowling Green State U., Bowling Green	98	8	0	8	0	12	11	0	1	11	0	11	29	17	0	0	0	2	10	0	0	0	0	0	0	0	0	0	0
Case Western Reserve U.	197	84	1	67	16	17	11	1	5	11	6	5	14	8	3	0	0	2	1	49	1	9	3	1	12	0	2	6	15
Cleveland State U.	42	6	0	6	0	7	7	0	0	1	1	0	4	2	0	0	0	0	2	11	0	3	1	0	5	0	0	1	1
Kent State U., Kent	156	34	0	19	15	21	7	0	14	7	2	5	25	14	1	0	2	4	4	0	0	0	0	0	0	0	0	0	0
Miami U., Oxford	50	14	0	14	0	9	6	3	0	0	0	0	8	7	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Ohio State U., Columbus	704	173	30	98	45	78	35	9	34	51	25	26	85	22	9	14	7	8	25	149	7	15	15	4	35	4	23	26	20
Ohio U., Athens	129	28	0	22	6	17	6	0	11	4	1	3	13	13	0	0	0	0	0	14	0	0	4	2	1	1	0	4	2
U. Akron, Akron	128	6	0	5	1	24	19	0	5	1	0	1	28	23	0	0	0	4	1	55	0	4	10	2	7	1	2	12	17
U. Cincinnati, Uptown West Campus	228	70	0	52	18	20	12	5	3	16	10	6	35	11	0	1	1	2	20	34	3	0	2	0	7	0	5	6	11
U. Dayton	44	5	0	5	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	13	0	4	3	3
U. Toledo	115	26	2	19	5	24	15	0	9	2	1	1	9	6	0	0	0	0	3	16	0	1	1	1	4	0	1	4	4
Wright State U., Dayton	33	4	2	2	0	1	0	1	0	9	7	2	4	4	0	0	0	0	0	15	0	0	0	0	8	0	1	1	5

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Youngstown State U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0
Oklahoma	492	113	30	60	23	58	20	26	12	18	9	9	65	41	1	7	4	3	9	91	2	4	13	5	14	4	3	10	36
Oklahoma City U.	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma State U., Center for Health Sciences	5	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma State U., Stillwater	214	58	30	23	5	16	8	5	3	6	3	3	37	24	0	5	0	2	6	29	2	2	3	2	5	3	3	6	3
U. Oklahoma, Norman	228	43	0	29	14	39	11	19	9	6	1	5	21	10	1	2	4	1	3	44	0	2	5	3	9	1	0	2	22
U. Tulsa	41	3	0	3	0	3	1	2	0	6	5	1	7	7	0	0	0	0	0	18	0	0	5	0	0	0	0	2	11
Oregon	551	152	34	80	38	82	44	13	25	54	33	21	94	39	11	7	2	4	31	85	0	5	3	21	20	5	4	9	18
Oregon Health and Science U.	36	28	1	21	6	1	1	0	0	2	2	0	2	2	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0
Oregon State U., Corvallis	255	87	30	33	24	29	14	9	6	26	17	9	23	8	6	1	0	0	8	73	0	2	3	19	17	5	4	8	15
Pacific U.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portland State U.	72	12	3	5	4	9	6	1	2	12	8	4	18	6	0	0	0	1	11	9	0	0	0	2	3	0	0	1	3
U. Oregon	186	25	0	21	4	43	23	3	17	14	6	8	49	21	5	6	2	3	12	0	0	0	0	0	0	0	0	0	0
Pennsylvania	2,602	559	27	412	120	241	119	26	96	253	144	109	381	126	20	64	21	25	125	565	11	69	73	33	79	19	72	83	126
Bryn Mawr C.	8	0	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carnegie Mellon U.	300	9	0	9	0	22	7	2	13	80	56	24	21	7	0	7	0	0	7	143	0	9	16	8	20	0	15	17	58
Drexel U.	161	43	0	35	8	10	6	0	4	17	10	7	20	16	0	4	0	0	0	51	0	14	5	5	7	0	7	6	7
Duquesne U.	71	18	0	8	10	7	7	0	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indiana U. Pennsylvania	76	1	0	0	1	0	0	0	0	0	0	0	20	0	0	0	0	5	15	0	0	0	0	0	0	0	0	0	0
Lehigh U.	95	6	1	4	1	11	1	1	9	5	3	2	13	7	0	6	0	0	0	48	0	1	7	2	8	4	2	16	8
Marywood U.	11	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pennsylvania State U., University Park and Hershey Medical Center	688	145	24	104	17	73	24	19	30	57	25	32	109	41	4	19	7	8	30	170	11	9	17	9	25	12	33	22	32
Salus U.	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Temple U.	217	32	0	21	11	24	18	1	5	23	14	9	41	11	4	4	3	2	17	8	0	3	0	2	1	0	1	1	0
Thomas Jefferson U.	17	17	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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U. Pennsylvania	469	129	0	112	17	45	25	2	18	37	17	20	86	10	6	17	10	8	35	56	0	13	14	0	10	0	9	5	5
U. Pittsburgh, Pittsburgh	420	137	1	90	46	47	30	1	16	34	19	15	47	16	6	7	1	2	15	74	0	19	13	6	4	3	5	8	16
U. of the Sciences Philadelphia	22	15	0	11	4	1	1	0	0	0	0	0	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
Villanova U.	24	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	1	1	1	4	0	0	8	0
Westminster Theological Seminary	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Widener U., Chester	16	4	0	0	4	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerto Rico	129	29	8	21	0	8	6	1	1	4	1	3	68	65	0	0	0	0	3	8	0	0	1	4	3	0	0	0	0
Carlos Albizu U., San Juan	41	0	0	0	0	0	0	0	0	0	0	0	37	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inter American U. Puerto Rico, San Juan	8	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ponce Heath Sciences U.	5	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	16	0	0	0	0	0	0	0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Central del Caribe	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. del Turabo	8	8	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Puerto Rico, Mayaguez	13	1	0	1	0	3	3	0	0	1	1	0	0	0	0	0	0	0	0	8	0	0	1	4	3	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	7	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Puerto Rico, Rio Piedras	30	7	1	6	0	5	3	1	1	3	0	3	11	8	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Rhode Island	311	72	5	49	18	49	18	15	16	34	12	22	49	16	4	16	4	8	1	36	0	8	7	1	4	2	1	3	10
Brown U.	216	48	0	37	11	35	15	9	11	26	9	17	36	4	4	15	4	8	1	23	0	8	4	0	2	0	1	2	6
Salve Regina U.	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Rhode Island	90	24	5	12	7	14	3	6	5	8	3	5	13	12	0	1	0	0	0	13	0	0	3	1	2	2	0	1	4
South Carolina	603	158	9	84	65	63	37	13	13	51	23	28	75	27	2	19	5	2	20	108	0	16	15	16	12	4	6	21	18
Clemson U.	243	33	8	18	7	25	13	1	11	20	10	10	29	9	0	16	0	0	4	72	0	13	9	10	8	4	6	9	13

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Medical U. South Carolina	37	37	0	25	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. South Carolina, Columbia	323	88	1	41	46	38	24	12	2	31	13	18	46	18	2	3	5	2	16	36	0	3	6	6	4	0	0	12	5
South Dakota	126	51	15	23	13	14	8	2	4	14	13	1	17	10	0	0	1	4	2	22	0	2	1	1	3	0	2	1	12
Dakota State U.	15	0	0	0	0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota School of Mines and Technology	16	1	1	0	0	6	0	2	4	0	0	0	0	0	0	0	0	0	0	9	0	0	1	1	0	0	1	1	5
South Dakota State U.	66	44	14	19	11	6	6	0	0	1	0	1	5	0	0	0	0	4	1	10	0	0	0	0	3	0	0	0	7
U. South Dakota	29	6	0	4	2	2	2	0	0	0	0	0	12	10	0	0	1	0	1	3	0	2	0	0	0	0	1	0	0
Tennessee	1,023	252	18	174	60	91	44	14	33	59	24	35	123	66	12	12	5	5	23	202	1	14	12	17	31	8	21	32	66
East Tennessee State U.	30	19	0	6	13	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meharry Medical C.	7	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mid-America Baptist Theological Seminary	6	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle Tennessee State U.	45	11	0	7	4	2	1	0	1	6	0	6	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee State U.	17	9	2	7	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Tennessee Technological U.	32	4	3	1	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	18	0	1	2	2	6	0	0	4	3
U. Memphis	182	15	0	12	3	12	7	5	0	7	1	6	30	20	0	1	0	0	9	21	0	5	0	4	1	0	0	5	6
U. Tennessee, Chattanooga	8	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
U. Tennessee, Health Science Center	21	18	0	8	10	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
U. Tennessee, Knoxville	393	76	13	47	16	47	20	6	21	24	8	16	44	20	5	4	1	3	11	111	1	0	5	7	16	7	19	12	44
Vanderbilt U.	282	93	0	79	14	28	14	3	11	18	12	6	32	13	7	3	4	2	3	46	0	7	5	4	8	1	2	11	8
Texas	4,201	889	119	582	188	443	181	128	134	316	164	152	537	241	18	56	42	36	144	964	26	93	122	92	174	26	76	145	210
Baylor C. of Medicine	78	78	0	77	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baylor U.	95	12	1	7	4	15	6	4	5	11	0	11	13	3	0	0	5	5	0	8	0	0	0	0	3	0	0	5	0
Brite Divinity S.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																		Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences																
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Dallas Theological Seminary	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lamar U.	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	9	1	3	1	0	0	1
Prairie View A&M U.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	0
Rice U.	206	25	0	25	0	51	17	12	22	24	9	15	23	3	5	8	3	3	1	54	0	12	12	2	8	0	8	4	8
Sam Houston State U.	26	0	0	0	0	0	0	0	0	0	0	0	22	7	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
Southern Methodist U.	80	6	1	5	0	12	5	3	4	14	5	9	9	4	2	1	0	0	2	26	0	0	0	3	4	0	0	9	10
Southwestern Baptist Theological Seminary	40	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
St. Mary's U., San Antonio	11	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M International U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M U., College Station and Health Science Center	772	210	72	115	23	86	37	30	19	43	15	28	66	24	6	13	2	6	15	252	15	21	29	22	27	4	19	43	72
Texas A&M U.-Commerce	18	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M U.-Corpus Christi	25	1	1	0	0	8	0	8	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M U.-Kingsville	16	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	3	0	0	0	10
Texas Christian U.	28	1	0	1	0	3	1	0	2	2	0	2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas Southern U.	25	11	0	8	3	0	0	0	0	0	0	0	7	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
Texas State U.	54	8	0	8	0	3	0	2	1	0	0	0	14	0	0	0	0	0	14	6	0	0	0	1	0	0	5	0	0
Texas Tech U.	356	54	29	25	0	23	11	4	8	15	6	9	40	32	0	5	2	0	1	62	0	0	17	6	8	6	0	11	14
Texas Tech U., Health Sciences Center	14	14	0	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas Woman's U.	106	49	0	11	38	0	0	0	0	0	0	0	36	26	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0
U. Dallas	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
U. Houston	294	44	0	30	14	53	19	19	15	28	14	14	24	11	0	5	5	0	3	90	0	12	17	4	21	5	9	9	13
U. North Texas, Denton	239	12	4	7	1	22	17	0	5	25	18	7	46	29	0	0	5	8	4	21	0	0	0	0	5	0	9	5	2

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																	Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
U. North Texas, Health Science Center	10	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. of St. Thomas, Houston	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. of the Incarnate Word	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Texas Health Science Center, Houston[a]	103	95	0	61	34	0	0	0	0	3	2	1	5	0	0	3	0	0	2	0	0	0	0	0	0	0	0	0
U. Texas Health Science Center, San Antonio	29	27	0	21	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
U. Texas Medical Branch	41	37	0	27	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
U. Texas Rio Grande Valley	10	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Texas Southwestern Medical Center	46	36	0	36	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	2	0	2	0	0	0	0	0	0
U. Texas, Arlington	205	22	3	10	9	24	15	4	5	27	17	10	16	3	0	0	0	0	13	80	5	10	0	19	9	9	1	16	11
U. Texas, Austin	744	78	0	49	29	95	31	27	37	55	23	32	109	36	2	17	12	8	34	212	5	16	38	26	43	0	8	18	58
U. Texas, Dallas	240	18	0	17	1	26	12	9	5	47	37	10	38	12	1	4	7	0	14	68	0	8	0	0	29	0	11	13	7
U. Texas, El Paso	119	28	2	20	6	11	4	6	1	9	5	4	10	10	0	0	0	0	0	32	1	7	0	7	3	0	6	6	2
U. Texas, San Antonio	121	8	2	5	1	11	6	0	5	12	12	0	27	10	2	0	0	0	15	16	0	3	0	1	3	1	0	6	2
West Texas A&M U.	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	543	113	7	76	30	77	37	18	22	55	25	30	85	55	6	9	3	6	6	113	2	14	12	11	28	1	5	23	17
Brigham Young U., Provo	111	18	2	16	0	19	14	0	5	11	5	6	20	20	0	0	0	0	0	27	0	1	2	4	4	0	2	10	4
U. Utah	336	79	0	52	27	53	20	17	16	38	17	21	43	17	6	9	3	3	5	67	0	10	10	3	19	1	3	11	10
Utah State U., Logan	96	16	5	8	3	5	3	1	1	6	3	3	22	18	0	0	0	3	1	19	2	3	0	4	5	0	0	2	3
Vermont	57	19	9	10	0	9	9	0	0	2	1	1	10	9	0	0	0	0	1	8	0	0	0	2	1	0	2	2	1
Middlebury C.	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Vermont	52	19	9	10	0	9	9	0	0	2	1	1	10	9	0	0	0	0	1	8	0	0	0	2	1	0	2	2	1
Virginia	1,532	289	53	167	69	149	65	35	49	103	62	41	252	98	8	32	14	11	89	330	17	35	18	26	64	8	25	49	88

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																		Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences																	
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
C. of William and Mary	62	3	0	3	0	19	0	14	5	11	10	1	5	0	1	0	0	0	4	4	0	0	0	0	0	4	0	0
Eastern Virginia Medical School	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
George Mason U.	234	33	3	15	15	17	3	9	5	16	10	6	104	24	0	20	7	2	51	11	0	3	0	0	4	0	0	0	4
Hampton U.	13	1	0	0	1	3	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
James Madison U.	9	1	0	0	1	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk State U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Old Dominion U.	147	12	0	8	4	8	2	1	5	9	4	5	15	10	0	0	0	0	5	30	1	1	0	3	9	0	0	2	14
Regent U.	64	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Union Presbyterian Seminary	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Virginia, Charlottesville	305	61	3	46	12	34	19	1	14	22	10	12	48	19	7	9	5	5	3	60	0	9	7	4	16	0	6	7	11
Virginia Commonwealth U.	196	77	0	49	28	23	22	0	1	5	3	2	24	19	0	0	0	0	5	29	0	9	3	0	5	0	1	7	4
Virginia Polytechnic Institute and State U.	495	100	47	45	8	45	19	9	17	40	25	15	51	21	0	3	2	4	21	195	16	13	8	19	30	8	13	33	55
Washington	1,015	275	32	181	62	125	51	42	32	103	69	34	133	41	12	21	10	15	34	203	6	18	29	11	40	5	15	33	46
Gonzaga U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seattle Pacific U.	16	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Washington, Seattle	681	201	11	145	45	98	39	36	23	80	57	23	79	19	8	11	8	7	26	115	6	14	17	7	20	5	5	20	21
Washington State U.	314	74	21	36	17	27	12	6	9	23	12	11	49	17	4	10	2	8	8	88	0	4	12	4	20	0	10	13	25
West Virginia	214	48	15	24	9	16	4	5	7	8	1	7	39	21	0	7	3	0	8	38	3	0	3	2	5	5	4	9	7
Marshall U.	11	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia U.	203	46	15	22	9	16	4	5	7	8	1	7	39	21	0	7	3	0	8	38	3	0	3	2	5	5	4	9	7
Wisconsin	976	277	43	172	62	102	54	18	30	64	26	38	129	39	9	22	9	19	31	152	0	28	16	7	32	8	16	18	27
Cardinal Stritch U.	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marquette U.	57	12	0	6	6	4	3	0	1	2	1	1	4	4	0	0	0	0	0	12	0	7	0	2	3	0	0	0	0
Medical C. Wisconsin	30	29	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
U. Wisconsin-Madison	724	197	43	115	39	84	43	14	27	58	23	35	95	21	6	18	8	16	26	119	0	19	16	1	26	5	15	13	24
U. Wisconsin-Milwaukee	140	39	0	22	17	14	8	4	2	4	2	2	30	14	3	4	1	3	5	20	0	1	0	4	3	3	1	5	3

Table 7

Doctorate recipients, by state or location, institution, and major science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Science																	Engineering									
		Life sciences				Physical sciences and earth sciences				Mathematics and computer sciences			Psychology and social sciences															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences	Total	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy	Total	Computer and information sciences	Mathematics and statistics	Total	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences	Total	Aerospace, aeronautical, and astronautical	Bioengineering and biomedical	Chemical	Civil	Electrical, electronics, and communications	Industrial and manufacturing	Materials science	Mechanical	Other engineering
Wyoming	94	20	5	15	0	25	4	15	6	8	3	5	12	8	1	3	0	0	0	20	0	0	2	5	1	0	0	5	7
U. Wyoming	94	20	5	15	0	25	4	15	6	8	3	5	12	8	1	3	0	0	0	20	0	0	2	5	1	0	0	5	7

[a] Most degrees reported in "biological and biomedical sciences" fields of study for U. Texas, Health Science Center at Houston are awarded jointly with the M. D. Anderson Cancer Center through the U. of Texas Graduate School of Biomedical Sciences at Houston.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
All institutions	55,283	4,716	927	2,312	113	940	424	4,939	564	887	1,392	2,096	3,006	1,466	593	947
Alabama	692	110	29	36	16	26	3	22	3	4	12	3	48	28	8	12
Alabama A&M U.	9	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Alabama State U.	18	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0
Auburn U., Auburn	269	46	8	14	15	8	1	6	0	3	2	1	14	7	0	7
Tuskegee U.	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Alabama, Birmingham	149	17	1	5	1	9	1	0	0	0	0	0	0	0	0	0
U. Alabama, Huntsville	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Alabama, Tuscaloosa	157	25	4	14	0	6	1	16	3	1	10	2	22	9	8	5
U. South Alabama	36	3	0	3	0	0	0	0	0	0	0	0	12	12	0	0
Alaska	54	2	0	1	0	0	1	1	0	0	1	0	3	1	0	2
U. Alaska, Anchorage	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Alaska, Fairbanks	49	2	0	1	0	0	1	1	0	0	1	0	3	1	0	2
Arizona	1,052	97	5	39	4	40	9	105	18	10	22	55	57	35	12	10
Arizona State U.	536	34	0	12	1	21	0	67	10	2	8	47	34	14	11	9
Northern Arizona U.	35	11	0	8	1	1	1	0	0	0	0	0	1	0	0	1
Prescott C.	8	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0
U. Arizona	473	46	5	19	2	18	2	38	8	8	14	8	22	21	1	0
Arkansas	270	28	5	17	0	6	0	23	2	7	10	4	17	16	0	1
Arkansas State U., Jonesboro	9	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0
U. Arkansas for Medical Sciences	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Arkansas, Fayetteville	193	26	4	17	0	5	0	20	2	7	10	1	15	14	0	1
U. Arkansas, Little Rock	32	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
U. Central Arkansas	11	1	1	0	0	0	0	0	0	0	0	0	2	2	0	0
California	5,988	280	33	120	5	30	92	564	62	103	114	285	182	99	35	48
Alliant International U., San Diego	82	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0
Azusa Pacific U.	22	19	1	18	0	0	0	0	0	0	0	0	0	0	0	0
Biola U.	29	13	1	2	0	1	9	2	0	0	0	2	0	0	0	0
California Institute of Integral Studies	40	1	1	0	0	0	0	12	0	0	0	12	9	0	1	8
California Institute of Technology	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
California Institute of the Arts	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
Chapman U.	24	11	1	1	1	0	8	0	0	0	0	0	0	0	0	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Claremont Graduate U.	137	24	0	8	1	1	14	30	0	5	6	19	4	4	0	0
Claremont School of Theology	16	0	0	0	0	0	0	16	0	0	0	16	0	0	0	0
Fielding Graduate U.	79	1	0	0	0	1	0	0	0	0	0	0	13	12	1	0
Frederick S. Pardee RAND Graduate School	16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Fuller Theological Seminary	34	0	0	0	0	0	0	14	0	0	0	14	0	0	0	0
Graduate Theological Union	17	0	0	0	0	0	0	17	0	1	0	16	0	0	0	0
Keck Graduate Institute	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
La Sierra U.	7	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0
Loma Linda U.	35	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Naval Postgraduate School	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacifica Graduate Institute	42	0	0	0	0	0	0	13	0	0	0	13	0	0	0	0
Palo Alto U.	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Diego State U., San Diego	44	7	0	3	0	2	2	0	0	0	0	0	0	0	0	0
Sanford-Burnham Medical Research Institute, La Jolla	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Clara U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saybrook U.	31	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0
Scripps Research Institute	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sofia U.	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stanford U.	769	25	0	10	0	6	9	56	7	10	19	20	32	22	4	6
U. California, Berkeley	797	34	2	20	0	1	11	98	16	27	23	32	27	10	0	17
U. California, Davis	493	10	0	3	0	3	4	44	7	7	14	16	2	0	2	0
U. California, Irvine	420	15	0	3	1	3	8	29	4	5	8	12	11	10	1	0
U. California, Los Angeles	632	44	1	28	0	2	13	80	16	20	14	30	16	8	0	8
U. California, Merced	63	0	0	0	0	0	0	4	0	1	2	1	0	0	0	0
U. California, Riverside	271	7	0	3	0	1	3	33	3	6	8	16	2	2	0	0
U. California, San Diego	512	18	15	0	0	2	1	29	1	5	3	20	8	3	5	0
U. California, San Francisco	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. California, Santa Barbara	281	8	0	1	0	3	4	43	7	9	7	20	5	0	5	0
U. California, Santa Cruz	150	0	0	0	0	0	0	16	0	3	4	9	1	0	1	0
U. of the Pacific	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. of the West	3	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0
U. San Diego	21	1	1	0	0	0	0	0	0	0	0	0	5	5	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
U. San Francisco	28	24	5	9	1	3	6	0	0	0	0	0	4	3	0	1
U. Southern California	437	9	1	8	0	0	0	23	1	4	6	12	33	11	15	7
Colorado	1,079	126	33	55	0	22	16	78	12	2	18	46	41	8	16	17
Colorado School of Mines	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorado State U., Fort Collins	245	23	15	5	0	1	2	0	0	0	0	0	5	2	1	2
U. Colorado Boulder	392	10	0	8	0	0	2	61	12	2	6	41	17	6	11	0
U. Colorado Colorado Springs	25	7	7	0	0	0	0	0	0	0	0	0	1	0	0	1
U. Colorado Denver	100	6	2	1	0	1	2	0	0	0	0	0	6	0	0	6
U. Denver	95	14	3	10	0	0	1	17	0	0	12	5	9	0	4	5
U. Northern Colorado	96	66	6	31	0	20	9	0	0	0	0	0	3	0	0	3
Connecticut	764	17	2	12	0	3	0	124	18	31	29	46	34	12	7	15
U. Bridgeport	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Connecticut, Storrs	326	16	2	12	0	2	0	32	5	8	16	3	21	7	6	8
U. Hartford	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
U. New Haven	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wesleyan U.	10	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
Yale U.	423	0	0	0	0	0	0	90	13	23	13	41	13	5	1	7
Delaware	218	7	0	5	1	0	1	15	0	4	2	9	0	0	0	0
Delaware State U.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Delaware	211	7	0	5	1	0	1	15	0	4	2	9	0	0	0	0
District of Columbia	579	48	17	25	1	1	4	88	12	29	6	41	47	6	11	30
American U.	47	0	0	0	0	0	0	5	0	5	0	0	9	0	5	4
Catholic U. of America	104	2	2	0	0	0	0	44	2	5	6	31	13	0	0	13
Gallaudet U.	16	2	0	1	0	1	0	2	2	0	0	0	0	0	0	0
George Washington U.	186	39	15	19	1	0	4	5	0	5	0	0	11	6	0	5
Georgetown U.	120	0	0	0	0	0	0	28	8	12	0	8	3	0	0	3
Howard U.	106	5	0	5	0	0	0	4	0	2	0	2	11	0	6	5
Florida	2,386	271	27	162	9	54	19	150	14	24	47	65	130	67	30	33
Barry U.	17	8	1	5	1	0	1	0	0	0	0	0	3	1	0	2
Embry-Riddle Aeronautical U., Daytona Beach	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida A&M U.	16	8	7	0	0	1	0	0	0	0	0	0	0	0	0	0
Florida Atlantic U.	99	20	10	10	0	0	0	3	1	0	2	0	8	6	0	2
Florida Institute of Technology	79	5	0	0	0	3	2	0	0	0	0	0	1	0	0	1

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

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		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Florida International U.	186	19	0	16	0	2	1	7	0	5	0	2	15	10	0	5
Florida State U.	381	48	1	36	1	10	0	53	4	10	24	15	24	9	4	11
Nova Southeastern U.	134	10	0	3	0	4	3	0	0	0	0	0	4	4	0	0
U. Central Florida	261	20	0	8	1	6	5	2	0	0	1	1	18	14	1	3
U. Florida	650	54	2	36	0	13	3	23	4	6	6	7	38	16	14	8
U. Miami	204	9	1	2	0	4	2	41	5	1	5	30	8	3	4	1
U. South Florida, Tampa	327	61	5	37	6	11	2	21	0	2	9	10	11	4	7	0
U. West Florida	9	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	1,484	100	12	40	5	35	8	116	10	17	52	37	89	53	13	23
Clark Atlanta U.	23	0	0	0	0	0	0	7	0	1	1	5	1	0	0	1
Emory U.	233	0	0	0	0	0	0	48	3	4	14	27	5	5	0	0
Georgia Institute of Technology	512	0	0	0	0	0	0	1	0	0	0	1	20	14	0	6
Georgia Regents U.	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia State U.	193	25	0	12	2	11	0	22	0	8	14	0	16	11	4	1
Kennesaw State U.	27	0	0	0	0	0	0	0	0	0	0	0	15	11	0	4
Mercer U.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehouse School of Medicine	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Georgia	449	75	12	28	3	24	8	38	7	4	23	4	32	12	9	11
U. West Georgia	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	195	28	5	16	0	3	4	20	4	3	8	5	5	4	1	0
U. Hawaii, Manoa	195	28	5	16	0	3	4	20	4	3	8	5	5	4	1	0
Idaho	114	9	5	3	0	1	0	10	0	0	9	1	3	0	0	3
Boise State U.	28	1	0	1	0	0	0	0	0	0	0	0	2	0	0	2
Idaho State U.	33	7	5	1	0	1	0	9	0	0	9	0	0	0	0	0
U. Idaho	53	1	0	1	0	0	0	1	0	0	0	1	1	0	0	1
Illinois	2,435	147	21	91	1	29	5	280	31	51	84	114	157	79	28	50
Benedictine U.	11	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0
Chicago Theological Seminary	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
DePaul U.	17	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0
Garrett-Evangelical Theological Seminary	8	0	0	0	0	0	0	8	0	1	0	7	0	0	0	0
Illinois Institute of Technology	82	5	0	1	0	4	0	1	0	0	0	1	11	7	0	4
Illinois State U.	41	17	9	5	0	3	0	8	0	0	8	0	0	0	0	0

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Institute for Clinical Social Work, Chicago	11	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11
Loyola U., Chicago	70	12	0	12	0	0	0	14	0	4	5	5	4	0	0	4
Lutheran School of Theology, Chicago	8	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0
National Louis U.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Illinois U.	67	10	0	9	0	1	0	10	0	1	8	1	1	0	0	1
Northwestern U.	433	5	0	5	0	0	0	46	5	5	16	20	21	15	6	0
Roosevelt U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rosalind Franklin U. of Medicine and Science	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rush U.	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern Illinois U., Carbondale	135	25	3	9	0	10	3	10	0	1	6	3	12	5	7	0
Toyota Technological Institute, Chicago	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Chicago	370	0	0	0	0	0	0	85	13	21	14	37	26	13	0	13
U. Illinois, Chicago	322	32	2	25	0	4	1	15	4	3	2	6	9	5	1	3
U. Illinois, Urbana-Champaign	821	41	7	25	1	7	1	62	9	15	25	13	52	24	14	14
Wheaton C., Wheaton	5	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0
Indiana	1,613	146	37	70	1	35	3	171	19	34	45	73	90	37	29	24
Ball State U.	29	8	0	7	1	0	0	2	0	0	2	0	0	0	0	0
Indiana State U.	52	37	29	7	0	1	0	0	0	0	0	0	6	6	0	0
Indiana U., Bloomington	395	56	1	36	0	17	2	78	11	14	19	34	40	14	12	14
Indiana U.-Purdue U., Indianapolis	106	4	4	0	0	0	0	1	0	1	0	0	8	0	3	5
Purdue U., West Lafayette	794	41	3	20	0	17	1	29	5	4	14	6	36	17	14	5
U. Notre Dame	237	0	0	0	0	0	0	61	3	15	10	33	0	0	0	0
Iowa	727	62	5	33	0	17	7	48	5	11	15	17	39	24	8	7
Iowa State U.	407	16	1	6	0	4	5	9	0	5	4	0	16	12	0	4
Maharishi U. of Management	6	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
St. Ambrose U.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
U. Iowa	304	40	3	24	0	13	0	39	5	6	11	17	18	8	8	2
U. Northern Iowa	8	6	1	3	0	0	2	0	0	0	0	0	1	0	0	1
Kansas	548	57	6	42	1	7	1	40	2	13	11	14	43	15	9	19
Kansas State U.	203	17	2	10	1	3	1	3	0	3	0	0	12	7	0	5
U. Kansas	310	39	3	32	0	4	0	37	2	10	11	14	31	8	9	14
Wichita State U.	35	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 8

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		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Kentucky	504	40	13	18	1	6	2	82	2	5	17	58	33	7	9	17
Asbury Theological Seminary	12	0	0	0	0	0	0	11	0	1	0	10	0	0	0	0
Southern Baptist Theological Seminary	22	0	0	0	0	0	0	21	0	1	0	20	0	0	0	0
U. Kentucky	332	31	10	13	0	6	2	39	2	3	12	22	21	5	9	7
U. Louisville	138	9	3	5	1	0	0	11	0	0	5	6	12	2	0	10
Louisiana	638	50	15	24	0	11	0	73	6	8	22	37	44	29	6	9
Grambling State U.	5	5	1	4	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana State U., Baton Rouge	328	33	7	19	0	7	0	35	2	5	12	16	24	12	6	6
Louisiana State U., Health Sciences Center, New Orleans	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana State U., Health Sciences Center, Shreveport	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana Tech U.	39	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0
New Orleans Baptist Theological Seminary	19	0	0	0	0	0	0	16	0	0	0	16	0	0	0	0
Southern U. and A&M C., Baton Rouge	22	5	0	1	0	4	0	0	0	0	0	0	0	0	0	0
Tulane U.	109	0	0	0	0	0	0	11	3	3	0	5	6	3	0	3
U. Louisiana, Lafayette	40	0	0	0	0	0	0	11	1	0	10	0	0	0	0	0
U. Louisiana, Monroe	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. New Orleans	39	7	7	0	0	0	0	0	0	0	0	0	8	8	0	0
Maine	69	8	3	4	0	0	1	5	0	5	0	0	4	0	3	1
U. Maine	60	5	2	2	0	0	1	5	0	5	0	0	4	0	3	1
U. Southern Maine	9	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0
Maryland	1,269	82	18	42	1	15	6	73	8	18	20	27	46	24	8	14
Bowie State U.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johns Hopkins U.	426	0	0	0	0	0	0	23	1	8	3	11	0	0	0	0
Loyola U., Maryland	6	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Morgan State U.	48	8	2	6	0	0	0	3	0	1	2	0	7	4	0	3
Notre Dame of Maryland U.	16	16	12	0	0	1	3	0	0	0	0	0	0	0	0	0
Towson U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Maryland, Baltimore	64	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9
U. Maryland, Baltimore County	85	6	0	2	0	2	2	2	1	0	0	1	0	0	0	0
U. Maryland, College Park	568	48	4	30	1	12	1	45	6	9	15	15	27	17	8	2
U. Maryland, Eastern Shore	13	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0

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Uniformed Services U. of the Health Sciences	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Massachusetts	2,815	137	41	48	2	22	24	253	21	46	54	132	117	68	11	38
Bentley U.	6	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0
Boston C.	116	18	0	14	0	1	3	27	0	4	2	21	8	5	0	3
Boston U.	337	1	0	0	0	1	0	48	4	9	6	29	13	7	1	5
Brandeis U.	77	0	0	0	0	0	0	17	0	5	6	6	1	0	0	1
Clark U.	37	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0
Harvard U.	630	21	0	6	0	0	15	92	15	20	18	39	30	17	0	13
Massachusetts C. of Pharmacy and Health Sciences	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Massachusetts Institute of Technology	579	2	0	2	0	0	0	16	0	0	0	16	19	17	0	2
New England Conservatory	12	0	0	0	0	0	0	12	0	0	0	12	0	0	0	0
Northeastern U.	174	0	0	0	0	0	0	7	0	4	3	0	0	0	0	0
Simmons C.	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Smith C.	7	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6
Springfield C.	5	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Suffolk U.	14	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Tufts U., Medford	138	3	0	0	0	3	0	11	0	0	10	1	0	0	0	0
U. Massachusetts, Amherst	313	29	2	14	2	8	3	18	2	1	9	6	19	9	9	1
U. Massachusetts, Boston	90	16	8	7	0	1	0	2	0	0	0	2	4	4	0	0
U. Massachusetts, Dartmouth	25	6	4	1	0	0	1	0	0	0	0	0	0	0	0	0
U. Massachusetts, Lowell	135	39	27	4	0	6	2	0	0	0	0	0	2	2	0	0
U. Massachusetts, Medical School	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western New England U.	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worcester Polytechnic Institute	54	0	0	0	0	0	0	0	0	0	0	0	3	1	1	1
Michigan	1,967	203	70	88	7	31	7	129	14	27	40	48	87	26	30	31
Andrews U.	25	7	5	2	0	0	0	10	0	0	0	10	1	1	0	0
Calvin Theological Seminary	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
Central Michigan U.	39	5	4	0	0	1	0	2	0	2	0	0	0	0	0	0
Eastern Michigan U.	39	29	25	1	0	1	2	0	0	0	0	0	4	1	0	3
Lawrence Technological U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Michigan State U.	524	72	5	50	3	14	0	32	0	8	12	12	35	11	18	6
Michigan Technological U.	85	0	0	0	0	0	0	1	0	0	1	0	2	0	2	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Oakland U.	51	15	6	1	4	3	1	0	0	0	0	0	0	0	0	0
U. Detroit Mercy	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Michigan, Ann Arbor	846	19	1	8	0	7	3	52	11	11	12	18	35	13	5	17
U. Michigan, Dearborn	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Van Andel Institute	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wayne State U.	202	17	1	15	0	1	0	21	3	3	9	6	7	0	5	2
Western Michigan U.	134	39	23	11	0	4	1	9	0	3	6	0	3	0	0	3
Minnesota	1,545	182	18	105	3	32	24	59	11	9	22	17	218	95	4	119
Mayo Clinic, Mayo Graduate School	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Minnesota, Twin Cities	647	58	6	42	0	8	2	52	11	9	22	10	34	22	4	8
Walden U.	867	124	12	63	3	24	22	7	0	0	0	7	184	73	0	111
Mississippi	445	104	53	34	2	15	0	29	0	11	17	1	38	23	7	8
Jackson State U.	65	29	28	1	0	0	0	0	0	0	0	0	10	3	0	7
Mississippi State U.	159	35	13	15	0	7	0	4	0	4	0	0	5	4	0	1
U. Mississippi, Oxford	111	16	2	10	1	3	0	8	0	3	4	1	4	4	0	0
U. Southern Mississippi	110	24	10	8	1	5	0	17	0	4	13	0	19	12	7	0
Missouri	960	62	18	28	0	13	3	117	12	17	26	62	48	21	10	17
Concordia Seminary	8	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0
Midwestern Baptist Theological Seminary	28	0	0	0	0	0	0	28	0	0	0	28	0	0	0	0
Missouri U. of Science and Technology	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saint Louis U.	118	20	6	12	0	0	2	17	0	6	2	9	6	3	0	3
U. Missouri, Columbia	287	24	4	10	0	10	0	27	0	4	15	8	24	10	9	5
U. Missouri, Kansas City	62	9	4	3	0	2	0	3	0	1	0	2	1	0	1	0
U. Missouri, Saint Louis	51	9	4	3	0	1	1	0	0	0	0	0	3	3	0	0
Washington U., Saint Louis	289	0	0	0	0	0	0	34	12	6	9	7	14	5	0	9
Montana	120	13	7	4	0	1	1	3	0	2	0	1	1	0	0	1
Montana State U., Bozeman	69	7	4	2	0	0	1	2	0	1	0	1	0	0	0	0
Montana Tech of U. Montana	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Montana, Missoula	50	6	3	2	0	1	0	1	0	1	0	0	1	0	0	1
Nebraska	361	31	13	9	0	2	7	19	0	3	11	5	15	5	5	5
Creighton U.	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Nebraska, Lincoln	268	31	13	9	0	2	7	19	0	3	11	5	12	5	5	2
U. Nebraska, Medical Center	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

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		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
U. Nebraska, Omaha	20	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Nevada	251	39	3	25	0	5	6	16	0	2	14	0	6	6	0	0
U. Nevada, Las Vegas	140	26	0	20	0	4	2	11	0	2	9	0	6	6	0	0
U. Nevada, Reno	111	13	3	5	0	1	4	5	0	0	5	0	0	0	0	0
New Hampshire	198	6	0	4	0	2	0	3	0	0	3	0	4	4	0	0
Antioch U., Keene	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dartmouth C.	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern New Hampshire U.	4	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0
U. New Hampshire, Durham	70	6	0	4	0	2	0	3	0	0	3	0	0	0	0	0
New Jersey	991	74	8	32	2	19	13	134	21	27	29	57	52	26	11	15
Caldwell U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drew U.	6	0	0	0	0	0	0	6	0	2	0	4	0	0	0	0
Fairleigh Dickinson U., Teaneck	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Montclair State U.	30	15	0	4	2	9	0	0	0	0	0	0	0	0	0	0
New Jersey Institute of Technology	54	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Princeton Theological Seminary	10	0	0	0	0	0	0	10	0	1	0	9	0	0	0	0
Princeton U.	318	0	0	0	0	0	0	67	13	16	16	22	5	0	0	5
Rowan U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rutgers, State U. New Jersey, Camden	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Rutgers, State U. New Jersey, New Brunswick	395	43	6	15	0	9	13	51	8	8	13	22	15	1	10	4
Rutgers, State U. New Jersey, Newark	61	2	1	0	0	1	0	0	0	0	0	0	24	20	0	4
Seton Hall U.	37	14	1	13	0	0	0	0	0	0	0	0	0	0	0	0
Stevens Institute of Technology	54	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0
New Mexico	300	55	10	34	0	9	2	25	4	5	13	3	14	3	8	3
New Mexico Institute of Mining and Technology	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico State U., Las Cruces	101	40	10	27	0	3	0	8	0	0	8	0	3	3	0	0
U. New Mexico, Albuquerque	188	15	0	7	0	6	2	17	4	5	5	3	11	0	8	3
New York	4,168	282	43	89	12	122	16	601	82	103	147	269	186	76	22	88
Adelphi U.	25	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Albany Medical C.	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Albert Einstein College of Medicine	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alfred U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Bard C.	3	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0
Clarkson U.	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cold Spring Harbor Laboratory	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Columbia U. in the City of New York	673	53	2	19	0	30	2	125	27	27	19	52	38	17	3	18
Columbia U., Teachers C.	93	74	9	15	9	39	2	2	0	0	0	2	3	2	1	0
Cornell U.	514	1	0	1	0	0	0	42	11	11	6	14	28	16	5	7
Cornell U., Weill Cornell Medical College	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNY, City C.	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNY, Graduate Center	394	18	13	2	0	2	1	122	16	9	39	58	16	7	0	9
Elmezzi Graduate School of Molecular Medicine	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Five Towns C.	3	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0
Fordham U.	90	15	5	6	1	1	2	26	0	2	4	20	6	0	0	6
Hebrew Union C.-Jewish Institute of Religion, New York City	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
Hofstra U.	21	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Icahn School of Medicine at Mt. Sinai	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jewish Theological Seminary of America	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
Juilliard School	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Long Island U., Brooklyn	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long Island U., Brookville	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Memorial Sloan Kettering Cancer Center	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molloy C.	4	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
New School	47	0	0	0	0	0	0	10	0	1	0	9	0	0	0	0
New York Medical C.	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York U.	411	17	3	7	2	5	0	89	13	22	16	38	36	14	5	17
Pace U.	13	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Rensselaer Polytechnic Institute, Troy	130	0	0	0	0	0	0	6	0	0	1	5	9	3	2	4
Rochester Institute of Technology	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rockefeller U.	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. John's U., Queens	38	5	0	0	0	5	0	13	0	2	11	0	0	0	0	0
SUNY, Binghamton U.	174	9	0	2	0	2	5	32	5	3	15	9	6	2	0	4

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SUNY, C. of Environmental Science and Forestry	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY, C. of Optometry	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY, Downstate Medical Center	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNY, Stony Brook U.	287	8	0	1	0	7	0	30	4	7	5	14	5	0	0	5
SUNY, U. Albany	142	15	6	8	0	1	0	10	2	2	6	0	9	0	1	8
SUNY, U. Buffalo	358	32	3	14	0	13	2	49	4	9	19	17	9	7	1	1
SUNY, Upstate Medical U.	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syracuse U.	138	23	1	10	0	12	0	6	0	1	2	3	7	1	4	2
Union Theological Seminary	5	0	0	0	0	0	0	5	0	1	0	4	0	0	0	0
U. Rochester	207	8	1	4	0	1	2	20	0	6	4	10	6	6	0	0
Yeshiva U.	23	0	0	0	0	0	0	2	0	0	0	2	4	0	0	4
North Carolina	1,873	116	3	74	4	19	16	163	18	29	47	69	130	62	16	52
Duke U.	407	0	0	0	0	0	0	60	9	6	16	29	22	19	0	3
East Carolina U.	39	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0
North Carolina Agricultural and Technical State U.	55	2	1	0	0	0	1	0	0	0	0	0	17	13	0	4
North Carolina State U.	533	43	0	26	1	12	4	4	0	1	3	0	41	5	6	30
Piedmont Baptist C. and Graduate School	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Southeastern Baptist Theological Seminary	24	0	0	0	0	0	0	22	0	0	0	22	1	1	0	0
U. North Carolina, Chapel Hill	556	20	0	9	1	3	7	65	9	18	21	17	42	17	10	15
U. North Carolina, Charlotte	111	19	0	16	1	1	1	0	0	0	0	0	4	4	0	0
U. North Carolina, Greensboro	115	32	2	23	1	3	3	7	0	4	3	0	3	3	0	0
U. North Carolina, Wilmington	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wake Forest U.	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Dakota	189	24	4	12	1	3	4	4	0	1	3	0	9	2	7	0
North Dakota State U.	118	5	0	2	0	1	2	2	0	0	2	0	8	2	6	0
U. North Dakota	71	19	4	10	1	2	2	2	0	1	1	0	1	0	1	0
Ohio	1,953	240	46	124	1	50	19	148	24	17	52	55	109	47	40	22
Air Force Institute of Technology	27	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Bowling Green State U., Bowling Green	98	13	9	2	0	1	1	14	0	0	3	11	11	3	7	1
Case Western Reserve U.	197	1	0	0	0	1	0	7	0	1	3	3	14	13	0	1
Cleveland State U.	42	12	9	2	0	0	1	0	0	0	0	0	1	1	0	0

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Kent State U., Kent	156	40	6	29	0	4	1	17	4	1	10	2	12	9	3	0
Miami U., Oxford	50	13	12	0	0	0	1	6	0	0	6	0	0	0	0	0
Ohio State U., Columbus	704	73	2	26	1	33	11	65	14	10	16	25	30	11	10	9
Ohio U., Athens	129	23	0	21	0	1	1	10	1	0	5	4	20	0	20	0
U. Akron, Akron	128	7	0	4	0	1	2	2	0	2	0	0	5	0	0	5
U. Cincinnati, Uptown West Campus	228	18	4	8	0	5	1	22	5	2	9	6	13	7	0	6
U. Dayton	44	5	4	1	0	0	0	4	0	0	0	4	0	0	0	0
U. Toledo	115	35	0	31	0	4	0	1	0	1	0	0	2	2	0	0
Wright State U., Dayton	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Youngstown State U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma	492	65	17	35	0	9	4	41	1	7	9	24	41	32	4	5
Oklahoma City U.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma State U., Center for Health Sciences	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oklahoma State U., Stillwater	214	36	13	17	0	5	1	7	0	2	3	2	25	23	0	2
U. Oklahoma, Norman	228	29	4	18	0	4	3	30	1	5	2	22	16	9	4	3
U. Tulsa	41	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0
Oregon	551	35	6	22	0	5	2	22	3	3	8	8	27	12	3	12
Oregon Health and Science U.	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon State U., Corvallis	255	15	4	6	0	3	2	0	0	0	0	0	2	2	0	0
Pacific U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portland State U.	72	2	0	0	0	2	0	0	0	0	0	0	10	0	0	10
U. Oregon	186	18	2	16	0	0	0	22	3	3	8	8	15	10	3	2
Pennsylvania	2,602	191	31	95	8	37	20	250	28	33	90	99	162	89	36	37
Bryn Mawr C.	8	0	0	0	0	0	0	5	0	0	1	4	1	0	0	1
Carnegie Mellon U.	300	1	0	0	0	1	0	7	0	5	2	0	17	11	0	6
Drexel U.	161	10	3	0	6	1	0	0	0	0	0	0	10	9	1	0
Duquesne U.	71	10	0	9	0	1	0	20	0	0	10	10	4	0	4	0
Indiana U. Pennsylvania	76	9	1	3	0	5	0	37	1	0	36	0	9	5	3	1
Lehigh U.	95	8	0	8	0	0	0	4	0	2	2	0	0	0	0	0
Marywood U.	11	3	2	1	0	0	0	0	0	0	0	0	5	5	0	0
Pennsylvania State U., University Park and Hershey Medical Center	688	70	5	43	2	10	10	35	7	3	16	9	29	16	7	6
Salus U.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Temple U.	217	42	18	14	0	6	4	27	4	6	2	15	20	14	6	0
Thomas Jefferson U.	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Pennsylvania	469	15	0	7	0	6	2	60	10	13	13	24	41	20	12	9
U. Pittsburgh, Pittsburgh	420	16	1	10	0	2	3	47	6	4	8	29	18	9	3	6
U. of the Sciences Philadelphia	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Villanova U.	24	5	0	0	0	5	0	2	0	0	0	2	0	0	0	0
Westminster Theological Seminary	6	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0
Widener U., Chester	16	2	1	0	0	0	1	0	0	0	0	0	8	0	0	8
Puerto Rico	129	4	0	0	0	4	0	8	2	3	1	2	0	0	0	0
Carlos Albizu U., San Juan	41	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Inter American U. Puerto Rico, San Juan	8	0	0	0	0	0	0	4	0	2	0	2	0	0	0	0
Ponce Heath Sciences U.	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontifical Catholic U. Puerto Rico, Ponce	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Central del Caribe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. del Turabo	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Puerto Rico, Mayaguez	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Puerto Rico, Medical Sciences Campus	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Puerto Rico, Rio Piedras	30	0	0	0	0	0	0	4	2	1	1	0	0	0	0	0
Rhode Island	311	9	0	0	1	2	6	59	7	6	18	28	3	3	0	0
Brown U.	216	2	0	0	0	2	0	46	7	6	10	23	0	0	0	0
Salve Regina U.	5	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0
U. Rhode Island	90	7	0	0	1	0	6	8	0	0	8	0	3	3	0	0
South Carolina	603	71	27	26	1	17	0	26	0	11	12	3	51	26	2	23
Clemson U.	243	35	15	12	0	8	0	5	0	0	5	0	24	5	0	19
Medical U. South Carolina	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. South Carolina, Columbia	323	36	12	14	1	9	0	21	0	11	7	3	27	21	2	4
South Dakota	126	2	0	2	0	0	0	4	0	0	4	0	2	2	0	0
Dakota State U.	15	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
South Dakota School of Mines and Technology	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota State U.	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. South Dakota	29	2	0	2	0	0	0	4	0	0	4	0	0	0	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Tennessee	1,023	147	24	75	7	29	12	102	11	21	34	36	47	21	16	10
East Tennessee State U.	30	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Meharry Medical C.	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mid-America Baptist Theological Seminary	6	1	1	0	0	0	0	4	0	0	0	4	0	0	0	0
Middle Tennessee State U.	45	10	0	0	0	9	1	11	1	5	4	1	1	0	0	1
Tennessee State U.	17	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Tennessee Technological U.	32	7	0	3	0	0	4	0	0	0	0	0	0	0	0	0
U. Memphis	182	47	11	28	4	4	0	29	0	1	16	12	21	12	9	0
U. Tennessee, Chattanooga	8	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0
U. Tennessee, Health Science Center	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Tennessee, Knoxville	393	50	6	23	2	12	7	18	2	6	9	1	23	9	7	7
Vanderbilt U.	282	25	3	19	0	3	0	40	8	9	5	18	0	0	0	0
Texas	4,201	451	91	238	12	91	19	332	29	70	91	142	269	146	58	65
Baylor C. of Medicine	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baylor U.	95	7	0	5	0	2	0	23	0	4	10	9	6	1	0	5
Brite Divinity S.	4	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0
Dallas Theological Seminary	7	0	0	0	0	0	0	7	0	0	0	7	0	0	0	0
Lamar U.	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prairie View A&M U.	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Rice U.	206	0	0	0	0	0	0	20	0	6	5	9	9	9	0	0
Sam Houston State U.	26	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Southern Methodist U.	80	2	0	0	0	1	1	9	0	2	0	7	2	0	0	2
Southwestern Baptist Theological Seminary	40	1	0	1	0	0	0	36	0	0	0	36	0	0	0	0
St. Mary's U., San Antonio	11	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M International U.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
Texas A&M U., College Station and Health Science Center	772	62	10	33	0	18	1	22	1	5	13	3	31	19	4	8
Texas A&M U.-Commerce	18	7	0	5	0	2	0	4	0	0	3	1	0	0	0	0
Texas A&M U.-Corpus Christi	25	15	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Texas A&M U.-Kingsville	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas Christian U.	28	6	1	4	0	1	0	12	0	7	5	0	0	0	0	0
Texas Southern U.	25	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0
Texas State U.	54	23	7	3	5	3	5	0	0	0	0	0	0	0	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
Texas Tech U.	356	88	18	52	0	15	3	22	2	3	9	8	52	26	21	5
Texas Tech U., Health Sciences Center	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas Woman's U.	106	14	0	3	6	5	0	6	0	0	3	3	1	0	0	1
U. Dallas	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
U. Houston	294	19	0	17	0	2	0	22	8	7	6	1	14	11	0	3
U. North Texas, Denton	239	60	12	41	0	6	1	22	0	7	6	9	31	16	0	15
U. North Texas, Health Science Center	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. of St. Thomas, Houston	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
U. of the Incarnate Word	9	7	3	3	0	0	1	1	0	0	0	1	1	1	0	0
U. Texas Health Science Center, Houston	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Texas Health Science Center, San Antonio	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Texas Medical Branch	41	1	0	0	0	1	0	2	0	0	0	2	0	0	0	0
U. Texas Rio Grande Valley	10	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0
U. Texas Southwestern Medical Center	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Texas, Arlington	205	11	7	2	0	1	1	6	0	3	3	0	19	10	0	9
U. Texas, Austin	744	63	11	31	0	20	1	77	18	15	19	25	55	13	32	10
U. Texas, Dallas	240	0	0	0	0	0	0	22	0	4	3	15	21	13	1	7
U. Texas, El Paso	119	7	1	0	0	6	0	11	0	7	4	0	11	11	0	0
U. Texas, San Antonio	121	40	16	10	1	8	5	0	0	0	0	0	7	7	0	0
West Texas A&M U.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	543	55	14	29	0	9	3	23	3	3	13	4	22	8	7	7
Brigham Young U., Provo	111	16	4	8	0	3	1	0	0	0	0	0	0	0	0	0
U. Utah	336	14	6	6	0	2	0	21	3	3	11	4	21	8	7	6
Utah State U., Logan	96	25	4	15	0	4	2	2	0	0	2	0	1	0	0	1
Vermont	57	4	3	1	0	0	0	5	5	0	0	0	0	0	0	0
Middlebury C.	5	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0
U. Vermont	52	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0
Virginia	1,532	205	38	119	2	24	22	87	12	18	23	34	117	61	27	29
C. of William and Mary	62	13	4	9	0	0	0	7	0	5	0	2	0	0	0	0
Eastern Virginia Medical School	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
George Mason U.	234	36	6	15	2	9	4	8	0	6	1	1	9	0	9	0
Hampton U.	13	8	5	2	0	1	0	0	0	0	0	0	1	1	0	0

Table 8

Doctorate recipients, by state or location, institution, and major non-science and engineering fields of study: 2020

(Number)

State or location and institution	All fields	Education						Humanities and arts					Other[a]			
		Total	Education administration	Education research	Teacher education	Teaching fields	Other education	Total	Foreign languages and literature	History	Letters	Other humanities and arts	Total	Business management and administration	Communication	Non-S&E fields nec
James Madison U.	9	5	2	3	0	0	0	0	0	0	0	0	1	1	0	0
Norfolk State U.	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Old Dominion U.	147	46	14	25	0	0	7	10	0	0	10	0	17	12	0	5
Regent U.	64	9	0	8	0	0	1	4	0	0	0	4	48	31	17	0
Union Presbyterian Seminary	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0
U. Virginia, Charlottesville	305	20	1	14	0	2	3	49	12	7	10	20	11	3	0	8
Virginia Commonwealth U.	196	30	6	18	0	2	4	2	0	0	0	2	6	3	1	2
Virginia Polytechnic Institute and State U.	495	38	0	25	0	10	3	5	0	0	2	3	21	10	0	11
Washington	1,015	61	11	37	1	5	7	57	8	13	27	9	58	33	15	10
Gonzaga U.	4	1	1	0	0	0	0	0	0	0	0	0	3	3	0	0
Seattle Pacific U.	16	11	2	6	1	0	2	0	0	0	0	0	0	0	0	0
U. Washington, Seattle	681	27	2	21	0	2	2	48	8	8	23	9	33	15	8	10
Washington State U.	314	22	6	10	0	3	3	9	0	5	4	0	22	15	7	0
West Virginia	214	23	4	14	0	4	1	25	0	6	3	16	17	9	5	3
Marshall U.	11	7	2	5	0	0	0	0	0	0	0	0	2	2	0	0
West Virginia U.	203	16	2	9	0	4	1	25	0	6	3	16	15	7	5	3
Wisconsin	976	103	33	49	1	17	3	107	20	15	37	35	42	14	16	12
Cardinal Stritch U.	25	25	18	1	0	6	0	0	0	0	0	0	0	0	0	0
Marquette U.	57	2	0	2	0	0	0	21	0	2	5	14	0	0	0	0
Medical C. Wisconsin	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U. Wisconsin-Madison	724	67	12	43	1	9	2	71	20	10	22	19	33	10	14	9
U. Wisconsin-Milwaukee	140	9	3	3	0	2	1	15	0	3	10	2	9	4	2	3
Wyoming	94	7	0	5	0	1	1	0	0	0	0	0	2	2	0	0
U. Wyoming	94	7	0	5	0	1	1	0	0	0	0	0	2	2	0	0

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

[a] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 9

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident doctorate recipients, by ethnicity and race: 5-year total, 2016–20

(Number)

Institution	Rank	Doctorate recipients
Hispanic or Latino (384 institutions)	-	13,351
From top 20 institutions	-	3,886
U. California, Berkeley	1	282
U. California, Los Angeles	2	277
U. Texas, Austin	3	238
Texas A&M U., College Station and Health Science Center	4	237
U. Wisconsin-Madison	5	222
U. Michigan, Ann Arbor	6	221
U. Arizona	7	200
U. Florida	7	200
Walden U.	9	191
U. California, San Diego	10	182
U. California, Davis	11	176
CUNY, Graduate Center	12	172
U. California, Irvine	13	171
U. Texas, El Paso	14	169
Florida International U.	15	167
U. Washington, Seattle	16	164
Harvard U.	17	159
U. Illinois, Urbana-Champaign	18	155
U. California, Riverside	19	152
Columbia U. in the City of New York	20	151
Not Hispanic or Latino	-	-
American Indian or Alaska Native (184 institutions)	-	568
From top 20 institutions	-	263
U. Arizona	1	28
Oklahoma State U., Stillwater	2	25
U. Oklahoma, Norman	3	21
U. New Mexico, Albuquerque	4	20
Arizona State U.	5	18
Walden U.	6	15
U. Minnesota, Twin Cities	7	14
U. Montana, Missoula	7	14
U. Washington, Seattle	9	12
U. Alaska, Fairbanks	10	10
U. California, Berkeley	11	9
U. California, Davis	11	9
U. Kansas	11	9
Texas A&M U., College Station and Health Science Center	14	8
U. North Dakota	14	8
SUNY, U. Buffalo	16	7
Colorado State U., Fort Collins	17	6
U. Colorado Boulder	17	6
U. Michigan, Ann Arbor	17	6
U. North Carolina, Chapel Hill	17	6
U. Oregon	17	6
Washington State U.	17	6
Asian (385 institutions)	-	16,522
From top 20 institutions	-	5,865

Table 9

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident doctorate recipients, by ethnicity and race: 5-year total, 2016–20

(Number)

Institution	Rank	Doctorate recipients
U. California, Los Angeles	1	521
U. California, Berkeley	2	482
Harvard U.	3	410
Massachusetts Institute of Technology	4	351
U. Michigan, Ann Arbor	5	315
Stanford U.	6	308
Columbia U. in the City of New York	7	304
U. California, San Diego	8	301
U. California, Irvine	9	298
U. Washington, Seattle	9	298
U. Illinois, Urbana-Champaign	11	272
U. Southern California	12	269
U. Pennsylvania	13	245
U. California, Davis	14	243
U. Maryland, College Park	15	227
Johns Hopkins U.	16	225
U. Wisconsin-Madison	17	207
Georgia Institute of Technology	18	205
Cornell U.	19	196
U. Texas, Austin	20	188
Black or African American (380 institutions)	-	12,177
From top 20 institutions	-	4,000
Walden U.	1	1,383
Howard U.	2	266
Jackson State U.	3	213
U. Georgia	4	165
U. Florida	5	164
Georgia State U.	6	147
U. North Carolina, Chapel Hill	7	141
Louisiana State U., Baton Rouge	8	135
U. Maryland, College Park	9	131
U. Michigan, Ann Arbor	10	126
George Washington U.	11	123
Michigan State U.	12	122
U. Memphis	13	121
Morgan State U.	14	116
North Carolina Agricultural and Technical State U.	15	114
Texas A&M U., College Station and Health Science Center	15	114
U. Illinois, Urbana-Champaign	17	109
Florida State U.	18	106
Auburn U., Auburn	19	103
U. California, Los Angeles	20	101
More than one race (345 institutions)	-	5,405
From top 20 institutions	-	1,659
U. California, Berkeley	1	150
U. Washington, Seattle	2	117
Harvard U.	3	109
U. California, Los Angeles	4	98
U. California, Davis	5	94

Table 9

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident doctorate recipients, by ethnicity and race: 5-year total, 2016–20

(Number)

Institution	Rank	Doctorate recipients
Walden U.	6	89
U. Michigan, Ann Arbor	7	87
Stanford U.	8	85
U. Wisconsin-Madison	9	83
U. California, Irvine	10	81
U. California, San Diego	11	80
U. Hawaii, Manoa	12	77
U. Illinois, Urbana-Champaign	13	70
Massachusetts Institute of Technology	14	68
U. North Carolina, Chapel Hill	15	64
Yale U.	15	64
U. Pennsylvania	17	63
Columbia U. in the City of New York	18	61
Ohio State U., Columbus	18	61
U. California, Santa Barbara	20	58

Note(s):
Tied institutions are listed alphabetically.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 10

Top 20 doctorate-granting institutions, ranked by number of doctorate recipients holding temporary visas: 2020

(Number)

Institution	Rank	Doctorate recipients
All institutions (449 institutions)	-	18,482
From top 20 institutions	-	5,397
Purdue U., West Lafayette	1	452
U. Illinois, Urbana-Champaign	2	394
Texas A&M U., College Station and Health Science Center	3	376
Pennsylvania State U., University Park and Hershey Medical Center	4	322
U. Michigan, Ann Arbor	5	300
Ohio State U., Columbus	6	275
U. Florida	7	273
Georgia Institute of Technology	8	261
U. Wisconsin-Madison	9	256
Columbia U. in the City of New York	10	255
Massachusetts Institute of Technology	11	248
U. Southern California	12	237
U. Texas, Austin	13	231
Virginia Polytechnic Institute and State U.	14	228
North Carolina State U.	15	227
U. Minnesota, Twin Cities	15	227
U. California, Berkeley	17	214
U. California, Los Angeles	18	211
Michigan State U.	19	210
Cornell U.	20	200

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 11

Doctorate recipients, by broad field of study and Carnegie category of doctorate institution: 2010–20

(Number)

Field and Carnegie category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All doctorate recipients	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283
Doctoral: Very high research	38,603	39,720	41,251	42,639	43,190	43,624	43,351	43,259	43,604	43,959	43,487
Doctoral: High research	5,945	5,859	6,126	6,460	6,973	7,280	7,475	7,442	7,409	7,467	7,575
Doctoral/ Professional	1,458	1,288	1,408	1,484	1,774	1,746	1,847	1,838	1,908	1,877	2,027
Other universities	2,022	2,042	2,158	2,120	2,049	2,236	2,136	2,013	2,164	2,311	2,194
Life sciences[a]	11,319	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,755	12,753	12,561
Doctoral: Very high research	9,055	9,144	9,400	9,653	9,603	9,555	9,619	9,749	9,797	9,790	9,696
Doctoral: High research	1,038	1,060	1,148	1,183	1,361	1,346	1,385	1,331	1,421	1,385	1,372
Doctoral/ Professional	141	162	172	205	294	290	315	325	309	293	354
Other universities	1,085	1,169	1,244	1,166	1,226	1,302	1,220	1,149	1,228	1,285	1,139
Physical sciences and earth sciences	4,995	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,331	6,579	6,247
Doctoral: Very high research	4,435	4,619	4,757	4,882	5,108	5,153	5,433	5,323	5,526	5,738	5,414
Doctoral: High research	510	586	590	635	744	701	745	701	727	766	759
Doctoral/ Professional	2	2	8	2	7	5	6	5	7	4	10
Other universities	48	64	64	65	51	57	67	53	71	71	64
Mathematics and computer sciences	3,223	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,231	4,392
Doctoral: Very high research	2,818	2,882	3,060	3,175	3,346	3,316	3,365	3,259	3,469	3,618	3,726
Doctoral: High research	365	348	390	438	472	442	536	519	491	559	601
Doctoral/ Professional	25	27	25	20	26	37	29	37	43	24	34
Other universities	15	16	21	27	18	23	24	27	19	30	31
Psychology and social sciences	7,882	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,877	9,043	8,946
Doctoral: Very high research	5,932	6,182	6,365	6,413	6,367	6,664	6,603	6,612	6,511	6,535	6,452
Doctoral: High research	1,133	1,230	1,242	1,275	1,383	1,423	1,409	1,474	1,330	1,379	1,349
Doctoral/ Professional	493	510	582	591	708	666	694	664	733	764	779
Other universities	324	298	309	301	290	320	331	284	303	365	366
Engineering	7,578	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,165	10,298	10,476
Doctoral: Very high research	6,768	7,152	7,531	7,930	8,546	8,604	8,230	8,521	8,746	8,893	8,991
Doctoral: High research	745	771	845	967	996	1,176	1,140	1,135	1,294	1,279	1,360
Doctoral/ Professional	16	27	22	20	27	27	27	38	33	30	25
Other universities	49	82	71	83	57	68	62	82	92	96	100
Education	5,287	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,716
Doctoral: Very high research	3,283	3,269	3,372	3,406	3,274	3,334	3,339	3,129	3,128	2,998	3,020
Doctoral: High research	1,336	986	1,043	1,098	1,093	1,291	1,277	1,299	1,214	1,198	1,194
Doctoral/ Professional	505	305	282	306	339	374	420	325	373	345	396
Other universities	163	110	105	124	83	99	110	73	103	92	106
Humanities and arts	5,015	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,939
Doctoral: Very high research	4,147	4,327	4,554	4,774	4,596	4,628	4,480	4,329	4,215	4,143	3,987
Doctoral: High research	487	529	569	520	535	549	615	550	526	498	517
Doctoral/ Professional	98	101	152	123	117	108	132	115	109	104	111
Other universities	283	268	286	298	276	309	255	292	289	306	324
Other[b]	2,729	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,978	3,026	3,006
Doctoral: Very high research	2,165	2,145	2,212	2,406	2,350	2,370	2,282	2,337	2,212	2,244	2,201
Doctoral: High research	331	349	299	344	389	352	368	433	406	403	423
Doctoral/ Professional	178	154	165	217	256	239	224	329	301	313	318
Other universities	55	35	58	56	48	58	67	53	59	66	64

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

Note(s):
Carnegie category is based on the 2018 Carnegie Classifications.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 12

Doctorate recipients, by major field of study: Selected years, 1990–2020

(Number and percent)

Field of study	1990		1995		2000		2005		2010		2015		2020	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	36,065	100.0	41,747	100.0	41,369	100.0	43,385	100.0	48,028	100.0	54,886	100.0	55,283	100.0
Life sciences	6,655	18.5	7,998	19.2	8,622	20.8	9,310	21.5	11,319	23.6	12,493	22.8	12,561	22.7
Agricultural sciences and natural resources	1,371	3.8	1,293	3.1	1,179	2.8	1,160	2.7	1,100	2.3	1,434	2.6	1,472	2.7
Biological and biomedical sciences	4,328	12.0	5,376	12.9	5,853	14.1	6,367	14.7	8,046	16.8	8,783	16.0	8,418	15.2
Health sciences	956	2.7	1,329	3.2	1,590	3.8	1,783	4.1	2,173	4.5	2,276	4.1	2,671	4.8
Physical sciences and earth sciences	4,212	11.7	4,540	10.9	4,071	9.8	4,359	10.0	4,995	10.4	5,916	10.8	6,247	11.3
Chemistry	2,100	5.8	2,162	5.2	1,989	4.8	2,126	4.9	2,304	4.8	2,666	4.9	2,763	5.0
Geosciences, atmospheric sciences, and ocean sciences	719	2.0	726	1.7	693	1.7	714	1.6	862	1.8	1,057	1.9	1,243	2.2
Physics and astronomy	1,393	3.9	1,652	4.0	1,389	3.4	1,519	3.5	1,829	3.8	2,193	4.0	2,241	4.1
Mathematics and computer sciences	1,597	4.4	2,187	5.2	1,910	4.6	2,334	5.4	3,223	6.7	3,818	7.0	4,392	7.9
Computer and information sciences	705	2.0	997	2.4	860	2.1	1,129	2.6	1,633	3.4	2,003	3.6	2,361	4.3
Mathematics and statistics	892	2.5	1,190	2.9	1,050	2.5	1,205	2.8	1,590	3.3	1,815	3.3	2,031	3.7
Psychology and social sciences	6,331	17.6	6,930	16.6	7,452	18.0	7,149	16.5	7,882	16.4	9,073	16.5	8,946	16.2
Psychology	3,281	9.1	3,429	8.2	3,616	8.7	3,322	7.7	3,420	7.1	3,776	6.9	3,879	7.0
Anthropology	324	0.9	375	0.9	446	1.1	456	1.1	507	1.1	492	0.9	448	0.8
Economics	862	2.4	979	2.3	948	2.3	1,061	2.4	1,073	2.2	1,255	2.3	1,216	2.2
Political science and government	462	1.3	599	1.4	669	1.6	618	1.4	728	1.5	859	1.6	637	1.2
Sociology	428	1.2	540	1.3	617	1.5	536	1.2	639	1.3	741	1.4	607	1.1
Other social sciences	974	2.7	1,008	2.4	1,156	2.8	1,156	2.7	1,515	3.2	1,950	3.6	2,159	3.9
Engineering	4,894	13.6	6,008	14.4	5,323	12.9	6,426	14.8	7,578	15.8	9,875	18.0	10,476	18.9
Aerospace, aeronautical, and astronautical engineering	192	0.5	252	0.6	214	0.5	219	0.5	252	0.5	361	0.7	399	0.7
Bioengineering and biomedical engineering	129	0.4	189	0.5	251	0.6	417	1.0	824	1.7	1,125	2.0	1,083	2.0
Chemical engineering	561	1.6	602	1.4	619	1.5	774	1.8	822	1.7	1,002	1.8	994	1.8
Civil engineering	505	1.4	572	1.4	480	1.2	622	1.4	643	1.3	632	1.2	796	1.4
Electrical, electronics, and communications engineering	1,110	3.1	1,513	3.6	1,330	3.2	1,547	3.6	1,778	3.7	1,997	3.6	1,973	3.6

Table 12

Doctorate recipients, by major field of study: Selected years, 1990–2020

(Number and percent)

Field of study	1990		1995		2000		2005		2010		2015		2020	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Industrial and manufacturing engineering	151	0.4	284	0.7	176	0.4	221	0.5	215	0.4	243	0.4	304	0.5
Materials science engineering	307	0.9	476	1.1	404	1.0	493	1.1	670	1.4	871	1.6	880	1.6
Mechanical engineering	773	2.1	917	2.2	807	2.0	892	2.1	983	2.0	1,466	2.7	1,634	3.0
Other engineering	1,166	3.2	1,203	2.9	1,042	2.5	1,241	2.9	1,391	2.9	2,178	4.0	2,413	4.4
Education	6,509	18.0	6,648	15.9	6,442	15.6	6,227	14.4	5,287	11.0	5,098	9.3	4,716	8.5
Education administration	1,664	4.6	1,974	4.7	2,036	4.9	2,167	5.0	1,439	3.0	920	1.7	927	1.7
Education research	2,439	6.8	2,576	6.2	2,667	6.4	2,674	6.2	2,443	5.1	2,772	5.1	2,312	4.2
Teacher education	419	1.2	390	0.9	261	0.6	263	0.6	245	0.5	156	0.3	113	0.2
Teaching fields	922	2.6	924	2.2	824	2.0	663	1.5	799	1.7	953	1.7	940	1.7
Other education	1,065	3.0	784	1.9	654	1.6	460	1.1	361	0.8	297	0.5	424	0.8
Humanities and arts	3,854	10.7	5,040	12.1	5,462	13.2	5,187	12.0	5,015	10.4	5,594	10.2	4,939	8.9
Foreign languages and literature	512	1.4	639	1.5	642	1.6	607	1.4	601	1.3	656	1.2	564	1.0
History	612	1.7	889	2.1	1,061	2.6	924	2.1	1,005	2.1	1,146	2.1	887	1.6
Letters	1,060	2.9	1,548	3.7	1,612	3.9	1,389	3.2	1,516	3.2	1,583	2.9	1,392	2.5
Other humanities and arts	1,670	4.6	1,964	4.7	2,147	5.2	2,267	5.2	1,893	3.9	2,209	4.0	2,096	3.8
Other[a]	2,013	5.6	2,396	5.7	2,087	5.0	2,393	5.5	2,729	5.7	3,019	5.5	3,006	5.4
Business management and administration	1,036	2.9	1,330	3.2	1,065	2.6	1,171	2.7	1,366	2.8	1,582	2.9	1,466	2.7
Communication	323	0.9	381	0.9	389	0.9	488	1.1	638	1.3	667	1.2	593	1.1
Non-S&E fields nec	654	1.8	685	1.6	633	1.5	734	1.7	725	1.5	770	1.4	947	1.7

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

[a] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields. Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All fields	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283
Life sciences	11,319	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,755	12,753	12,561
Agricultural sciences and natural resources	1,100	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,472
Agricultural sciences	668	669	735	786	793	831	781	905	874	915	920
Agricultural economics	118	106	88	107	96	101	113	144	108	117	137
Agricultural and horticultural plant breeding	31	23	31	21	39	43	61	53	67	69	59
Agricultural animal breeding	7	7	6	8	na	na	na	na	na	na	na
Agronomy and crop science	69	54	73	86	80	81	82	100	80	87	91
Animal nutrition	34	48	57	54	50	40	42	27	36	49	43
Animal science, poultry or avian	12	25	22	23	25	31	21	20	32	32	32
Animal sciences, other	54	69	75	85	103	90	83	107	121	120	139
Food science	100	73	108	105	93	125	122	123	112	103	109
Food science and technology, other	37	39	35	48	39	47	40	48	51	53	34
Horticulture science	42	48	40	41	51	50	32	42	46	44	60
Plant pathology and phytopathology, agricultural	56	53	71	74	74	57	73	106	90	105	105
Plant sciences, other	49	51	77	67	78	95	51	63	65	55	48
Soil chemistry, microbiology	20	34	15	16	20	17	23	20	16	28	18
Soil sciences, other	39	39	37	51	45	54	38	52	50	53	45
Natural resources and conservation	414	514	501	509	501	566	504	536	501	497	476
Environmental science	155	195	182	204	213	182	193	228	221	229	201
Fishing and fisheries sciences and management	34	59	51	53	52	60	47	46	51	63	49
Forest management, forest resources management	41	34	29	44	28	36	35	25	18	16	24
Forest sciences and biology	23	26	25	19	22	37	15	32	22	15	26
Forestry, other	17	35	29	26	20	22	29	36	53	43	42
Natural resource and environmental policy	na	na	na	na	35	56	68	54	51	40	37
Natural resources and conservation	88	100	99	92	70	87	72	63	47	53	56
Natural resources and environmental economics (agricultural sciences)	na	na	31	22	28	39	23	21	27	35	29
Wildlife, range management	48	50	39	41	29	32	14	20	11	3	12
Wood science, pulp and paper technology	8	15	16	8	4	15	8	11	na	na	na
Agricultural sciences and natural resources, general[a]	2	9	8	9	25	21	73	38	38	39	45
Agricultural sciences and natural resources, other[b]	16	14	11	20	19	16	21	14	29	37	31
Biological and biomedical sciences	8,046	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,681	8,418
Anatomy	25	25	23	15	15	24	21	8	23	23	18
Bacteriology	24	22	23	28	25	22	18	12	13	14	5
Biochemistry (biological sciences)	861	867	847	826	820	749	832	818	811	791	687
Bioinformatics	123	140	145	166	183	174	193	184	201	242	223
Biomedical sciences	287	311	366	401	438	416	329	339	421	380	409
Biometrics and biostatistics	127	137	174	145	165	171	198	216	233	221	241
Biophysics (biological sciences)	171	192	193	179	186	181	165	181	152	175	174
Biotechnology	22	33	54	39	45	38	36	37	35	44	25
Botany and plant biology	110	110	110	91	93	97	111	97	120	117	117
Cancer biology	300	396	381	379	455	454	436	370	354	364	305
Cell, cellular biology, and histology	361	379	376	318	335	321	258	230	218	202	168

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Computational biology	69	65	94	115	117	107	134	149	146	184	137
Developmental biology and embryology	193	205	174	197	198	187	162	133	135	114	123
Ecology	431	404	415	468	449	453	482	437	417	433	388
Endocrinology	23	32	26	39	26	22	11	17	21	12	10
Entomology	122	113	120	118	112	109	127	129	119	123	124
Environmental toxicology	39	30	45	33	49	34	45	64	56	67	58
Epidemiology[c]	na	na	na	na	292	378	343	351	400	362	357
Evolutionary biology	214	213	203	209	215	210	200	229	242	238	207
Genetics, genomics, human and animal	383	374	334	396	401	358	338	344	363	341	347
Immunology	452	449	455	471	456	471	397	402	419	413	389
Microbiology	490	462	451	455	463	480	465	431	474	429	478
Molecular biology	697	716	620	646	670	632	549	634	596	555	579
Molecular medicine	na	na	na	na	na	na	25	66	62	34	36
Neurosciences, neurobiology[d]	954	958	1,053	1,016	1,048	1,089	997	984	1,033	1,035	974
Nutrition sciences	180	163	183	177	175	184	204	215	201	201	205
Parasitology	37	26	29	26	26	31	20	16	20	26	12
Pathology, human and animal	79	83	95	95	99	88	49	68	52	50	68
Pharmacology, human and animal	290	301	308	286	292	243	207	230	210	199	208
Physiology, human and animal	258	226	254	210	208	210	165	162	201	177	151
Plant genetics	52	45	41	37	48	57	67	50	72	58	61
Plant pathology and phytopathology (biological sciences)	19	18	25	21	29	20	13	11	11	13	19
Plant physiology	28	15	19	25	17	18	13	17	18	12	16
Structural biology	53	71	57	67	59	64	47	56	51	73	54
Toxicology	99	96	101	99	117	104	85	77	95	84	63
Virology	134	178	162	162	163	164	142	115	116	128	119
Wildlife biology	na	na	na	na	36	47	47	60	62	68	49
Zoology	72	65	51	40	32	46	38	40	29	24	27
Biological and biomedical sciences, general	184	168	223	256	245	258	771	469	467	534	649
Biological and biomedical sciences, other	83	64	92	103	66	72	123	118	113	121	138
Health sciences	2,173	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,531	2,584	2,671
Environmental health	66	56	67	70	77	79	76	84	83	90	83
Epidemiology[c]	324	314	365	353	na	na	na	na	na	na	na
Gerontology (health sciences)	10	15	14	13	14	13	25	19	15	16	8
Health and behavior	na	na	na	na	88	125	119	83	59	88	62
Health services research	na	na	na	na	na	na	120	164	139	138	139
Health systems administration	75	84	51	89	89	70	41	36	22	22	31
Kinesiology, exercise science[e]	215	198	228	214	249	264	231	267	268	260	291
Medical physics, radiological science	61	74	80	93	103	84	94	92	74	90	81
Nursing science	482	523	552	510	580	536	482	552	584	546	591
Oral biology, oral pathology	15	22	15	20	15	19	23	33	24	18	33
Pharmaceutical sciences[f]	274	271	295	332	279	270	274	292	344	358	382
Public health	295	266	349	431	400	437	379	440	421	452	431
Rehabilitation, therapeutic services	61	60	80	85	83	86	108	90	124	109	116
Speech-language pathology and audiology	100	110	119	110	114	117	116	128	112	116	125
Veterinary sciences	57	60	59	67	42	56	49	50	57	50	64
Health sciences, general	37	41	37	62	39	36	93	65	72	79	113
Health sciences, other	101	83	76	80	106	84	67	100	133	152	121
Physical sciences and earth sciences	4,995	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,331	6,579	6,247

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Chemistry	2,304	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,808	2,939	2,763
Analytical chemistry	402	391	370	417	415	388	393	387	401	366	364
Chemical biology	na	na	na	na	na	na	120	150	160	185	135
Inorganic chemistry	294	320	307	297	372	354	343	353	358	386	327
Medicinal chemistry[g]	na	na	na	na	86	79	72	70	86	94	85
Organic chemistry	599	663	667	643	605	625	565	552	574	564	535
Physical chemistry	360	390	360	355	340	366	379	343	397	390	398
Polymer chemistry	126	123	125	125	127	135	151	160	132	174	128
Theoretical chemistry	86	69	78	74	103	111	88	88	106	96	87
Chemistry, general	269	289	290	364	416	398	411	432	429	476	532
Chemistry, other	168	187	219	209	209	210	181	164	165	208	172
Geosciences, atmospheric sciences, and ocean sciences	862	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,243
Atmospheric science and meteorology	170	178	205	205	200	213	245	248	265	235	230
Atmospheric chemistry and climatology	39	43	50	49	42	36	41	62	50	56	41
Atmospheric physics and dynamics	45	40	51	43	51	59	58	30	48	32	34
Meteorology	15	29	18	18	32	30	20	17	19	13	18
Atmospheric science and meteorology, general	47	47	61	77	55	62	108	105	123	117	119
Atmospheric science and meteorology, other	24	19	25	18	20	26	18	34	25	17	18
Geological sciences	463	451	462	489	579	554	618	572	591	621	674
Geochemistry	74	70	68	73	85	94	81	67	61	66	50
Geology	128	124	112	126	130	135	127	118	132	148	167
Geomorphology, glacial geology	28	23	16	32	25	27	24	22	18	21	18
Geophysics and seismology	94	95	95	113	151	123	138	124	129	136	144
Mineralogy and petrology	13	19	19	16	15	21	6	9	9	8	3
Paleontology	31	38	41	31	38	30	30	29	30	24	22
Stratigraphy and sedimentation	18	16	16	22	15	17	12	12	14	6	4
Geological and earth sciences, general	36	26	34	33	60	55	155	139	125	159	207
Geological and earth sciences, other	41	40	61	43	60	52	45	52	73	53	59
Ocean and marine sciences	229	223	274	295	319	290	364	349	329	416	339
Hydrology and water resources	47	48	52	51	63	76	130	99	107	163	114
Marine biology and biological oceanography	na	na	100	111	110	85	90	112	73	88	74
Marine sciences	79	69	36	26	41	42	54	53	56	70	68
Oceanography, chemical and physical	87	90	70	92	89	67	79	70	81	81	71
Ocean and marine sciences, other	16	16	16	15	16	20	11	15	12	14	12
Physics and astronomy	1,829	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,241
Astronomy and astrophysics	266	287	274	301	289	269	315	339	351	361	305
Astronomy	102	88	88	103	112	86	95	119	138	125	116
Astrophysics	155	185	175	184	171	174	211	216	203	230	174
Astronomy and astrophysics, other	9	14	11	14	6	9	9	4	10	6	15
Physics	1,563	1,700	1,788	1,810	1,850	1,924	2,006	1,875	1,987	2,007	1,936
Acoustics	15	20	10	22	20	19	17	16	19	18	19
Applied physics	143	144	138	180	157	146	229	171	200	164	154
Atomic, molecular, chemical physics	105	125	116	118	121	125	137	126	121	120	94
Biophysics (physics)	123	132	130	133	131	127	138	138	146	154	126
Condensed matter, low-temperature physics	379	383	390	413	389	439	350	354	443	400	376
Elementary particle physics	196	229	282	272	244	242	231	234	232	234	198

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nuclear physics	86	81	92	75	103	86	92	109	93	116	98
Optics, photonics	145	165	165	174	194	216	225	201	176	217	196
Plasma, high-temperature physics	50	83	66	71	83	88	79	69	61	63	65
Polymer physics	18	20	19	32	44	26	43	33	29	46	37
Physics, general	213	189	241	192	230	285	356	330	339	320	447
Physics, other	90	129	139	128	134	125	109	94	128	155	126
Mathematics and computer sciences	3,223	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,231	4,392
Computer and information sciences	1,633	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,221	2,361
Computer science	1,356	1,393	1,482	1,568	1,664	1,658	1,650	1,592	1,628	1,815	1,952
Information science, systems	158	165	173	152	152	158	173	160	121	127	148
Computer and information sciences, general	na	na	na	na	94	117	161	123	141	154	151
Computer and information sciences, other	119	109	138	123	78	70	98	123	110	125	110
Mathematics and statistics	1,590	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,031
Algebra	150	152	149	151	174	146	83	109	107	82	57
Analysis and functional analysis	143	145	134	159	137	161	97	85	100	66	57
Applied mathematics	401	432	462	455	476	435	474	493	455	427	420
Computational mathematics	na	na	na	na	na	na	na	na	92	93	98
Computing theory and practice	16	20	14	22	19	24	15	19	8	10	4
Geometry, geometric analysis	104	120	112	119	120	108	52	63	78	72	66
Logic	22	17	15	33	26	21	14	15	19	18	13
Number theory	71	73	63	79	82	89	48	54	62	60	51
Operations research (mathematics)	27	27	26	15	28	34	45	34	45	45	40
Statistics (mathematics)	327	332	365	364	407	381	265	368	412	365	404
Topology and foundations	84	73	74	78	77	86	41	47	58	44	31
Mathematics and statistics, general	163	143	192	234	235	243	686	493	519	660	725
Mathematics and statistics, other	82	72	97	108	93	87	52	64	67	68	65
Psychology and social sciences	7,882	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,877	9,043	8,946
Psychology	3,420	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,879
Behavioral analysis	na	na	44	54	51	63	65	53	63	54	47
Clinical psychology	1,151	1,229	1,228	1,140	1,220	1,173	1,207	1,193	1,260	1,249	1,282
Cognitive neuroscience	na	na	na	na	na	na	161	208	200	215	198
Cognitive psychology and psycholinguistics	220	204	199	219	201	221	165	127	143	135	112
Community psychology	na	na	na	na	na	na	34	42	44	33	42
Counseling	408	427	392	425	378	417	310	319	288	291	277
Developmental and child psychology	191	218	205	227	245	190	236	207	163	176	161
Educational psychology (psychology)	70	62	67	60	65	60	108	118	115	108	94
Experimental psychology	142	147	134	141	143	144	144	159	137	137	142
Family psychology	45	33	41	33	41	55	12	5	2	3	2
Health, medical psychology	na	na	46	65	80	102	53	65	80	81	73
Human development and family studies	145	145	136	138	141	134	191	206	141	170	164
Industrial and organizational psychology	207	200	222	214	203	221	217	196	194	183	213
Marriage and family therapy, counseling	na	na	na	na	na	na	77	75	69	97	91
Neuropsychology, physiological psychology[h]	82	77	101	112	122	130	69	47	40	62	29
Personality psychology	22	23	20	15	21	21	23	16	13	17	10
Psychometrics and quantitative psychology	36	35	34	44	33	48	49	51	41	64	40
School psychology (psychology)	107	110	118	114	110	116	125	146	148	128	144
Social psychology	210	228	246	211	242	220	219	219	215	236	190

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Psychology, general	185	228	220	229	275	289	295	264	248	250	302
Psychology, other	199	210	146	151	153	172	150	209	217	220	266
Social sciences	4,462	4,644	4,899	4,988	5,024	5,297	5,127	5,109	5,056	5,134	5,067
Anthropology	507	553	547	550	523	492	460	446	424	445	448
Anthropology, cultural	na	na	na	na	267	317	290	272	277	295	248
Anthropology, general[i]	507	553	547	550	184	99	90	89	52	76	101
Anthropology, physical and biological	na	na	na	na	72	76	80	85	95	74	99
Economics	1,073	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,216
Econometrics	34	28	40	48	46	40	38	26	28	33	23
Natural resources and environmental economics (social sciences)	na	na	48	49	49	47	59	56	58	60	45
Other economics[j]	1,039	1,093	1,155	1,086	1,101	1,168	1,139	1,157	1,159	1,154	1,148
Political science and government	728	685	724	803	775	859	745	743	734	707	637
Sociology	639	656	633	636	678	741	613	683	668	632	607
Other social sciences	1,515	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,985	2,103	2,159
American, U.S. studies	115	132	121	122	121	130	111	98	68	67	57
Applied linguistics	na	na	na	na	na	na	81	106	70	100	95
Archaeology (social sciences)	na	na	na	na	na	na	na	na	119	117	116
Area, ethnic, cultural studies[k]	111	110	113	98	90	80	188	175	133	137	156
Criminal justice and corrections	74	80	80	75	80	111	93	110	87	143	135
Criminology	52	101	86	76	78	102	104	94	96	99	103
Demography and population studies	13	30	17	27	32	21	37	22	27	18	25
Gender and women's studies	na	na	na	na	40	34	72	49	48	55	50
Geography	225	233	270	251	293	301	246	279	242	265	301
Gerontology (social sciences)	18	27	31	32	28	24	22	31	23	27	21
Health policy analysis	na	na	41	69	50	81	61	55	58	56	56
History, science and technology and society[l]	na	na	na	na	na	na	na	na	55	74	61
International relations, international affairs	107	113	124	119	105	104	137	154	135	137	131
Linguistics	240	270	258	285	276	288	236	208	249	245	232
Public policy analysis	244	223	263	279	277	293	230	238	265	231	249
Statistics (social sciences)	21	22	19	24	20	22	44	15	21	28	26
Urban, city, community and regional planning	106	104	121	114	111	128	131	149	102	118	122
Urban studies, affairs	34	31	34	39	35	31	39	41	35	34	44
Social sciences, general	48	39	32	55	59	55	99	48	41	44	45
Social sciences, other	107	114	142	151	157	145	142	126	111	108	134
Engineering	7,578	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,165	10,298	10,476
Aerospace, aeronautical, and astronautical engineering	252	262	307	348	386	361	370	379	383	379	399
Bioengineering and biomedical engineering	824	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,083
Chemical engineering	822	823	840	824	973	1,002	921	931	981	980	994
Civil engineering	643	634	495	542	617	632	564	713	675	700	796
Electrical, electronics, and communications engineering	1,778	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973
Industrial and manufacturing engineering	215	258	226	241	298	243	256	249	272	234	304
Materials science engineering	670	662	743	815	832	871	984	937	992	992	880
Mechanical engineering	983	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,634
Other engineering	1,391	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,283	2,519	2,413
Agricultural engineering	58	60	68	75	80	67	62	79	84	65	76

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Ceramic sciences engineering	11	7	5	3	na	na	na	na	na	na	na
Communications engineering	15	16	24	31	29	30	19	16	14	16	11
Computer engineering	374	372	406	417	465	410	401	423	436	445	479
Engineering management, administration	38	37	44	59	44	45	29	54	36	41	28
Engineering mechanics	46	63	48	70	70	66	101	62	71	82	62
Engineering physics	31	32	17	34	30	36	24	27	37	23	28
Engineering science	52	51	45	41	60	72	33	65	57	47	70
Environmental, environmental health engineering[m]	112	144	214	269	270	282	216	240	248	251	242
Geotechnical and geoenvironmental engineering	na	na	49	51	72	68	81	75	65	84	63
Metallurgical engineering	11	30	16	25	24	34	31	25	26	24	22
Mining and mineral engineering	7	6	14	29	na	na	na	na	na	na	na
Nuclear engineering	91	107	101	119	156	130	131	156	178	156	169
Ocean engineering	23	26	21	30	30	36	26	25	24	41	23
Operations research (engineering)	85	83	90	119	117	88	130	115	107	146	145
Petroleum engineering	51	56	67	92	107	104	99	85	133	144	139
Polymer, plastics engineering	57	71	67	61	63	80	60	90	54	70	58
Robotics	31	46	50	59	80	82	120	98	107	145	144
Structural engineering	66	69	81	81	101	125	117	103	95	146	113
Systems engineering	68	79	82	114	95	105	113	121	113	125	119
Transportation and highway engineering	na	na	76	80	101	106	109	85	96	136	92
Engineering, general	36	36	43	24	40	42	107	60	73	111	111
Engineering, other	128	134	129	134	157	170	146	254	229	221	219
Education	5,287	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,716
Education administration	1,439	924	1,057	965	893	920	824	922	895	839	927
Educational administration and supervision	320	217	219	187	170	169	148	184	167	153	150
Educational and human resource studies, development	na	na	78	93	62	68	62	71	46	57	44
Educational leadership	1,029	649	673	601	605	620	555	595	618	564	673
Urban education and leadership	90	58	87	84	56	63	59	72	64	65	60
Education research	2,443	2,438	2,568	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,312
Counseling education, counseling and guidance	211	223	223	257	229	292	276	273	278	255	232
Curriculum and instruction	617	590	583	586	552	585	380	501	531	391	478
Educational and instructional media design	121	133	30	17	18	30	26	19	15	17	19
Educational and instructional technology	na	na	163	241	192	201	224	233	200	179	178
Educational assessment, testing, measurement	65	73	57	63	53	65	66	42	57	46	47
Educational policy analysis	122	151	157	171	152	168	173	128	142	146	123
Educational psychology (education)	269	287	302	283	261	286	221	233	210	198	190
Educational statistics, research methods	68	79	70	84	74	92	76	83	95	86	91
Higher education evaluation and research	420	384	448	435	446	519	449	438	394	389	408
International education	65	60	52	65	70	55	56	45	43	51	33
Learning sciences	na	na	na	na	na	na	na	na	73	80	65
School psychology (education)	132	128	117	131	145	132	117	120	116	126	108
Social and philosophical foundations of education	92	100	98	84	92	90	63	66	80	78	67
Special education	261	230	268	286	276	257	257	237	266	262	273
Teacher education	245	204	156	109	152	156	180	114	96	104	113
Adult and continuing teacher education	91	64	49	23	53	39	64	30	42	32	38

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Elementary teacher education	48	45	40	26	36	37	36	30	12	21	31
Pre-elementary, early childhood teacher education	58	52	29	35	29	47	51	34	28	37	35
Secondary teacher education	48	43	38	25	34	33	29	20	14	14	9
Teaching fields	799	805	757	892	915	953	1,166	925	959	957	940
Agricultural education	34	28	30	27	25	30	36	34	43	51	50
Art education	35	48	36	30	42	42	37	34	41	34	34
Bilingual and multilingual education	na	na	35	50	30	27	52	36	30	29	31
English as a second or foreign language	na	na	na	na	58	94	70	55	58	39	34
English education	61	64	32	35	31	33	39	36	33	32	31
Family, consumer, and human sciences	23	24	10	19	20	24	16	9	8	16	15
Foreign languages education	60	55	60	54	39	31	39	26	26	26	37
Health education	45	49	35	52	43	53	70	66	62	54	50
Literacy and reading education[n]	83	80	124	126	127	123	137	139	119	126	127
Mathematics education	144	142	114	138	142	133	182	150	148	151	122
Music education	83	86	69	91	104	114	87	75	82	78	84
Nursing education	30	23	18	33	30	32	73	53	55	65	57
Physical education and coaching	34	43	38	44	35	36	39	21	19	27	19
Science education	96	93	110	114	112	122	133	100	138	116	139
Social science education	21	27	20	22	16	24	28	19	14	10	24
Teacher education and professional development, other	50	43	26	57	61	35	128	72	83	103	86
Other education	361	299	264	265	269	297	592	447	368	429	424
Workforce education and development	na	na	na	na	32	36	36	57	37	35	20
Education, general	152	122	121	128	135	140	369	216	170	216	258
Education, other	209	177	143	137	102	121	187	174	161	178	146
Humanities and arts	5,015	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,939
Foreign languages and literature	601	644	684	701	674	656	599	618	617	610	564
Arabic language and literature	14	8	12	9	14	6	5	8	6	5	1
Chinese language and literature	41	29	20	37	17	28	17	28	39	23	20
French language and literature	110	114	122	140	139	137	107	92	100	100	89
Germanic language and literature	64	71	90	74	84	72	67	72	62	74	49
Italian language and literature	35	38	50	44	39	40	34	45	31	29	31
Japanese language and literature	27	16	20	21	23	21	10	15	16	17	9
Latin American languages and literature	na	na	57	66	83	79	96	30	38	42	47
Russian language and literature	23	34	24	30	25	21	14	26	12	14	16
Spanish language and literature	231	247	205	216	181	186	127	178	207	161	162
Foreign languages and literatures, other	56	87	84	64	69	66	122	124	106	145	140
History	1,005	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	887
African history	30	29	38	32	32	30	26	24	33	23	31
American history, United States and Canada	391	432	440	444	433	412	391	376	389	319	319
Asian history	59	68	73	85	78	89	73	59	73	71	79
European history	193	224	186	186	232	198	207	179	172	149	148
History, science and technology and society[l]	46	47	49	53	78	72	66	78	na	na	na
Latin American history	65	52	63	77	73	64	77	63	56	71	42
Middle, Near East history	65	63	60	71	68	82	63	70	44	61	46
History, general	78	68	93	105	121	108	155	120	106	139	132
History, other	78	82	84	95	71	91	90	89	75	79	90

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Letters	1,516	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,392
American literature, United States and Canada	361	367	409	397	349	334	343	319	272	255	247
Classics	86	91	101	101	91	94	109	80	94	96	85
Comparative literature	197	192	201	218	196	165	172	164	172	165	175
Creative writing	81	84	93	79	87	97	79	84	86	98	94
English language	146	179	154	92	147	153	126	129	119	120	184
English literature, British and Commonwealth	419	354	423	399	396	412	414	382	383	378	335
Folklore	11	10	6	9	17	6	na	na	na	na	na
Rhetoric and composition	na	na	154	220	207	238	211	227	242	190	206
Speech and rhetorical studies	152	165	53	33	29	42	39	45	42	50	33
Letters, general	22	25	18	26	12	22	23	15	15	15	17
Letters, other	41	46	26	32	20	20	15	17	14	19	16
Other humanities and arts	1,893	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,096
African American studies, literature, and history	na	na	na	na	na	na	na	na	52	65	68
Archaeology (humanities)	60	87	79	72	105	121	166	132	54	31	30
Art history, criticism, and conservation	248	242	227	265	263	272	278	247	219	250	223
Bible, biblical studies	97	103	95	106	86	87	62	84	113	102	107
Dance	na	na	na	na	na	na	13	11	17	18	9
Drama, theater arts, performance studies[o]	104	106	111	120	104	86	74	87	96	91	83
Ethics	na	na	29	26	29	30	38	30	37	37	18
Film, cinema, media studies[p]	na	na	62	67	71	67	73	81	90	112	83
Jewish, Judaic studies	na	na	17	33	27	27	27	28	23	19	22
Music	66	81	67	88	64	54	59	67	55	56	76
Musicology and ethnomusicology	135	137	138	128	140	148	127	158	131	129	126
Music performance	106	92	113	124	77	110	92	92	88	75	136
Music theory and composition	91	95	95	102	104	108	92	90	85	111	116
Music, other	18	22	21	29	20	23	19	16	14	23	16
Philosophy	431	462	497	494	454	463	454	419	477	437	442
Religion, religious studies	282	312	290	301	292	314	254	310	258	226	205
Theology, religious education	160	150	184	173	156	172	212	162	194	202	214
Humanities, general	28	43	16	31	34	27	106	60	53	46	51
Humanities, other	67	71	112	101	87	100	58	74	79	113	71
Other[q]	2,729	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,978	3,026	3,006
Business management and administration	1,366	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,474	1,532	1,466
Accounting	148	157	175	168	196	194	178	159	160	162	157
Banking/ financial services	5	1	na	na	na	na	na	na	na	na	na
Business administration and management	157	146	221	269	243	231	263	253	258	264	302
Business, managerial economics	29	26	31	24	22	43	26	15	23	17	19
Finance	210	200	232	260	265	241	251	201	193	233	198
Hospitality, food service and tourism management	36	59	57	71	65	46	66	74	56	47	54
Human resources development	70	70	44	44	68	51	30	29	29	28	33
International business, trade, commerce	25	28	21	33	30	24	24	21	19	30	18
Management information systems, business statistics	108	100	103	107	100	102	107	92	109	99	109
Marketing management and research	157	156	174	191	152	181	140	143	141	108	109
Operations research (business)	84	70	80	103	91	110	83	68	53	74	52
Organizational behavior	175	189	163	186	212	189	168	271	214	221	183

Table 13

Doctorate recipients, by fine field of study: 2010–20

(Number)

Field of study	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Business management and administration, general	102	67	50	40	68	68	114	140	123	140	120
Business management and administration, other	60	58	53	55	72	102	59	99	96	109	112
Communication	638	650	595	645	663	667	672	622	630	543	593
Communication research	120	125	126	155	149	149	183	120	143	161	141
Communication theory	34	29	31	30	39	41	63	37	26	24	24
Film, radio, TV and digital communication	73	77	43	30	35	37	23	34	16	12	10
Mass communication, media studies	214	212	199	239	251	242	211	230	227	171	188
Communication, general	119	117	117	107	123	119	143	131	155	118	174
Communication, other	78	90	79	84	66	79	49	70	63	57	56
Non-S&E fields nec	725	706	735	827	796	770	760	965	874	951	947
Architecture and environmental design	81	81	109	101	118	116	99	118	105	128	120
Family, consumer sciences and human sciences	48	54	50	57	51	47	39	79	64	77	91
Law	68	57	53	81	76	76	67	85	74	111	98
Library science	40	35	49	39	39	41	32	46	32	24	21
Parks, sports, recreation, leisure and fitness	54	63	61	76	67	52	83	46	51	52	57
Public administration	126	118	132	127	119	121	143	184	138	207	221
Social work	308	289	280	330	325	307	294	296	358	330	310
Other fields nec	0	9	1	16	1	10	3	111	52	22	29

na = not applicable; the field was not on questionnaire's specialties list for that year.

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

[a] This field was renamed from "Agriculture, general" in 2014.
[b] This field was renamed from "Agricultural sciences, other" in 2014.
[c] This field was moved from "Health sciences" to "Biological and biomedical sciences" in 2014.
[d] This field was renamed from "Neurosciences" in 2012.
[e] This field was renamed from "Kinesiology/Exercise science" in 2012.
[f] This field was renamed from "Medicinal/Pharmaceutical sciences" in 2014.
[g] This field was "Medicinal/pharmaceutical chemistry" through 2006. It was removed from the taxonomy in 2007–13 and was reinstated in 2014 as "Medicinal chemistry."
[h] This field was renamed from "Physiological psychology/Psychobiology" in 2012.
[i] This field was renamed from "Anthropology" in 2014.
[j] This field is collected as "Economics."
[k] This field was renamed from "Area/Ethnic/Cultural/Gender studies" and "Gender studies" was moved to a new field "Gender and women's studies" in 2014.
[l] This field was moved from "History" to "Other social sciences" in 2018.
[m] This field was renamed from "Environmental health engineering" in 2012.
[n] This field was renamed from "Reading education" in 2012.
[o] This field was renamed from "Drama, theater arts" in 2018.
[p] This field was renamed from "Film, cinema, video studies" in 2018.
[q] Includes other non-S&E fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 14

Doctorate recipients, by broad field of study and sex: Selected years, 1990–2020

(Number and percent)

Field and sex	1990		1995		2000		2005		2010		2015		2020	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields[a]	36,064	100.0	41,576	100.0	41,296	100.0	43,319	100.0	48,012	100.0	54,879	100.0	55,278	100.0
Male	22,960	63.7	25,160	60.5	23,165	56.1	23,737	54.8	25,524	53.2	29,532	53.8	29,886	54.1
Female	13,104	36.3	16,416	39.5	18,131	43.9	19,582	45.2	22,488	46.8	25,347	46.2	25,392	45.9
Life sciences[b]	6,655	100.0	7,956	100.0	8,611	100.0	9,296	100.0	11,314	100.0	12,492	100.0	12,560	100.0
Male	4,163	62.6	4,598	57.8	4,568	53.0	4,561	49.1	5,101	45.1	5,563	44.5	5,553	44.2
Female	2,492	37.4	3,358	42.2	4,043	47.0	4,735	50.9	6,213	54.9	6,929	55.5	7,007	55.8
Physical sciences and earth sciences	4,212	100.0	4,519	100.0	4,063	100.0	4,357	100.0	4,994	100.0	5,915	100.0	6,245	100.0
Male	3,421	81.2	3,499	77.4	3,041	74.8	3,141	72.1	3,379	67.7	3,928	66.4	4,177	66.9
Female	791	18.8	1,020	22.6	1,022	25.2	1,216	27.9	1,615	32.3	1,987	33.6	2,068	33.1
Mathematics and computer sciences	1,597	100.0	2,178	100.0	1,907	100.0	2,329	100.0	3,223	100.0	3,816	100.0	4,392	100.0
Male	1,329	83.2	1,727	79.3	1,507	79.0	1,782	76.5	2,409	74.7	2,877	75.4	3,297	75.1
Female	268	16.8	451	20.7	400	21.0	547	23.5	814	25.3	939	24.6	1,095	24.9
Psychology and social sciences	6,331	100.0	6,906	100.0	7,443	100.0	7,144	100.0	7,881	100.0	9,072	100.0	8,946	100.0
Male	3,378	53.4	3,380	48.9	3,370	45.3	3,159	44.2	3,357	42.6	3,757	41.4	3,588	40.1
Female	2,953	46.6	3,526	51.1	4,073	54.7	3,985	55.8	4,524	57.4	5,315	58.6	5,358	59.9
Engineering	4,894	100.0	5,966	100.0	5,297	100.0	6,408	100.0	7,575	100.0	9,875	100.0	10,475	100.0
Male	4,479	91.5	5,270	88.3	4,459	84.2	5,226	81.6	5,829	77.0	7,578	76.7	7,882	75.2
Female	415	8.5	696	11.7	838	15.8	1,182	18.4	1,746	23.0	2,297	23.3	2,593	24.8
Education	6,509	100.0	6,638	100.0	6,439	100.0	6,217	100.0	5,285	100.0	5,097	100.0	4,715	100.0
Male	2,758	42.4	2,546	38.4	2,260	35.1	2,065	33.2	1,661	31.4	1,605	31.5	1,456	30.9
Female	3,751	57.6	4,092	61.6	4,179	64.9	4,152	66.8	3,624	68.6	3,492	68.5	3,259	69.1
Humanities and arts	3,854	100.0	5,034	100.0	5,458	100.0	5,181	100.0	5,014	100.0	5,593	100.0	4,939	100.0
Male	2,188	56.8	2,695	53.5	2,786	51.0	2,600	50.2	2,462	49.1	2,763	49.4	2,516	50.9
Female	1,666	43.2	2,339	46.5	2,672	49.0	2,581	49.8	2,552	50.9	2,830	50.6	2,423	49.1
Other[c]	2,012	100.0	2,379	100.0	2,078	100.0	2,387	100.0	2,726	100.0	3,019	100.0	3,006	100.0
Male	1,244	61.8	1,445	60.7	1,174	56.5	1,203	50.4	1,326	48.6	1,461	48.4	1,417	47.1
Female	768	38.2	934	39.3	904	43.5	1,184	49.6	1,400	51.4	1,558	51.6	1,589	52.9

[a] Excludes respondents who did not report sex.

[b] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[c] Includes other non-science and engineering fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 15

Doctorate recipients, by sex and major field of study: 2010–20

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
All doctorate recipients[a]	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283	15.1
Life sciences	11,319	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,755	12,753	12,561	11.0
Agricultural sciences and natural resources	1,100	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,472	33.8
Biological and biomedical sciences	8,046	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,681	8,418	4.6
Health sciences	2,173	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,531	2,584	2,671	22.9
Physical sciences and earth sciences	4,995	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,331	6,579	6,247	25.1
Chemistry	2,304	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,808	2,939	2,763	19.9
Geosciences, atmospheric sciences, and ocean sciences	862	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,243	44.2
Physics and astronomy	1,829	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,241	22.5
Mathematics and computer sciences	3,223	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,231	4,392	36.3
Computer and information sciences	1,633	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,221	2,361	44.6
Mathematics and statistics	1,590	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,031	27.7
Psychology and social sciences	7,882	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,877	9,043	8,946	13.5
Psychology	3,420	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,879	13.4
Anthropology	507	553	547	550	523	492	460	446	424	445	448	-11.6
Economics	1,073	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,216	13.3
Political science and government	728	685	724	803	775	859	745	743	734	707	637	-12.5
Sociology	639	656	633	636	678	741	613	683	668	632	607	-5.0
Other social sciences	1,515	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,985	2,103	2,159	42.5
Engineering	7,578	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,165	10,298	10,476	38.2
Aerospace, aeronautical, and astronautical engineering	252	262	307	348	386	361	370	379	383	379	399	58.3
Bioengineering and biomedical engineering	824	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,083	31.4
Chemical engineering	822	823	840	824	973	1,002	921	931	981	980	994	20.9
Civil engineering	643	634	495	542	617	632	564	713	675	700	796	23.8
Electrical, electronics, and communications engineering	1,778	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973	11.0
Industrial and manufacturing engineering	215	258	226	241	298	243	256	249	272	234	304	41.4
Materials science engineering	670	662	743	815	832	871	984	937	992	992	880	31.3
Mechanical engineering	983	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,634	66.2
Other engineering	1,391	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,283	2,519	2,413	73.5
Education	5,287	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,716	-10.8
Education administration	1,439	924	1,057	965	893	920	824	922	895	839	927	-35.6
Education research	2,443	2,438	2,568	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,312	-5.4
Teacher education	245	204	156	109	152	156	180	114	96	104	113	-53.9
Teaching fields	799	805	757	892	915	953	1,166	925	959	957	940	17.6
Other education	361	299	264	265	269	297	592	447	368	429	424	17.5
Humanities and arts	5,015	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,939	-1.5
Foreign languages and literature	601	644	684	701	674	656	599	618	617	610	564	-6.2
History	1,005	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	887	-11.7
Letters	1,516	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,392	-8.2

Table 15

Doctorate recipients, by sex and major field of study: 2010–20

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other humanities and arts	1,893	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,096	10.7
Other[b]	2,729	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,978	3,026	3,006	10.2
Business management and administration	1,366	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,474	1,532	1,466	7.3
Communication	638	650	595	645	663	667	672	622	630	543	593	-7.1
Non-S&E fields nec	725	706	735	827	796	770	760	965	874	951	947	30.6
Male	25,524	26,188	27,362	28,326	29,008	29,532	29,572	29,081	29,746	30,113	29,886	17.1
Life sciences	5,101	5,243	5,335	5,492	5,514	5,563	5,628	5,612	5,648	5,807	5,553	8.9
Agricultural sciences and natural resources	609	652	698	702	691	746	755	755	746	758	746	22.5
Biological and biomedical sciences	3,823	3,878	3,891	3,941	4,088	4,100	4,154	4,056	4,079	4,192	3,892	1.8
Health sciences	669	713	746	849	735	717	719	801	823	857	915	36.8
Physical sciences and earth sciences	3,379	3,629	3,684	3,717	3,968	3,928	4,285	4,068	4,212	4,363	4,177	23.6
Chemistry	1,440	1,508	1,521	1,497	1,642	1,592	1,712	1,667	1,742	1,788	1,669	15.9
Geosciences, atmospheric sciences, and ocean sciences	496	522	538	539	622	600	716	644	659	738	737	48.6
Physics and astronomy	1,443	1,599	1,625	1,681	1,704	1,736	1,857	1,757	1,811	1,837	1,771	22.7
Mathematics and computer sciences	2,409	2,456	2,638	2,792	2,912	2,877	2,994	2,867	3,036	3,138	3,297	36.9
Computer and information sciences	1,286	1,312	1,419	1,502	1,580	1,581	1,662	1,548	1,565	1,712	1,859	44.6
Mathematics and statistics	1,123	1,144	1,219	1,290	1,332	1,296	1,332	1,319	1,471	1,426	1,438	28.0
Psychology and social sciences	3,357	3,332	3,539	3,501	3,507	3,757	3,741	3,670	3,636	3,666	3,588	6.9
Psychology	1,031	1,003	1,040	997	1,063	1,057	1,133	1,123	1,095	1,113	1,082	4.9
Anthropology	201	223	187	188	195	185	171	155	126	155	145	-27.9
Economics	703	734	840	767	785	821	819	812	849	818	809	15.1
Political science and government	434	389	420	469	433	527	462	449	429	433	388	-10.6
Sociology	250	254	230	259	247	284	257	263	250	229	243	-2.8
Other social sciences	738	729	822	821	784	883	899	868	887	918	921	24.8
Engineering	5,829	6,242	6,565	6,946	7,401	7,578	7,267	7,341	7,711	7,830	7,882	35.2
Aerospace, aeronautical, and astronautical engineering	215	228	268	293	330	308	314	336	337	323	329	53.0
Bioengineering and biomedical engineering	509	563	608	684	660	698	686	605	687	720	653	28.3
Chemical engineering	574	566	583	566	682	685	624	659	688	664	695	21.1
Civil engineering	473	486	388	417	465	457	437	508	505	541	586	23.9
Electrical, electronics, and communications engineering	1,462	1,579	1,594	1,616	1,614	1,704	1,529	1,524	1,599	1,501	1,630	11.5
Industrial and manufacturing engineering	159	180	164	176	209	154	185	168	204	172	209	31.4
Materials science engineering	495	496	556	598	617	648	721	688	718	701	638	28.9
Mechanical engineering	858	934	1,042	1,081	1,126	1,265	1,096	1,159	1,285	1,283	1,373	60.0
Other engineering	1,084	1,210	1,362	1,515	1,698	1,659	1,675	1,694	1,688	1,925	1,769	63.2
Education	1,661	1,432	1,500	1,570	1,468	1,605	1,545	1,519	1,494	1,422	1,456	-12.3
Education administration	547	349	389	372	371	344	304	344	323	342	346	-36.7
Education research	706	699	761	826	723	849	718	772	762	654	675	-4.4
Teacher education	59	38	43	22	35	36	43	21	18	20	28	-52.5
Teaching fields	233	250	229	275	265	294	313	263	271	259	292	25.3

Table 15

Doctorate recipients, by sex and major field of study: 2010–20

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other education	116	96	78	75	74	82	167	119	120	147	115	-0.9
Humanities and arts	2,462	2,571	2,741	2,829	2,760	2,763	2,639	2,580	2,564	2,478	2,516	2.2
Foreign languages and literature	218	248	238	271	248	238	228	237	247	215	223	2.3
History	556	586	602	632	664	632	621	594	513	529	512	-7.9
Letters	625	615	659	665	657	647	600	591	585	560	589	-5.8
Other humanities and arts	1,063	1,122	1,242	1,261	1,191	1,246	1,190	1,158	1,219	1,174	1,192	12.1
Other[b]	1,326	1,283	1,360	1,479	1,478	1,461	1,473	1,424	1,445	1,409	1,417	6.9
Business management and administration	814	792	837	909	909	934	932	872	863	872	851	4.5
Communication	247	233	244	244	277	256	261	197	234	205	230	-6.9
Non-S&E fields nec	265	258	279	326	292	271	280	355	348	332	336	26.8
Female	22,488	22,699	23,526	24,365	24,813	25,347	25,222	25,449	25,311	25,491	25,392	12.9
Life sciences	6,213	6,289	6,614	6,712	6,930	6,929	6,908	6,937	7,101	6,945	7,007	12.8
Agricultural sciences and natural resources	490	554	554	622	646	688	623	736	693	730	725	48.0
Biological and biomedical sciences	4,219	4,272	4,422	4,410	4,747	4,682	4,707	4,508	4,700	4,488	4,526	7.3
Health sciences	1,504	1,463	1,638	1,680	1,537	1,559	1,578	1,693	1,708	1,727	1,756	16.8
Physical sciences and earth sciences	1,615	1,640	1,730	1,864	1,924	1,987	1,963	2,013	2,116	2,212	2,068	28.0
Chemistry	864	922	894	985	1,021	1,074	991	1,031	1,066	1,151	1,092	26.4
Geosciences, atmospheric sciences, and ocean sciences	366	330	403	449	475	457	510	525	526	533	506	38.3
Physics and astronomy	385	388	433	430	428	456	462	457	524	528	470	22.1
Mathematics and computer sciences	814	813	855	868	934	939	959	974	982	1,092	1,095	34.5
Computer and information sciences	347	353	374	341	400	422	420	450	434	508	502	44.7
Mathematics and statistics	467	460	481	527	534	517	539	524	548	584	593	27.0
Psychology and social sciences	4,524	4,887	4,955	5,077	5,217	5,315	5,295	5,360	5,239	5,377	5,358	18.4
Psychology	2,389	2,573	2,558	2,594	2,648	2,719	2,776	2,802	2,726	2,796	2,797	17.1
Anthropology	306	330	360	362	328	307	289	291	298	290	303	-1.0
Economics	369	387	402	416	404	434	417	425	396	429	407	10.3
Political science and government	294	296	303	333	341	332	283	294	304	274	249	-15.3
Sociology	389	402	402	377	431	457	356	419	418	403	364	-6.4
Other social sciences	777	899	930	995	1,065	1,066	1,174	1,129	1,097	1,185	1,238	59.3
Engineering	1,746	1,782	1,887	2,052	2,184	2,297	2,189	2,429	2,450	2,466	2,593	48.5
Aerospace, aeronautical, and astronautical engineering	37	34	39	55	55	53	56	43	46	56	70	89.2
Bioengineering and biomedical engineering	315	335	335	355	384	427	403	427	445	443	430	36.5
Chemical engineering	248	256	256	258	290	317	296	271	293	316	299	20.6
Civil engineering	169	147	106	125	147	175	127	203	170	159	210	24.3
Electrical, electronics, and communications engineering	315	301	336	279	325	293	293	355	344	297	343	8.9
Industrial and manufacturing engineering	55	78	62	65	89	89	71	80	68	62	95	72.7
Materials science engineering	175	166	184	217	211	223	262	249	274	290	242	38.3
Mechanical engineering	125	150	177	196	197	201	201	239	216	249	261	108.8

Table 15

Doctorate recipients, by sex and major field of study: 2010–20

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other engineering	307	315	392	502	486	519	480	562	594	594	643	109.4
Education	3,624	3,234	3,298	3,364	3,311	3,492	3,601	3,305	3,323	3,211	3,259	-10.1
Education administration	892	574	665	593	522	576	520	578	572	497	580	-35.0
Education research	1,736	1,736	1,807	1,877	1,828	1,922	1,666	1,645	1,737	1,650	1,637	-5.7
Teacher education	186	166	113	87	117	120	137	92	78	84	85	-54.3
Teaching fields	566	555	527	617	649	659	853	662	688	698	648	14.5
Other education	244	203	186	190	195	215	425	328	248	282	309	26.6
Humanities and arts	2,552	2,654	2,818	2,885	2,760	2,830	2,842	2,705	2,572	2,571	2,423	-5.1
Foreign languages and literature	382	396	446	430	424	418	371	381	370	394	341	-10.7
History	449	479	484	516	521	514	527	464	435	383	375	-16.5
Letters	891	898	978	941	894	936	931	871	853	826	803	-9.9
Other humanities and arts	830	881	910	998	921	962	1,013	989	914	968	904	8.9
Other[b]	1,400	1,400	1,369	1,543	1,553	1,558	1,465	1,726	1,528	1,617	1,589	13.5
Business management and administration	550	535	564	641	669	648	575	692	608	660	615	11.8
Communication	390	417	350	401	383	411	410	425	395	338	363	-6.9
Non-S&E fields nec	460	448	455	501	501	499	480	609	525	619	611	32.8

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

[a] Includes respondents who did not report sex.
[b] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 16

Doctorate recipients, by subfield of study and sex: 2020

(Number and percent)

Field of study	Total[a]	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

Table 16

Doctorate recipients, by subfield of study and sex: 2020

(Number and percent)

Field of study	Total[a]	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[a]	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[a]	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[a]	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[b]	3,006	1,417	1,589	52.9
Business management and administration	1,466	851	615	42.0

Table 16

Doctorate recipients, by subfield of study and sex: 2020

(Number and percent)

Field of study	Total[a]	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&E = science and engineering.

[a] Includes respondents who did not report sex.
[b] 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.

Table 17

Doctorate recipients, by broad field of study and citizenship status: Selected years, 1975–2020

(Number)

Field and citizenship status	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
All fields	32,952	31,019	31,295	36,065	41,747	41,369	43,385	48,028	54,886	55,283
U.S. citizen or permanent resident	28,872	26,532	24,711	26,619	32,062	29,952	27,945	31,602	35,071	34,492
Temporary visa holder	3,562	3,696	5,252	8,140	8,831	9,667	12,832	13,636	16,129	18,482
Unknown	518	791	1,332	1,306	854	1,750	2,608	2,790	3,686	2,309
Life sciences[a]	5,103	5,501	5,822	6,655	7,998	8,622	9,310	11,319	12,493	12,561
U.S. citizen or permanent resident	4,312	4,688	4,694	4,944	6,131	6,086	6,282	7,812	8,470	8,707
Temporary visa holder	701	725	934	1,539	1,741	2,213	2,553	2,926	3,264	3,430
Unknown	90	88	194	172	126	323	475	581	759	424
Physical sciences and earth sciences	3,633	3,109	3,491	4,212	4,540	4,071	4,359	4,995	5,916	6,247
U.S. citizen or permanent resident	3,023	2,536	2,618	2,835	3,367	2,547	2,344	2,860	3,481	3,741
Temporary visa holder	549	510	734	1,240	1,091	1,331	1,788	1,884	2,099	2,311
Unknown	61	63	139	137	82	193	227	251	336	195
Mathematics and computer sciences	1,147	962	998	1,597	2,187	1,910	2,334	3,223	3,818	4,392
U.S. citizen or permanent resident	924	752	632	828	1,389	1,035	1,011	1,599	1,663	1,736
Temporary visa holder	197	183	332	699	749	807	1,200	1,446	1,917	2,475
Unknown	26	27	34	70	49	68	123	178	238	181
Psychology and social sciences	6,325	6,118	6,027	6,331	6,930	7,452	7,149	7,882	9,073	8,946
U.S. citizen or permanent resident	5,638	5,407	4,994	5,078	5,652	5,930	5,252	5,803	6,685	6,605
Temporary visa holder	581	535	721	983	1,115	1,148	1,464	1,553	1,622	1,832
Unknown	106	176	312	270	163	374	433	526	766	509
Engineering	3,002	2,479	3,166	4,894	6,008	5,323	6,426	7,578	9,875	10,476
U.S. citizen or permanent resident	2,138	1,555	1,594	2,349	3,343	2,575	2,288	3,332	4,219	4,154
Temporary visa holder	819	861	1,423	2,286	2,527	2,451	3,756	3,866	5,108	5,955
Unknown	45	63	149	259	138	297	382	380	548	367
Education	7,360	7,586	6,733	6,509	6,648	6,442	6,227	5,287	5,098	4,716
U.S. citizen or permanent resident	6,934	6,864	5,909	5,789	5,993	5,686	5,255	4,476	4,196	3,896
Temporary visa holder	352	515	577	506	506	539	536	478	539	661
Unknown	74	207	247	214	149	217	436	333	363	159
Humanities and arts	4,965	3,803	3,406	3,854	5,040	5,462	5,187	5,015	5,594	4,939
U.S. citizen or permanent resident	4,667	3,501	3,024	3,372	4,360	4,604	4,036	4,029	4,478	3,915
Temporary visa holder	211	179	232	384	591	665	806	667	713	742
Unknown	87	123	150	98	89	193	345	319	403	282
Other[b]	1,417	1,461	1,652	2,013	2,396	2,087	2,393	2,729	3,019	3,006
U.S. citizen or permanent resident	1,236	1,229	1,246	1,424	1,827	1,489	1,477	1,691	1,879	1,738
Temporary visa holder	152	188	299	503	511	513	729	816	867	1,076
Unknown	29	44	107	86	58	85	187	222	273	192

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 18

Doctorate recipients, by citizenship status and major field of study: 2010–20

(Number and percent)

Citizenship status and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
All doctorate recipients[a]	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283	15.1
Life sciences	11,319	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,755	12,753	12,561	11.0
Agricultural sciences and natural resources	1,100	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,472	33.8
Biological and biomedical sciences	8,046	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,681	8,418	4.6
Health sciences	2,173	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,531	2,584	2,671	22.9
Physical sciences and earth sciences	4,995	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,331	6,579	6,247	25.1
Chemistry	2,304	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,808	2,939	2,763	19.9
Geosciences, atmospheric sciences, and ocean sciences	862	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,243	44.2
Physics and astronomy	1,829	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,241	22.5
Mathematics and computer sciences	3,223	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,231	4,392	36.3
Computer and information sciences	1,633	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,221	2,361	44.6
Mathematics and statistics	1,590	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,031	27.7
Psychology and social sciences	7,882	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,877	9,043	8,946	13.5
Psychology	3,420	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,879	13.4
Anthropology	507	553	547	550	523	492	460	446	424	445	448	-11.6
Economics	1,073	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,216	13.3
Political science and government	728	685	724	803	775	859	745	743	734	707	637	-12.5
Sociology	639	656	633	636	678	741	613	683	668	632	607	-5.0
Other social sciences	1,515	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,985	2,103	2,159	42.5
Engineering	7,578	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,165	10,298	10,476	38.2
Aerospace, aeronautical, and astronautical engineering	252	262	307	348	386	361	370	379	383	379	399	58.3
Bioengineering and biomedical engineering	824	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,083	31.4
Chemical engineering	822	823	840	824	973	1,002	921	931	981	980	994	20.9
Civil engineering	643	634	495	542	617	632	564	713	675	700	796	23.8
Electrical, electronics, and communications engineering	1,778	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973	11.0
Industrial and manufacturing engineering	215	258	226	241	298	243	256	249	272	234	304	41.4
Materials science engineering	670	662	743	815	832	871	984	937	992	992	880	31.3
Mechanical engineering	983	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,634	66.2
Other engineering	1,391	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,283	2,519	2,413	73.5
Education	5,287	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,716	-10.8
Education administration	1,439	924	1,057	965	893	920	824	922	895	839	927	-35.6
Education research	2,443	2,438	2,568	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,312	-5.4
Teacher education	245	204	156	109	152	156	180	114	96	104	113	-53.9
Teaching fields	799	805	757	892	915	953	1,166	925	959	957	940	17.6
Other education	361	299	264	265	269	297	592	447	368	429	424	17.5
Humanities and arts	5,015	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,939	-1.5
Foreign languages and literature	601	644	684	701	674	656	599	618	617	610	564	-6.2
History	1,005	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	887	-11.7
Letters	1,516	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,392	-8.2

Table 18

Doctorate recipients, by citizenship status and major field of study: 2010–20

(Number and percent)

Citizenship status and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other humanities and arts	1,893	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,096	10.7
Other[b]	2,729	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,978	3,026	3,006	10.2
Business management and administration	1,366	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,474	1,532	1,466	7.3
Communication	638	650	595	645	663	667	672	622	630	543	593	-7.1
Non-S&E fields nec	725	706	735	827	796	770	760	965	874	951	947	30.6
U.S. citizen or permanent resident	31,602	31,725	32,981	33,964	34,003	35,071	35,678	35,735	35,351	35,232	34,492	9.1
Life sciences	7,812	7,892	8,184	8,352	8,390	8,470	8,683	8,827	9,029	9,040	8,707	11.5
Agricultural sciences and natural resources	618	697	675	737	754	774	771	822	792	821	796	28.8
Biological and biomedical sciences	5,585	5,614	5,790	5,768	5,993	6,029	6,215	6,147	6,396	6,371	6,008	7.6
Health sciences	1,609	1,581	1,719	1,847	1,643	1,667	1,697	1,858	1,841	1,848	1,903	18.3
Physical sciences and earth sciences	2,860	3,048	3,148	3,247	3,300	3,481	3,669	3,714	3,769	3,900	3,741	30.8
Chemistry	1,323	1,407	1,385	1,443	1,447	1,572	1,581	1,696	1,710	1,780	1,696	28.2
Geosciences, atmospheric sciences, and ocean sciences	573	555	623	654	722	704	803	790	760	808	811	41.5
Physics and astronomy	964	1,086	1,140	1,150	1,131	1,205	1,285	1,228	1,299	1,312	1,234	28.0
Mathematics and computer sciences	1,599	1,603	1,627	1,631	1,738	1,663	1,729	1,748	1,736	1,785	1,736	8.6
Computer and information sciences	761	790	785	758	807	774	783	801	742	799	808	6.2
Mathematics and statistics	838	813	842	873	931	889	946	947	994	986	928	10.7
Psychology and social sciences	5,803	6,070	6,319	6,464	6,389	6,685	6,798	6,843	6,691	6,702	6,605	13.8
Psychology	2,874	3,062	3,046	3,067	3,042	3,103	3,341	3,376	3,309	3,326	3,317	15.4
Anthropology	384	455	445	457	405	397	360	349	336	360	366	-4.7
Economics	459	428	517	505	469	552	522	547	483	491	459	0.0
Political science and government	522	488	536	593	574	621	579	572	544	504	460	-11.9
Sociology	519	511	512	516	544	596	506	562	557	511	488	-6.0
Other social sciences	1,045	1,126	1,263	1,326	1,355	1,416	1,490	1,437	1,462	1,510	1,515	45.0
Engineering	3,332	3,350	3,579	3,767	4,066	4,219	4,181	4,311	4,213	4,251	4,154	24.7
Aerospace, aeronautical, and astronautical engineering	141	145	181	194	246	216	233	241	221	212	221	56.7
Bioengineering and biomedical engineering	516	564	602	637	674	723	746	695	743	771	689	33.5
Chemical engineering	433	393	377	365	445	488	470	469	469	480	465	7.4
Civil engineering	231	216	159	182	229	231	219	231	200	200	245	6.1
Electrical, electronics, and communications engineering	627	617	614	603	575	632	548	581	543	518	552	-12.0
Industrial and manufacturing engineering	62	100	75	77	91	65	82	85	62	84	82	32.3
Materials science engineering	313	278	350	349	363	381	456	470	462	501	398	27.2
Mechanical engineering	403	440	505	547	558	620	585	591	608	600	601	49.1
Other engineering	606	597	716	813	885	863	842	948	905	885	901	48.7
Education	4,476	3,878	4,040	4,118	3,934	4,196	4,303	4,052	4,025	3,848	3,896	-13.0
Education administration	1,296	833	936	844	763	797	727	792	783	755	818	-36.9
Education research	2,059	1,989	2,143	2,216	2,104	2,273	1,981	2,029	2,056	1,909	1,872	-9.1
Teacher education	203	156	134	90	132	134	158	97	87	87	94	-53.7

Table 18

Doctorate recipients, by citizenship status and major field of study: 2010–20

(Number and percent)

Citizenship status and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Teaching fields	646	679	613	741	732	762	950	763	785	769	751	16.3
Other education	272	221	214	227	203	230	487	371	314	328	361	32.7
Humanities and arts	4,029	4,191	4,434	4,535	4,361	4,478	4,450	4,297	4,145	3,988	3,915	-2.8
Foreign languages and literature	389	426	472	467	469	463	399	430	405	383	349	-10.3
History	843	893	889	947	968	944	950	890	800	741	746	-11.5
Letters	1,287	1,289	1,383	1,354	1,304	1,353	1,314	1,277	1,232	1,187	1,165	-9.5
Other humanities and arts	1,510	1,583	1,690	1,767	1,620	1,718	1,787	1,700	1,708	1,677	1,655	9.6
Other[b]	1,691	1,693	1,650	1,850	1,825	1,879	1,865	1,943	1,743	1,718	1,738	2.8
Business management and administration	746	755	736	831	849	892	845	859	740	748	709	-5.0
Communication	468	473	426	471	473	479	472	458	434	349	412	-12.0
Non-S&E fields nec	477	465	488	548	503	508	548	626	569	621	617	29.4
Temporary visa holder	13,636	14,235	14,784	15,674	15,839	16,129	16,477	16,288	17,586	18,324	18,482	35.5
Life sciences	2,926	3,029	3,197	3,177	3,169	3,264	3,352	3,331	3,360	3,395	3,430	17.2
Agricultural sciences and natural resources	412	472	529	516	504	555	561	607	607	646	633	53.6
Biological and biomedical sciences	2,084	2,124	2,166	2,154	2,229	2,266	2,304	2,180	2,157	2,129	2,176	4.4
Health sciences	430	433	502	507	436	443	487	544	596	620	621	44.4
Physical sciences and earth sciences	1,884	1,955	1,959	2,032	2,196	2,099	2,313	2,160	2,374	2,484	2,311	22.7
Chemistry	847	907	880	888	1,000	929	1,000	919	1,022	1,071	994	17.4
Geosciences, atmospheric sciences, and ocean sciences	251	246	281	290	326	307	390	332	392	429	391	55.8
Physics and astronomy	786	802	798	854	870	863	923	909	960	984	926	17.8
Mathematics and computer sciences	1,446	1,449	1,617	1,833	1,850	1,917	2,053	1,926	2,128	2,304	2,475	71.2
Computer and information sciences	760	759	870	990	1,029	1,094	1,201	1,105	1,163	1,329	1,452	91.1
Mathematics and statistics	686	690	747	843	821	823	852	821	965	975	1,023	49.1
Psychology and social sciences	1,553	1,588	1,601	1,634	1,549	1,622	1,753	1,668	1,769	1,915	1,832	18.0
Psychology	270	238	254	282	249	260	305	286	284	339	257	-4.8
Anthropology	88	73	74	76	86	68	76	65	70	66	63	-28.4
Economics	556	623	656	615	627	606	656	641	707	708	691	24.3
Political science and government	162	150	150	163	145	178	128	140	159	173	152	-6.2
Sociology	95	113	85	92	90	101	89	93	88	104	101	6.3
Other social sciences	382	391	382	406	352	409	499	443	461	525	568	48.7
Engineering	3,866	4,164	4,355	4,759	4,961	5,108	4,842	5,037	5,576	5,680	5,955	54.0
Aerospace, aeronautical, and astronautical engineering	99	100	107	138	124	132	121	123	146	153	163	64.6
Bioengineering and biomedical engineering	290	291	292	352	318	348	301	300	362	359	364	25.5
Chemical engineering	359	379	414	409	482	461	401	426	478	478	482	34.3
Civil engineering	378	373	303	333	339	359	307	427	442	461	513	35.7
Electrical, electronics, and communications engineering	1,040	1,109	1,181	1,160	1,217	1,237	1,160	1,215	1,316	1,198	1,344	29.2
Industrial and manufacturing engineering	142	152	140	156	185	161	164	157	196	140	200	40.8
Materials science engineering	326	350	334	435	419	448	494	428	500	461	463	42.0

Table 18

Doctorate recipients, by citizenship status and major field of study: 2010–20

(Number and percent)

Citizenship status and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Mechanical engineering	519	568	631	664	686	783	652	741	831	879	983	89.4
Other engineering	713	842	953	1,112	1,191	1,179	1,242	1,220	1,305	1,551	1,443	102.4
Education	478	497	460	515	478	539	562	534	611	615	661	38.3
Education administration	35	41	46	44	39	35	33	51	52	54	59	68.6
Education research	277	294	278	319	265	327	279	308	366	317	387	39.7
Teacher education	19	26	13	17	14	13	13	12	8	16	18	-5.3
Teaching fields	112	96	101	116	134	145	181	132	155	165	163	45.5
Other education	35	40	22	19	26	19	56	31	30	63	34	-2.9
Humanities and arts	667	767	761	779	731	713	712	692	739	826	742	11.2
Foreign languages and literature	179	180	160	179	142	151	164	159	181	202	185	3.4
History	113	131	136	134	147	131	142	125	112	130	120	6.2
Letters	134	157	141	150	140	122	126	122	139	149	131	-2.2
Other humanities and arts	241	299	324	316	302	309	280	286	307	345	306	27.0
Other[b]	816	786	834	945	905	867	890	940	1,029	1,105	1,076	31.9
Business management and administration	499	477	542	600	589	546	553	588	643	688	658	31.9
Communication	131	132	107	133	137	137	160	122	165	163	154	17.6
Non-S&E fields nec	186	177	185	212	179	184	177	230	221	254	264	41.9

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

[a] Includes respondents who did not report citizenship status.

[b] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 19

Doctorate recipients, by ethnicity, race, and citizenship status: 2010–20

(Number)

Ethnicity, race, and citizenship status	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All doctorate recipients	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283
U.S. citizen or permanent resident	31,602	31,725	32,981	33,964	34,003	35,071	35,678	35,735	35,351	35,232	34,492
Temporary visa holder	13,636	14,235	14,784	15,674	15,839	16,129	16,477	16,288	17,586	18,324	18,482
Unknown citizenship	2,790	2,949	3,178	3,065	4,144	3,686	2,654	2,529	2,148	2,058	2,309
Hispanic or Latino	2,702	2,915	3,064	3,073	3,147	3,422	3,572	3,566	3,592	4,000	4,110
U.S. citizen or permanent resident	1,842	1,989	2,144	2,135	2,190	2,449	2,548	2,536	2,572	2,844	2,851
Temporary visa holder	849	922	916	921	944	964	1,016	997	1,016	1,146	1,254
Unknown citizenship	11	4	4	17	13	9	8	33	4	10	5
Not Hispanic or Latino											
American Indian or Alaska Native	129	135	107	126	109	141	136	111	116	124	100
U.S. citizen or permanent resident	117	127	104	119	103	131	128	109	115	119	97
Temporary visa holder[a]	12	8	D	7	6	10	8	D	D	5	D
Unknown citizenship	0	0	D	0	0	0	0	D	D	0	D
Asian	11,583	12,311	12,850	13,430	13,556	13,833	14,052	14,260	14,802	15,181	15,102
U.S. citizen or permanent resident	2,738	2,832	2,943	2,892	2,881	3,072	3,084	3,499	3,302	3,419	3,218
Temporary visa holder	8,822	9,451	9,889	10,514	10,662	10,741	10,931	10,731	11,465	11,717	11,852
Unknown citizenship	23	28	18	24	13	20	37	30	35	45	32
Black or African American	2,380	2,313	2,528	2,655	2,654	2,773	2,866	2,952	3,050	3,092	3,095
U.S. citizen or permanent resident	1,939	1,899	2,055	2,172	2,172	2,275	2,358	2,400	2,449	2,512	2,458
Temporary visa holder	426	404	469	479	477	493	502	530	595	570	625
Unknown citizenship	15	10	4	4	5	5	6	22	6	10	12
White	25,964	26,173	26,982	27,871	27,947	28,619	28,766	28,346	28,558	28,084	27,783
U.S. citizen or permanent resident	23,100	23,278	24,010	24,749	24,829	25,375	25,502	24,843	24,926	24,218	23,944
Temporary visa holder	2,810	2,841	2,931	3,070	3,086	3,180	3,224	3,428	3,598	3,771	3,783
Unknown citizenship	54	54	41	52	32	64	40	75	34	95	56
More than one race	711	780	868	929	939	971	1,116	1,110	1,211	1,266	1,252
U.S. citizen or permanent resident	654	722	807	858	879	903	1,033	1,015	1,100	1,121	1,136
Temporary visa holder	54	58	61	71	60	67	83	D	D	145	D
Unknown citizenship	3	0	0	0	0	1	0	D	D	0	D
Other race or race not reported	441	464	462	447	411	458	470	788	861	894	831
U.S. citizen or permanent resident	272	248	293	279	272	249	272	471	371	381	353
Temporary visa holder	160	212	D	147	125	171	174	279	476	475	454
Unknown citizenship	9	4	D	21	14	38	24	38	14	38	24
Ethnicity not reported	4,118	3,818	4,082	4,172	5,223	4,669	3,831	3,419	2,895	2,973	3,010
U.S. citizen or permanent resident	940	630	625	760	677	617	753	862	516	618	435
Temporary visa holder	503	339	355	465	479	503	539	228	324	495	395
Unknown citizenship	2,675	2,849	3,102	2,947	4,067	3,549	2,539	2,329	2,055	1,860	2,180

D = suppressed to avoid disclosure of confidential information.

[a] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 20

Male doctorate recipients, by ethnicity, race, and citizenship status: 2010–20

(Number)

Ethnicity, race, and citizenship status	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All doctorate recipients	25,524	26,188	27,362	28,326	29,008	29,532	29,572	29,081	29,746	30,113	29,886
U.S. citizen or permanent resident	15,275	15,396	16,072	16,550	16,660	17,218	17,530	17,553	17,312	17,264	16,783
Temporary visa holder	8,768	9,179	9,556	10,103	10,204	10,395	10,671	10,601	11,311	11,768	11,874
Unknown citizenship	1,481	1,613	1,734	1,673	2,144	1,919	1,371	927	1,123	1,081	1,229
Hispanic or Latino	1,383	1,494	1,549	1,523	1,588	1,758	1,766	1,805	1,865	2,011	2,048
U.S. citizen or permanent resident	815	893	948	905	999	1,119	1,134	1,152	1,196	1,302	1,266
Temporary visa holder	563	598	599	612	580	634	630	634	666	706	779
Unknown citizenship	5	3	2	6	9	5	2	19	3	3	3
Not Hispanic or Latino											
American Indian or Alaska Native	64	56	42	62	54	64	63	49	44	58	39
U.S. citizen or permanent resident	58	50	41	56	49	58	57	48	43	56	39
Temporary visa holder[a]	6	D	D	D	D	D	6	D	D	D	0
Unknown citizenship	0	D	D	D	D	D	0	D	D	D	0
Asian	6,919	7,407	7,730	8,038	8,091	8,235	8,538	8,665	8,902	9,182	9,196
U.S. citizen or permanent resident	1,220	1,263	1,312	1,264	1,243	1,359	1,432	1,651	1,562	1,626	1,535
Temporary visa holder	5,687	6,131	6,405	6,761	6,842	6,867	7,081	6,998	7,315	7,532	7,642
Unknown citizenship	12	13	13	13	6	9	25	16	25	24	19
Black or African American	977	917	1,047	1,101	1,151	1,113	1,205	1,204	1,324	1,261	1,318
U.S. citizen or permanent resident	697	666	741	801	821	807	863	849	923	893	918
Temporary visa holder	274	248	303	297	329	306	341	347	398	365	396
Unknown citizenship	6	3	3	3	1	0	1	8	3	3	4
White	13,439	13,601	14,041	14,608	14,624	15,101	15,155	14,945	14,985	14,889	14,573
U.S. citizen or permanent resident	11,604	11,737	12,168	12,582	12,590	12,978	13,033	12,662	12,608	12,367	12,093
Temporary visa holder	1,809	1,838	1,859	2,005	2,021	2,101	2,103	2,246	2,363	2,478	2,448
Unknown citizenship	26	26	14	21	13	22	19	37	14	44	32
More than one race	293	381	384	432	451	436	511	517	556	588	606
U.S. citizen or permanent resident	263	346	347	388	411	394	455	462	485	495	530
Temporary visa holder	28	35	37	44	40	42	56	D	D	D	76
Unknown citizenship	2	0	0	0	0	0	0	D	D	D	0
Other race or race not reported	236	273	260	243	249	291	278	467	528	521	478
U.S. citizen or permanent resident	139	136	148	148	162	152	149	269	215	207	175
Temporary visa holder	94	D	D	D	D	D	118	191	305	298	293
Unknown citizenship	3	D	D	D	D	D	11	7	8	16	10
Ethnicity not reported	2,213	2,059	2,309	2,319	2,800	2,534	2,056	1,429	1,542	1,603	1,628
U.S. citizen or permanent resident	479	305	367	406	385	351	407	460	280	318	227
Temporary visa holder	307	189	243	290	305	320	336	129	192	294	240
Unknown citizenship	1,427	1,565	1,699	1,623	2,110	1,863	1,313	840	1,070	991	1,161

D = suppressed to avoid disclosure of confidential information.

[a] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 21

Female doctorate recipients, by ethnicity, race, and citizenship status: 2010–20

(Number)

Ethnicity, race, and citizenship status	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All doctorate recipients	22,488	22,699	23,526	24,365	24,813	25,347	25,222	25,449	25,311	25,491	25,392
U.S. citizen or permanent resident	16,327	16,329	16,909	17,414	17,343	17,853	18,147	18,181	18,038	17,967	17,709
Temporary visa holder	4,868	5,056	5,224	5,571	5,633	5,734	5,805	5,686	6,275	6,555	6,608
Unknown citizenship	1,293	1,314	1,393	1,380	1,837	1,760	1,270	1,582	998	969	1,075
Hispanic or Latino	1,319	1,421	1,515	1,550	1,559	1,664	1,806	1,761	1,726	1,989	2,062
U.S. citizen or permanent resident	1,027	1,096	1,196	1,230	1,191	1,330	1,414	1,384	1,375	1,542	1,585
Temporary visa holder	286	324	317	309	364	330	386	363	350	440	475
Unknown citizenship	6	1	2	11	4	4	6	14	1	7	2
Not Hispanic or Latino											
American Indian or Alaska Native	65	79	65	64	55	77	73	62	72	66	61
U.S. citizen or permanent resident	59	77	63	63	54	73	71	61	72	63	58
Temporary visa holder[a]	6	D	D	D	D	D	D	D	0	D	D
Unknown citizenship	0	D	D	D	D	D	D	D	0	D	D
Asian	4,662	4,904	5,117	5,392	5,465	5,598	5,513	5,593	5,900	5,999	5,906
U.S. citizen or permanent resident	1,518	1,569	1,631	1,628	1,638	1,713	1,652	1,847	1,740	1,793	1,683
Temporary visa holder	3,135	3,320	3,481	3,753	3,820	3,874	3,849	3,732	4,150	4,185	4,210
Unknown citizenship	9	15	5	11	7	11	12	14	10	21	13
Black or African American	1,403	1,396	1,481	1,554	1,503	1,660	1,661	1,748	1,726	1,831	1,777
U.S. citizen or permanent resident	1,242	1,233	1,314	1,371	1,351	1,468	1,495	1,551	1,526	1,619	1,540
Temporary visa holder	152	156	166	182	148	187	161	183	197	205	229
Unknown citizenship	9	7	1	1	4	5	5	14	3	7	8
White	12,525	12,572	12,941	13,263	13,323	13,518	13,611	13,401	13,573	13,194	13,210
U.S. citizen or permanent resident	11,496	11,541	11,842	12,167	12,239	12,397	12,469	12,181	12,318	11,850	11,851
Temporary visa holder	1,001	1,003	1,072	1,065	1,065	1,079	1,121	1,182	1,235	1,293	1,335
Unknown citizenship	28	28	27	31	19	42	21	38	20	51	24
More than one race	418	399	484	497	488	535	605	593	655	678	646
U.S. citizen or permanent resident	391	376	460	470	468	509	578	553	615	626	606
Temporary visa holder	26	23	24	27	20	25	27	D	40	D	D
Unknown citizenship	1	0	0	0	0	1	0	D	0	D	D
Other race or race not reported	205	191	202	204	162	167	192	321	333	373	353
U.S. citizen or permanent resident	133	112	145	131	110	97	123	202	156	174	178
Temporary visa holder	66	D	D	D	D	D	D	88	171	177	161
Unknown citizenship	6	D	D	D	D	D	D	31	6	22	14
Ethnicity not reported	1,891	1,737	1,721	1,841	2,258	2,128	1,761	1,970	1,326	1,361	1,377
U.S. citizen or permanent resident	461	325	258	354	292	266	345	402	236	300	208
Temporary visa holder	196	150	111	175	172	183	203	99	132	200	155
Unknown citizenship	1,234	1,262	1,352	1,312	1,794	1,679	1,213	1,469	958	861	1,014

D = suppressed to avoid disclosure of confidential information.

[a] In most cases, non-U.S. American Indians are citizens of Canada or of a Latin American country.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
All fields	55,283	18,482	34,492	2,851	97	3,218	2,458	23,944	1,136	353	435
Life sciences	12,561	3,430	8,707	710	22	960	558	5,988	311	73	85
Agricultural sciences and natural resources	1,472	633	796	60	5	44	41	602	24	6	14
Agricultural sciences	920	447	443	34	3	30	22	329	14	3	8
Agricultural economics	137	83	44	6	0	6	2	27	3	0	0
Agronomy, horticulture science, plant breeding, plant pathology, plant sciences-other	363	167	193	18	1	15	9	140	6	1	3
Animal nutrition, poultry science	75	33	39	1	0	1	2	33	2	0	0
Animal sciences, other	139	45	87	5	2	3	3	68	2	1	3
Food science, food technology-other	143	94	42	1	0	5	5	29	0	0	2
Soil chemistry and microbiology, soil sciences-other	63	25	38	3	0	0	1	32	1	1	0
Natural resources and conservation	476	152	311	25	1	14	15	241	7	3	5
Environmental science	201	67	126	15	0	9	7	92	3	0	0
Fishing and fisheries sciences and management	49	12	36	2	1	0	0	30	0	0	3
Forest biology, forest management, forestry sciences-other	92	33	56	1	0	1	3	48	1	1	1
Natural resources policy and environmental economics	66	24	41	5	0	4	1	26	3	1	1
Natural resources and conservation, wildlife and range management	68	16	52	2	0	0	4	45	0	1	0
Agricultural sciences and natural resources, aggregated	76	34	42	1	1	0	4	32	3	0	1
Biological and biomedical sciences	8,418	2,176	6,008	521	9	748	265	4,144	237	44	40
Anatomy, developmental biology	141	36	99	15	0	18	4	55	6	1	0
Bacteriology, parasitology, and virology	136	36	99	8	0	8	5	72	6	0	0

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Biochemistry (biological sciences)	687	198	459	45	0	60	14	316	18	1	5
Bioinformatics	223	97	122	9	0	30	5	73	2	1	2
Biomedical sciences	409	122	274	36	0	38	10	178	11	1	0
Biometrics and biostatistics	241	140	96	4	0	23	1	61	6	1	0
Biophysics (biological sciences)	174	49	123	6	0	13	3	98	2	1	0
Botany, plant pathology, plant physiology	152	53	96	4	0	9	3	71	7	2	0
Cancer biology	305	85	213	21	0	33	16	134	5	2	2
Cell, cellular biology, and histology	168	35	121	6	0	15	4	91	4	0	1
Computational biology	137	60	75	6	0	19	2	45	2	1	0
Ecology	388	44	342	20	0	9	12	290	8	0	3
Endocrinology, human/ animal pathology	78	15	61	7	0	5	3	44	1	0	1
Entomology	124	29	92	6	0	3	2	75	4	2	0
Environmental toxicology	58	14	42	5	0	4	5	26	1	1	0
Epidemiology	357	82	267	23	3	44	30	155	9	3	0
Evolutionary biology	207	43	162	9	0	8	5	133	6	1	0
Genetics and genomics, human and animal	347	77	260	23	1	30	6	186	11	2	1
Immunology	389	92	290	29	0	54	17	173	13	3	1
Microbiology	478	87	386	34	0	41	21	271	14	3	2
Molecular biology	579	157	413	38	0	61	21	272	16	3	2
Molecular medicine	36	4	32	3	0	3	3	22	1	0	0
Neurosciences, neurobiology	974	196	756	68	0	97	21	529	30	6	5
Nutrition sciences	205	74	128	8	0	10	6	95	8	1	0
Pharmacology, human and animal	208	46	156	17	1	12	10	106	10	0	0
Physiology, human and animal	151	33	110	8	1	14	0	79	4	2	2
Plant genetics	61	26	34	1	0	2	0	30	1	0	0
Structural biology	54	14	39	2	0	6	2	26	2	1	0
Toxicology	63	16	46	3	0	6	2	31	3	1	0
Wildlife biology, zoology	76	8	67	5	0	2	0	58	2	0	0
Biological and biomedical sciences, general	649	166	431	39	3	55	26	271	22	4	11
Biotechnology, biology/ biomedical sciences-other	163	42	117	13	0	16	6	78	2	0	2

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Health sciences	2,671	621	1,903	129	8	168	252	1,242	50	23	31
Environmental health	83	18	60	9	1	9	3	35	3	0	0
Health and behavior	62	11	49	8	1	3	8	27	1	0	1
Health services/ systems administration	170	47	118	11	0	19	27	58	2	1	0
Kinesiology, exercise science	291	54	229	16	0	7	11	185	8	1	1
Medical physics, radiological science	81	19	61	6	0	5	2	46	1	0	1
Nursing science	591	70	490	22	3	38	59	348	6	3	11
Pharmaceutical sciences	382	195	159	4	0	35	10	98	5	5	2
Public health	431	76	339	32	0	28	92	163	14	7	3
Rehabilitation, therapeutic services	116	26	79	2	0	4	3	67	0	1	2
Speech-language pathology and audiology	125	23	98	5	0	3	7	79	4	0	0
Health sciences, aggregated	339	82	221	14	3	17	30	136	6	5	10
Physical sciences and earth sciences	6,247	2,311	3,741	246	4	313	79	2,892	140	32	35
Chemistry	2,763	994	1,696	119	1	157	45	1,265	72	17	20
Analytical chemistry	364	154	207	11	0	14	8	160	10	3	1
Chemical biology	135	35	99	9	0	20	4	60	6	0	0
Inorganic chemistry	327	105	222	15	0	21	4	169	11	2	0
Medicinal chemistry	85	37	47	3	0	5	3	33	2	1	0
Organic chemistry	535	186	346	23	1	26	9	269	15	1	2
Physical chemistry	398	148	248	19	0	20	4	193	11	1	0
Polymer chemistry	128	51	76	3	0	10	4	53	3	2	1
Theoretical chemistry	87	40	47	1	0	7	0	37	1	1	0
Chemistry, general	532	182	290	20	0	28	7	204	10	6	15
Chemistry, other	172	56	114	15	0	6	2	87	3	0	1
Geosciences, atmospheric sciences, and ocean sciences	1,243	391	811	59	1	45	13	646	36	6	5
Atmospheric science and meteorology	230	81	140	8	0	6	2	120	2	1	1
Atmospheric physics, meteorology	52	20	29	0	0	2	0	26	1	0	0
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	178	61	111	8	0	4	2	94	1	1	1
Geological sciences	674	217	431	36	0	20	8	340	20	3	4

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
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Geochemistry, mineralogy	53	12	41	5	0	1	0	33	1	0	1
Geology	167	49	115	11	0	5	2	91	3	1	2
Geomorphology, geological sciences-general, geological sciences-other	284	78	193	15	0	10	3	153	9	2	1
Geophysics and seismology	144	75	59	5	0	3	2	43	6	0	0
Paleontology, stratigraphy	26	3	23	0	0	1	1	20	1	0	0
Ocean and marine sciences	339	93	240	15	1	19	3	186	14	2	0
Marine biology and biological oceanography	74	9	63	1	0	9	0	47	5	1	0
Oceanography, chemical and physical	71	28	42	6	0	3	1	30	2	0	0
Ocean/ marine sciences, aggregated	194	56	135	8	1	7	2	109	7	1	0
Physics and astronomy	2,241	926	1,234	68	2	111	21	981	32	9	10
Astronomy and astrophysics	305	83	213	15	0	12	1	178	5	0	2
Astronomy	116	24	89	6	0	5	1	73	3	0	1
Astrophysics	174	54	115	8	0	7	0	98	1	0	1
Astronomy and astrophysics, other	15	5	9	1	0	0	0	7	1	0	0
Physics	1,936	843	1,021	53	2	99	20	803	27	9	8
Acoustics, optics/ photonics	215	118	90	5	0	15	1	67	2	0	0
Applied physics	154	65	83	8	0	15	8	49	1	2	0
Atomic physics, polymer physics	131	53	75	3	0	6	3	60	1	1	1
Biophysics (physics)	126	51	72	5	0	11	1	49	4	2	0
Condensed matter, low-temperature physics	376	196	179	7	0	20	3	143	5	0	1
Elementary particle physics	198	88	108	3	1	7	1	93	3	0	0
Nuclear physics	98	30	68	7	0	5	0	55	0	1	0
Plasma, high-temperature physics	65	13	51	0	0	2	0	49	0	0	0
Physics, general	447	164	235	12	1	14	1	188	10	3	6
Physics, other	126	65	60	3	0	4	2	50	1	0	0
Mathematics and computer sciences	4,392	2,475	1,736	100	1	264	56	1,196	77	23	19
Computer and information sciences	2,361	1,452	808	44	1	146	26	535	33	13	10

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Computer science	1,952	1,233	645	34	0	120	17	434	26	7	7
Information science, systems	148	62	70	4	1	10	8	38	5	2	2
Computer and information sciences, general	151	101	47	4	0	10	0	31	1	0	1
Computer and information sciences, other	110	56	46	2	0	6	1	32	1	4	0
Mathematics and statistics	2,031	1,023	928	56	0	118	30	661	44	10	9
Algebra	57	29	28	1	0	1	1	23	2	0	0
Analysis and functional analysis	57	29	28	2	0	2	2	21	0	0	1
Applied mathematics, computing theory	424	195	224	16	0	28	11	162	6	0	1
Computational mathematics	98	50	43	3	0	6	5	24	4	0	1
Geometry, geometric analysis	66	39	27	3	0	2	0	20	2	0	0
Logic, topology/ foundations	44	14	30	2	0	4	1	23	0	0	0
Number theory	51	26	25	1	0	3	0	20	0	0	1
Operations research, mathematics/ statistics-general, mathematics/ statistics-other	830	388	391	19	0	40	7	286	25	10	4
Statistics (mathematics)	404	253	132	9	0	32	3	82	5	0	1
Psychology and social sciences	8,946	1,832	6,605	657	22	443	536	4,550	236	69	92
Psychology	3,879	257	3,317	355	3	193	262	2,298	122	31	53
Behavioral analysis	47	0	46	0	0	2	2	40	1	0	1
Clinical psychology	1,282	36	1,155	124	1	81	75	803	44	14	13
Cognitive neuroscience	198	35	160	16	0	14	2	120	8	0	0
Cognitive psychology and psycholinguistics	112	20	90	5	0	4	1	76	4	0	0
Community psychology	42	3	35	4	0	3	8	19	0	0	1
Counseling	277	16	242	22	1	15	37	147	10	2	8
Developmental and child psychology	161	19	138	20	0	14	12	87	5	0	0
Educational psychology (psychology)	94	7	73	10	0	1	12	44	2	3	1
Experimental psychology	142	15	125	8	0	6	3	102	5	0	1

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

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Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
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Family psychology, human development and family studies	166	31	129	10	0	5	17	87	6	2	2
Health, medical psychology	73	3	59	5	0	2	4	44	2	0	2
Industrial and organizational psychology	213	16	188	26	0	5	15	131	10	1	0
Marriage and family therapy, counseling	91	6	66	6	0	2	14	41	3	0	0
Neuropsychology, physiological psychology	29	1	25	4	0	2	2	15	2	0	0
School psychology (psychology)	144	1	141	19	0	6	16	96	4	0	0
Social psychology	190	14	173	16	0	11	10	130	4	2	0
Psychology, general	302	17	202	28	0	5	17	121	7	6	18
Psychology, aggregated	316	17	270	32	1	15	15	195	5	1	6
Social sciences	5,067	1,575	3,288	302	19	250	274	2,252	114	38	39
Anthropology	448	63	366	38	2	28	11	261	20	1	5
Anthropology, cultural	248	48	195	23	2	18	9	130	11	0	2
Anthropology, general	101	8	80	5	0	6	2	62	4	0	1
Anthropology, physical and biological	99	7	91	10	0	4	0	69	5	1	2
Economics	1,216	691	459	32	1	60	22	318	19	2	5
Econometrics, economics	1,171	674	431	31	1	59	21	294	18	2	5
Natural resources and environmental economics (social sciences)	45	17	28	1	0	1	1	24	1	0	0
Political science and government	637	152	460	31	1	34	20	348	11	9	6
Sociology	607	101	488	50	3	33	50	328	14	5	5
Other social sciences	2,159	568	1,515	151	12	95	171	997	50	21	18
American, U.S. studies	57	6	49	6	1	4	7	27	3	1	0
Applied linguistics	95	47	47	5	0	8	0	32	2	0	0
Archaeology (social sciences)	116	17	99	10	1	1	2	77	4	4	0
Area, ethnic, and cultural studies	156	37	114	30	5	10	15	41	10	1	2
Criminal justice and corrections	135	12	116	13	0	0	27	74	0	0	2
Criminology	103	21	79	7	0	3	5	61	2	0	1

Table 22

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Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
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Demography, gerontology, statistics, urban affairs, social sciences- general, social sciences- other	295	67	202	20	1	13	32	123	7	4	2
Gender and women's studies	50	10	40	2	1	2	6	26	2	0	1
Geography	301	104	194	17	1	13	7	143	7	3	3
Health policy analysis	56	13	42	3	0	6	11	22	0	0	0
History, science and technology and society	61	11	48	2	0	3	3	33	3	2	2
International relations, international affairs	131	27	97	7	1	7	5	73	1	1	2
Linguistics	232	79	145	14	1	8	7	112	2	1	0
Public policy analysis	249	63	179	10	0	12	35	112	5	3	2
Urban, city, community and regional planning	122	54	64	5	0	5	9	41	2	1	1
Engineering	10,476	5,955	4,154	287	5	665	177	2,804	128	46	42
Aerospace, aeronautical, and astronautical engineering	399	163	221	17	0	25	7	163	5	1	3
Bioengineering and biomedical engineering	1,083	364	689	51	1	145	29	428	30	3	2
Chemical engineering	994	482	465	35	0	88	15	308	12	6	1
Civil engineering	796	513	245	17	2	28	14	170	4	5	5
Electrical, electronics, and communications engineering	1,973	1,344	552	46	1	111	21	349	12	8	4
Industrial and manufacturing engineering	304	200	82	9	0	12	11	43	1	2	4
Materials science engineering	880	463	398	28	0	69	13	267	14	4	3
Mechanical engineering	1,634	983	601	32	1	79	13	437	25	6	8
Other engineering	2,413	1,443	901	52	0	108	54	639	25	11	12
Computer engineering	479	339	127	5	0	25	7	83	2	2	3
Environmental, environmental health engineering	242	112	122	8	0	12	10	87	3	1	1
Nuclear engineering	169	58	109	7	0	7	2	89	3	1	0
Robotics	144	78	65	4	0	10	2	42	5	2	0
Structural engineering	113	75	37	4	0	8	1	22	2	0	0

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Systems engineering	119	53	61	5	0	7	4	45	0	0	0
Other engineering, aggregated	1,147	728	380	19	0	39	28	271	10	5	8
Education	4,716	661	3,896	371	16	204	628	2,474	99	41	63
Education administration	927	59	818	74	4	24	198	476	18	8	16
Educational administration and supervision	150	12	125	4	0	5	48	60	3	2	3
Educational and human resource studies, development	44	9	33	8	0	3	5	16	1	0	0
Educational leadership	673	37	606	56	4	15	122	380	10	6	13
Urban education and leadership	60	1	54	6	0	1	23	20	4	0	0
Education research	2,279	372	1,855	181	9	114	269	1,194	50	13	25
Counseling education, counseling and guidance	232	25	195	18	2	10	41	112	4	0	8
Curriculum, instruction, educational assessment/ measurement	525	112	397	47	1	18	43	271	9	5	3
Educational policy analysis	123	22	100	8	0	4	18	63	4	1	2
Educational psychology (education)	190	34	154	6	1	23	10	99	10	5	0
Educational statistics, research methods	91	30	60	2	0	5	9	42	2	0	0
Educational/ instructional technology, media design	197	53	138	9	0	11	21	90	6	0	1
Higher education evaluation and research	408	24	378	49	3	19	79	215	6	1	6
Learning sciences	65	9	53	5	0	2	3	40	1	0	2
School psychology (education)	108	6	101	9	0	4	12	74	1	0	1
Social and philosophical foundations of education	67	6	60	11	1	8	10	26	3	0	1
Special education	273	51	219	17	1	10	23	162	4	1	1
Teacher education	113	18	94	4	0	5	18	60	1	0	6
Teaching fields	940	163	751	59	2	36	93	522	16	12	11
Health education	50	9	40	3	0	0	13	23	1	0	0

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Literacy and reading education	127	21	102	6	1	2	10	77	2	2	2
Mathematics education	122	21	101	5	1	6	11	73	3	1	1
Music education	84	8	74	5	0	2	9	53	1	1	3
Science education	139	21	115	7	0	7	21	74	4	0	2
Teaching fields, aggregated	418	83	319	33	0	19	29	222	5	8	3
Other education	457	49	378	53	1	25	50	222	14	8	5
Education, general	258	19	216	39	0	18	27	121	3	4	4
Other education, aggregated	199	30	162	14	1	7	23	101	11	4	1
Humanities and arts	4,939	742	3,915	352	16	207	174	2,943	107	51	65
Foreign languages and literature	564	185	349	84	2	16	6	224	6	8	3
French	89	22	57	3	0	4	2	47	0	1	0
German	49	10	38	1	0	1	0	32	2	1	1
Spanish	162	53	103	43	0	1	2	52	1	3	1
Other languages and literature, aggregated	264	100	151	37	2	10	2	93	3	3	1
History	887	120	746	58	2	36	28	585	21	6	10
American history, United States and Canada	319	11	308	24	2	8	15	246	9	2	2
Asian history	79	28	51	0	0	17	1	28	4	0	1
European history	148	15	133	9	0	0	0	122	1	1	0
Latin American history	42	10	32	9	0	1	0	20	2	0	0
Middle, Near East history	46	16	28	1	0	1	1	24	0	1	0
History, general	132	19	96	9	0	5	5	66	4	1	6
History, aggregated	121	21	98	6	0	4	6	79	1	1	1
Letters	1,392	131	1,165	72	5	51	46	914	39	11	27
American literature, United States and Canada	247	14	232	18	0	6	8	188	11	1	0
Classics	85	12	68	4	0	1	0	56	5	1	1
Comparative literature	175	45	117	15	0	10	3	86	2	1	0
English language	184	15	104	3	1	1	6	66	1	4	22
English literature, British and Commonwealth	335	28	303	11	0	15	7	264	4	1	1
Rhetoric and composition	206	10	195	13	3	9	14	147	6	1	2
Speech and rhetorical studies	33	0	30	0	0	1	3	25	0	1	0
Letters, aggregated	127	7	116	8	1	8	5	82	10	1	1
Other humanities and arts	2,096	306	1,655	138	7	104	94	1,220	41	26	25

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
African American studies, literature, and history	68	2	64	5	0	2	39	13	3	1	1
Art history, criticism, and conservation	223	33	180	20	0	13	1	140	4	2	0
Dance, drama	92	13	70	4	1	5	4	50	2	2	2
Film, cinema, video studies	83	20	60	4	0	5	5	42	2	2	0
Music	76	14	49	4	1	3	2	34	1	1	3
Musicology and ethnomusicology	126	18	106	8	0	6	3	85	1	2	1
Music performance	136	28	95	8	0	4	6	71	3	2	1
Music theory and composition	116	24	91	6	0	8	0	72	3	0	2
Philosophy, ethics	460	69	368	37	2	15	10	278	11	9	6
Religion/ religious studies, Jewish/ Judaic studies	227	20	187	14	0	17	9	134	7	2	4
Theology, religious education	214	30	178	13	1	13	9	133	3	2	4
Other humanities, aggregated	275	35	207	15	2	13	6	168	1	1	1
Other [b]	3,006	1,076	1,738	128	11	162	250	1,097	38	18	34
Business management and administration	1,466	658	709	46	2	106	102	413	19	6	15
Accounting	157	73	81	5	0	15	2	53	5	0	1
Business administration and management	302	138	137	7	0	15	23	86	1	2	3
Finance	198	119	63	5	2	19	1	33	3	0	0
Human resources, organizational behavior	216	44	160	8	0	16	36	94	4	1	1
Management information systems, business statistics	109	65	37	0	0	7	6	22	1	1	0
Marketing management and research	109	50	51	9	0	9	3	27	1	0	2
Other aggregated business fields	375	169	180	12	0	25	31	98	4	2	8
Communication	593	154	412	30	1	23	32	304	9	6	7
Communication research	141	36	102	10	1	3	11	74	2	1	0
Mass communication, media studies	188	61	117	11	0	9	5	83	2	2	5
Communication, general	174	42	126	5	0	8	9	95	4	3	2
Communication, aggregated	90	15	67	4	0	3	7	52	1	0	0

Table 22

Doctorate recipients, by subfield of study, citizenship status, ethnicity, and race: 2020

(Number)

Field of study	All doctorate recipients [a]	Temporary visa holders	U.S. citizens and permanent residents								
			Total	Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Non-S&E fields nec	947	264	617	52	8	33	116	380	10	6	12
Architecture and environmental design	120	61	52	2	0	6	1	37	1	3	2
Family, consumer sciences and human sciences	91	29	60	4	2	6	13	32	1	0	2
Parks, sports, recreation, leisure and fitness	57	10	46	1	0	1	4	38	2	0	0
Public administration	221	56	150	17	2	3	50	71	3	1	3
Social work	310	41	252	20	3	16	43	164	3	1	2
Fields nec, aggregated	148	67	57	8	1	1	5	38	0	1	3

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

[a] Includes respondents who did not report citizenship.
[b] 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.

Table 23

U.S. citizen and permanent resident doctorate recipients, by broad field of study, ethnicity, and race: Selected years, 1975–2020

(Number)

Field, ethnicity, and race	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
All fields	28,872	26,532	24,711	26,619	32,062	29,952	27,945	31,602	35,071	34,492
Hispanic or Latino	349	490	635	840	1,065	1,310	1,435	1,842	2,449	2,851
Not Hispanic or Latino										
American Indian or Alaska Native	36	75	96	96	147	169	137	117	131	97
Asian[a]	1,007	1,095	1,069	1,306	4,297	2,274	2,155	2,738	3,072	3,218
Black or African American	1,047	1,094	1,042	1,048	1,461	1,749	1,741	1,939	2,275	2,458
White	24,878	22,435	21,308	22,878	24,683	23,714	21,208	23,100	25,375	23,944
More than one race	na	na	na	na	na	na	395	654	903	1,136
Other race or race not reported[b]	167	51	93	132	170	370	306	272	249	353
Ethnicity not reported	1,388	1,292	468	319	239	366	568	940	617	435
Life sciences[c]	4,312	4,688	4,694	4,944	6,131	6,086	6,282	7,812	8,470	8,707
Hispanic or Latino	47	44	90	130	183	242	293	449	630	710
Not Hispanic or Latino										
American Indian or Alaska Native	2	7	19	9	27	27	19	22	23	22
Asian[a]	221	228	213	275	1,111	680	671	843	920	960
Black or African American	63	71	99	103	190	221	289	392	454	558
White	3,792	4,063	4,180	4,345	4,545	4,762	4,761	5,689	6,034	5,988
More than one race	na	na	na	na	na	na	80	155	239	311
Other race or race not reported[b]	19	14	11	18	39	80	69	57	55	73
Ethnicity not reported	168	261	82	64	36	74	100	205	115	85
Physical sciences and earth sciences	3,023	2,536	2,618	2,835	3,367	2,547	2,344	2,860	3,481	3,741
Hispanic or Latino	24	31	34	85	84	93	92	128	180	246
Not Hispanic or Latino										
American Indian or Alaska Native	0	5	4	3	7	13	8	7	9	4
Asian[a]	183	182	169	177	847	225	213	235	272	313
Black or African American	33	17	30	33	43	65	61	80	103	79
White	2,588	2,112	2,301	2,463	2,332	2,085	1,876	2,241	2,752	2,892
More than one race	na	na	na	na	na	na	36	62	89	140
Other race or race not reported[b]	18	3	12	21	16	28	29	14	16	32
Ethnicity not reported	177	186	68	53	38	38	29	93	60	35
Mathematics and computer sciences	924	752	632	828	1,389	1,035	1,011	1,599	1,663	1,736
Hispanic or Latino	8	6	18	16	21	29	36	58	76	100
Not Hispanic or Latino										
American Indian or Alaska Native	3	0	0	1	2	3	1	5	1	1
Asian[a]	62	51	50	76	344	146	158	223	205	264
Black or African American	11	12	10	5	16	32	36	50	53	56
White	795	639	527	712	985	801	730	1,164	1,217	1,196
More than one race	na	na	na	na	na	na	15	32	35	77
Other race or race not reported[b]	2	0	3	2	6	11	13	19	19	23
Ethnicity not reported	43	44	24	16	15	13	22	48	57	19
Psychology and social sciences	5,638	5,407	4,994	5,078	5,652	5,930	5,252	5,803	6,685	6,605
Hispanic or Latino	63	114	142	200	236	313	334	386	498	657
Not Hispanic or Latino										
American Indian or Alaska Native	8	13	19	25	31	41	33	38	31	22
Asian[a]	93	151	130	157	415	315	281	373	441	443
Black or African American	177	211	208	219	281	370	317	349	533	536
White	4,968	4,666	4,372	4,386	4,619	4,739	3,988	4,285	4,809	4,550
More than one race	na	na	na	na	na	na	92	149	193	236

Table 23

U.S. citizen and permanent resident doctorate recipients, by broad field of study, ethnicity, and race: Selected years, 1975–2020

(Number)

Field, ethnicity, and race	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Other race or race not reported[b]	26	11	24	36	41	84	53	46	59	69
Ethnicity not reported	303	241	99	55	29	68	154	177	121	92
Engineering	2,138	1,555	1,594	2,349	3,343	2,575	2,288	3,332	4,219	4,154
Hispanic or Latino	18	27	22	54	77	82	89	192	294	287
Not Hispanic or Latino										
American Indian or Alaska Native	1	3	1	4	9	8	9	6	7	5
Asian[a]	273	278	281	359	1,032	440	399	543	648	665
Black or African American	16	18	34	40	70	81	96	137	164	177
White	1,646	1,143	1,189	1,840	2,092	1,891	1,590	2,227	2,867	2,804
More than one race	na	na	na	na	na	na	31	65	108	128
Other race or race not reported[b]	14	0	8	17	16	30	26	36	31	46
Ethnicity not reported	170	86	59	35	47	43	48	126	100	42
Education	6,934	6,864	5,909	5,789	5,993	5,686	5,255	4,476	4,196	3,896
Hispanic or Latino	100	153	190	191	258	285	293	275	315	371
Not Hispanic or Latino										
American Indian or Alaska Native	16	43	40	37	41	51	41	22	28	16
Asian[a]	71	93	98	104	179	174	153	186	195	204
Black or African American	615	606	505	495	623	693	648	622	631	628
White	5,874	5,700	4,992	4,900	4,846	4,375	3,903	3,129	2,848	2,474
More than one race	na	na	na	na	na	na	58	77	89	99
Other race or race not reported[b]	44	11	23	23	24	49	46	40	23	41
Ethnicity not reported	214	258	61	39	22	59	113	125	67	63
Humanities and arts	4,667	3,501	3,024	3,372	4,360	4,604	4,036	4,029	4,478	3,915
Hispanic or Latino	80	98	108	132	161	213	217	269	364	352
Not Hispanic or Latino										
American Indian or Alaska Native	5	3	7	8	20	20	21	14	25	16
Asian[a]	60	66	62	73	206	193	194	180	198	207
Black or African American	87	93	75	75	124	167	174	171	138	174
White	4,135	3,067	2,703	3,032	3,785	3,884	3,229	3,147	3,535	2,943
More than one race	na	na	na	na	na	na	66	84	110	107
Other race or race not reported[b]	41	8	11	10	22	73	56	47	36	51
Ethnicity not reported	259	166	58	42	42	54	79	117	72	65
Other[d]	1,236	1,229	1,246	1,424	1,827	1,489	1,477	1,691	1,879	1,738
Hispanic or Latino	9	17	31	32	45	53	81	85	92	128
Not Hispanic or Latino										
American Indian or Alaska Native	1	1	6	9	10	6	5	3	7	11
Asian[a]	44	46	66	85	163	101	86	155	193	162
Black or African American	45	66	81	78	114	120	120	138	199	250
White	1,080	1,045	1,044	1,200	1,479	1,177	1,131	1,218	1,313	1,097
More than one race	na	na	na	na	na	na	17	30	40	38
Other race or race not reported[b]	3	4	1	5	6	15	14	13	10	18
Ethnicity not reported	54	50	17	15	10	17	23	49	25	34

na = not applicable; respondents were instructed to indicate only one race.

[a] Includes Native Hawaiians or Other Pacific Islanders through 2000, but excludes them since 2001.

[b] Before 2001, this category included respondents who selected more than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

[c] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[d] Includes other non-science and engineering fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 24

U.S. citizen and permanent resident doctorate recipients, by major field of study, ethnicity, and race: 2020

(Number and percent distribution)

Field of study	All U.S. citizen and permanent resident doctorate recipients (number)	Total	U.S. citizen or permanent resident							
			Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
All fields	34,492	100.0	8.3	0.3	9.3	7.1	69.4	3.3	1.0	1.3
Life sciences	8,707	100.0	8.2	0.3	11.0	6.4	68.8	3.6	0.8	1.0
Agricultural sciences and natural resources	796	100.0	7.5	0.6	5.5	5.2	75.6	3.0	0.8	1.8
Biological and biomedical sciences	6,008	100.0	8.7	0.1	12.5	4.4	69.0	3.9	0.7	0.7
Health sciences	1,903	100.0	6.8	0.4	8.8	13.2	65.3	2.6	1.2	1.6
Physical sciences and earth sciences	3,741	100.0	6.6	0.1	8.4	2.1	77.3	3.7	0.9	0.9
Chemistry	1,696	100.0	7.0	0.1	9.3	2.7	74.6	4.2	1.0	1.2
Geosciences, atmospheric sciences, and ocean sciences	811	100.0	7.3	0.1	5.5	1.6	79.7	4.4	0.7	0.6
Physics and astronomy	1,234	100.0	5.5	0.2	9.0	1.7	79.5	2.6	0.7	0.8
Mathematics and computer sciences	1,736	100.0	5.8	0.1	15.2	3.2	68.9	4.4	1.3	1.1
Computer and information sciences	808	100.0	5.4	0.1	18.1	3.2	66.2	4.1	1.6	1.2
Mathematics and statistics	928	100.0	6.0	0.0	12.7	3.2	71.2	4.7	1.1	1.0
Psychology and social sciences	6,605	100.0	9.9	0.3	6.7	8.1	68.9	3.6	1.0	1.4
Psychology	3,317	100.0	10.7	0.1	5.8	7.9	69.3	3.7	0.9	1.6
Anthropology	366	100.0	10.4	0.5	7.7	3.0	71.3	5.5	0.3	1.4
Economics	459	100.0	7.0	0.2	13.1	4.8	69.3	4.1	0.4	1.1
Political science and government	460	100.0	6.7	0.2	7.4	4.3	75.7	2.4	2.0	1.3
Sociology	488	100.0	10.2	0.6	6.8	10.2	67.2	2.9	1.0	1.0
Other social sciences	1,515	100.0	10.0	0.8	6.3	11.3	65.8	3.3	1.4	1.2
Engineering	4,154	100.0	6.9	0.1	16.0	4.3	67.5	3.1	1.1	1.0
Aerospace, aeronautical, and astronautical engineering	221	100.0	7.7	0.0	11.3	3.2	73.8	2.3	0.5	1.4
Bioengineering and biomedical engineering	689	100.0	7.4	0.1	21.0	4.2	62.1	4.4	0.4	0.3
Chemical engineering	465	100.0	7.5	0.0	18.9	3.2	66.2	2.6	1.3	0.2
Civil engineering	245	100.0	6.9	0.8	11.4	5.7	69.4	1.6	2.0	2.0
Electrical, electronics, and communications engineering	552	100.0	8.3	0.2	20.1	3.8	63.2	2.2	1.4	0.7
Industrial and manufacturing engineering	82	100.0	11.0	0.0	14.6	13.4	52.4	1.2	2.4	4.9
Materials science engineering	398	100.0	7.0	0.0	17.3	3.3	67.1	3.5	1.0	0.8

Table 24

U.S. citizen and permanent resident doctorate recipients, by major field of study, ethnicity, and race: 2020

(Number and percent distribution)

Field of study	All U.S. citizen and permanent resident doctorate recipients (number)	Total	U.S. citizen or permanent resident							
			Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Mechanical engineering	601	100.0	5.3	0.2	13.1	2.2	72.7	4.2	1.0	1.3
Other engineering	901	100.0	5.8	0.0	12.0	6.0	70.9	2.8	1.2	1.3
Education	3,896	100.0	9.5	0.4	5.2	16.1	63.5	2.5	1.1	1.6
Education administration	818	100.0	9.0	0.5	2.9	24.2	58.2	2.2	1.0	2.0
Education research	1,872	100.0	9.8	0.5	6.1	14.5	64.3	2.7	0.7	1.3
Teacher education	94	100.0	4.3	0.0	5.3	19.1	63.8	1.1	0.0	6.4
Teaching fields	751	100.0	7.9	0.3	4.8	12.4	69.5	2.1	1.6	1.5
Other education	361	100.0	14.1	0.3	6.6	13.0	58.7	3.6	2.2	1.4
Humanities and arts	3,915	100.0	9.0	0.4	5.3	4.4	75.2	2.7	1.3	1.7
Foreign languages and literature	349	100.0	24.1	0.6	4.6	1.7	64.2	1.7	2.3	0.9
History	746	100.0	7.8	0.3	4.8	3.8	78.4	2.8	0.8	1.3
Letters	1,165	100.0	6.2	0.4	4.4	3.9	78.5	3.3	0.9	2.3
Other humanities and arts	1,655	100.0	8.3	0.4	6.3	5.7	73.7	2.5	1.6	1.5
Other[a]	1,738	100.0	7.4	0.6	9.3	14.4	63.1	2.2	1.0	2.0
Business management and administration	709	100.0	6.5	0.3	15.0	14.4	58.3	2.7	0.8	2.1
Communication	412	100.0	7.3	0.2	5.6	7.8	73.8	2.2	1.5	1.7
Non-S&E fields nec	617	100.0	8.4	1.3	5.3	18.8	61.6	1.6	1.0	1.9

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

[a] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields. Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 25

Top 40 countries of origin of temporary visa holders earning U.S. doctorates, ranked by number of doctorate recipients: 2020

(Number)

Country	Rank	Doctorate recipients
All temporary visa holders (154 countries)[a]	-	18,166
Top 40 countries of origin	-	16,858
China[b]	1	6,337
India	2	2,256
South Korea	3	1,054
Iran	4	962
Saudi Arabia	5	615
Taiwan	6	468
Canada	7	398
Bangladesh	8	392
Turkey	9	369
Brazil	10	318
Mexico	11	236
Nepal	12	226
Iraq	13	192
Colombia	14	191
Sri Lanka	15	174
Italy	16	170
Vietnam	17	169
Nigeria	18	161
Pakistan	19	157
Germany	20	150
Egypt	21	127
Thailand	22	126
Spain	23	122
Russian Federation (former USSR)	24	120
United Kingdom	25	119
France	26	118
Japan	27	114
Jordan	27	114
Ghana	29	107
Singapore	29	107
Chile	31	106
Greece	32	89
Indonesia	33	78
Israel	34	69
Argentina	35	64
Libya	36	61
Malaysia	37	59
Kenya	38	56
Peru	38	56
Australia	40	51

[a] Excludes cases with unknown country of origin.

[b] Includes Hong Kong.

Note(s):
Tied countries are listed alphabetically.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 26

Top 10 countries of origin of temporary visa holders earning U.S. doctorates, by country of citizenship and field of study: 2010–20

(Number)

Country and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
China[a]	3,744	3,988	4,222	4,796	4,982	5,374	5,527	5,553	6,188	6,316	6,337
Science and engineering	3,457	3,652	3,906	4,443	4,650	4,970	5,141	5,147	5,692	5,755	5,730
Non-science and engineering	287	336	316	353	332	404	386	406	496	561	607
India	2,142	2,165	2,248	2,204	2,316	2,229	2,195	1,970	2,045	2,056	2,256
Science and engineering	1,994	2,036	2,142	2,074	2,208	2,119	2,085	1,884	1,922	1,910	2,116
Non-science and engineering	148	129	106	130	108	110	110	86	123	146	140
South Korea	1,381	1,445	1,472	1,383	1,284	1,234	1,229	1,128	1,040	1,167	1,054
Science and engineering	1,076	1,085	1,132	1,012	928	920	891	815	729	824	756
Non-science and engineering	305	360	340	371	356	314	338	313	311	343	298
Taiwan	650	693	719	699	668	614	592	520	514	492	468
Science and engineering	501	570	581	571	558	514	499	435	445	426	417
Non-science and engineering	149	123	138	128	110	100	93	85	69	66	51
Iran	147	198	287	409	483	629	695	767	937	964	962
Science and engineering	D	193	278	380	463	608	664	728	871	882	895
Non-science and engineering	D	5	9	29	20	21	31	39	66	82	67
Turkey	477	493	439	478	426	469	472	496	454	406	369
Science and engineering	405	422	352	391	360	386	380	392	364	324	303
Non-science and engineering	72	71	87	87	66	83	92	104	90	82	66
Canada	469	455	423	485	488	454	408	409	431	427	398
Science and engineering	339	307	299	332	321	318	272	288	307	313	281
Non-science and engineering	130	148	124	153	167	136	136	121	124	114	117
Saudi Arabia	40	49	57	73	105	134	238	339	404	555	615
Science and engineering	26	34	41	53	76	98	175	232	295	432	472
Non-science and engineering	14	15	16	20	29	36	63	107	109	123	143
Thailand	222	266	260	264	231	220	185	171	177	159	126
Science and engineering	182	235	240	227	200	193	168	153	155	139	117
Non-science and engineering	40	31	20	37	31	27	17	18	22	20	9
Mexico	201	185	213	177	193	194	221	180	185	187	236
Science and engineering	169	159	185	146	161	155	191	145	156	162	196
Non-science and engineering	32	26	28	31	32	39	30	35	29	25	40

D = suppressed to avoid disclosure of confidential information.

[a] Includes Hong Kong.

Note(s):
Rank is based on the total number of doctorate recipients from 2010 to 2020.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 27

Median age and age distribution of doctorate recipients, by broad field of study, sex, citizenship status, ethnicity, and race: 2020

(Median age and percent distribution)

Field and demographic characteristic	Median age at doctorate (years)[a]	All ages	25 and under	26–30	31–35	36–40	41–45	Over 45
All fields	31.5	100.0	0.6	44.1	31.1	12.0	5.3	6.9
Life sciences[b]	31.1	100.0	0.5	48.3	32.2	9.8	4.1	5.2
Physical sciences and earth sciences	29.6	100.0	D	67.1	24.1	5.3	D	1.2
Mathematics and computer sciences	30.4	100.0	1.2	54.9	29.5	8.3	3.2	2.9
Psychology and social sciences	32.3	100.0	0.4	36.1	35.8	14.1	5.8	7.8
Engineering	30.2	100.0	1.3	58.2	28.9	7.4	2.3	1.9
Education	38.5	100.0	D	11.8	25.6	23.4	D	24.1
Humanities and arts	34.2	100.0	0.1	22.0	39.2	20.5	8.5	9.7
Other[c]	34.8	100.0	0.3	23.1	33.0	18.7	10.0	14.9
Sex								
Male	31.3	100.0	0.7	46.0	32.0	11.4	4.8	5.1
Female	31.8	100.0	0.6	41.9	30.0	12.6	5.9	9.0
Citizenship status								
U.S. citizen or permanent resident	31.8	100.0	0.6	42.5	28.3	12.7	6.4	9.5
Temporary visa holder	31.1	100.0	0.6	47.5	36.4	10.5	3.2	1.8
Ethnicity and race (U.S. citizens and permanent residents)								
Hispanic or Latino	32.3	100.0	0.3	40.2	29.1	13.9	7.3	9.2
Not Hispanic or Latino								
American Indian or Alaska Native	36.5	100.0	0.0	22.9	26.0	15.6	11.5	24.0
Asian	31.1	100.0	1.0	47.6	29.8	10.7	5.2	5.7
Black or African American	36.2	100.0	0.3	24.0	25.0	16.1	10.7	24.0
White	31.6	100.0	0.6	44.0	28.3	12.4	6.0	8.7
More than one race	30.8	100.0	1.2	49.5	26.2	11.6	5.2	6.2
Other race or race not reported	32.5	100.0	0.0	39.6	29.2	17.2	5.8	8.1
Ethnicity not reported	33.3	100.0	1.0	29.6	31.6	17.2	9.8	10.8

D = suppressed to avoid disclosure of confidential information.

[a] Includes only doctorate recipients with valid year of birth.
[b] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[c] Includes other non-science and engineering fields not shown separately.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 28

Doctorate recipients reporting one or more functional limitations, by broad field of study, sex, and citizenship status: 2020

(Number and percent)

Demographic characteristic	One or more limitations of any type		Visual limitations		Hearing limitations		Walking limitations		Lifting limitations		Cognitive limitations	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All doctorate recipients	4,558	8.2	1,688	3.1	648	1.2	274	0.5	416	0.8	2,518	4.6
Field of doctorate												
Life sciences[a]	1,020	8.1	330	2.6	124	1.0	47	0.4	73	0.6	629	5.0
Physical sciences and earth sciences	501	8.0	177	2.8	71	1.1	27	0.4	34	0.5	294	4.7
Mathematics and computer sciences	317	7.2	148	3.4	38	0.9	14	0.3	32	0.7	156	3.6
Psychology and social sciences	879	9.8	254	2.8	121	1.4	57	0.6	97	1.1	548	6.1
Engineering	653	6.2	343	3.3	106	1.0	33	0.3	54	0.5	264	2.5
Education	418	8.9	189	4.0	69	1.5	43	0.9	46	1.0	175	3.7
Humanities and arts	547	11.1	150	3.0	88	1.8	33	0.7	57	1.2	341	6.9
Other[b]	223	7.4	97	3.2	31	1.0	20	0.7	23	0.8	111	3.7
Sex												
Male	2,241	7.5	882	3.0	400	1.3	109	0.4	139	0.5	1,213	4.1
Female	2,317	9.1	806	3.2	248	1.0	165	0.6	277	1.1	1,305	5.1
Citizenship status[c]												
U.S. citizen or permanent resident	3,309	9.6	873	2.5	501	1.5	200	0.6	246	0.7	2,100	6.1
Temporary visa holder	1,244	6.7	814	4.4	147	0.8	72	0.4	167	0.9	417	2.3

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Excludes doctorate recipients who did not report citizenship status.

Note(s):
Individual doctorate recipients could report more than one functional limitation. Survey asks degree of difficulty—none, slight, moderate, severe, or unable to do—an individual has in seeing (with glasses), hearing (with hearing aid), walking without assistance, lifting 10 pounds, or concentrating, remembering, or making decisions. Those respondents who answered "moderate," "severe," or "unable to do" for any activity were classified as having a functional limitation.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 29

Doctorate recipients who earned a master's degree related to doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctoral study: 2020

(Percent)

Demographic characteristic	All fields		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's	Master's	Related master's
All doctorate recipients	70.5	55.8	52.6	36.3	53.3	44.9	72.3	59.5	83.0	66.0	73.0	66.6	89.0	60.6	83.5	67.4	81.4	59.6
Sex																		
Male	69.0	56.3	50.0	34.0	54.5	45.9	71.2	58.5	82.2	65.7	73.4	67.9	88.0	56.8	82.8	69.1	79.5	57.2
Female	72.1	55.2	54.6	38.2	51.0	42.9	75.8	62.5	83.5	66.2	71.7	62.7	89.4	62.3	84.2	65.6	83.1	61.9
Citizenship status																		
U.S. citizen or permanent resident	71.0	55.9	47.9	33.8	49.1	42.7	74.7	62.8	87.5	70.3	69.5	63.8	92.2	63.2	87.9	71.8	86.2	62.9
Temporary visa holder	77.0	61.7	69.9	46.5	64.0	51.6	74.8	60.6	87.8	67.4	79.2	72.1	88.8	58.7	89.4	68.2	86.2	64.1
Ethnicity and race (U.S. citizens and permanent residents)																		
Hispanic or Latino	72.6	57.1	50.3	37.5	49.2	41.1	75.0	63.0	85.2	68.8	69.0	62.4	93.5	61.5	84.7	70.5	89.1	71.9
Not Hispanic or Latino																		
American Indian or Alaska Native	75.3	46.4	59.1	45.5	D	D	D	0.0	86.4	D	D	D	81.3	43.8	75.0	43.8	72.7	D
Asian	68.8	53.7	48.6	31.5	58.5	49.8	72.0	57.6	87.4	68.4	71.6	66.0	92.6	62.7	89.9	67.1	83.3	66.7
Black or African American	82.7	56.1	67.7	44.8	54.4	46.8	87.5	60.7	90.9	58.4	74.0	65.5	89.8	59.9	88.5	64.4	90.4	56.8
White	70.9	57.1	46.0	33.1	48.3	42.6	75.3	64.6	88.7	73.4	69.7	64.2	93.9	66.0	90.0	74.6	87.6	64.2
More than one race	70.4	54.6	48.6	31.5	47.1	40.0	72.7	68.8	89.8	73.3	66.4	63.3	99.0	55.6	90.7	70.1	92.1	76.3
Other race or race not reported	60.6	42.2	47.9	32.9	D	D	D	39.1	71.0	D	D	D	85.4	56.1	60.8	45.1	61.1	D
Ethnicity not reported	26.7	18.6	14.1	10.6	25.7	20.0	47.4	36.8	30.4	20.7	31.0	26.2	33.3	17.5	23.1	16.9	26.5	17.6

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

Note(s):
Percentages based on total number of doctorate recipients. A master's degree is counted as "related master's" if the fields of study of doctorate recipient's first or most recent master's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 30

Doctorate recipients who had attended community college, by sex, citizenship status, ethnicity, race, and broad field of study: 2020

(Percent)

Demographic characteristic	All doctorate recipients	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All doctorate recipients	19.2	22.6	17.1	12.8	21.3	13.4	27.6	19.1	19.0
Sex									
Male	18.1	22.1	16.7	12.8	21.0	13.6	29.3	21.1	19.2
Female	20.5	23.1	18.0	13.0	21.5	12.9	26.9	17.0	18.8
Citizenship status									
U.S. citizen or permanent resident	26.4	28.5	24.5	23.4	27.1	21.9	31.6	22.7	28.0
Temporary visa holder	7.6	10.2	6.6	6.0	5.1	8.1	9.2	5.7	7.1
Ethnicity and race (U.S. citizens and permanent residents)									
Hispanic or Latino	32.2	33.1	30.1	31.0	33.5	26.1	39.1	27.6	31.3
Not Hispanic or Latino									
American Indian or Alaska Native	30.9	36.4	D	0.0	D	D	D	37.5	D
Asian	20.2	24.3	18.8	17.4	20.8	18.2	20.6	15.9	14.8
Black or African American	27.1	30.5	17.7	30.4	27.8	24.9	26.0	22.4	28.4
White	26.6	28.4	24.7	23.5	27.0	22.5	33.1	22.9	29.5
More than one race	31.2	32.2	30.7	32.5	30.9	25.0	38.4	24.3	44.7
Other race or race not reported	24.9	34.2	D	13.0	D	D	D	21.6	D
Ethnicity not reported	9.2	11.8	8.6	21.1	7.6	0.0	11.1	7.7	11.8

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[b] Includes other non-science and engineering fields not shown separately.

Note(s):
Percentages based on total number of doctorate recipients.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 31

Median years to doctorate, by major field of study: Selected years, 1970–2020

(Median years)

Field and time to degree	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
All fields											
Since bachelor's	8.0	8.7	9.3	10.3	10.6	10.9	10.3	9.9	9.3	8.7	8.7
Since starting graduate school	6.7	7.5	7.7	8.7	8.7	8.7	8.5	8.2	7.7	7.3	7.5
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.8
Life sciences[b]											
Since bachelor's	6.7	7.2	7.5	8.5	9.2	9.5	9.1	8.7	8.6	8.2	8.3
Since starting graduate school	5.7	6.2	6.3	7.2	7.7	7.7	7.7	7.1	6.8	6.7	6.9
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.5
Agricultural sciences and natural resources											
Since bachelor's	7.3	8.2	8.3	9.1	10.4	11.1	11.2	10.0	9.8	9.1	8.8
Since starting graduate school	5.7	6.7	6.7	7.2	8.0	8.3	8.7	7.9	7.9	7.3	7.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.2	5.0
Biological and biomedical sciences											
Since bachelor's	6.3	6.9	7.0	8.0	8.3	8.6	8.3	8.0	8.0	7.7	7.9
Since starting graduate school	5.7	6.0	6.2	6.7	7.2	7.2	6.9	6.7	6.6	6.5	6.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.8
Health sciences											
Since bachelor's	8.9	9.0	9.5	12.0	13.3	14.0	14.3	12.5	11.3	11.7	10.9
Since starting graduate school	7.1	7.2	8.0	9.7	11.2	11.2	11.2	9.7	9.0	9.2	8.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.0
Physical sciences and earth sciences											
Since bachelor's	6.0	6.7	6.9	7.1	7.5	8.1	7.6	7.5	7.3	7.0	7.0
Since starting graduate school	5.7	5.9	5.9	6.2	6.7	6.9	6.7	6.6	6.5	6.2	6.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.5
Chemistry											
Since bachelor's	5.6	6.2	6.0	6.5	6.8	7.5	7.0	6.9	6.7	6.3	6.3
Since starting graduate school	5.0	5.4	5.2	5.7	5.7	6.2	5.9	6.0	5.9	5.7	5.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.3
Geosciences, atmospheric sciences, and ocean sciences											
Since bachelor's	7.7	7.9	8.0	8.7	9.0	10.7	9.9	9.0	8.7	8.0	7.7
Since starting graduate school	6.7	7.2	7.0	7.4	7.7	8.9	8.3	7.8	7.3	7.0	6.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.6	5.3
Physics and astronomy											
Since bachelor's	6.5	7.2	7.3	7.5	7.7	8.0	7.7	7.6	7.3	7.1	7.2
Since starting graduate school	5.7	6.7	6.7	6.7	6.7	6.9	6.7	6.7	6.7	6.3	6.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.9	6.0
Mathematics and computer sciences											
Since bachelor's	6.0	7.0	7.2	8.2	8.3	9.0	8.7	8.3	8.0	7.8	7.9
Since starting graduate school	5.7	6.2	6.2	6.9	7.2	7.7	7.2	7.2	7.0	6.7	7.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.6
Computer and information sciences											
Since bachelor's	-	-	7.3	9.1	8.9	9.5	9.9	9.0	9.0	8.6	8.6
Since starting graduate school	-	-	6.5	7.4	7.2	8.1	8.2	7.7	7.6	7.6	7.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.9	5.8
Mathematics and statistics											
Since bachelor's	6.0	7.0	7.1	8.0	8.0	8.6	7.7	7.9	7.2	6.9	7.0
Since starting graduate school	5.7	6.2	6.2	6.7	6.9	7.2	6.9	6.8	6.3	6.0	6.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.3

Table 31

Median years to doctorate, by major field of study: Selected years, 1970–2020

(Median years)

Field and time to degree	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Psychology and social sciences											
Since bachelor's	7.3	7.9	8.8	10.1	10.8	10.6	9.9	10.0	9.5	9.3	9.3
Since starting graduate school	6.5	6.9	7.5	8.7	8.9	8.7	7.9	8.2	7.7	7.7	7.9
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	6.0
Psychology											
Since bachelor's	6.3	6.9	8.0	9.5	10.2	9.8	9.0	9.0	8.4	8.3	8.3
Since starting graduate school	5.7	5.9	6.7	7.9	8.5	7.9	7.2	7.3	6.9	7.0	7.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	5.9
Anthropology											
Since bachelor's	8.3	8.3	9.7	12.0	13.1	12.9	12.2	11.9	11.9	11.7	11.2
Since starting graduate school	7.7	7.2	8.5	10.2	11.4	10.4	9.9	10.0	10.0	9.4	9.1
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	7.7	7.2
Economics											
Since bachelor's	7.3	7.8	8.3	8.9	9.3	9.6	8.9	8.7	8.5	8.1	8.4
Since starting graduate school	6.3	6.9	7.2	7.7	7.7	8.2	7.4	7.3	7.0	6.7	7.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.7	5.8
Political science and government											
Since bachelor's	8.2	9.1	9.6	10.5	10.7	10.7	10.3	11.1	10.0	10.0	10.0
Since starting graduate school	7.1	8.1	8.2	9.2	9.3	8.7	8.5	9.3	8.2	8.2	8.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.3	6.0
Sociology											
Since bachelor's	8.8	8.7	10.0	11.3	12.3	11.9	11.0	11.2	10.7	11.0	11.0
Since starting graduate school	7.7	7.7	8.7	9.7	10.7	9.8	8.9	9.0	8.9	9.0	9.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	7.0	6.8
Other social sciences											
Since bachelor's	8.8	9.4	10.2	11.7	12.6	12.4	12.1	12.5	12.0	11.3	11.3
Since starting graduate school	7.6	8.2	8.7	9.7	10.1	10.3	9.7	10.2	9.3	9.0	9.5
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	6.0
Engineering											
Since bachelor's	7.0	7.6	7.7	8.2	8.3	9.2	8.7	8.3	7.8	7.3	7.5
Since starting graduate school	5.7	6.5	6.4	6.7	6.7	7.3	7.2	7.3	6.9	6.7	6.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.2	5.3
Aerospace, aeronautical, and astronautical engineering											
Since bachelor's	7.0	8.2	8.6	8.5	8.6	8.3	8.3	7.9	7.0	7.0	7.1
Since starting graduate school	5.7	7.2	6.9	7.3	6.7	7.2	7.7	7.0	6.6	6.7	6.6
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.6	5.3
Bioengineering and biomedical engineering											
Since bachelor's	8.0	7.2	7.8	8.0	8.0	8.3	8.4	7.4	7.1	6.8	7.0
Since starting graduate school	6.7	5.9	6.7	6.7	6.7	7.2	7.2	6.5	6.3	6.0	6.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.3
Chemical engineering											
Since bachelor's	6.3	6.9	6.6	6.9	6.9	7.5	6.5	6.6	6.7	6.1	6.2
Since starting graduate school	5.2	5.7	5.6	5.7	5.8	6.2	5.7	5.7	5.8	5.7	5.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.0	5.0
Civil engineering											
Since bachelor's	7.0	8.7	8.3	8.7	9.6	10.2	9.8	9.0	9.4	8.1	8.6
Since starting graduate school	5.7	7.1	6.7	6.9	7.2	8.1	7.7	7.8	7.9	7.2	7.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	4.9	5.0

Table 31

Median years to doctorate, by major field of study: Selected years, 1970–2020

(Median years)

Field and time to degree	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Electrical, electronics, and communications engineering											
Since bachelor's	-	-	-	8.0	8.0	8.6	8.7	8.6	8.0	7.8	7.9
Since starting graduate school	-	-	-	6.7	6.7	7.2	7.2	7.7	7.0	6.9	7.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.4
Industrial and manufacturing engineering											
Since bachelor's	7.6	8.9	9.2	9.4	10.2	10.4	10.4	9.8	9.0	8.3	8.6
Since starting graduate school	5.9	6.9	7.7	7.2	7.7	7.7	8.7	8.2	7.7	7.2	7.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.2	5.0
Materials science engineering											
Since bachelor's	6.6	7.7	7.0	7.2	8.0	8.7	8.0	7.8	7.5	6.6	6.8
Since starting graduate school	5.7	6.5	5.7	6.3	6.2	7.2	7.1	6.7	6.5	6.0	6.1
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.0	5.0
Mechanical engineering											
Since bachelor's	7.2	8.0	7.9	8.1	8.5	9.5	9.0	8.7	7.9	7.4	7.3
Since starting graduate school	5.9	6.7	6.4	6.3	6.9	7.7	7.7	7.7	6.8	6.7	6.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.2	5.3
Other engineering											
Since bachelor's	7.0	7.5	7.9	9.0	8.9	10.0	9.7	8.7	8.4	8.0	8.2
Since starting graduate school	5.7	6.5	6.7	6.9	7.2	7.7	7.7	7.6	7.3	7.1	7.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.2	5.0
Education											
Since bachelor's	12.8	12.6	13.2	15.2	18.0	19.9	19.4	17.4	16.2	14.8	15.0
Since starting graduate school	10.2	9.9	10.7	12.7	14.7	15.7	14.2	13.0	12.5	11.7	12.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	5.8
Education administration											
Since bachelor's	15.0	14.6	15.0	16.9	19.6	22.1	23.2	20.6	19.4	18.6	18.2
Since starting graduate school	11.7	11.7	12.2	14.2	16.3	18.7	18.0	15.0	15.1	15.2	14.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.7	5.8
Education research											
Since bachelor's	11.2	11.3	12.7	14.6	17.2	18.5	17.1	15.3	14.6	13.3	14.0
Since starting graduate school	8.9	9.2	10.2	11.9	13.9	14.4	12.7	12.0	11.6	10.9	11.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	5.8
Teacher education											
Since bachelor's	13.9	14.3	13.4	15.3	18.7	20.9	22.0	19.3	17.9	17.0	16.0
Since starting graduate school	10.9	10.9	10.9	12.9	14.3	15.9	14.9	13.7	13.1	13.4	12.9
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.2	5.8
Teaching fields											
Since bachelor's	12.3	12.2	12.3	13.8	15.6	16.7	16.3	15.8	15.0	14.3	14.0
Since starting graduate school	9.9	9.9	10.2	11.2	12.2	12.9	12.2	11.7	11.1	11.3	11.5
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.9	5.5
Other education											
Since bachelor's	13.5	13.9	14.3	15.4	18.3	19.8	18.0	17.0	16.3	15.7	15.0
Since starting graduate school	10.7	10.7	11.1	12.5	15.2	15.7	13.2	12.3	12.1	12.3	11.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.3	5.8
Humanities and arts											
Since bachelor's	9.0	9.9	10.9	11.9	12.3	12.1	11.6	12.0	11.6	11.0	11.1
Since starting graduate school	7.9	8.7	9.7	10.2	10.7	10.1	9.7	9.9	9.5	9.2	9.6
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.9	6.8

Table 31

Median years to doctorate, by major field of study: Selected years, 1970–2020

(Median years)

Field and time to degree	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Foreign languages and literature											
Since bachelor's	9.0	10.0	11.0	11.9	11.6	11.2	11.2	11.0	11.4	10.7	10.8
Since starting graduate school	7.7	8.7	9.7	10.2	9.7	8.9	8.9	9.3	9.1	8.9	9.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.9	6.7
History											
Since bachelor's	9.0	9.5	10.7	11.9	12.7	12.2	11.3	11.7	11.3	10.9	11.0
Since starting graduate school	7.9	8.7	9.7	10.7	10.7	9.7	9.2	10.0	9.4	9.0	9.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	7.0	7.0
Letters											
Since bachelor's	9.0	9.2	10.6	11.8	12.0	11.6	10.9	11.7	11.2	10.3	10.8
Since starting graduate school	7.7	8.2	9.7	9.9	10.0	9.7	9.2	9.7	9.0	8.9	9.0
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.7	6.3
Other humanities and arts											
Since bachelor's	10.0	10.6	11.0	12.0	12.6	12.9	12.6	12.3	12.0	11.8	11.6
Since starting graduate school	8.7	9.7	9.9	10.3	11.0	11.1	10.7	10.3	9.7	9.9	9.9
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	7.1	6.8
Other[c]											
Since bachelor's	10.0	10.1	11.0	13.0	13.2	13.2	13.6	13.0	12.1	11.2	11.3
Since starting graduate school	7.9	8.6	9.2	10.7	10.2	10.3	10.2	10.3	9.3	8.9	9.3
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.3
Business management and administration											
Since bachelor's	9.1	9.5	10.4	11.9	12.0	12.2	13.0	12.4	11.5	10.7	10.6
Since starting graduate school	7.0	7.9	8.7	9.6	9.0	9.7	9.9	9.8	8.9	8.7	8.9
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.0	5.0
Communication											
Since bachelor's	10.0	9.1	9.9	12.0	12.2	11.6	12.0	12.0	11.3	10.3	10.3
Since starting graduate school	7.3	7.9	7.7	9.9	9.7	9.5	9.2	9.3	8.7	8.0	8.7
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	5.3	5.3
Non-S&E fields nec											
Since bachelor's	13.0	13.4	13.3	15.5	15.9	16.9	16.0	15.0	14.5	13.0	13.0
Since starting graduate school	9.9	11.2	10.7	12.7	13.1	13.9	12.7	12.7	11.0	10.7	10.8
Since starting doctoral program[a]	na	na	na	na	na	na	na	na	na	6.0	5.8

na = not applicable; not available prior to 2014.

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

[a] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

[b] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[c] Includes other non-science and engineering fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 32

Median years to doctorate, by sex, citizenship status, ethnicity, race, and broad field of study: 2020

(Median years and number)

Time to degree and demographic characteristic	All fields		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number
Years since bachelor's																		
All doctorate recipients[c]	8.7	52,403	8.3	11,993	7.0	6,002	7.9	4,181	9.3	8,384	7.5	10,005	15.0	4,486	11.1	4,593	11.3	2,759
Sex																		
Male	8.3	28,332	8.2	5,283	7.0	3,998	7.9	3,138	9.4	3,384	7.6	7,528	14.6	1,380	11.1	2,325	11.0	1,296
Female	9.2	24,071	8.3	6,710	6.7	2,004	7.8	1,043	9.3	5,000	7.3	2,477	15.0	3,106	11.0	2,268	11.5	1,463
Citizenship status																		
U.S. citizen or permanent resident	9.0	33,943	8.0	8,563	6.6	3,699	7.6	1,721	9.3	6,508	7.0	4,108	15.3	3,816	11.0	3,841	13.0	1,687
Temporary visa holder	8.4	17,938	8.7	3,312	7.4	2,253	8.0	2,409	9.5	1,782	7.9	5,809	12.4	630	11.2	705	9.5	1,038
Ethnicity and race (U.S. citizens and permanent residents)																		
Hispanic or Latino	9.0	2,796	8.0	695	6.4	242	8.2	100	9.2	639	6.7	287	14.3	368	11.3	340	12.0	125
Not Hispanic or Latino																		
American Indian or Alaska Native	11.1	94	10.0	21	D	D	D	D	D	D	7.1	5	16.6	14	11.3	16	12.6	11
Asian	8.5	3,160	8.4	937	6.8	309	7.5	259	9.3	433	7.3	662	14.3	196	12.9	204	10.7	160
Black or African American	12.1	2,404	10.3	545	7.6	77	8.3	56	11.4	525	9.1	176	15.3	611	12.0	173	16.2	241
White	8.8	23,699	8.0	5,925	6.6	2,870	7.4	1,189	9.3	4,510	7.0	2,780	15.6	2,440	11.0	2,913	12.7	1,072
More than one race	8.3	1,129	7.7	310	6.3	140	7.0	77	9.2	235	6.4	126	14.5	99	11.8	105	11.0	37
Other race or race not reported	9.7	327	8.3	68	D	D	D	D	D	D	7.6	41	13.1	40	10.6	45	15.5	16
Ethnicity not reported	10.1	334	8.3	62	6.8	27	9.7	17	10.0	79	8.6	31	14.3	48	11.0	45	13.6	25
Years since entering graduate school																		
All doctorate recipients[d]	7.5	50,873	6.9	11,780	6.3	5,844	7.0	4,072	7.9	8,077	6.8	9,738	12.0	4,319	9.6	4,417	9.3	2,626
Sex																		
Male	7.3	27,546	6.9	5,218	6.3	3,896	7.0	3,053	7.9	3,261	6.9	7,331	12.0	1,318	9.7	2,238	9.0	1,231
Female	7.8	23,327	7.0	6,562	6.0	1,948	6.9	1,019	7.9	4,816	6.6	2,407	12.0	3,001	9.6	2,179	9.8	1,395
Citizenship status																		
U.S. citizen or permanent resident	7.3	32,912	6.8	8,412	6.0	3,595	6.8	1,679	7.8	6,257	6.3	4,001	12.5	3,680	9.3	3,695	10.3	1,593
Temporary visa holder	7.7	17,497	7.8	3,281	7.0	2,211	7.0	2,343	8.8	1,733	7.1	5,647	9.8	598	10.3	686	8.5	998
Ethnicity and race (U.S. citizens and permanent residents)																		
Hispanic or Latino	7.6	2,721	6.8	696	5.8	234	7.3	99	7.7	611	6.2	278	12.0	352	9.3	328	10.0	123
Not Hispanic or Latino																		
American Indian or Alaska Native	9.7	85	7.8	19	D	D	D	D	9.7	21	D	D	12.5	13	10.8	14	14.8	9
Asian	7.3	3,107	7.0	935	6.0	305	7.0	257	7.9	419	6.6	644	11.0	196	10.3	198	9.0	153
Black or African American	10.2	2,317	8.6	536	6.8	73	7.8	56	9.8	509	7.8	171	12.8	580	9.8	165	13.4	227
White	7.3	23,138	6.5	5,830	6.0	2,802	6.8	1,158	7.3	4,382	6.1	2,734	12.8	2,381	9.3	2,831	10.0	1,020
More than one race	7.0	1,127	6.6	309	5.8	139	6.8	77	7.8	233	5.8	126	11.3	99	9.7	106	9.0	38

Table 32

Median years to doctorate, by sex, citizenship status, ethnicity, race, and broad field of study: 2020

(Median years and number)

Time to degree and demographic characteristic	All fields		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number
Other race or race not reported	8.3	267	6.8	60	D	D	D	D	10.0	49	D	D	10.0	37	9.5	36	12.0	12
Ethnicity not reported	9.6	150	6.8	27	7.1	11	9.3	13	9.5	33	8.0	16	13.5	22	10.8	17	9.3	11
Years since entering doctoral program[e]																		
All doctorate recipients[f]	5.8	49,422	5.5	11,474	5.5	5,683	5.6	3,962	6.0	7,815	5.3	9,467	5.8	4,191	6.8	4,298	5.3	2,532
Sex																		
Male	5.7	26,718	5.5	5,059	5.7	3,781	5.7	2,958	5.8	3,168	5.3	7,122	5.6	1,276	6.8	2,179	5.0	1,175
Female	5.8	22,704	5.4	6,415	5.3	1,902	5.3	1,004	6.0	4,647	5.2	2,345	5.8	2,915	6.8	2,119	5.3	1,357
Citizenship status																		
U.S. citizen or permanent resident	5.8	31,894	5.7	8,184	5.7	3,488	5.8	1,630	6.0	6,039	5.3	3,875	5.8	3,562	6.8	3,591	5.7	1,525
Temporary visa holder	5.3	17,078	5.3	3,204	5.3	2,159	5.3	2,283	5.8	1,693	5.0	5,504	5.3	589	6.7	673	5.0	973
Ethnicity and race (U.S. citizens and permanent residents)																		
Hispanic or Latino	5.8	2,621	5.8	674	5.3	226	6.0	95	6.0	577	5.3	270	5.9	343	6.8	319	5.8	117
Not Hispanic or Latino																		
American Indian or Alaska Native	5.8	84	5.8	19	D	D	D	D	7.6	21	D	D	4.6	13	7.9	13	5.0	9
Asian	5.8	3,007	5.8	909	5.7	296	5.8	249	6.0	408	5.6	622	6.0	185	7.0	191	5.7	147
Black or African American	5.9	2,207	5.8	516	5.8	70	5.9	53	6.0	485	5.3	165	6.0	550	6.3	159	5.7	209
White	5.8	22,488	5.7	5,682	5.7	2,726	5.8	1,127	6.0	4,249	5.3	2,648	5.7	2,316	6.8	2,755	5.5	985
More than one race	5.8	1,099	5.8	304	5.3	130	6.0	77	6.0	224	5.3	124	5.3	98	6.8	105	5.3	37
Other race or race not reported	6.0	251	5.6	57	D	D	D	D	6.3	44	D	D	5.7	35	7.3	36	6.3	10
Ethnicity not reported	5.8	137	5.8	23	6.7	10	6.2	12	6.8	31	5.3	15	5.0	22	7.3	13	5.8	11

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Includes only cases with valid year of bachelor's award.

[d] Includes only cases with valid year of entry into graduate school.

[e] Years since entering doctoral program is based on master's degree program entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

[f] Includes only cases with valid year of entry into master's program if master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, includes only cases with valid year of doctoral program entry.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 33

Educational attainment of doctorate recipients' parents, by sex, citizenship status, ethnicity, race, and broad field of study: 2020

(Number and percent distribution)

Demographic characteristic and field	Total (number)	Parental education attainment (%)						
		All	High school or less	Some college[a]	Bachelor's degree	Master's degree	Professional degree[b]	Research doctoral degree
All doctorate recipients								
Father's education[c]	47,254	100.0	23.0	13.8	28.1	17.3	8.0	9.8
Mother's education[d]	47,657	100.0	26.5	17.4	29.5	17.8	4.4	4.3
Sex								
Male								
Father's education	25,531	100.0	23.4	13.3	28.6	17.2	7.7	9.8
Mother's education	25,667	100.0	28.8	16.3	29.8	17.0	4.3	3.7
Female								
Father's education	21,723	100.0	22.5	14.5	27.4	17.5	8.3	9.9
Mother's education	21,990	100.0	23.9	18.7	29.2	18.7	4.5	5.0
Citizenship status								
U.S. citizen or permanent resident								
Father's education	30,963	100.0	21.2	14.6	25.3	18.6	9.8	10.5
Mother's education	31,375	100.0	21.4	19.1	28.9	21.0	5.1	4.6
Temporary visa holder								
Father's education	16,274	100.0	26.5	12.3	33.2	14.9	4.5	8.6
Mother's education	16,265	100.0	36.5	14.2	30.9	11.7	3.2	3.6
Ethnicity and race (U.S. citizens and permanent residents)								
Hispanic or Latino								
Father's education	2,506	100.0	35.4	17.0	19.9	13.6	7.7	6.3
Mother's education	2,584	100.0	34.5	21.1	22.3	14.7	4.1	3.2
Not Hispanic or Latino								
American Indian or Alaska Native								
Father's education	80	100.0	46.3	21.3	16.3	D	7.5	D
Mother's education	83	100.0	39.8	21.7	D	14.5	6.0	D
Asian								
Father's education	2,907	100.0	19.4	9.7	24.1	18.3	7.7	20.8
Mother's education	2,928	100.0	27.0	13.3	29.7	18.6	5.1	6.3
Black or African American								
Father's education	1,998	100.0	41.1	19.1	18.3	11.9	4.4	5.2
Mother's education	2,112	100.0	32.9	25.1	18.9	16.9	2.8	3.4
White								
Father's education	22,125	100.0	18.1	14.6	26.8	19.8	10.9	9.8
Mother's education	22,288	100.0	18.1	19.0	30.5	22.4	5.3	4.6
More than one race								
Father's education	1,061	100.0	17.7	14.1	24.4	20.2	8.6	15.0
Mother's education	1,088	100.0	19.4	18.4	27.3	21.6	6.7	6.6
Other race or race not reported								
Father's education	215	100.0	16.3	13.5	27.9	D	9.3	D
Mother's education	216	100.0	15.7	22.7	D	19.4	6.0	D
Ethnicity not reported								
Father's education	71	100.0	29.6	19.7	15.5	14.1	8.5	12.7
Mother's education	76	100.0	23.7	17.1	27.6	18.4	7.9	5.3
Field of study								

Table 33

Educational attainment of doctorate recipients' parents, by sex, citizenship status, ethnicity, race, and broad field of study: 2020

(Number and percent distribution)

Demographic characteristic and field	Total (number)	Parental education attainment (%)						
		All	High school or less	Some college[a]	Bachelor's degree	Master's degree	Professional degree[b]	Research doctoral degree
Life sciences[e]								
Father's education	11,046	100.0	22.8	13.9	27.2	17.0	9.0	10.1
Mother's education	11,141	100.0	25.0	17.9	29.6	18.1	5.2	4.2
Physical sciences and earth sciences								
Father's education	5,488	100.0	22.3	14.6	27.9	18.3	7.4	9.6
Mother's education	5,494	100.0	25.4	16.9	31.5	17.7	4.3	4.1
Mathematics and computer sciences								
Father's education	3,741	100.0	21.9	12.1	29.8	17.7	6.0	12.5
Mother's education	3,748	100.0	29.4	14.6	30.5	16.5	4.0	4.9
Psychology and social sciences								
Father's education	7,453	100.0	22.5	14.5	25.6	17.7	10.0	9.7
Mother's education	7,555	100.0	23.6	18.4	27.6	19.7	5.7	4.9
Engineering								
Father's education	9,050	100.0	21.5	12.1	33.2	18.1	5.2	9.9
Mother's education	9,088	100.0	28.9	15.1	33.4	15.3	3.5	3.8
Education								
Father's education	4,003	100.0	31.9	17.0	24.9	13.4	6.8	6.1
Mother's education	4,059	100.0	33.0	22.0	22.9	16.3	2.6	3.1
Humanities and arts								
Father's education	4,116	100.0	20.4	13.5	25.0	18.6	12.1	10.6
Mother's education	4,182	100.0	21.5	17.5	28.4	22.5	4.9	5.2
Other[f]								
Father's education	2,357	100.0	24.4	14.0	28.6	16.2	7.1	9.7
Mother's education	2,390	100.0	29.5	18.2	27.9	16.7	3.5	4.1

D = suppressed to avoid disclosure of confidential information.

[a] Includes those who attended college but did not earn a bachelor's.
[b] Includes professional doctorate such as MD, DDS, DVM, JD, PsyD, DDiv.
[c] Total count excludes those who did not report father's education and those who reported "not applicable/unknown."
[d] Total count excludes those who did not report mother's education and those who reported "not applicable/unknown."
[e] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[f] Includes other non-science and engineering fields not shown separately.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 34

Highest educational attainment of either parent of doctorate recipients: 1970–2020

(Percent)

Year	High school or less	Some college[a]	Bachelor's degree	Master's degree	Professional degree[b]	Research doctoral degree
1970	47.9	16.7	19.3	11.7	na	4.4
1971	46.9	16.6	19.3	12.6	na	4.7
1972	46.2	16.4	19.7	12.8	na	4.9
1973	45.7	16.8	19.5	13.2	na	4.8
1974	45.3	16.8	19.7	13.3	na	4.8
1975	44.2	16.1	20.7	13.7	na	5.2
1976	43.8	16.3	20.1	14.3	na	5.4
1977	43.1	16.5	20.5	14.3	na	5.7
1978	41.6	16.4	20.9	15.2	na	5.9
1979	41.1	16.6	21.0	15.3	na	6.0
1980	40.8	16.0	21.7	15.4	na	6.1
1981	39.9	15.8	21.8	16.0	na	6.4
1982	39.4	15.8	21.6	16.3	na	7.0
1983	38.1	15.7	22.2	16.9	na	7.1
1984	38.3	15.0	22.5	16.9	na	7.3
1985	37.9	14.7	22.6	17.5	na	7.3
1986	37.1	14.6	22.6	17.8	na	7.9
1987	36.4	14.5	22.6	18.0	na	8.6
1988	35.2	14.7	22.8	18.6	na	8.7
1989	34.5	13.9	23.4	19.0	na	9.1
1990	32.9	15.2	20.9	13.8	7.0	10.3
1991	32.5	15.3	20.3	12.5	8.7	10.8
1992	31.4	15.4	20.9	12.4	8.8	11.1
1993	31.2	15.1	20.8	12.8	8.6	11.4
1994	30.0	15.2	21.1	12.9	8.9	11.9
1995	28.7	15.1	21.6	14.0	8.8	11.8
1996	28.2	14.3	21.9	14.4	8.6	12.5
1997	26.5	13.9	22.6	15.1	8.6	13.4
1998	25.8	13.7	22.4	15.5	8.9	13.7
1999	25.1	13.6	21.9	16.1	9.1	14.2
2000	25.2	13.3	22.4	16.2	9.0	14.0
2001	23.9	13.6	22.3	17.0	8.9	14.2
2002	23.6	13.5	22.9	17.0	8.9	14.2
2003	23.2	13.3	23.2	17.2	9.0	14.0
2004	22.7	13.4	23.8	18.7	8.9	12.1
2005	22.2	13.5	24.7	18.9	8.8	11.6
2006	21.7	13.3	25.5	19.3	8.5	11.3
2007	21.2	13.4	25.9	19.6	9.2	10.2
2008	20.8	13.3	25.4	20.4	9.3	10.3
2009	20.1	13.0	25.3	21.2	9.9	10.1
2010	19.1	13.0	25.3	21.1	10.4	10.4
2011	19.0	12.9	25.4	21.6	9.9	10.5
2012	18.9	12.4	25.6	21.6	10.3	10.6
2013	18.5	12.7	25.4	22.4	10.0	10.6
2014	18.1	12.2	26.1	22.2	10.2	10.6
2015	18.0	12.3	26.5	22.1	9.9	10.6
2016	17.6	12.7	26.0	22.5	10.0	10.7
2017	17.4	13.3	26.1	22.0	9.4	11.3
2018	16.2	12.9	26.4	22.1	9.6	12.3
2019	16.5	13.1	26.4	22.2	9.4	12.0

Table 34

Highest educational attainment of either parent of doctorate recipients: 1970–2020

(Percent)

Year	High school or less	Some college[a]	Bachelor's degree	Master's degree	Professional degree[b]	Research doctoral degree
2020	16.0	13.1	27.0	22.4	9.2	11.9

na = not applicable; added to survey in FY 1990.

[a] Includes those who attended college but did not earn a bachelor's degree.
[b] Includes professional doctorate such as MD, DDS, DVM, JD, PsyD, DDiv.

Note(s):
Percentages may not sum to 100 due to rounding and doctorate recipients who reported "not applicable/unknown" for both father's and mother's education.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 35

Doctorate recipients' primary source of financial support, by broad field of study, sex, citizenship status, ethnicity, and race: 2020

(Number and percent)

Field and primary source of support	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	Ethnicity not reported
All fields (number)	48,877	26,443	22,434	31,700	16,997	2,602	83	2,986	2,184	22,378	1,097	250	120
Teaching assistantships	21.5	21.9	20.9	20.5	23.2	16.8	8.4	18.5	12.5	22.1	20.3	18.4	19.2
Research assistantships or traineeships[b]	33.7	38.6	27.9	26.8	46.6	20.3	18.1	33.9	14.7	27.9	27.0	24.4	19.2
Fellowships, scholarships, or dissertation grants	24.4	22.8	26.4	26.9	19.8	36.2	32.5	32.5	25.8	25.0	31.4	26.4	20.0
Own resources	15.2	11.3	19.8	21.2	4.0	22.1	31.3	12.1	40.8	20.4	18.4	23.2	36.7
Employer	2.8	2.7	2.9	4.0	0.5	3.5	7.2	2.5	5.5	4.2	2.5	6.0	5.0
Other	2.4	2.7	2.0	0.5	5.9	1.1	2.4	0.4	0.8	0.4	0.5	1.6	0.0
Life sciences (number)[c]	11,336	5,001	6,335	8,122	3,178	669	18	903	512	5,638	304	56	22
Teaching assistantships	13.5	14.6	12.7	13.0	14.8	8.5	0.0	9.4	6.8	14.7	13.2	8.9	18.2
Research assistantships or traineeships[b]	36.4	38.3	34.9	33.1	44.7	28.0	27.8	35.1	21.3	34.5	33.9	30.4	22.7
Fellowships, scholarships, or dissertation grants	32.3	31.2	33.2	34.9	25.6	46.9	38.9	42.6	33.8	32.0	41.4	32.1	27.3
Own resources	12.0	9.8	13.8	15.1	4.2	14.3	33.3	10.2	33.8	14.4	9.9	19.6	22.7
Employer	2.7	2.5	2.8	3.3	0.9	1.5	0.0	2.4	3.9	3.7	1.6	5.4	9.1
Other	3.1	3.7	2.7	0.6	9.6	0.7	0.0	0.2	0.4	0.7	0.0	3.6	0.0
Physical sciences and earth sciences (number)	5,650	3,761	1,889	3,484	2,150	226	D	292	70	2,726	130	D	10
Teaching assistantships	25.3	25.2	25.5	22.7	29.5	19.9	D	25.0	30.0	22.6	D	23.1	30.0
Research assistantships or traineeships[b]	50.5	53.1	45.4	48.0	54.6	32.3	D	45.9	D	50.0	45.4	61.5	30.0
Fellowships, scholarships, or dissertation grants	19.3	16.7	24.5	23.7	12.2	41.6	D	26.7	34.3	21.5	28.5	D	30.0
Own resources	2.9	3.0	2.7	4.1	0.8	3.5	0.0	D	D	4.4	3.8	3.8	10.0
Employer	0.9	1.1	0.6	1.3	0.3	D	0.0	D	D	D	D	0.0	0.0
Other	1.1	1.0	1.4	0.2	2.6	D	0.0	0.0	0.0	D	0.0	0.0	0.0

Table 35

Doctorate recipients' primary source of financial support, by broad field of study, sex, citizenship status, ethnicity, and race: 2020

(Number and percent)

Field and primary source of support	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	Ethnicity not reported
Mathematics and computer sciences (number)	3,938	2,933	1,005	1,624	2,283	95	D	246	53	1,126	76	D	10
Teaching assistantships	37.3	36.2	40.5	37.3	37.5	35.8	0.0	32.9	34.0	38.9	38.2	17.6	20.0
Research assistantships or traineeships[b]	37.6	39.5	32.2	28.5	44.2	21.1	0.0	35.8	13.2	28.5	26.3	11.8	50.0
Fellowships, scholarships, or dissertation grants	14.9	14.1	17.2	18.7	12.1	26.3	0.0	17.9	26.4	17.7	19.7	35.3	10.0
Own resources	5.9	5.8	6.3	11.1	2.1	9.5	D	10.6	D	11.1	D	5.9	20.0
Employer	1.9	1.9	1.9	4.0	0.4	7.4	0.0	2.4	D	3.5	D	D	0.0
Other	2.4	2.6	1.9	0.4	3.7	0.0	D	0.4	3.8	0.4	0.0	D	0.0
Psychology and social sciences (number)	7,726	3,133	4,593	6,010	1,687	576	20	406	481	4,237	223	43	24
Teaching assistantships	28.8	32.3	26.4	26.9	35.6	22.6	D	29.3	15.2	28.9	D	25.6	8.3
Research assistantships or traineeships[b]	16.9	15.1	18.2	16.8	17.2	12.2	D	14.0	10.2	18.7	D	14.0	16.7
Fellowships, scholarships, or dissertation grants	27.0	29.5	25.3	24.7	35.1	30.2	30.0	35.5	22.5	23.1	27.4	20.9	20.8
Own resources	24.0	18.9	27.5	28.6	7.6	32.1	30.0	18.5	48.0	26.5	32.3	32.6	54.2
Employer	1.9	2.5	1.5	2.4	0.4	1.7	D	1.7	3.5	2.4	D	4.7	0.0
Other	1.4	1.8	1.1	0.6	4.1	1.2	0.0	1.0	0.6	0.5	0.4	2.3	0.0
Engineering (number)	9,369	7,054	2,315	3,850	5,480	267	D	617	163	2,635	124	D	13
Teaching assistantships	11.7	11.6	12.1	8.3	14.1	7.1	0.0	9.6	9.2	8.0	9.7	0.0	23.1
Research assistantships or traineeships[b]	58.7	60.0	54.6	48.1	66.1	34.8	D	55.1	29.4	49.1	D	51.9	23.1
Fellowships, scholarships, or dissertation grants	19.2	17.5	24.6	29.8	11.8	44.2	D	25.8	35.6	28.8	34.7	D	15.4
Own resources	4.6	4.7	4.3	8.1	2.2	7.5	0.0	5.8	14.7	8.3	5.6	7.4	15.4
Employer	2.2	2.5	1.4	5.0	0.2	4.5	0.0	3.1	8.6	5.4	D	D	23.1

Table 35

Doctorate recipients' primary source of financial support, by broad field of study, sex, citizenship status, ethnicity, and race: 2020

(Number and percent)

Field and primary source of support	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	Ethnicity not reported
Other	3.5	3.7	3.0	0.6	5.6	1.9	0.0	0.6	2.5	0.3	0.8	3.7	0.0
Education (number)	4,123	1,253	2,870	3,533	581	339	13	184	545	2,298	98	35	21
Teaching assistantships	12.1	12.1	12.1	10.7	20.7	8.8	0.0	17.9	7.0	11.3	12.2	11.4	14.3
Research assistantships or traineeships[b]	17.0	15.3	17.7	15.2	27.7	18.0	D	D	13.0	14.2	17.3	14.3	9.5
Fellowships, scholarships, or dissertation grants	13.3	13.7	13.1	12.0	21.0	16.5	D	D	16.3	9.8	12.2	20.0	14.3
Own resources	45.2	44.3	45.6	50.2	15.1	44.0	D	D	54.3	51.8	48.0	45.7	57.1
Employer	9.8	10.9	9.3	D	D	D	D	D	8.8	12.3	10.2	8.6	4.8
Other	2.7	3.6	2.3	D	D	D	15.4	0.0	0.6	0.6	0.0	0.0	0.0
Humanities and arts (number)	4,251	2,156	2,095	3,570	671	315	14	191	158	2,740	105	36	11
Teaching assistantships	39.7	37.5	41.9	40.0	37.7	34.0	D	35.1	32.3	41.6	D	38.9	45.5
Research assistantships or traineeships[b]	1.5	1.4	1.7	1.6	1.0	1.9	D	D	D	1.6	0.0	0.0	0.0
Fellowships, scholarships, or dissertation grants	36.7	36.6	36.7	34.2	49.8	41.6	D	D	40.5	32.2	41.9	38.9	27.3
Own resources	19.5	21.0	18.0	22.0	6.7	20.0	42.9	20.4	24.7	22.2	16.2	22.2	27.3
Employer	1.7	2.5	0.9	D	D	1.9	D	D	D	D	D	0.0	0.0
Other	0.9	1.0	0.8	D	D	0.6	0.0	0.5	0.0	D	1.0	0.0	0.0
Other (number)[d]	2,484	1,152	1,332	1,507	967	115	9	147	202	978	37	10	9
Teaching assistantships	22.3	23.1	21.5	20.2	25.2	13.9	0.0	24.5	10.4	22.8	13.5	30.0	11.1
Research assistantships or traineeships[b]	18.0	18.3	17.6	13.8	24.4	14.8	D	D	6.9	14.8	16.2	10.0	11.1
Fellowships, scholarships, or dissertation grants	24.4	25.9	23.2	19.6	32.0	26.1	D	D	16.3	17.3	16.2	10.0	11.1
Own resources	28.1	25.2	30.7	39.1	11.2	39.1	D	20.4	57.4	37.6	D	50.0	66.7
Employer	4.1	3.7	4.5	6.3	0.8	5.2	D	D	6.9	6.9	D	0.0	0.0
Other	3.1	3.8	2.4	0.9	6.4	0.9	0.0	0.7	2.0	0.6	5.4	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes doctorate recipients with missing citizenship information and who did not report sex.
[b] Includes research assistantships, other assistantships, traineeships, and internships or clinical residencies.
[c] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[d] Includes other non-science and engineering fields not shown separately.

Note(s):
Includes only doctorate recipients who reported primary source of support. Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 36

Doctorate recipients' sources of financial support, by broad field of study and sex: 2020

(Number and percent)

Financial resource	All fields		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Unduplicated total[c]	26,513	22,509	5,009	6,360	3,769	1,893	2,939	1,006	3,140	4,607	7,078	2,320	1,258	2,881	2,163	2,104	1,157	1,338
Fellowship or scholarship	63.9	68.4	68.2	72.2	61.0	69.0	56.9	63.0	73.4	69.6	58.1	65.9	46.1	50.6	83.6	86.7	64.5	63.7
Dissertation grant	14.5	22.3	13.4	18.1	8.2	11.8	6.5	9.2	30.4	33.9	7.4	8.8	13.4	16.7	38.6	46.2	17.4	24.4
Assistantship																		
Teaching	70.4	66.4	53.4	54.2	86.8	87.4	83.1	84.5	80.1	76.0	65.7	66.9	38.9	41.1	84.2	88.3	69.9	66.6
Research	70.7	62.9	65.0	64.4	89.0	87.7	75.4	72.8	61.6	62.6	85.5	85.3	35.9	40.8	35.3	40.8	62.9	58.7
Other	7.4	10.5	5.7	5.3	4.0	5.0	4.5	5.7	12.7	16.3	5.0	5.0	17.2	16.9	14.2	17.2	9.7	11.4
Traineeship	3.3	5.1	9.6	11.2	2.3	2.8	1.2	1.1	3.6	4.5	1.9	3.7	0.7	1.0	0.7	1.3	1.2	1.5
Internship or clinical residency	11.2	10.7	3.8	4.6	5.8	6.4	26.4	27.1	12.9	22.6	17.0	15.8	4.5	5.4	2.8	4.6	5.3	4.5
Loan (any source)	19.8	29.1	18.9	22.9	10.6	10.2	9.8	9.1	34.3	41.7	10.1	8.9	51.6	47.9	38.5	37.5	30.1	37.4
Personal sources																		
Savings	49.4	56.0	49.0	52.7	37.7	43.5	44.4	45.7	62.0	64.6	43.4	41.9	67.0	64.4	61.0	62.3	64.4	63.8
Other earnings during graduate school	27.0	36.8	25.2	30.1	15.6	16.9	19.4	19.6	41.0	45.9	15.4	15.1	58.1	57.8	57.0	56.5	33.4	40.8
Spouse's, partner's, or family's earnings or savings	36.2	47.6	35.6	44.4	28.2	33.7	31.9	40.8	46.2	55.6	32.2	37.3	39.4	51.4	51.0	57.4	42.9	55.0
Employer reimbursement or assistance	11.0	12.6	10.7	12.5	8.4	7.1	10.6	9.1	10.1	9.1	9.2	7.4	29.7	28.6	10.9	8.9	14.5	16.4
Foreign (non-U.S.) support	8.3	5.9	8.4	5.9	5.1	4.9	9.1	8.7	7.5	4.6	10.1	8.6	7.2	4.7	7.3	6.1	10.1	7.0
Other	1.1	1.4	1.4	1.3	0.5	0.5	0.6	0.7	1.8	1.4	0.8	0.8	2.0	2.0	1.6	1.8	2.1	1.9

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Excludes doctorate recipients who did not report sources of support and those who did not report sex. Percentages based on known responses.

Note(s):
In this table a respondent counts once in each source category from which he or she received support. Because students indicate multiple sources of support, percentages sum to more than 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 37

Doctorate recipients' sources of financial support, by sex and broad field of study: 2020

(Number and percent distribution)

Sex and financial resource	All fields (number)	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
Male doctorate recipients										
Unduplicated total[c]	26,513	100.0	18.9	14.2	11.1	11.8	26.7	4.7	8.2	4.4
Fellowship or scholarship	16,939	100.0	20.2	13.6	9.9	13.6	24.3	3.4	10.7	4.4
Dissertation grant	3,856	100.0	17.4	8.0	4.9	24.8	13.6	4.4	21.7	5.2
Assistantship										
Teaching	18,673	100.0	14.3	17.5	13.1	13.5	24.9	2.6	9.8	4.3
Research	18,753	100.0	17.4	17.9	11.8	10.3	32.3	2.4	4.1	3.9
Other	1,958	100.0	14.6	7.7	6.8	20.4	18.1	11.0	15.7	5.7
Traineeship	888	100.0	54.2	9.6	3.9	12.6	15.3	1.0	1.8	1.6
Internship or clinical residency	2,971	100.0	6.4	7.4	26.1	13.6	40.5	1.9	2.0	2.1
Loan (any source)	5,260	100.0	18.0	7.6	5.5	20.5	13.7	12.3	15.8	6.6
Personal sources										
Savings	13,108	100.0	18.7	10.8	10.0	14.9	23.4	6.4	10.1	5.7
Other earnings during graduate school	7,150	100.0	17.7	8.2	8.0	18.0	15.3	10.2	17.2	5.4
Spouse's, partner's, or family's earnings or savings	9,605	100.0	18.6	11.0	9.8	15.1	23.7	5.2	11.5	5.2
Employer reimbursement or assistance	2,908	100.0	18.5	10.8	10.7	10.9	22.4	12.9	8.1	5.8
Foreign (non-U.S.) support	2,195	100.0	19.1	8.7	12.1	10.8	32.7	4.1	7.2	5.3
Other	302	100.0	23.5	6.6	6.3	18.2	17.9	8.3	11.3	7.9
Female doctorate recipients										
Unduplicated total[c]	22,509	100.0	28.3	8.4	4.5	20.5	10.3	12.8	9.3	5.9
Fellowship or scholarship	15,403	100.0	29.8	8.5	4.1	20.8	9.9	9.5	11.8	5.5
Dissertation grant	5,017	100.0	23.0	4.4	1.9	31.1	4.1	9.6	19.4	6.5
Assistantship										
Teaching	14,937	100.0	23.1	11.1	5.7	23.4	10.4	7.9	12.4	6.0
Research	14,169	100.0	28.9	11.7	5.2	20.4	14.0	8.3	6.1	5.5
Other	2,355	100.0	14.3	4.0	2.4	31.8	4.9	20.6	15.3	6.5
Traineeship	1,146	100.0	62.2	4.6	1.0	18.2	7.4	2.4	2.4	1.7
Internship or clinical residency	2,409	100.0	12.2	5.1	11.3	43.2	15.2	6.5	4.0	2.5
Loan (any source)	6,540	100.0	22.3	3.0	1.4	29.4	3.2	21.1	12.1	7.6
Personal sources										
Savings	12,598	100.0	26.6	6.5	3.7	23.6	7.7	14.7	10.4	6.8
Other earnings during graduate school	8,293	100.0	23.1	3.8	2.4	25.5	4.2	20.1	14.3	6.6

Table 37

Doctorate recipients' sources of financial support, by sex and broad field of study: 2020

(Number and percent distribution)

Sex and financial resource	All fields (number)	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
Spouse's, partner's, or family's earnings or savings	10,722	100.0	26.3	5.9	3.8	23.9	8.1	13.8	11.3	6.9
Employer reimbursement or assistance	2,838	100.0	27.9	4.7	3.2	14.7	6.1	29.0	6.6	7.7
Foreign (non-U.S.) support	1,323	100.0	28.2	7.0	6.7	15.9	15.1	10.3	9.8	7.1
Other	307	100.0	27.7	3.3	2.3	21.5	5.9	18.9	12.1	8.5

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Excludes doctorate recipients who did not report sources of support.

Note(s):
In this table a recipient counts once in each source category from which he or she received support. Because students indicate multiple sources of support, sum of individual sources of support exceeds unduplicated total. Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 38

Education-related debt of doctorate recipients, by broad field of study: 2020

(Mean debt, number, and percent)

Debt level	Total		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
Cumulative debt																		
Mean	$25,895		$24,039		$13,444		$9,859		$42,566		$11,484		$49,340		$34,051		$37,015	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	29,871	59.2	6,746	57.6	3,841	66.1	3,093	76.5	3,809	47.6	7,079	73.2	1,806	42.2	2,087	47.7	1,410	54.3
$10,000 or less	3,830	7.6	982	8.4	445	7.7	253	6.3	584	7.3	734	7.6	286	6.7	367	8.4	179	6.9
$10,001–$20,000	2,719	5.4	693	5.9	352	6.1	177	4.4	456	5.7	440	4.6	212	5.0	278	6.3	111	4.3
$20,001–$30,000	2,325	4.6	600	5.1	320	5.5	138	3.4	395	4.9	339	3.5	184	4.3	249	5.7	100	3.8
$30,001–$40,000	1,627	3.2	429	3.7	226	3.9	79	2.0	255	3.2	216	2.2	172	4.0	196	4.5	54	2.1
$40,001–$50,000	1,346	2.7	341	2.9	157	2.7	58	1.4	235	2.9	150	1.6	148	3.5	167	3.8	90	3.5
$50,001–$60,000	1,004	2.0	269	2.3	91	1.6	30	0.7	188	2.4	129	1.3	124	2.9	116	2.6	57	2.2
$60,001–$70,000	868	1.7	214	1.8	67	1.2	32	0.8	186	2.3	75	0.8	125	2.9	117	2.7	52	2.0
$70,001–$80,000	751	1.5	194	1.7	45	0.8	22	0.5	171	2.1	67	0.7	112	2.6	90	2.1	50	1.9
$80,001–$90,000	732	1.5	186	1.6	49	0.8	27	0.7	148	1.9	64	0.7	103	2.4	98	2.2	57	2.2
$90,001–$100,000	817	1.6	200	1.7	74	1.3	28	0.7	184	2.3	81	0.8	121	2.8	78	1.8	51	2.0
$100,001–$120,000	1,002	2.0	185	1.6	42	0.7	30	0.7	254	3.2	82	0.8	196	4.6	140	3.2	73	2.8
$120,001–$140,000	742	1.5	146	1.2	27	0.5	21	0.5	206	2.6	40	0.4	146	3.4	104	2.4	52	2.0
$140,001–$160,000	700	1.4	150	1.3	23	0.4	20	0.5	184	2.3	51	0.5	123	2.9	77	1.8	72	2.8
$160,001 or more	2,142	4.2	371	3.2	50	0.9	34	0.8	739	9.2	122	1.3	421	9.8	215	4.9	190	7.3
Total	50,476	100.0	11,706	100.0	5,809	100.0	4,042	100.0	7,994	100.0	9,669	100.0	4,279	100.0	4,379	100.0	2,598	100.0
Graduate debt																		
Mean	$17,375		$14,526		$5,009		$6,010		$31,487		$6,936		$36,792		$23,887		$28,071	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	35,114	69.7	8,440	72.2	4,911	84.6	3,406	84.3	4,449	55.8	7,881	81.6	2,005	47.0	2,515	57.5	1,507	58.1
$10,000 or less	3,402	6.7	803	6.9	359	6.2	208	5.2	570	7.1	635	6.6	292	6.8	357	8.2	178	6.9
$10,001–$20,000	1,924	3.8	411	3.5	129	2.2	119	2.9	396	5.0	292	3.0	230	5.4	231	5.3	116	4.5
$20,001–$30,000	1,488	3.0	313	2.7	105	1.8	70	1.7	305	3.8	202	2.1	202	4.7	198	4.5	93	3.6
$30,001–$40,000	1,060	2.1	242	2.1	64	1.1	41	1.0	200	2.5	112	1.2	175	4.1	168	3.8	58	2.2
$40,001–$50,000	915	1.8	222	1.9	45	0.8	36	0.9	184	2.3	88	0.9	136	3.2	118	2.7	86	3.3
$50,001–$60,000	813	1.6	172	1.5	35	0.6	17	0.4	201	2.5	76	0.8	144	3.4	115	2.6	53	2.0
$60,001–$70,000	697	1.4	154	1.3	27	0.5	18	0.4	175	2.2	42	0.4	146	3.4	73	1.7	62	2.4
$70,001–$80,000	579	1.1	137	1.2	16	0.3	17	0.4	127	1.6	43	0.4	112	2.6	82	1.9	45	1.7
$80,001–$90,000	506	1.0	93	0.8	23	0.4	14	0.3	140	1.8	36	0.4	85	2.0	70	1.6	45	1.7
$90,001–$100,000	559	1.1	107	0.9	12	0.2	18	0.4	149	1.9	38	0.4	105	2.5	72	1.6	58	2.2
$100,001–$120,000	805	1.6	164	1.4	27	0.5	20	0.5	200	2.5	67	0.7	151	3.5	106	2.4	70	2.7
$120,001–$140,000	582	1.2	97	0.8	18	0.3	14	0.3	176	2.2	28	0.3	120	2.8	80	1.8	49	1.9

Table 38

Education-related debt of doctorate recipients, by broad field of study: 2020

(Mean debt, number, and percent)

Debt level	Total		Life sciences[a]		Physical sciences and earth sciences		Mathematics and computer sciences		Psychology and social sciences		Engineering		Education		Humanities and arts		Other[b]	
$140,001–$160,000	636	1.3	119	1.0	14	0.2	23	0.6	184	2.3	44	0.5	129	3.0	70	1.6	53	2.0
$160,001 or more	1,325	2.6	218	1.9	18	0.3	17	0.4	524	6.6	71	0.7	237	5.6	121	2.8	119	4.6
Total	50,405	100.0	11,692	100.0	5,803	100.0	4,038	100.0	7,980	100.0	9,655	100.0	4,269	100.0	4,376	100.0	2,592	100.0
Undergraduate debt																		
Mean	$8,555		$9,539		$8,455		$3,859		$11,149		$4,561		$12,666		$10,194		$9,023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	36,763	72.9	8,173	69.9	4,177	72.0	3,445	85.3	5,320	66.6	8,088	83.7	2,742	64.2	2,877	65.8	1,941	74.8
$10,000 or less	3,108	6.2	816	7.0	338	5.8	170	4.2	548	6.9	440	4.6	310	7.3	357	8.2	129	5.0
$10,001–$20,000	2,596	5.1	656	5.6	320	5.5	128	3.2	511	6.4	327	3.4	240	5.6	303	6.9	111	4.3
$20,001–$30,000	2,393	4.7	580	5.0	317	5.5	112	2.8	487	6.1	259	2.7	248	5.8	283	6.5	107	4.1
$30,001–$40,000	1,679	3.3	463	4.0	235	4.1	68	1.7	301	3.8	168	1.7	197	4.6	159	3.6	88	3.4
$40,001–$50,000	1,049	2.1	291	2.5	134	2.3	33	0.8	191	2.4	103	1.1	129	3.0	115	2.6	53	2.0
$50,001–$60,000	811	1.6	196	1.7	87	1.5	22	0.5	174	2.2	99	1.0	110	2.6	88	2.0	35	1.3
$60,001–$70,000	473	0.9	124	1.1	52	0.9	12	0.3	101	1.3	41	0.4	72	1.7	49	1.1	22	0.8
$70,001–$80,000	348	0.7	83	0.7	33	0.6	9	0.2	79	1.0	32	0.3	58	1.4	34	0.8	20	0.8
$80,001–$90,000	367	0.7	105	0.9	35	0.6	13	0.3	60	0.8	42	0.4	46	1.1	40	0.9	26	1.0
$90,001 or more	825	1.6	209	1.8	71	1.2	25	0.6	212	2.7	62	0.6	116	2.7	68	1.6	62	2.4
Total	50,412	100.0	11,696	100.0	5,799	100.0	4,037	100.0	7,984	100.0	9,661	100.0	4,268	100.0	4,373	100.0	2,594	100.0

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

Note(s):
Mean calculations are based on all valid responses to debt item. See technical notes for details on calculations of means. Percentages may not sum to 100 due to rounding.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 39

Graduate education-related debt of doctorate recipients, by broad field of study: 2010–20

(Number)

Debt level and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All doctorate recipients	43,898	44,781	46,490	46,449	46,819	48,759	49,778	49,230	50,047	50,735	50,405
No debt	28,105	28,663	29,297	28,883	29,333	30,890	31,987	32,603	33,849	34,717	35,114
$10,000 or less	3,510	3,697	4,030	3,931	3,842	4,189	4,071	3,801	3,831	3,470	3,402
$10,001–$30,000	4,238	4,314	4,565	4,609	4,435	4,464	4,376	3,897	3,720	3,791	3,412
$30,001 or more	8,045	8,107	8,598	9,026	9,209	9,216	9,344	8,929	8,647	8,757	8,477
Life sciences[a]	10,466	10,673	11,115	10,867	10,917	11,306	11,636	11,617	11,789	11,903	11,692
No debt	7,268	7,451	7,658	7,318	7,427	7,812	8,100	8,213	8,401	8,492	8,440
$10,000 or less	849	853	943	904	860	940	914	913	875	837	803
$10,001–$30,000	944	909	1,001	1,016	997	943	940	818	815	852	724
$30,001 or more	1,405	1,460	1,513	1,629	1,633	1,611	1,682	1,673	1,698	1,722	1,725
Physical sciences and earth sciences	4,629	4,900	5,009	5,005	5,203	5,328	5,748	5,624	5,872	6,123	5,803
No debt	3,575	3,734	3,833	3,831	4,023	4,164	4,530	4,583	4,825	5,023	4,911
$10,000 or less	384	401	426	421	404	460	484	392	446	394	359
$10,001–$30,000	333	353	377	380	365	324	335	298	269	317	234
$30,001 or more	337	412	373	373	411	380	399	351	332	389	299
Mathematics and computer sciences	2,956	2,999	3,149	3,273	3,415	3,407	3,589	3,468	3,675	3,890	4,038
No debt	2,358	2,381	2,505	2,633	2,685	2,747	2,885	2,835	3,045	3,251	3,406
$10,000 or less	174	217	202	204	238	222	190	218	215	211	208
$10,001–$30,000	171	178	187	182	189	175	217	175	170	169	189
$30,001 or more	253	223	255	254	303	263	297	240	245	259	235
Psychology and social sciences	7,095	7,363	7,598	7,442	7,435	7,853	8,073	7,956	7,921	8,062	7,980
No debt	3,415	3,523	3,560	3,446	3,431	3,635	3,966	4,057	4,169	4,339	4,449
$10,000 or less	556	630	657	615	609	670	687	644	609	550	570
$10,001–$30,000	866	882	983	880	860	947	881	840	736	724	701
$30,001 or more	2,258	2,328	2,398	2,501	2,535	2,601	2,539	2,415	2,407	2,449	2,260
Engineering	6,989	7,363	7,747	7,964	8,445	8,827	8,549	8,854	9,289	9,429	9,655
No debt	5,347	5,654	5,907	5,981	6,426	6,787	6,555	7,034	7,488	7,573	7,881
$10,000 or less	581	635	692	706	746	774	759	679	716	639	635
$10,001–$30,000	528	504	549	615	617	613	568	520	516	577	494
$30,001 or more	533	570	599	662	656	653	667	621	569	640	645
Education	4,766	4,255	4,397	4,300	4,079	4,490	4,621	4,300	4,356	4,204	4,269
No debt	2,445	2,152	2,115	1,898	1,725	1,942	2,038	1,893	1,952	1,979	2,005
$10,000 or less	365	312	373	361	347	396	369	340	339	267	292
$10,001–$30,000	556	542	534	574	502	555	557	483	480	422	432
$30,001 or more	1,400	1,249	1,375	1,467	1,505	1,597	1,657	1,584	1,585	1,536	1,540
Humanities and arts	4,577	4,808	5,059	4,974	4,771	4,939	4,953	4,735	4,614	4,507	4,376
No debt	2,383	2,459	2,451	2,431	2,325	2,437	2,551	2,544	2,550	2,564	2,515
$10,000 or less	434	477	539	525	450	543	466	444	457	402	357
$10,001–$30,000	569	657	671	667	629	633	611	509	483	476	429
$30,001 or more	1,191	1,215	1,398	1,351	1,367	1,326	1,325	1,238	1,124	1,065	1,075
Other[b]	2,420	2,420	2,416	2,624	2,554	2,609	2,609	2,676	2,531	2,617	2,592
No debt	1,314	1,309	1,268	1,345	1,291	1,366	1,362	1,444	1,419	1,496	1,507
$10,000 or less	167	172	198	195	188	184	202	171	174	170	178
$10,001–$30,000	271	289	263	295	276	274	267	254	251	254	209
$30,001 or more	668	650	687	789	799	785	778	807	687	697	698

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 40

Education-related debt of doctorate recipients, by sex, citizenship status, ethnicity, and race: 2020

(Mean debt, number, and percent)

Debt level	Sex				Citizenship status				U.S. citizens and permanent residents													
											Not Hispanic or Latino											
	Male		Female		U.S. citizen or permanent resident		Temporary visa holder		Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported		Ethnicity not reported	
Cumulative debt																						
Mean	$21,608		$30,966		$35,621		$7,621		$42,337		$56,250		$15,925		$88,206		$31,878		$38,902		$38,750		$50,536	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	16,954	62.0	12,917	55.9	16,001	48.7	13,760	78.8	1,088	40.1	23	27.4	2,111	68.1	447	19.4	11,610	50.2	533	47.4	121	45.8	68	48.6
$10,000 or less	2,184	8.0	1,646	7.1	2,388	7.3	1,432	8.2	258	9.5	6	7.1	207	6.7	146	6.3	1,668	7.2	73	6.5	23	8.7	7	5.0
$10,001–$20,000	1,470	5.4	1,249	5.4	2,095	6.4	617	3.5	181	6.7	7	8.3	176	5.7	101	4.4	1,538	6.7	68	6.0	19	7.2	5	3.6
$20,001–$30,000	1,309	4.8	1,016	4.4	1,857	5.7	459	2.6	168	6.2	6	7.1	145	4.7	94	4.1	1,352	5.9	71	6.3	17	6.4	4	2.9
$30,001–$40,000	869	3.2	758	3.3	1,392	4.2	227	1.3	126	4.6	D	D	81	2.6	92	4.0	1,028	4.4	D	D	11	4.2	4	2.9
$40,001–$50,000	690	2.5	656	2.8	1,155	3.5	185	1.1	107	3.9	7	8.3	58	1.9	115	5.0	824	3.6	33	2.9	8	3.0	3	2.1
$50,001–$60,000	488	1.8	516	2.2	874	2.7	128	0.7	75	2.8	D	D	52	1.7	75	3.3	632	2.7	D	D	5	1.9	4	2.9
$60,001–$70,000	409	1.5	459	2.0	761	2.3	102	0.6	71	2.6	5	6.0	28	0.9	72	3.1	543	2.3	34	3.0	5	1.9	3	2.1
$70,001–$80,000	341	1.2	410	1.8	682	2.1	67	0.4	73	2.7	D	D	25	0.8	72	3.1	473	2.0	D	D	5	1.9	3	2.1
$80,001–$90,000	331	1.2	401	1.7	670	2.0	60	0.3	53	2.0	D	D	33	1.1	93	4.0	445	1.9	D	D	6	2.3	4	2.9
$90,001–$100,000	372	1.4	445	1.9	752	2.3	61	0.3	72	2.7	D	D	31	1.0	109	4.7	502	2.2	D	D	6	2.3	7	5.0
$100,001–$120,000	431	1.6	571	2.5	910	2.8	91	0.5	112	4.1	D	D	43	1.4	122	5.3	587	2.5	D	D	7	2.7	5	3.6
$120,001–$140,000	327	1.2	415	1.8	692	2.1	49	0.3	77	2.8	D	D	29	0.9	123	5.3	436	1.9	D	D	7	2.7	2	1.4
$140,001–$160,000	312	1.1	388	1.7	618	1.9	79	0.5	60	2.2	D	D	22	0.7	106	4.6	393	1.7	D	D	5	1.9	3	2.1
$160,001 or more	868	3.2	1,274	5.5	1,994	6.1	141	0.8	192	7.1	9	10.7	61	2.0	535	23.2	1,080	4.7	80	7.1	19	7.2	18	12.9
Total	27,355	100.0	23,121	100.0	32,841	100.0	17,458	100.0	2,713	100.0	84	100.0	3,102	100.0	2,302	100.0	23,111	100.0	1,125	100.0	264	100.0	140	100.0
Graduate debt																						
Mean	$13,920		$21,462		$23,569		$5,736		$29,133		$37,500		$10,636		$63,087		$20,451		$25,695		$26,794		$37,482	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	19,969	73.1	15,145	65.6	20,659	63.0	14,338	82.3	1,470	54.3	32	38.1	2,427	78.3	681	29.7	15,112	65.4	704	62.7	155	59.2	78	56.1
$10,000 or less	1,891	6.9	1,511	6.5	2,111	6.4	1,278	7.3	217	8.0	7	8.3	165	5.3	142	6.2	1,497	6.5	60	5.3	16	6.1	7	5.0
$10,001–$20,000	1,007	3.7	917	4.0	1,368	4.2	551	3.2	133	4.9	6	7.1	92	3.0	97	4.2	979	4.2	47	4.2	12	4.6	2	1.4
$20,001–$30,000	742	2.7	746	3.2	1,135	3.5	343	2.0	112	4.1	8	9.5	81	2.6	93	4.1	783	3.4	40	3.6	13	5.0	5	3.6
$30,001–$40,000	514	1.9	546	2.4	878	2.7	177	1.0	77	2.8	6	7.1	47	1.5	91	4.0	625	2.7	24	2.1	6	2.3	2	1.4
$40,001–$50,000	431	1.6	484	2.1	779	2.4	132	0.8	85	3.1	5	6.0	40	1.3	88	3.8	516	2.2	34	3.0	7	2.7	4	2.9
$50,001–$60,000	358	1.3	455	2.0	712	2.2	100	0.6	79	2.9	D	D	42	1.4	96	4.2	463	2.0	D	D	5	1.9	1	0.7
$60,001–$70,000	310	1.1	387	1.7	618	1.9	76	0.4	61	2.3	D	D	30	1.0	90	3.9	402	1.7	D	D	5	1.9	5	3.6
$70,001–$80,000	250	0.9	329	1.4	527	1.6	52	0.3	56	2.1	D	D	29	0.9	79	3.4	334	1.4	D	D	5	1.9	4	2.9
$80,001–$90,000	209	0.8	297	1.3	462	1.4	D	D	47	1.7	0	0.0	20	0.6	74	3.2	300	1.3	16	1.4	3	1.1	2	1.4

Table 40

Education-related debt of doctorate recipients, by sex, citizenship status, ethnicity, and race: 2020

(Mean debt, number, and percent)

Debt level	Sex				Citizenship status				U.S. citizens and permanent residents															
											Not Hispanic or Latino													
	Male		Female		U.S. citizen or permanent resident		Temporary visa holder		Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported		Ethnicity not reported	
$90,001–$100,000	235	0.9	324	1.4	508	1.5	D	D	56	2.1	D	D	22	0.7	89	3.9	308	1.3	D	D	6	2.3	6	4.3
$100,001–$120,000	354	1.3	451	2.0	717	2.2	85	0.5	85	3.1	D	D	22	0.7	113	4.9	465	2.0	D	D	11	4.2	5	3.6
$120,001–$140,000	246	0.9	336	1.5	552	1.7	29	0.2	55	2.0	D	D	24	0.8	100	4.4	341	1.5	D	D	1	0.4	4	2.9
$140,001–$160,000	293	1.1	343	1.5	560	1.7	D	D	65	2.4	D	D	17	0.5	131	5.7	315	1.4	18	1.6	D	D	5	3.6
$160,001 or more	507	1.9	818	3.5	1,217	3.7	D	D	108	4.0	D	D	41	1.3	331	14.4	655	2.8	56	5.0	D	D	9	6.5
Total	27,316	100.0	23,089	100.0	32,803	100.0	17,432	100.0	2,706	100.0	84	100.0	3,099	100.0	2,295	100.0	23,095	100.0	1,123	100.0	262	100.0	139	100.0
Undergraduate debt																								
Mean	$7,718		$9,546		$12,093		$1,896		$13,288		$18,750		$5,303		$25,399		$11,451		$13,277		$12,299		$13,417	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	20,403	74.7	16,360	70.8	20,785	63.4	15,844	90.9	1,538	56.7	43	51.2	2,466	79.5	931	40.6	14,889	64.5	663	59.0	165	63.2	90	64.7
$10,000 or less	1,648	6.0	1,460	6.3	2,387	7.3	715	4.1	288	10.6	6	7.1	168	5.4	216	9.4	1,585	6.9	97	8.6	21	8.0	6	4.3
$10,001–$20,000	1,320	4.8	1,276	5.5	2,313	7.1	276	1.6	234	8.6	6	7.1	170	5.5	182	7.9	1,607	7.0	85	7.6	20	7.7	9	6.5
$20,001–$30,000	1,233	4.5	1,160	5.0	2,139	6.5	248	1.4	194	7.2	D	D	108	3.5	186	8.1	1,530	6.6	D	D	19	7.3	10	7.2
$30,001–$40,000	873	3.2	806	3.5	1,551	4.7	124	0.7	127	4.7	5	6.0	72	2.3	154	6.7	1,120	4.9	53	4.7	9	3.4	11	7.9
$40,001–$50,000	517	1.9	532	2.3	970	3.0	74	0.4	97	3.6	10	11.9	31	1.0	124	5.4	665	2.9	35	3.1	7	2.7	1	0.7
$50,001–$60,000	408	1.5	403	1.7	758	2.3	51	0.3	67	2.5	D	D	26	0.8	117	5.1	514	2.2	D	D	4	1.5	1	0.7
$60,001–$70,000	220	0.8	253	1.1	451	1.4	20	0.1	40	1.5	D	D	10	0.3	80	3.5	293	1.3	D	D	0	0.0	1	0.7
$70,001–$80,000	146	0.5	202	0.9	331	1.0	16	0.1	26	1.0	D	D	5	0.2	59	2.6	226	1.0	D	D	1	0.4	2	1.4
$80,001–$90,000	186	0.7	181	0.8	338	1.0	29	0.2	32	1.2	D	D	20	0.6	50	2.2	215	0.9	D	D	2	0.8	1	0.7
$90,001 or more	365	1.3	460	2.0	780	2.4	39	0.2	68	2.5	D	D	24	0.8	195	8.5	447	1.9	D	D	13	5.0	7	5.0
Total	27,319	100.0	23,093	100.0	32,803	100.0	17,436	100.0	2,711	100.0	84	100.0	3,100	100.0	2,294	100.0	23,091	100.0	1,123	100.0	261	100.0	139	100.0

D = suppressed to avoid disclosure of confidential information.

Note(s):
Mean calculations are based on all valid responses to debt item. See technical notes for details on calculations of means.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 41

U.S. citizen and permanent resident doctorate recipients with graduate-school debt, by ethnicity, race, and broad field of study: 2020

(Number and percent)

Ethnicity, race, and debt level	All fields	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All U.S. citizen and permanent resident doctorate recipients									
Total (number)[c]	32,803	8,384	3,587	1,677	6,228	3,989	3,665	3,682	1,591
Debt > $30,000 (%)	23.0	18.3	6.7	9.1	34.4	8.3	39.9	28.5	38.5
Hispanic or Latino									
Total (number)[c]	2,706	692	233	98	607	274	352	327	123
Debt > $30,000 (%)	28.6	19.8	10.3	7.1	42.2	9.9	46.9	32.1	43.1
Not Hispanic or Latino									
American Indian or Alaska Native									
Total (number)[c]	84	18	D	D	21	D	13	14	9
Debt > $30,000 (%)	36.9	D	0.0	0.0	52.4	0.0	D	50.0	D
Asian									
Total (number)[c]	3,099	933	304	258	415	643	195	197	154
Debt > $30,000 (%)	10.8	10.5	3.9	3.5	19.8	5.3	23.6	17.8	11.7
Black or African American									
Total (number)[c]	2,295	529	72	56	506	171	573	162	226
Debt > $30,000 (%)	55.9	49.3	23.6	26.8	62.3	29.8	66.8	53.1	68.1
White									
Total (number)[c]	23,095	5,819	2,798	1,157	4,372	2,727	2,378	2,825	1,019
Debt > $30,000 (%)	20.5	16.5	6.4	9.2	31.3	7.3	33.2	27.2	34.8
More than one race									
Total (number)[c]	1,123	308	139	77	231	127	97	106	38
Debt > $30,000 (%)	24.2	18.2	6.5	15.6	37.2	8.7	45.4	32.1	52.6
Other race or race not reported									
Total (number)[c]	262	59	D	D	47	D	37	35	12
Debt > $30,000 (%)	25.2	D	0.0	5.6	25.5	17.9	D	31.4	D
Ethnicity not reported									
Total (number)[c]	139	26	11	12	29	15	20	16	10
Debt > $30,000 (%)	33.8	34.6	9.1	16.7	55.2	20.0	50.0	18.8	30.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.
[b] Includes other non-science and engineering fields not shown separately.
[c] Includes all persons who responded to the graduate-school debt question, even if they reported they had no debt.

Note(s):
Percentages were calculated based on the number of cases in each category.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 42

Postgraduation commitment of doctorate recipients, by broad field of study: Selected years, 1990–2020

(Number and percent)

Commitment status and year	All fields	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All doctorate recipients (number)									
1990	36,065	6,655	4,212	1,597	6,331	4,894	6,509	3,854	2,013
1995	41,747	7,998	4,540	2,187	6,930	6,008	6,648	5,040	2,396
2000	41,369	8,622	4,071	1,910	7,452	5,323	6,442	5,462	2,087
2005	43,385	9,310	4,359	2,334	7,149	6,426	6,227	5,187	2,393
2010	48,028	11,319	4,995	3,223	7,882	7,578	5,287	5,015	2,729
2015	54,886	12,493	5,916	3,818	9,073	9,875	5,098	5,594	3,019
2020	55,283	12,561	6,247	4,392	8,946	10,476	4,716	4,939	3,006
All responses to postgraduation commitment									
1990	32,708	6,122	3,804	1,425	5,708	4,304	5,993	3,535	1,817
1995	37,977	7,314	4,148	2,007	6,303	5,385	5,998	4,649	2,173
2000	37,743	8,008	3,717	1,759	6,718	4,830	5,795	5,035	1,881
2005	38,913	8,500	3,992	2,099	6,372	5,774	5,477	4,617	2,082
2010	43,833	10,479	4,602	2,940	7,115	6,963	4,745	4,573	2,416
2015	49,002	11,386	5,350	3,404	7,891	8,871	4,521	4,972	2,607
2020	50,505	11,714	5,808	4,041	8,009	9,661	4,287	4,384	2,601
Definite commitment for employment or postdoctoral study (%)[c]									
1990	71.6	74.6	74.0	70.1	69.1	65.9	74.6	66.7	78.5
1995	65.8	70.3	64.8	63.5	65.0	57.0	72.9	59.1	73.1
2000	71.2	72.4	73.6	76.0	69.8	69.9	75.2	61.7	78.1
2005	70.5	70.6	71.7	74.6	73.0	64.6	73.9	64.5	75.9
2010	68.1	65.9	72.0	71.5	71.4	65.4	70.7	60.1	73.8
2015	62.0	58.7	61.1	69.8	68.5	58.2	64.5	54.8	71.1
2020	70.0	66.6	69.7	76.4	75.6	68.4	72.5	59.4	77.2
No definite commitment for employment or postdoctoral study (%)[c,d]									
1990	28.4	25.4	26.0	29.9	30.9	34.1	25.4	33.3	21.5
1995	34.2	29.7	35.2	36.5	35.0	43.0	27.1	40.9	26.9
2000	28.8	27.6	26.4	24.0	30.2	30.1	24.8	38.3	21.9
2005	29.5	29.4	28.3	25.4	27.0	35.4	26.1	35.5	24.1
2010	31.9	34.1	28.0	28.5	28.6	34.6	29.3	39.9	26.2
2015	38.0	41.3	38.9	30.2	31.5	41.8	35.5	45.2	28.9
2020	30.0	33.4	30.3	23.6	24.4	31.6	27.5	40.6	22.8

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Percentages based on number responding to the survey item on postgraduation commitment.

[d] Includes respondents who indicated "other" in all years, respondents who indicated "do not plan to work or study" in 2004 and later years, and respondents who indicated definite plans for "other full-time degree program" in 2007 and later years.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 43

Postgraduation commitment of doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Commitment status and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
All doctorate recipients (number)													
1990	36,065	22,960	13,104	26,619	8,140	840	96	1,306	1,048	22,878	na	132	319
1995	41,747	25,160	16,416	32,062	8,831	1,065	147	4,297	1,461	24,683	na	170	239
2000	41,369	23,165	18,131	29,952	9,667	1,310	169	2,274	1,749	23,714	na	370	366
2005	43,385	23,737	19,582	27,945	12,832	1,435	137	2,155	1,741	21,208	395	306	568
2010	48,028	25,524	22,488	31,602	13,636	1,842	117	2,738	1,939	23,100	654	272	940
2015	54,886	29,532	25,347	35,071	16,129	2,449	131	3,072	2,275	25,375	903	249	617
2020	55,283	29,886	25,392	34,492	18,482	2,851	97	3,218	2,458	23,944	1,136	353	435
All responses to postgraduation commitment													
1990	32,708	20,690	12,017	25,364	7,331	789	90	1,191	956	22,011	na	113	214
1995	37,977	22,959	15,013	29,963	8,005	982	138	3,895	1,299	23,363	na	134	152
2000	37,743	21,175	16,568	28,602	9,101	1,236	162	2,161	1,632	22,895	na	347	169
2005	38,913	21,319	17,590	26,680	12,167	1,357	132	2,084	1,646	20,591	384	277	209
2010	43,833	23,339	20,493	30,597	13,008	1,782	113	2,678	1,881	22,698	650	253	542
2015	49,002	26,424	22,578	33,609	15,278	2,327	121	3,006	2,161	24,708	896	219	171
2020	50,505	27,352	23,153	32,895	17,449	2,719	84	3,106	2,318	23,127	1,128	267	146
Definite commitment for employment or postdoctoral study (%)[d]													
1990	71.6	72.0	70.8	73.7	64.1	67.9	65.6	63.1	69.8	74.8	na	70.8	64.5
1995	65.8	65.2	66.7	67.6	58.9	66.0	68.1	56.8	67.9	69.5	na	61.2	66.4
2000	71.2	72.5	69.5	72.3	67.7	71.4	72.8	66.4	67.7	73.4	na	64.3	65.1
2005	70.5	71.3	69.5	72.4	66.2	69.9	68.2	65.9	66.8	73.9	64.6	69.7	70.8
2010	68.1	69.6	66.3	68.8	66.3	66.1	66.4	61.8	63.4	70.4	69.4	65.6	66.1
2015	62.0	63.2	60.6	63.5	58.7	57.2	57.9	56.8	55.5	65.7	62.3	66.7	62.6
2020	70.0	70.6	69.2	69.8	70.1	68.0	75.0	66.6	65.3	71.1	67.1	64.4	66.4
No definite commitment for employment or postdoctoral study (%)[d,e]													
1990	28.4	28.0	29.2	26.3	35.9	32.1	34.4	36.9	30.2	25.2	na	29.2	35.5
1995	34.2	34.8	33.3	32.4	41.1	34.0	31.9	43.2	32.1	30.5	na	38.8	33.6
2000	28.8	27.5	30.5	27.7	32.3	28.6	27.2	33.6	32.3	26.6	na	35.7	34.9
2005	29.5	28.7	30.5	27.6	33.8	30.1	31.8	34.1	33.2	26.1	35.4	30.3	29.2
2010	31.9	30.4	33.7	31.2	33.7	33.9	33.6	38.2	36.6	29.6	30.6	34.4	33.9

Table 43

Postgraduation commitment of doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Commitment status and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
2015	38.0	36.8	39.4	36.5	41.3	42.8	42.1	43.2	44.5	34.3	37.7	33.3	37.4
2020	30.0	29.4	30.8	30.2	29.9	32.0	25.0	33.4	34.7	28.9	32.9	35.6	33.6

na = not applicable; respondents were instructed to indicate only one race.

[a] Includes respondents who did not report sex and respondents who did not report citizenship status.

[b] Includes Native Hawaiians or Other Pacific Islanders through 2000, but excludes them since 2001.

[c] Before 2001, this category included respondents who selected more than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

[d] Percentages based on number responding to the survey item on postgraduation commitment.

[e] Includes respondents who indicated "other" in all years, respondents who indicated "do not plan to work or study" in 2004 and later years, and respondents who indicated definite plans for "other full-time degree program" in 2007 and later years.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 44

Postgraduation plans of doctorate recipients with definite commitments, by broad field of study: Selected years, 1990–2020

(Number and percent)

Definite commitment, plan, and year	All fields	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All definite commitments (number)									
1990	23,412	4,566	2,815	999	3,943	2,835	4,470	2,358	1,426
1995	24,977	5,141	2,686	1,275	4,095	3,068	4,374	2,749	1,589
2000	26,868	5,797	2,736	1,337	4,692	3,374	4,355	3,107	1,470
2005	27,416	5,999	2,863	1,565	4,649	3,732	4,049	2,979	1,580
2010	29,841	6,908	3,314	2,102	5,077	4,551	3,357	2,748	1,784
2015	30,385	6,680	3,267	2,375	5,404	5,163	2,917	2,726	1,853
2020	35,332	7,804	4,050	3,088	6,056	6,611	3,110	2,606	2,007
Reported type of plan									
1990	23,298	4,557	2,812	998	3,920	2,822	4,428	2,337	1,424
1995	24,821	5,126	2,677	1,265	4,063	3,060	4,328	2,721	1,581
2000	26,744	5,765	2,724	1,332	4,676	3,358	4,329	3,096	1,464
2005	27,086	5,906	2,847	1,556	4,594	3,702	3,978	2,943	1,560
2010	28,995	6,768	3,268	2,063	4,900	4,445	3,213	2,644	1,694
2015	27,787	6,155	3,088	2,206	4,949	4,754	2,612	2,405	1,618
2020	35,289	7,784	4,047	3,088	6,042	6,607	3,110	2,604	2,007
Employment (%)[c]									
1990	73.6	37.5	43.6	79.3	84.5	80.7	96.0	94.2	96.3
1995	70.3	35.6	35.2	75.7	78.7	75.1	96.1	93.0	96.5
2000	71.4	39.8	44.0	76.6	76.2	78.9	95.2	91.9	95.4
2005	64.5	33.1	33.3	65.4	70.7	67.2	93.8	88.9	94.4
2010	57.1	30.0	26.9	57.7	65.6	54.9	93.2	84.7	92.1
2015	60.3	36.7	35.8	66.3	62.6	64.4	91.2	79.8	91.1
2020	61.6	43.1	41.3	70.7	59.5	64.7	90.2	79.5	89.3
Postdoctoral study (%)[c]									
1990	26.4	62.5	56.4	20.7	15.5	19.3	4.0	5.8	3.7
1995	29.7	64.4	64.8	24.3	21.3	24.9	3.9	7.0	3.5
2000	28.6	60.2	56.0	23.4	23.8	21.1	4.8	8.1	4.6
2005	35.5	66.9	66.7	34.6	29.3	32.8	6.2	11.1	5.6
2010	42.9	70.0	73.1	42.3	34.4	45.1	6.8	15.3	7.9
2015	39.7	63.3	64.2	33.7	37.4	35.6	8.8	20.2	8.9
2020	38.4	56.9	58.7	29.3	40.5	35.3	9.8	20.5	10.7

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Percentages based on number reporting definite postgraduation commitments with response to type of plan (employment or postdoctoral study).

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 45

Postgraduation plans of doctorate recipients with definite commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Definite commitment, plan, and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
All definite commitments (number)													
1990	23,412	14,898	8,513	18,702	4,700	536	59	752	667	16,470	na	80	138
1995	24,977	14,964	10,011	20,251	4,718	648	94	2,212	882	16,232	na	82	101
2000	26,868	15,359	11,509	20,683	6,162	883	118	1,435	1,105	16,809	na	223	110
2005	27,416	15,195	12,218	19,314	8,059	948	90	1,374	1,100	15,213	248	193	148
2010	29,841	16,254	13,587	21,055	8,625	1,178	75	1,655	1,192	15,980	451	166	358
2015	30,385	16,694	13,691	21,348	8,963	1,332	70	1,708	1,199	16,228	558	146	107
2020	35,332	19,303	16,029	22,966	12,231	1,848	63	2,068	1,513	16,448	757	172	97
Reported type of plan													
1990	23,298	14,823	8,474	18,618	4,670	533	59	750	661	16,398	na	79	138
1995	24,821	14,881	9,938	20,127	4,686	640	93	2,196	869	16,149	na	82	98
2000	26,744	15,283	11,461	20,605	6,119	876	116	1,425	1,099	16,758	na	223	108
2005	27,086	15,023	12,060	19,073	7,971	937	88	1,355	1,084	15,031	246	188	144
2010	28,995	15,820	13,175	20,384	8,454	1,130	71	1,617	1,139	15,482	432	164	349
2015	27,787	15,351	12,436	19,373	8,345	1,153	61	1,542	1,068	14,808	512	133	96
2020	35,289	19,286	16,003	22,933	12,223	1,846	62	2,064	1,510	16,426	756	172	97
Employment (%)[d]													
1990	73.6	71.4	77.4	76.1	63.4	77.5	88.1	65.1	87.0	76.2	na	70.9	64.5
1995	70.3	67.5	74.5	72.0	62.9	73.0	74.2	50.8	82.5	74.3	na	68.3	64.3
2000	71.4	69.7	73.6	73.7	63.5	71.5	79.3	62.4	81.6	74.3	na	68.6	75.0
2005	64.5	62.2	67.4	68.1	55.9	65.5	78.4	56.1	74.4	68.8	67.5	63.8	72.9
2010	57.1	55.2	59.3	61.1	47.3	60.2	D	53.3	72.1	61.5	D	59.8	61.6
2015	60.3	59.9	60.8	62.5	55.1	55.7	62.3	59.7	72.1	62.7	60.2	62.4	68.8
2020	61.6	61.4	61.9	63.2	58.6	61.1	79.0	60.9	75.4	62.6	59.5	65.7	75.3
Postdoctoral study (%)[d]													
1990	26.4	28.6	22.6	23.9	36.6	22.5	11.9	34.9	13.0	23.8	na	29.1	35.5
1995	29.7	32.5	25.5	28.0	37.1	27.0	25.8	49.2	17.5	25.7	na	31.7	35.7
2000	28.6	30.3	26.4	26.3	36.5	28.5	20.7	37.6	18.4	25.7	na	31.4	25.0
2005	35.5	37.8	32.6	31.9	44.1	34.5	21.6	43.9	25.6	31.2	32.5	36.2	27.1
2010	42.9	44.8	40.7	38.9	52.7	39.8	D	46.7	27.9	38.5	D	40.2	38.4
2015	39.7	40.1	39.2	37.5	44.9	44.3	37.7	40.3	27.9	37.3	39.8	37.6	31.3
2020	38.4	38.6	38.1	36.8	41.4	38.9	21.0	39.1	24.6	37.4	40.5	34.3	24.7

D = suppressed to avoid disclosure of confidential information.

na = not applicable; respondents were instructed to indicate only one race.

[a] Includes respondents who did not report sex and respondents who did not report citizenship status.

[b] Includes Native Hawaiians or Other Pacific Islanders through 2000, but excludes them since 2001.

[c] Before 2001, this category included respondents who selected more than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

[d] Percentages based on number reporting definite commitments and type of plan (employment or postdoctoral study).

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 46

Employment sector of doctorate recipients with definite postgraduation commitments for employment in the United States, by broad field of study: Selected years, 1990–2020

(Number and percent)

Employment commitment, sector, and year	Total	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All U.S. employment commitments (number)									
1990	15,239	1,325	1,104	676	2,981	1,872	4,020	2,045	1,216
1995	15,303	1,456	836	830	2,773	1,890	3,913	2,290	1,315
2000	17,248	1,948	1,095	938	3,175	2,336	3,907	2,619	1,230
2005	15,658	1,713	879	906	2,785	2,129	3,550	2,408	1,288
2010	14,706	1,813	793	1,061	2,740	2,070	2,839	2,059	1,331
2015	15,166	2,024	1,029	1,364	2,691	2,761	2,245	1,759	1,293
2020	19,556	2,969	1,544	1,981	3,154	3,836	2,626	1,899	1,547
Academe (%)[c]									
1990	51.5	48.5	20.7	68.0	50.7	26.3	46.4	79.7	83.4
1995	52.4	51.4	28.3	55.3	53.8	19.1	48.3	79.8	76.7
2000	48.6	46.0	21.9	47.5	52.0	14.8	47.9	78.0	73.0
2005	54.3	53.2	26.2	54.6	62.0	18.5	50.2	82.5	76.2
2010	52.6	48.9	28.5	40.8	60.2	16.9	53.4	80.6	76.0
2015	48.5	45.6	23.8	32.4	59.4	14.5	59.4	78.6	79.9
2020	39.6	36.7	16.3	26.5	51.0	10.3	54.6	69.9	71.9
Government (%)[c]									
1990	8.8	16.3	11.0	3.8	12.8	11.9	7.2	2.1	4.0
1995	8.1	14.2	12.9	4.2	12.4	10.9	6.0	1.7	5.3
2000	7.4	13.7	9.3	3.8	11.4	9.0	4.6	1.9	5.4
2005	6.9	12.7	9.3	4.0	10.0	9.3	4.1	2.3	5.3
2010	8.9	14.3	14.4	6.7	13.9	12.9	3.5	2.1	5.6
2015	7.1	9.7	6.4	4.5	11.7	9.8	3.7	2.1	4.3
2020	7.7	9.8	9.9	4.5	12.4	8.5	3.8	2.9	6.9
Industry or business (%)[c,d]									
1990	21.9	26.4	66.0	25.4	18.2	59.1	6.2	4.8	7.4
1995	21.7	24.5	53.2	37.3	16.3	66.1	6.0	5.1	12.1
2000	26.0	28.9	63.8	44.0	17.4	72.9	5.7	6.4	14.0
2005	22.8	25.3	59.5	38.3	14.2	68.7	4.1	4.3	12.3
2010	23.3	25.0	50.9	46.7	13.5	64.3	4.5	5.0	10.0
2015	32.4	33.0	64.8	59.0	16.3	72.0	4.5	5.7	11.1
2020	40.0	42.9	68.8	65.0	22.0	77.0	7.5	7.3	14.7
Nonprofit organization (%)[c]									
1990	6.7	7.3	1.5	1.6	13.2	2.2	5.7	9.4	3.5
1995	6.3	7.3	2.3	2.2	11.4	2.2	5.1	9.1	4.3
2000	5.9	6.9	2.0	2.0	11.4	1.8	4.6	7.6	4.9
2005	5.3	7.1	3.1	1.9	8.8	2.3	4.3	6.8	4.1
2010	5.2	8.4	3.0	2.3	7.0	3.1	4.5	6.2	4.2
2015	6.1	9.4	3.0	2.8	9.2	3.2	5.8	8.8	3.6
2020	6.0	7.8	3.2	2.0	9.4	3.2	6.4	10.8	4.2
Other or unknown (%)[c,e]									
1990	11.1	1.5	0.7	1.0	5.1	0.5	34.5	4.0	1.7
1995	11.4	2.6	3.2	1.0	6.1	1.6	34.6	4.3	1.7

Table 46

Employment sector of doctorate recipients with definite postgraduation commitments for employment in the United States, by broad field of study: Selected years, 1990–2020

(Number and percent)

Employment commitment, sector, and year	Total	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
2000	12.0	4.6	2.9	2.6	7.7	1.5	37.2	6.2	2.8
2005	10.7	1.8	1.9	1.2	5.0	1.2	37.3	4.2	2.2
2010	10.0	3.4	3.2	3.5	5.3	2.8	34.1	6.1	4.2
2015	5.8	2.3	1.9	1.2	3.4	0.6	26.7	4.7	1.1
2020	6.6	2.7	1.7	2.0	5.2	1.1	27.7	9.1	2.3

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Percentages based on number reporting definite employment commitments in the United States.

[d] Includes doctorate recipients who indicated self-employment.

[e] "Other" is mainly composed of elementary and secondary schools.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 47

Employment sector of doctorate recipients with definite postgraduation commitments for employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Employment commitment, sector, and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
All U.S. employment commitments (number)													
1990	15,239	9,042	6,197	13,847	1,384	397	52	447	570	12,245	na	52	84
1995	15,303	8,420	6,882	14,049	1,249	449	67	1,028	707	11,681	na	54	63
2000	17,248	9,361	7,887	14,850	2,387	601	87	849	887	12,203	na	146	77
2005	15,658	8,145	7,513	12,733	2,899	606	68	727	801	10,156	161	112	102
2010	14,706	7,557	7,149	12,108	2,517	658	D	816	812	9,263	215	D	207
2015	15,166	8,207	6,959	11,814	3,313	633	38	874	758	9,075	301	75	60
2020	19,556	10,444	9,112	14,241	5,241	1,112	47	1,212	1,131	10,117	442	107	73
Academe (%)[d]													
1990	51.5	48.0	56.5	51.2	54.0	57.2	63.5	39.4	55.1	51.2	na	42.3	53.6
1995	52.4	47.1	58.9	53.0	45.8	59.2	62.7	37.2	58.4	53.8	na	57.4	52.4
2000	48.6	43.9	54.3	51.1	33.6	56.2	62.1	34.6	52.2	51.8	na	51.4	57.1
2005	54.3	49.5	59.6	56.3	45.7	61.7	52.9	46.2	56.2	56.8	58.4	49.1	51.0
2010	52.6	47.1	58.4	54.6	43.8	55.8	D	43.5	49.3	55.9	51.2	D	55.1
2015	48.5	41.5	56.8	53.0	32.5	54.2	63.2	37.5	53.6	54.1	57.1	57.3	53.3
2020	39.6	33.0	47.1	43.8	28.2	49.1	53.2	30.8	43.7	44.9	41.6	42.1	42.5
Government (%)[d]													
1990	8.8	9.7	7.6	9.5	2.5	11.1	3.8	8.3	10.0	9.5	na	7.7	10.7
1995	8.1	8.8	7.3	8.7	1.8	9.1	6.0	5.4	6.9	9.0	na	7.4	15.9
2000	7.4	8.1	6.5	8.3	1.8	8.8	11.5	6.4	9.0	8.3	na	6.2	14.3
2005	6.9	7.5	6.3	8.2	1.5	6.4	11.8	8.7	8.9	8.0	10.6	12.5	9.8
2010	8.9	9.5	8.2	10.3	2.4	9.7	D	9.9	13.4	10.0	D	8.6	10.1
2015	7.1	7.5	6.7	8.7	1.7	8.2	D	8.4	11.2	8.6	8.0	D	13.3
2020	7.7	7.9	7.6	10.1	1.5	10.0	14.9	7.3	13.2	9.9	11.1	13.1	9.6
Industry or business (%)[d,e]													
1990	21.9	27.7	13.5	20.3	38.1	12.3	13.5	44.3	5.4	20.3	na	38.5	22.6
1995	21.7	29.1	12.7	19.6	45.6	15.1	14.9	49.0	6.6	17.9	na	24.1	23.8
2000	26.0	34.6	16.0	20.8	58.4	17.5	8.0	48.1	12.0	19.8	na	26.7	23.4
2005	22.8	30.6	14.3	16.9	48.5	12.0	16.2	35.8	8.1	16.6	13.7	14.3	22.5
2010	23.3	30.9	15.2	18.3	47.4	16.0	18.2	35.4	10.8	17.4	21.4	20.4	21.3
2015	32.4	41.9	21.2	24.0	62.4	23.2	D	43.2	12.7	23.3	22.6	D	18.3
2020	40.0	49.5	29.2	30.2	66.9	24.6	14.9	50.7	21.1	29.3	34.6	25.2	24.7
Nonprofit organization (%)[d]													
1990	6.7	6.1	7.6	7.2	2.1	8.6	5.8	4.9	6.3	7.3	na	3.8	6.0
1995	6.3	6.3	6.3	6.6	2.6	5.1	1.5	4.4	4.4	7.1	na	3.7	4.8

Table 47

Employment sector of doctorate recipients with definite postgraduation commitments for employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Employment commitment, sector, and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
2000	5.9	5.0	7.0	6.5	2.5	5.2	4.6	5.8	5.4	6.7	na	5.5	0.0
2005	5.3	4.6	6.0	6.0	2.2	6.1	8.8	5.8	5.4	6.0	6.2	6.3	6.9
2010	5.2	4.8	5.7	5.7	3.0	5.6	D	5.5	6.5	5.6	D	4.3	4.8
2015	6.1	4.9	7.5	7.1	2.5	7.0	D	7.6	8.0	7.0	7.0	D	11.7
2020	6.0	5.2	7.0	7.3	2.5	7.0	D	6.7	7.4	7.4	D	6.5	11.0
Other or unknown (%)[d,f]													
1990	11.1	8.5	14.8	11.9	3.3	10.8	13.5	3.1	23.2	11.7	na	7.7	7.1
1995	11.4	8.7	14.8	12.1	4.2	11.4	14.9	4.0	23.6	12.2	na	7.4	3.2
2000	12.0	8.5	16.2	13.4	3.6	12.3	13.8	5.2	21.4	13.5	na	10.3	5.2
2005	10.7	7.8	13.9	12.7	2.1	13.7	10.3	3.6	21.5	12.6	11.2	17.9	9.8
2010	10.0	7.7	12.5	11.2	3.3	12.9	11.4	5.6	20.0	11.0	8.4	3.2	8.7
2015	5.8	4.2	7.8	7.2	1.0	7.4	13.2	3.3	14.5	7.0	5.3	4.0	3.3
2020	6.6	4.4	9.1	8.6	1.0	9.3	D	4.5	14.6	8.4	D	13.1	12.3

D = suppressed to avoid disclosure of confidential information.

na = not applicable; respondents were instructed to indicate only one race.

[a] Includes respondents who did not report sex and respondents who did not report citizenship.

[b] Includes Native Hawaiians or Other Pacific Islanders through 2000, but excludes them since 2001.

[c] Before 2001, this category included respondents who selected more than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

[d] Percentages based on number reporting definite employment commitments and sector.

[e] Includes doctorate recipients who indicated self-employment.

[f] "Other" is mainly composed of elementary and secondary schools.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 48

Median basic annual salary for doctorate recipients with definite postgraduation plans in the United States, by field of study, type of postgraduation plans, and sex: 2020

(Dollars)

Field of study	Total[a]		Employment			Postdoctoral study		
	Male	Female	Total	Male	Female	Total	Male	Female
All fields	70,000	60,000	85,000	100,000	75,000	51,000	52,000	50,004
Science and engineering	71,000	60,000	97,000	105,000	85,000	51,000	52,000	50,004
Life sciences	55,000	55,000	85,000	89,000	83,000	50,004	50,004	50,004
Agricultural sciences and natural resources	60,000	55,000	75,990	80,000	71,000	50,000	50,000	50,000
Biological and biomedical sciences	52,704	52,704	86,000	90,000	83,500	50,004	50,004	50,004
Health sciences	68,000	70,000	88,000	90,000	87,000	51,000	50,004	51,500
Physical sciences and earth sciences	63,000	62,000	100,000	105,000	85,000	54,000	54,000	53,000
Chemistry	55,000	62,000	92,000	98,000	90,000	50,004	50,003	50,004
Geosciences, atmospheric sciences, and ocean sciences	62,000	60,000	80,000	97,000	70,000	56,000	57,000	55,000
Physics and astronomy	70,000	68,000	115,000	115,000	111,690	60,000	60,000	60,000
Mathematics and computer sciences	105,000	95,000	125,000	130,000	120,000	61,200	61,900	60,000
Psychology and social sciences	63,900	55,000	72,000	80,000	70,000	50,000	50,004	50,000
Psychology	52,000	51,000	68,000	72,000	67,000	50,000	50,000	50,000
Economics	108,000	110,000	120,000	120,000	120,000	67,500	68,750	67,500
Social sciences[b]	62,000	60,000	67,250	70,000	65,000	53,460	55,000	53,000
Engineering	90,000	85,000	110,000	112,000	105,000	52,701	53,000	52,000
Non-science and engineering	65,000	64,000	68,000	70,000	67,000	50,002	50,000	50,760
Education	71,000	65,000	70,000	75,000	70,000	50,760	50,004	50,760
Humanities and arts	52,000	53,750	55,000	54,500	55,000	50,000	50,000	50,000
Business management and administration	130,000	130,000	130,000	130,000	131,000	68,500	67,500	68,500
Other non-S&E fields[c]	67,000	66,275	70,000	72,000	70,000	52,000	55,000	52,000

S&E = science and engineering.

[a] Includes doctorate recipients who did not report type of postgraduation plan.

[b] Excludes economics, which is usually included within social sciences.

[c] Excludes business management and administration, which is usually included within other non-S&E fields.

Note(s):
Basic annual salary is based on the job or postdoctoral study expected to hold in the next year. Median salaries in this table are the exact salary values of respondents at the 50th percentile of their frequency distribution; salary values are rounded to the nearest dollar. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 49

Median basic annual salary for doctorate recipients with definite postgraduation plans for employment in the United States, by field of study and employment sector: 2020

(Dollars)

Field of study	Total[a]	Academe	Industry or business[b]	Government	Nonprofit organization	Other or unknown[c]
All fields	85,000	65,550	115,000	88,000	80,000	74,088
Science and engineering	97,000	69,700	117,000	90,000	90,000	67,000
Life sciences	85,000	70,000	102,000	80,000	90,000	53,500
Agricultural sciences and natural resources	75,990	65,000	93,500	75,000	60,000	52,000
Biological and biomedical sciences	86,000	58,000	103,000	73,015	73,000	44,000
Health sciences	88,000	78,000	110,000	97,500	105,000	58,000
Physical sciences and earth sciences	100,000	56,000	110,000	80,000	89,000	68,000
Chemistry	92,000	52,000	100,000	76,000	55,000	70,000
Geosciences, atmospheric sciences, and ocean sciences	80,000	58,000	120,000	73,000	90,700	50,000
Physics and astronomy	115,000	60,616	117,700	98,500	127,500	110,000
Mathematics and computer sciences	125,000	79,000	144,000	105,010	122,000	74,000
Psychology and social sciences	72,000	64,000	100,000	85,000	75,000	66,115
Psychology	68,000	60,000	87,500	70,000	70,000	63,000
Economics	120,000	91,000	132,500	112,450	120,000	110,000
Social sciences[d]	67,250	62,000	93,000	81,000	75,000	70,000
Engineering	110,000	85,000	116,050	98,500	110,000	100,000
Non-science and engineering	68,000	64,000	90,000	81,300	70,000	75,000
Education	70,000	65,000	84,000	75,000	82,250	80,000
Humanities and arts	55,000	53,000	60,250	75,000	60,000	56,848
Business management and administration	130,000	130,000	145,000	130,000	110,000	100,000
Other non-S&E fields[e]	70,000	65,000	90,000	90,000	88,000	75,000

S&E = science and engineering.

[a] Includes doctorate recipients who did not report employment sector.
[b] Includes doctorate recipients who indicated self-employment.
[c] "Other" is mainly composed of elementary and secondary schools.
[d] Excludes economics, which is usually included within social sciences.
[e] Excludes business management and administration, which is usually included within other non-S&E fields.

Note(s):
Basic annual salary is based on the job expected to hold in the next year. Median salaries in this table are the exact salary values of respondents at the 50th percentile of their frequency distribution; salary values are rounded to the nearest dollar. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 50

Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Postgraduate study commitments, source of support, and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
All postgraduate study commitments (number)													
1990	6,158	4,245	1,912	4,448	1,708	120	7	262	86	3,901	na	23	49
1995	7,380	4,843	2,536	5,640	1,737	173	24	1,081	152	4,149	na	26	35
2000	7,657	4,626	3,031	5,413	2,236	250	24	536	202	4,304	na	70	27
2005	9,611	5,674	3,934	6,086	3,513	323	19	595	277	4,685	80	68	39
2010	12,447	7,080	5,367	7,923	4,458	450	D	755	318	5,964	D	66	134
2015	11,026	6,149	4,877	7,257	3,748	511	23	622	298	5,519	204	50	30
2020	13,546	7,447	6,099	8,435	5,064	718	13	806	372	6,137	306	59	24
College or university (%)[d]													
1990	26.7	29.2	21.1	19.5	45.4	25.0	14.3	24.4	33.7	18.7	na	34.8	14.3
1995	29.1	32.0	23.7	23.9	46.3	26.0	20.8	29.3	24.3	22.6	na	7.7	5.7
2000	33.5	35.6	30.2	28.3	46.0	28.8	25.0	29.1	35.6	28.0	na	20.0	18.5
2005	47.7	49.2	45.7	40.9	59.5	36.5	36.8	46.4	45.1	40.2	42.5	41.2	46.2
2010	39.1	40.8	37.0	33.7	49.1	32.2	20.8	40.1	40.3	32.9	34.0	31.8	23.9
2015	44.9	47.0	42.2	40.0	54.3	43.6	39.1	42.6	43.0	39.2	40.2	50.0	33.3
2020	38.4	39.9	36.6	32.8	48.0	34.4	53.8	34.7	37.9	32.1	34.0	27.1	8.3
U.S. government (%)[d]													
1990	35.7	34.8	37.7	42.3	18.4	30.0	42.9	41.2	16.3	43.3	na	39.1	44.9
1995	36.8	36.2	37.9	42.7	17.8	34.7	45.8	37.5	32.9	44.6	na	34.6	65.7
2000	35.8	35.7	36.0	42.2	20.3	44.4	37.5	41.4	35.6	42.6	na	32.9	48.1
2005	29.0	28.8	29.2	35.6	17.5	37.8	36.8	31.3	30.7	36.6	28.8	25.0	35.9
2010	33.3	32.9	33.9	39.9	21.8	34.7	58.3	32.2	37.1	41.5	37.7	33.3	43.3
2015	30.7	30.0	31.5	36.2	20.0	35.2	34.8	33.6	33.2	36.8	37.3	30.0	30.0
2020	31.7	31.5	32.1	39.3	19.3	35.2	D	37.0	32.5	40.8	35.3	D	20.8
Private foundation (%)[d]													
1990	11.0	10.3	12.7	11.4	10.1	11.7	14.3	11.8	9.3	11.4	na	8.7	10.2
1995	8.7	8.1	9.8	8.6	9.0	7.5	0.0	7.1	9.2	9.1	na	7.7	2.9
2000	8.0	7.8	8.2	7.5	9.3	6.4	8.3	7.8	5.4	7.5	na	10.0	14.8
2005	4.8	4.2	5.6	5.6	3.5	7.1	15.8	3.9	4.3	5.6	8.8	10.3	2.6
2010	4.5	3.9	5.2	5.6	2.5	7.1	D	5.7	D	5.7	D	4.5	2.2
2015	4.8	4.5	5.1	5.6	3.3	5.9	D	5.1	3.7	5.7	D	2.0	6.7
2020	4.1	3.6	4.6	4.8	2.9	4.6	D	3.6	6.2	4.8	4.9	D	8.3

Table 50

Sources of support for doctorate recipients with postgraduation commitments for postdoctoral study, by sex, citizenship status, ethnicity, and race: Selected years, 1990–2020

(Number and percent)

Postgraduate study commitments, source of support, and year	Total[a]	Sex		Citizenship status		U.S. citizens and permanent residents							
							Not Hispanic or Latino						
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian[b]	Black or African American	White	More than one race	Other race or race not reported[c]	Ethnicity not reported
Nonprofit, other than private foundation (%)[d]													
1990	2.7	2.4	3.2	2.5	3.2	2.5	0.0	1.9	7.0	2.5	na	0.0	2.0
1995	2.5	2.3	3.0	2.4	3.1	3.5	4.2	3.2	3.3	2.1	na	0.0	2.9
2000	3.4	3.2	3.6	2.9	4.5	3.2	0.0	2.8	4.0	2.9	na	1.4	3.7
2005	3.1	2.6	3.8	3.3	2.8	3.7	0.0	2.4	5.1	3.2	7.5	2.9	0.0
2010	3.4	2.5	4.6	3.5	3.3	D	D	2.5	4.1	3.5	5.7	3.0	4.5
2015	3.8	2.7	5.2	4.4	2.7	3.3	D	5.3	4.7	4.4	D	2.0	3.3
2020	3.0	2.4	3.8	3.3	2.5	4.2	D	3.1	4.3	3.2	2.6	D	0.0
Other (%)[d]													
1990	9.2	9.6	8.4	8.8	10.2	5.0	0.0	6.1	2.3	9.3	na	8.7	6.1
1995	9.4	9.3	9.8	8.8	11.4	9.2	12.5	8.3	8.6	8.9	na	11.5	14.3
2000	8.3	7.5	9.6	8.3	8.3	7.6	8.3	6.3	5.0	8.6	na	15.7	7.4
2005	7.8	8.1	7.5	6.9	9.5	7.4	0.0	7.6	5.1	6.9	8.8	8.8	2.6
2010	8.6	9.2	7.9	7.4	10.8	8.4	D	8.2	D	7.3	D	4.5	8.2
2015	9.0	9.1	8.8	7.9	11.0	6.5	0.0	6.1	5.7	8.1	12.7	12.0	10.0
2020	8.4	8.3	8.4	7.3	10.2	6.5	0.0	7.4	7.0	7.3	7.5	11.9	16.7
Unknown (%)[d]													
1990	14.7	13.7	16.9	15.5	12.6	25.8	28.6	14.5	31.4	14.8	na	8.7	22.4
1995	13.4	12.1	15.8	13.7	12.4	19.1	16.7	14.5	21.7	12.8	na	38.5	8.6
2000	11.0	10.2	12.4	10.8	11.6	9.6	20.8	12.5	14.4	10.3	na	20.0	7.4
2005	7.6	7.2	8.1	7.7	7.2	7.4	10.5	8.6	9.7	7.5	3.8	11.8	12.8
2010	11.0	10.6	11.5	9.9	12.4	D	D	11.3	D	9.1	9.0	22.7	17.9
2015	6.9	6.7	7.1	6.0	8.6	5.5	4.3	7.2	9.7	5.8	2.9	4.0	16.7
2020	14.4	14.3	14.5	12.5	17.1	15.0	15.4	14.1	12.1	11.7	15.7	15.3	45.8

D = suppressed to avoid disclosure of confidential information.

na = not applicable; respondents were instructed to indicate only one race.

[a] Includes respondents who did not report sex and respondents who did not report citizenship status.

[b] Includes Native Hawaiians or Other Pacific Islanders through 2000, but excludes them since 2001.

[c] Before 2001, this category included respondents who selected more than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

[d] Percentages based on number reporting definite commitments for postdoctoral study or training.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 51

Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2020

(Number)

Citizenship status and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
All doctorate recipients[c]	55,283	35,289	31,845	12,289	7,744	7,831	3,981	3,430	14
Life sciences	12,561	7,784	7,141	4,172	1,091	1,274	604	640	3
Agricultural sciences and natural resources	1,472	919	765	354	159	135	117	153	1
Biological and biomedical sciences	8,418	5,181	4,855	3,268	431	914	242	325	1
Health sciences	2,671	1,684	1,521	550	501	225	245	162	1
Physical sciences and earth sciences	6,247	4,047	3,648	2,104	252	1,062	230	399	0
Chemistry	2,763	1,692	1,571	867	104	536	64	121	0
Geosciences, atmospheric sciences, and ocean sciences	1,243	845	741	463	70	115	93	104	0
Physics and astronomy	2,241	1,510	1,336	774	78	411	73	174	0
Mathematics and computer sciences	4,392	3,088	2,719	738	525	1,287	169	365	4
Computer and information sciences	2,361	1,687	1,497	282	271	848	96	188	2
Mathematics and statistics	2,031	1,401	1,222	456	254	439	73	177	2
Psychology and social sciences	8,946	6,042	5,399	2,245	1,608	693	853	641	2
Psychology	3,879	2,655	2,573	1,544	417	302	310	82	0
Anthropology	448	246	206	71	85	11	39	40	0
Economics	1,216	920	693	128	234	194	137	227	0
Political science and government	637	444	386	126	175	31	54	57	1
Sociology	607	428	384	106	212	25	41	43	1
Other social sciences	2,159	1,349	1,157	270	485	130	272	192	0
Engineering	10,476	6,607	5,985	2,149	394	2,952	490	618	4
Aerospace, aeronautical, and astronautical engineering	399	263	245	75	28	87	55	18	0
Bioengineering and biomedical engineering	1,083	631	590	310	29	225	26	40	1
Chemical engineering	994	598	551	221	11	305	14	46	1
Civil engineering	796	461	395	161	39	141	54	65	1
Electrical, electronics, and communications engineering	1,973	1,348	1,225	293	58	788	86	122	1
Industrial and manufacturing engineering	304	186	157	30	36	79	12	29	0
Materials science engineering	880	513	473	214	10	222	27	40	0
Mechanical engineering	1,634	1,007	918	377	61	415	65	89	0
Other engineering	2,413	1,600	1,431	468	122	690	151	169	0
Education	4,716	3,110	2,907	281	1,433	198	995	203	0
Education administration	927	645	624	13	246	31	334	21	0
Education research	2,312	1,543	1,442	184	749	124	385	101	0

Table 51

Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2020

(Number)

Citizenship status and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Teacher education	113	66	59	D	33	D	20	7	0
Teaching fields	940	603	544	55	301	25	163	59	0
Other education	424	253	238	D	104	D	93	15	0
Humanities and arts	4,939	2,604	2,320	421	1,328	138	433	284	0
Foreign languages and literature	564	302	264	37	185	11	31	38	0
History	887	509	452	115	221	26	90	57	0
Letters	1,392	714	659	94	446	38	81	55	0
Other humanities and arts	2,096	1,079	945	175	476	63	231	134	0
Other[d]	3,006	2,007	1,726	179	1,113	227	207	280	1
Business management and administration	1,466	1,049	881	46	646	123	66	167	1
Communication	593	381	342	46	239	35	22	39	0
Non-S&E fields nec	947	577	503	87	228	69	119	74	0
U.S. citizen or permanent resident	34,492	22,933	22,176	7,935	6,242	4,300	3,699	753	4
Life sciences	8,707	5,537	5,386	2,941	959	926	560	149	2
Agricultural sciences and natural resources	796	527	500	171	131	92	106	27	0
Biological and biomedical sciences	6,008	3,744	3,643	2,373	378	673	219	100	1
Health sciences	1,903	1,266	1,243	397	450	161	235	22	1
Physical sciences and earth sciences	3,741	2,471	2,342	1,249	210	670	213	129	0
Chemistry	1,696	1,048	1,019	508	84	365	62	29	0
Geosciences, atmospheric sciences, and ocean sciences	811	577	542	315	63	81	83	35	0
Physics and astronomy	1,234	846	781	426	63	224	68	65	0
Mathematics and computer sciences	1,736	1,242	1,171	299	308	430	134	70	1
Computer and information sciences	808	597	569	97	131	267	74	27	1
Mathematics and statistics	928	645	602	202	177	163	60	43	0
Psychology and social sciences	6,605	4,747	4,592	1,941	1,329	527	795	155	0
Psychology	3,317	2,482	2,443	1,455	399	284	305	39	0
Anthropology	366	205	185	58	79	10	38	20	0
Economics	459	377	359	69	111	D	D	18	0
Political science and government	460	335	320	90	150	D	D	15	0
Sociology	488	353	344	87	193	D	D	9	0
Other social sciences	1,515	995	941	182	397	105	257	54	0
Engineering	4,154	2,762	2,701	817	211	1,261	412	60	1
Aerospace, aeronautical, and astronautical engineering	221	163	D	36	D	57	51	D	0

Table 51

Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2020

(Number)

Citizenship status and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Bioengineering and biomedical engineering	689	397	387	178	19	167	23	10	0
Chemical engineering	465	304	295	D	D	161	13	9	0
Civil engineering	245	155	148	38	19	49	42	6	1
Electrical, electronics, and communications engineering	552	413	404	72	28	238	66	9	0
Industrial and manufacturing engineering	82	45	D	D	8	22	10	D	0
Materials science engineering	398	253	243	D	D	127	25	10	0
Mechanical engineering	601	408	D	D	42	174	55	D	0
Other engineering	901	624	614	158	63	266	127	10	0
Education	3,896	2,760	2,730	237	1,337	180	976	30	0
Education administration	818	622	616	D	D	31	332	6	0
Education research	1,872	1,343	1,328	D	694	D	372	15	0
Teacher education	94	D	D	D	D	D	20	0	0
Teaching fields	751	D	498	D	268	D	159	D	0
Other education	361	238	D	25	D	D	93	D	0
Humanities and arts	3,915	2,196	2,075	336	1,189	133	417	121	0
Foreign languages and literature	349	200	187	20	129	11	27	13	0
History	746	431	405	D	199	D	88	26	0
Letters	1,165	648	625	D	424	D	79	23	0
Other humanities and arts	1,655	917	858	D	437	D	223	59	0
Other[d]	1,738	1,218	1,179	115	699	173	192	39	0
Business management and administration	709	517	492	21	329	87	55	25	0
Communication	412	276	269	33	187	29	20	7	0
Non-S&E fields nec	617	425	418	61	183	57	117	7	0
Temporary visa holder	18,482	12,223	9,558	4,317	1,479	3,504	258	2,660	5
Life sciences	3,430	2,222	1,734	1,219	130	345	40	488	0
Agricultural sciences and natural resources	633	389	264	183	28	43	10	125	0
Biological and biomedical sciences	2,176	1,420	1,197	885	52	239	21	223	0
Health sciences	621	413	273	151	50	63	9	140	0
Physical sciences and earth sciences	2,311	1,560	1,291	846	42	388	15	269	0
Chemistry	994	641	549	357	20	170	2	92	0
Geosciences, atmospheric sciences, and ocean sciences	391	266	198	147	7	34	10	68	0
Physics and astronomy	926	653	544	342	15	184	3	109	0
Mathematics and computer sciences	2,475	1,825	1,531	438	215	849	29	291	3

Table 51

Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2020

(Number)

Citizenship status and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Computer and information sciences	1,452	1,078	918	185	138	575	20	159	1
Mathematics and statistics	1,023	747	613	253	77	274	9	132	2
Psychology and social sciences	1,832	1,271	786	296	272	164	54	485	0
Psychology	257	165	122	83	18	18	3	43	0
Anthropology	63	40	20	13	6	0	1	20	0
Economics	691	536	327	59	119	D	D	209	0
Political science and government	152	107	65	36	24	D	D	42	0
Sociology	101	72	38	18	18	D	D	34	0
Other social sciences	568	351	214	87	87	25	15	137	0
Engineering	5,955	3,819	3,264	1,328	181	1,681	74	553	2
Aerospace, aeronautical, and astronautical engineering	163	97	D	38	D	28	4	D	0
Bioengineering and biomedical engineering	364	234	203	132	10	58	3	30	1
Chemical engineering	482	292	256	D	D	144	1	36	0
Civil engineering	513	304	246	123	19	92	12	58	0
Electrical, electronics, and communications engineering	1,344	929	815	221	30	545	19	113	1
Industrial and manufacturing engineering	200	140	D	D	28	57	1	D	0
Materials science engineering	463	259	229	D	D	95	2	30	0
Mechanical engineering	983	595	D	D	19	240	9	D	0
Other engineering	1,443	969	812	309	58	422	23	157	0
Education	661	347	175	44	95	18	18	172	0
Education administration	59	21	7	D	D	0	1	14	0
Education research	387	199	113	D	54	D	13	86	0
Teacher education	18	D	D	0	D	D	0	7	0
Teaching fields	163	D	46	D	33	D	4	D	0
Other education	34	15	D	D	D	0	0	D	0
Humanities and arts	742	400	238	83	135	5	15	162	0
Foreign languages and literature	185	100	75	15	56	0	4	25	0
History	120	77	46	D	21	D	2	31	0
Letters	131	65	33	D	21	D	2	32	0
Other humanities and arts	306	158	84	D	37	D	7	74	0
Other[d]	1,076	779	539	63	409	54	13	240	0
Business management and administration	658	524	383	25	312	36	10	141	0
Communication	154	105	73	13	52	6	2	32	0

Table 51

Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2020

(Number)

Citizenship status and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Non-S&E fields nec	264	150	83	25	45	12	1	67	0

D = suppressed to avoid disclosure of confidential information.

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

[a] Includes doctorate recipients who indicated self-employment.
[b] Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.
[c] Includes respondents who did not report citizenship status.
[d] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields. Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 52

Definite postgraduation commitments of doctorate recipients, by sex and major field of study: 2020

(Number)

Sex and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
All doctorate recipients[c]	55,283	35,289	31,845	12,289	7,744	7,831	3,981	3,430	14
Life sciences	12,561	7,784	7,141	4,172	1,091	1,274	604	640	3
Agricultural sciences and natural resources	1,472	919	765	354	159	135	117	153	1
Biological and biomedical sciences	8,418	5,181	4,855	3,268	431	914	242	325	1
Health sciences	2,671	1,684	1,521	550	501	225	245	162	1
Physical sciences and earth sciences	6,247	4,047	3,648	2,104	252	1,062	230	399	0
Chemistry	2,763	1,692	1,571	867	104	536	64	121	0
Geosciences, atmospheric sciences, and ocean sciences	1,243	845	741	463	70	115	93	104	0
Physics and astronomy	2,241	1,510	1,336	774	78	411	73	174	0
Mathematics and computer sciences	4,392	3,088	2,719	738	525	1,287	169	365	4
Computer and information sciences	2,361	1,687	1,497	282	271	848	96	188	2
Mathematics and statistics	2,031	1,401	1,222	456	254	439	73	177	2
Psychology and social sciences	8,946	6,042	5,399	2,245	1,608	693	853	641	2
Psychology	3,879	2,655	2,573	1,544	417	302	310	82	0
Anthropology	448	246	206	71	85	11	39	40	0
Economics	1,216	920	693	128	234	194	137	227	0
Political science and government	637	444	386	126	175	31	54	57	1
Sociology	607	428	384	106	212	25	41	43	1
Other social sciences	2,159	1,349	1,157	270	485	130	272	192	0
Engineering	10,476	6,607	5,985	2,149	394	2,952	490	618	4
Aerospace, aeronautical, and astronautical engineering	399	263	245	75	28	87	55	18	0
Bioengineering and biomedical engineering	1,083	631	590	310	29	225	26	40	1
Chemical engineering	994	598	551	221	11	305	14	46	1
Civil engineering	796	461	395	161	39	141	54	65	1
Electrical, electronics, and communications engineering	1,973	1,348	1,225	293	58	788	86	122	1
Industrial and manufacturing engineering	304	186	157	30	36	79	12	29	0
Materials science engineering	880	513	473	214	10	222	27	40	0
Mechanical engineering	1,634	1,007	918	377	61	415	65	89	0
Other engineering	2,413	1,600	1,431	468	122	690	151	169	0
Education	4,716	3,110	2,907	281	1,433	198	995	203	0
Education administration	927	645	624	13	246	31	334	21	0
Education research	2,312	1,543	1,442	184	749	124	385	101	0

Table 52

Definite postgraduation commitments of doctorate recipients, by sex and major field of study: 2020

(Number)

Sex and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Teacher education	113	66	59	D	33	D	20	7	0
Teaching fields	940	603	544	55	301	25	163	59	0
Other education	424	253	238	D	104	D	93	15	0
Humanities and arts	4,939	2,604	2,320	421	1,328	138	433	284	0
Foreign languages and literature	564	302	264	37	185	11	31	38	0
History	887	509	452	115	221	26	90	57	0
Letters	1,392	714	659	94	446	38	81	55	0
Other humanities and arts	2,096	1,079	945	175	476	63	231	134	0
Other[d]	3,006	2,007	1,726	179	1,113	227	207	280	1
Business management and administration	1,466	1,049	881	46	646	123	66	167	1
Communication	593	381	342	46	239	35	22	39	0
Non-S&E fields nec	947	577	503	87	228	69	119	74	0
Male	29,886	19,286	17,085	6,641	3,451	5,167	1,826	2,192	9
Life sciences	5,553	3,493	3,161	1,929	417	599	216	331	1
Agricultural sciences and natural resources	746	482	385	180	81	67	57	97	0
Biological and biomedical sciences	3,892	2,403	2,247	1,543	181	437	86	156	0
Health sciences	915	608	529	206	155	95	73	78	1
Physical sciences and earth sciences	4,177	2,750	2,455	1,445	148	735	127	295	0
Chemistry	1,669	1,040	961	569	51	312	29	79	0
Geosciences, atmospheric sciences, and ocean sciences	737	503	435	276	36	81	42	68	0
Physics and astronomy	1,771	1,207	1,059	600	61	342	56	148	0
Mathematics and computer sciences	3,297	2,319	2,029	557	358	998	116	287	3
Computer and information sciences	1,859	1,344	1,194	226	201	694	73	148	2
Mathematics and statistics	1,438	975	835	331	157	304	43	139	1
Psychology and social sciences	3,588	2,443	2,084	734	667	313	370	358	1
Psychology	1,082	738	704	395	127	96	86	34	0
Anthropology	145	77	64	17	D	D	14	13	0
Economics	809	611	450	87	148	120	95	161	0
Political science and government	388	263	231	70	D	D	35	31	1
Sociology	243	176	153	46	81	7	19	23	0
Other social sciences	921	578	482	119	176	66	121	96	0
Engineering	7,882	5,028	4,516	1,613	263	2,262	378	509	3
Aerospace, aeronautical, and astronautical engineering	329	210	197	61	21	73	42	13	0
Bioengineering and biomedical engineering	653	381	349	184	15	134	16	31	1

Table 52

Definite postgraduation commitments of doctorate recipients, by sex and major field of study: 2020

(Number)

Sex and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Chemical engineering	695	413	377	150	D	D	13	36	0
Civil engineering	586	339	289	128	D	D	37	49	1
Electrical, electronics, and communications engineering	1,630	1,125	1,015	252	41	650	72	109	1
Industrial and manufacturing engineering	209	129	106	24	22	52	8	23	0
Materials science engineering	638	382	350	162	D	D	18	32	0
Mechanical engineering	1,373	855	771	319	46	350	56	84	0
Other engineering	1,769	1,194	1,062	333	79	534	116	132	0
Education	1,456	973	894	73	465	62	294	79	0
Education administration	346	243	235	D	99	D	118	8	0
Education research	675	459	415	50	224	37	104	44	0
Teacher education	28	16	16	0	12	D	D	0	0
Teaching fields	292	190	168	15	102	D	D	22	0
Other education	115	65	60	D	28	D	23	5	0
Humanities and arts	2,516	1,322	1,157	221	611	87	238	165	0
Foreign languages and literature	223	122	102	17	73	5	7	20	0
History	512	284	253	65	115	20	53	31	0
Letters	589	299	273	41	173	21	38	26	0
Other humanities and arts	1,192	617	529	98	250	41	140	88	0
Other[d]	1,417	958	789	69	522	111	87	168	1
Business management and administration	851	618	507	27	369	72	39	110	1
Communication	230	139	125	15	84	16	10	14	0
Non-S&E fields nec	336	201	157	27	69	23	38	44	0
Female	25,392	16,003	14,760	5,648	4,293	2,664	2,155	1,238	5
Life sciences	7,007	4,291	3,980	2,243	674	675	388	309	2
Agricultural sciences and natural resources	725	437	380	174	78	68	60	56	1
Biological and biomedical sciences	4,526	2,778	2,608	1,725	250	477	156	169	1
Health sciences	1,756	1,076	992	344	346	130	172	84	0
Physical sciences and earth sciences	2,068	1,297	1,193	659	104	327	103	104	0
Chemistry	1,092	652	610	298	53	224	35	42	0
Geosciences, atmospheric sciences, and ocean sciences	506	342	306	187	34	34	51	36	0
Physics and astronomy	470	303	277	174	17	69	17	26	0
Mathematics and computer sciences	1,095	769	690	181	167	289	53	78	1
Computer and information sciences	502	343	303	56	70	154	23	40	0

Table 52

Definite postgraduation commitments of doctorate recipients, by sex and major field of study: 2020

(Number)

Sex and field	All recipients	Recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment[a]	Other[b]		
Mathematics and statistics	593	426	387	125	97	135	30	38	1
Psychology and social sciences	5,358	3,599	3,315	1,511	941	380	483	283	1
Psychology	2,797	1,917	1,869	1,149	290	206	224	48	0
Anthropology	303	169	142	54	D	D	25	27	0
Economics	407	309	243	41	86	74	42	66	0
Political science and government	249	181	155	56	D	D	19	26	0
Sociology	364	252	231	60	131	18	22	20	1
Other social sciences	1,238	771	675	151	309	64	151	96	0
Engineering	2,593	1,579	1,469	536	131	690	112	109	1
Aerospace, aeronautical, and astronautical engineering	70	53	48	14	7	14	13	5	0
Bioengineering and biomedical engineering	430	250	241	126	14	91	10	9	0
Chemical engineering	299	185	174	71	D	D	1	10	1
Civil engineering	210	122	106	33	D	D	17	16	0
Electrical, electronics, and communications engineering	343	223	210	41	17	138	14	13	0
Industrial and manufacturing engineering	95	57	51	6	14	27	4	6	0
Materials science engineering	242	131	123	52	D	D	9	8	0
Mechanical engineering	261	152	147	58	15	65	9	5	0
Other engineering	643	406	369	135	43	156	35	37	0
Education	3,259	2,137	2,013	208	968	136	701	124	0
Education administration	580	402	389	D	147	D	216	13	0
Education research	1,637	1,084	1,027	134	525	87	281	57	0
Teacher education	85	50	43	D	21	D	D	7	0
Teaching fields	648	413	376	40	199	D	D	37	0
Other education	309	188	178	22	76	10	70	10	0
Humanities and arts	2,423	1,282	1,163	200	717	51	195	119	0
Foreign languages and literature	341	180	162	20	112	6	24	18	0
History	375	225	199	50	106	6	37	26	0
Letters	803	415	386	53	273	17	43	29	0
Other humanities and arts	904	462	416	77	226	22	91	46	0
Other[d]	1,589	1,049	937	110	591	116	120	112	0
Business management and administration	615	431	374	19	277	51	27	57	0
Communication	363	242	217	31	155	19	12	25	0
Non-S&E fields nec	611	376	346	60	159	46	81	30	0

D = suppressed to avoid disclosure of confidential information.

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

[a] Includes doctorate recipients who indicated self-employment.
[b] Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.
[c] Includes respondents who did not report sex.
[d] Includes other non-S&E fields not shown separately.

Note(s):
See table A-6 in the technical notes for a listing of major fields and their constituent subfields. Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 53

Doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country of citizenship: 2014–20

(Number and percent)

Country of citizenship	Total, 2014–20		2014		2015		2016		2017		2018		2019		2020	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
All temporary visa holders	119,125	72.2	15,839	71.1	16,129	71.3	16,477	72.5	16,288	74.3	17,586	72.0	18,324	71.2	18,482	73.0
Africa	4,926	70.1	648	66.8	649	66.4	653	70.8	700	70.9	745	70.6	743	72.0	788	72.6
Egypt	983	71.5	135	70.4	129	62.8	117	66.7	156	69.9	156	73.7	163	74.8	127	81.1
Nigeria	848	79.5	87	82.8	83	75.9	112	83.9	113	77.9	147	75.5	145	81.4	161	79.5
Ghana	615	70.6	62	77.4	83	65.1	87	70.1	85	71.8	103	66.0	88	72.7	107	72.9
Libya	411	67.2	58	36.2	60	71.7	67	65.7	48	75.0	56	76.8	61	68.9	61	77.0
Kenya	390	69.2	72	70.8	57	68.4	60	66.7	57	63.2	50	68.0	38	78.9	56	71.4
South Africa	176	52.8	32	53.1	25	52.0	20	60.0	20	45.0	26	53.8	29	51.7	24	54.2
Uganda	155	51.0	27	44.4	23	60.9	16	56.3	19	47.4	20	50.0	20	45.0	30	53.3
Other	1,348	68.7	175	66.9	189	65.6	174	71.3	202	73.3	187	70.1	199	67.8	222	66.2
Americas	10,642	58.1	1,542	55.6	1,480	55.7	1,503	57.5	1,445	56.5	1,474	60.0	1,534	60.8	1,664	60.3
Canada	3,015	58.5	488	55.1	454	56.6	408	56.6	409	59.2	431	62.2	427	62.3	398	57.8
Mexico	1,396	62.5	193	54.9	194	53.1	221	61.1	180	69.4	185	71.4	187	64.2	236	64.0
Colombia	1,374	58.0	216	56.9	183	68.3	187	61.5	190	48.4	205	52.7	202	58.9	191	60.2
Brazil	1,361	58.7	139	50.4	149	50.3	156	56.4	168	61.3	178	61.2	253	63.6	318	60.7
Chile	757	34.3	99	35.4	103	32.0	130	32.3	128	25.8	91	39.6	100	35.0	106	43.4
Argentina	424	63.4	67	64.2	64	53.1	65	61.5	52	69.2	60	66.7	52	61.5	64	68.8
Peru	370	65.7	58	53.4	53	66.0	56	69.6	50	70.0	46	50.0	51	76.5	56	73.2
Ecuador	310	43.9	34	47.1	42	38.1	42	40.5	49	36.7	44	38.6	50	42.0	49	63.3
Jamaica	230	68.7	25	68.0	36	69.4	34	76.5	29	69.0	44	54.5	32	68.8	30	80.0
Venezuela	213	80.3	40	82.5	29	75.9	27	D	31	67.7	26	76.9	28	82.1	32	D
Costa Rica	201	44.8	28	57.1	31	38.7	33	42.4	24	45.8	28	50.0	26	38.5	31	41.9
Other	991	63.0	155	63.9	142	61.3	144	D	135	60.0	136	68.4	126	66.7	153	D
Asia	78,061	77.7	10,752	75.8	10,885	76.0	11,016	78.1	10,640	80.0	11,324	77.5	11,621	77.2	11,823	79.0
China[a]	40,277	80.7	4,982	81.3	5,374	81.1	5,527	81.0	5,553	83.3	6,188	79.4	6,316	79.2	6,337	80.1
India	15,067	86.7	2,316	86.2	2,229	84.6	2,195	87.2	1,970	88.5	2,045	87.1	2,056	85.9	2,256	88.0
South Korea	8,136	64.9	1,284	60.7	1,234	62.9	1,229	66.7	1,128	68.5	1,040	63.7	1,167	65.3	1,054	67.0
Taiwan	3,868	74.3	668	68.6	614	70.4	592	77.9	520	76.7	514	78.0	492	73.4	468	76.9
Bangladesh	1,678	87.1	139	83.5	154	87.7	185	90.3	236	88.1	280	88.2	292	86.0	392	86.0
Nepal	1,484	89.8	172	84.9	177	88.1	222	88.7	221	91.9	225	88.9	241	89.6	226	94.7
Thailand	1,269	27.6	231	26.4	220	21.4	185	30.3	171	25.7	177	31.1	159	30.2	126	31.0
Sri Lanka	1,025	81.9	139	81.3	133	76.7	132	78.0	146	81.5	150	85.3	151	83.4	174	85.1
Vietnam	992	75.6	142	76.8	134	74.6	124	71.8	133	75.9	122	80.3	168	76.2	169	74.0
Japan	980	49.8	173	48.6	164	39.6	166	53.6	117	58.1	118	50.0	128	51.6	114	50.0
Pakistan	845	57.0	127	47.2	124	54.0	102	45.1	113	54.0	110	59.1	112	64.3	157	70.7

Table 53

Doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country of citizenship: 2014–20

(Number and percent)

Country of citizenship	Total, 2014–20		2014		2015		2016		2017		2018		2019		2020	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Singapore	679	38.7	97	38.1	102	36.3	91	38.5	101	41.6	81	25.9	100	38.0	107	49.5
Indonesia	530	41.9	78	38.5	53	37.7	92	43.5	69	50.7	81	34.6	79	43.0	78	44.9
Malaysia	517	49.9	88	46.6	79	38.0	72	55.6	65	47.7	83	59.0	71	50.7	59	52.5
Philippines	348	70.4	70	67.1	40	75.0	51	76.5	47	70.2	57	73.7	38	65.8	45	64.4
Other	366	62.0	46	56.5	54	63.0	51	60.8	50	58.0	53	62.3	51	68.6	61	63.9
Australia-Oceania	518	60.0	64	45.3	83	55.4	65	61.5	79	62.0	66	57.6	81	71.6	80	63.8
Australia	326	62.3	44	43.2	52	48.1	42	66.7	47	72.3	37	64.9	53	73.6	51	66.7
New Zealand	176	56.3	D	D	26	65.4	23	52.2	D	D	23	56.5	D	D	D	D
Other	16	56.3	D	D	5	80.0	0	0.0	D	D	6	16.7	D	D	D	D
Europe	12,469	64.2	1,802	63.4	1,832	61.4	1,776	62.7	1,785	67.4	1,807	63.3	1,757	64.4	1,710	67.3
Turkey	3,092	62.0	426	62.9	469	59.7	472	57.6	496	61.1	454	59.7	406	64.5	369	70.5
Germany	1,181	56.6	203	51.2	195	51.3	183	61.2	154	68.2	144	54.2	152	57.9	150	54.0
Italy	1,093	66.5	156	64.1	126	65.1	167	65.9	161	70.8	139	72.7	174	63.8	170	64.1
Russian Federation (former USSR)	829	75.8	106	72.6	118	78.0	108	69.4	112	81.3	154	73.4	111	73.0	120	82.5
France	826	65.7	114	67.5	131	58.8	105	66.7	107	69.2	133	64.7	118	67.8	118	66.9
United Kingdom	772	61.3	97	70.1	100	55.0	115	54.8	103	60.2	110	60.0	128	62.5	119	66.4
Spain	695	62.4	68	60.3	98	60.2	73	61.6	100	74.0	104	61.5	130	57.7	122	62.3
Greece	631	74.2	81	72.8	84	71.4	84	71.4	89	73.0	114	78.1	90	73.3	89	77.5
Romania	350	78.0	79	78.5	57	82.5	51	88.2	43	81.4	47	61.7	48	D	25	D
Ukraine	283	79.2	51	72.5	42	85.7	31	71.0	37	83.8	35	74.3	43	81.4	44	84.1
Poland	254	66.5	48	64.6	48	70.8	27	70.4	30	66.7	33	60.6	34	70.6	34	61.8
Netherlands	230	53.9	32	34.4	23	56.5	40	50.0	27	55.6	30	66.7	38	55.3	40	60.0
Bulgaria	209	79.4	42	66.7	34	70.6	44	88.6	30	D	23	78.3	21	D	15	D
Switzerland	183	53.6	25	64.0	23	65.2	18	44.4	32	65.6	42	38.1	21	38.1	22	63.6
Portugal	180	52.8	22	63.6	24	45.8	33	39.4	32	56.3	25	52.0	24	62.5	20	55.0
Hungary	150	58.7	26	61.5	23	56.5	20	45.0	20	D	20	40.0	17	D	24	66.7
Sweden	107	53.3	15	46.7	18	50.0	19	63.2	14	64.3	14	64.3	12	D	15	46.7
Other	1,404	61.3	211	59.7	219	53.9	186	64.5	198	D	186	62.9	190	61.1	214	63.1
Middle East	10,811	61.3	938	65.9	1,131	66.9	1,309	63.9	1,500	62.1	1,752	62.3	2,080	56.5	2,101	58.0
Iran	5,437	91.3	483	89.2	629	89.7	695	91.1	767	92.6	937	91.4	964	91.5	962	92.2
Saudi Arabia	2,390	13.2	105	17.1	134	14.2	238	10.1	339	10.3	404	14.9	555	12.8	615	14.3
Jordan	730	47.9	110	40.9	128	44.5	98	44.9	114	44.7	77	57.1	89	56.2	114	51.8
Israel	540	54.1	81	61.7	86	59.3	83	51.8	77	49.4	64	50.0	80	53.8	69	50.7
Lebanon	341	74.2	50	66.0	39	64.1	57	70.2	52	78.8	51	76.5	53	79.2	39	84.6
Other	1,373	33.1	109	37.6	115	35.7	138	37.7	151	37.7	219	27.4	339	26.0	302	38.4

Table 53

Doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country of citizenship: 2014–20

(Number and percent)

Country of citizenship	Total, 2014–20		2014		2015		2016		2017		2018		2019		2020	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Country unknown	1,698	44.6	93	24.7	69	47.8	155	12.9	139	62.6	418	45.5	508	49.4	316	48.4

D = suppressed to avoid disclosure of confidential information.

[a] Includes Hong Kong.

Note(s):
Percentages based on all doctorate recipients on temporary visas who indicated where they intended to stay after graduation (United States versus foreign location), not just those with definite commitments for employment or postdoctoral study.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 54

Statistical profile of doctorate recipients, by sex and broad field of study: 2020

(Number, percent, and median years)

Characteristic	All fields	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
All doctorate recipients (number)[c]	55,283	12,561	6,247	4,392	8,946	10,476	4,716	4,939	3,006
Sex (%)									
Male	54.1	44.2	66.9	75.1	40.1	75.2	30.9	50.9	47.1
Female	45.9	55.8	33.1	24.9	59.9	24.8	69.1	49.1	52.9
Unknown	*	*	*	0.0	0.0	*	*	0.0	0.0
Citizenship (%)									
U.S. citizen or permanent resident	62.4	69.3	59.9	39.5	73.8	39.7	82.6	79.3	57.8
Temporary visa holder	33.4	27.3	37.0	56.4	20.5	56.8	14.0	15.0	35.8
Unknown	4.2	3.4	3.1	4.1	5.7	3.5	3.4	5.7	6.4
Marital status (%)									
Never married	36.9	37.8	47.4	43.9	31.9	45.3	19.4	29.2	26.0
Married	41.3	41.5	32.9	37.9	40.7	38.3	56.1	44.2	46.9
Marriage-like relationship	7.0	8.2	8.4	5.4	9.6	4.4	5.0	8.1	4.6
Separated, divorced, widowed	3.3	3.0	1.8	1.8	4.1	1.4	7.5	4.9	5.7
Unknown	11.5	9.4	9.6	11.0	13.8	10.7	12.0	13.6	16.9
Bachelor's in same field as doctorate (%)[d]	56.7	51.9	69.9	61.5	51.9	78.8	24.7	52.2	36.2
Master's earned (%)	70.5	52.6	53.3	72.3	83.0	73.0	89.0	83.5	81.4
Age at doctorate (median years)	31.5	31.1	29.6	30.4	32.3	30.2	38.5	34.2	34.8
Time to doctorate (median years)									
From bachelor's	8.7	8.3	7.0	7.9	9.3	7.5	15.0	11.1	11.3
From graduate school start	7.5	6.9	6.3	7.0	7.9	6.8	12.0	9.6	9.3
From doctoral program start[e]	5.8	5.5	5.5	5.6	6.0	5.3	5.8	6.8	5.3
Male doctorate recipients (number)	29,886	5,553	4,177	3,297	3,588	7,882	1,456	2,516	1,417
Citizenship (%)									
U.S. citizen or permanent resident	56.2	65.9	58.2	39.1	68.5	38.4	81.0	79.7	52.1
Temporary visa holder	39.7	30.6	38.5	56.8	26.4	58.1	15.4	14.2	41.3
Unknown	4.1	3.5	3.4	4.2	5.1	3.4	3.6	6.2	6.6
Marital status (%)									
Never married	39.0	38.5	48.0	44.0	32.2	45.1	18.6	28.0	26.0
Married	41.2	42.1	32.9	38.0	43.8	39.0	58.1	46.6	48.3
Marriage-like relationship	6.1	7.5	7.6	5.0	8.4	4.1	5.0	7.2	3.9
Separated, divorced, widowed	2.2	2.3	1.5	1.4	3.0	1.2	5.2	4.2	3.6

Table 54

Statistical profile of doctorate recipients, by sex and broad field of study: 2020

(Number, percent, and median years)

Characteristic	All fields	Life sciences[a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other[b]
Unknown	11.5	9.6	10.1	11.6	12.7	10.6	13.0	13.9	18.2
Bachelor's in same field as doctorate (%)[d]	60.6	50.0	70.1	61.1	50.3	80.7	21.8	54.9	36.6
Master's earned (%)	69.0	50.0	54.5	71.2	82.2	73.4	88.0	82.8	79.5
Age at doctorate (median years)	31.3	31.2	29.7	30.6	32.8	30.3	38.6	34.4	34.8
Time to doctorate (median years)									
From bachelor's	8.3	8.2	7.0	7.9	9.4	7.6	14.6	11.1	11.0
From graduate school start	7.3	6.9	6.3	7.0	7.9	6.9	12.0	9.7	9.0
From doctoral program start[e]	5.7	5.5	5.7	5.7	5.8	5.3	5.6	6.8	5.0
Female doctorate recipients (number)	25,392	7,007	2,068	1,095	5,358	2,593	3,259	2,423	1,589
Citizenship (%)									
U.S. citizen or permanent resident	69.7	72.0	63.4	40.9	77.4	43.4	83.4	78.9	62.9
Temporary visa holder	26.0	24.7	34.0	55.1	16.5	52.9	13.4	15.9	30.9
Unknown	4.2	3.3	2.6	4.0	6.1	3.7	3.2	5.2	6.2
Marital status (%)									
Never married	34.4	37.2	46.2	43.7	31.7	46.0	19.8	30.4	26.0
Married	41.3	41.0	32.8	37.7	38.6	36.0	55.2	41.6	45.6
Marriage-like relationship	8.1	8.8	10.1	6.5	10.3	5.2	5.0	9.0	5.2
Separated, divorced, widowed	4.6	3.6	2.3	2.9	4.9	1.9	8.5	5.6	7.6
Unknown	11.6	9.3	8.7	9.1	14.5	10.9	11.5	13.4	15.7
Bachelor's in same field as doctorate (%)[d]	52.1	53.5	69.5	62.7	52.9	73.1	26.0	49.4	35.9
Master's earned (%)	72.1	54.6	51.0	75.8	83.5	71.7	89.4	84.2	83.1
Age at doctorate (median years)	31.8	30.9	29.3	30.1	32.1	29.8	38.4	33.8	34.9
Time to doctorate (median years)									
From bachelor's	9.2	8.3	6.7	7.8	9.3	7.3	15.0	11.0	11.5
From graduate school start	7.8	7.0	6.0	6.9	7.9	6.6	12.0	9.6	9.8
From doctoral program start[e]	5.8	5.4	5.3	5.3	6.0	5.2	5.8	6.8	5.3

* = value between 0.00% and 0.05%.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Includes respondents who did not report sex.

[d] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[e] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2020

(Number and percent)

Characteristic	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
All doctorate recipients (number)[c]	55,283	12,561	6,247	4,392	8,946	10,476	4,716	4,939	3,006
Postgraduation status (number)[d]									
Definite postgraduation study	13,546	4,432	2,374	906	2,450	2,332	305	533	214
Definite employment	21,743	3,352	1,673	2,182	3,592	4,275	2,805	2,071	1,793
Seeking employment or study	13,677	3,313	1,645	886	1,765	2,875	1,050	1,612	531
Other[e]	1,496	597	113	67	188	175	127	166	63
Definite postgraduation study (%)[f]									
Postdoc fellowship or research associateship	94.1	93.2	97.9	95.7	90.0	95.7	92.5	94.7	95.3
Other or unknown[g]	5.9	6.8	2.1	4.3	10.0	4.3	7.5	5.3	4.7
Definite employment (%)[h]									
Academe	41.9	39.0	17.9	29.5	53.1	14.1	55.9	70.4	73.2
Government	8.0	10.7	10.1	4.3	12.6	8.8	4.1	3.1	6.6
Industry or business[i]	37.9	39.4	67.1	61.9	20.3	72.6	7.4	7.3	13.7
Nonprofit organization	5.9	8.0	3.0	1.8	9.2	3.1	6.4	10.8	3.8
Other or unknown[j]	6.3	3.0	1.9	2.4	4.8	1.5	26.2	8.5	2.7
Primary activity[k]									
R&D	46.5	46.2	70.8	69.5	38.1	74.3	12.8	9.7	41.0
Teaching	28.8	25.2	12.7	20.2	33.7	7.8	40.2	67.5	38.9
Management or administration	10.1	9.1	3.7	2.0	8.5	3.6	33.0	10.6	10.9
Professional services	14.0	18.9	11.9	7.9	19.1	13.7	13.5	11.7	8.8
Other	0.6	0.6	0.9	0.5	0.6	0.6	0.5	0.5	0.5
Secondary activity[l]									
R&D	23.3	25.6	12.8	17.3	29.5	12.0	25.6	34.8	34.3
Teaching	14.3	10.8	3.0	10.1	19.6	6.4	20.1	12.9	36.8
Management or administration	10.3	13.9	14.1	5.7	9.7	12.1	9.4	9.1	4.8
Professional services	6.5	7.2	5.4	5.4	7.8	6.2	7.2	6.5	4.8
Other	0.5	0.7	0.6	0.7	0.5	0.5	0.6	0.5	0.2
No secondary activity	45.1	41.8	64.1	60.8	32.9	62.8	37.0	36.3	19.2
Activity unknown	5.4	6.3	5.2	4.6	5.5	4.8	5.5	5.8	5.5
Postgraduation location (%)[m]									
United States[n]	90.2	91.7	90.1	88.1	89.4	90.6	93.5	89.1	86.0
New England	8.6	10.9	9.9	6.9	9.1	8.0	4.5	8.1	6.9
Middle Atlantic	12.2	12.4	11.3	13.6	14.1	9.1	10.8	16.4	13.1
East North Central	10.9	10.6	9.7	9.4	10.5	10.8	14.1	11.7	11.9

Table 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2020

(Number and percent)

Characteristic	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
West North Central	4.7	5.7	3.0	2.7	5.2	3.4	6.4	5.9	5.3
South Atlantic	15.8	17.8	14.3	12.1	17.9	12.6	19.3	14.6	17.6
East South Central	4.0	4.1	2.6	1.8	3.2	3.2	8.4	5.6	5.1
West South Central	7.5	6.6	6.1	5.3	6.9	7.9	11.3	9.2	10.0
Mountain	6.2	5.1	8.5	4.3	5.8	7.6	7.6	4.8	5.0
Pacific and insular	19.7	17.9	24.3	31.0	15.9	27.5	10.8	11.9	9.9
Not in United States	9.7	8.2	9.9	11.8	10.6	9.4	6.5	10.9	14.0
Location unknown	*	*	0.0	0.1	*	0.1	0.0	0.0	*
Male doctorate recipients (number)	29,886	5,553	4,177	3,297	3,588	7,882	1,456	2,516	1,417
Postgraduation status (number)[d]									
Definite postgraduation study	7,447	2,053	1,648	692	841	1,756	81	288	88
Definite employment	11,839	1,440	1,102	1,627	1,602	3,272	892	1,034	870
Seeking employment or study	7,300	1,376	1,055	653	727	2,130	296	823	240
Other[e]	749	305	67	54	65	120	37	79	22
Definite postgraduation study (%)[f]									
Postdoc fellowship or research associateship	94.5	91.4	97.9	95.5	92.0	95.9	93.8	93.8	96.6
Other or unknown[g]	5.5	8.6	2.1	4.5	8.0	4.1	6.2	6.3	3.4
Definite employment (%)[h]									
Academe	36.1	36.9	16.0	27.4	52.6	13.5	58.5	65.6	73.3
Government	8.3	10.7	8.6	3.9	14.6	9.2	4.9	3.1	6.4
Industry or business[i]	46.1	43.4	71.2	64.5	20.6	72.9	7.0	9.1	14.3
Nonprofit organization	5.2	6.3	2.7	1.8	8.4	3.0	6.7	13.4	3.6
Other or unknown[j]	4.4	2.7	1.5	2.4	3.8	1.4	22.9	8.8	2.4
Primary activity[k]									
R&D	55.1	52.1	74.8	72.0	43.7	75.8	14.1	9.0	42.4
Teaching	24.4	23.3	10.2	18.5	33.0	7.9	36.4	66.5	39.3
Management or administration	7.9	8.0	3.1	1.9	7.2	3.6	38.6	9.8	9.6
Professional services	12.1	15.9	11.2	7.1	15.5	12.3	10.6	14.2	8.0
Other	0.6	0.7	0.8	0.5	0.6	0.5	0.2	0.5	0.7
Secondary activity[l]									
R&D	20.7	24.6	11.7	15.8	28.7	12.0	23.8	33.2	35.3
Teaching	13.2	11.4	3.1	10.4	20.5	5.9	22.3	14.7	37.2
Management or administration	10.7	14.4	13.8	6.0	9.7	12.4	10.8	10.0	5.2
Professional services	6.5	7.2	5.2	5.6	8.6	6.5	7.8	6.1	3.8
Other	0.5	0.7	0.4	0.5	0.5	0.4	0.6	0.5	0.2

Table 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2020

(Number and percent)

Characteristic	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
No secondary activity	48.5	41.7	65.9	61.8	32.1	62.8	34.8	35.5	18.2
Activity unknown	5.5	6.5	5.8	5.2	5.2	4.9	6.2	5.2	6.7
Postgraduation location (%)[m]									
United States[n]	88.6	90.5	89.3	87.5	85.3	89.8	91.9	87.5	82.4
New England	8.3	11.5	9.4	6.6	8.8	7.4	4.2	7.9	6.2
Middle Atlantic	11.6	11.3	10.9	13.5	13.4	9.2	10.7	16.0	12.1
East North Central	10.8	11.3	9.7	9.7	10.0	10.8	14.6	11.3	12.6
West North Central	4.2	6.0	2.6	2.7	4.6	3.3	6.8	6.2	5.1
South Atlantic	14.3	16.2	12.9	11.5	17.8	12.3	19.1	14.6	15.2
East South Central	3.7	4.1	2.6	1.9	3.4	3.3	8.1	5.8	4.9
West South Central	7.2	6.4	6.6	5.1	6.1	7.7	10.7	9.4	9.7
Mountain	6.3	5.4	8.4	4.2	5.4	7.7	7.4	4.0	4.9
Pacific and insular	21.6	17.9	25.7	31.5	15.2	27.5	10.0	11.4	10.2
Not in United States	11.4	9.5	10.7	12.4	14.7	10.1	8.1	12.5	17.5
Location unknown	*	*	0.0	0.1	*	0.1	0.0	0.0	0.1
Female doctorate recipients (number)	25,392	7,007	2,068	1,095	5,358	2,593	3,259	2,423	1,589
Postgraduation status (number)[d]									
Definite postgraduation study	6,099	2,379	726	214	1,609	576	224	245	126
Definite employment	9,904	1,912	571	555	1,990	1,003	1,913	1,037	923
Seeking employment or study	6,377	1,937	590	233	1,038	745	754	789	291
Other[e]	747	292	46	13	123	55	90	87	41
Definite postgraduation study (%)[f]									
Postdoc fellowship or research associateship	93.6	94.8	97.7	96.3	88.9	95.0	92.0	95.9	94.4
Other or unknown[g]	6.4	5.2	2.3	3.7	11.1	5.0	8.0	4.1	5.6
Definite employment (%)[h]									
Academe	48.7	40.5	21.5	35.7	53.5	16.1	54.7	75.1	73.1
Government	7.7	10.6	13.0	5.6	10.9	7.6	3.7	3.1	6.7
Industry or business[i]	28.0	36.5	59.2	54.2	20.1	71.5	7.6	5.5	13.1
Nonprofit organization	6.9	9.3	3.7	2.0	9.8	3.3	6.3	8.1	4.1
Other or unknown[j]	8.7	3.2	2.6	2.5	5.7	1.6	27.7	8.2	2.9
Primary activity[k]									
R&D	36.2	41.8	63.3	62.2	33.5	69.6	12.1	10.5	39.8
Teaching	34.0	26.6	17.3	25.0	34.3	7.4	41.9	68.6	38.5
Management or administration	12.8	10.0	4.7	2.2	9.6	3.8	30.4	11.3	12.0
Professional services	16.4	21.2	13.3	10.2	22.1	18.2	14.9	9.2	9.5

Table 55

Statistical profile of postgraduation plans of doctorate recipients, by sex and broad field of study: 2020

(Number and percent)

Characteristic	All fields	Life sciences [a]	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Education	Humanities and arts	Other [b]
Other	0.6	0.5	1.3	0.4	0.5	1.0	0.6	0.4	0.2
Secondary activity[l]									
R&D	26.4	26.4	15.0	21.7	30.2	11.8	26.5	36.4	33.3
Teaching	15.5	10.3	2.9	9.3	18.9	8.0	19.1	11.0	36.5
Management or administration	9.8	13.5	14.6	5.0	9.6	11.3	8.8	8.2	4.4
Professional services	6.6	7.2	5.7	5.0	7.2	5.4	6.9	6.8	5.7
Other	0.6	0.7	1.1	1.3	0.5	0.7	0.6	0.4	0.1
No secondary activity	41.1	41.9	60.8	57.8	33.6	62.7	38.1	37.1	20.0
Activity unknown	5.2	6.1	4.0	2.7	5.6	4.6	5.2	6.5	4.3
Postgraduation location (%)[m]									
United States[n]	92.2	92.8	92.0	89.7	92.1	93.0	94.2	90.7	89.3
New England	8.9	10.4	10.8	7.8	9.3	9.9	4.7	8.3	7.5
Middle Atlantic	13.1	13.3	12.0	13.9	14.6	8.6	10.9	16.9	13.9
East North Central	10.9	10.0	9.6	8.3	10.9	10.5	13.8	12.0	11.2
West North Central	5.2	5.5	4.0	2.7	5.7	3.7	6.2	5.6	5.5
South Atlantic	17.6	19.1	17.3	14.0	17.9	13.5	19.4	14.7	19.7
East South Central	4.3	4.1	2.5	1.7	3.1	3.0	8.5	5.5	5.2
West South Central	8.0	6.8	5.0	5.9	7.4	8.6	11.5	9.0	10.2
Mountain	6.1	4.8	8.6	4.8	6.2	7.3	7.6	5.6	5.1
Pacific and insular	17.5	17.9	21.3	29.4	16.4	27.4	11.1	12.5	9.5
Not in United States	7.7	7.2	8.0	10.1	7.9	6.9	5.8	9.3	10.7
Location unknown	*	*	0.0	0.1	*	0.1	0.0	0.0	0.0

* = value between 0.00% and 0.05%.

[a] Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

[b] Includes other non-science and engineering fields not shown separately.

[c] Includes respondents who did not report sex.

[d] Includes only respondents who reported postgraduation status.

[e] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[f] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

[g] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[h] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[i] Includes doctorate recipients who indicated self-employment.

[j] Other is mainly composed of elementary and secondary schools.

[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.

[l] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

[m] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

[n] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 56

Statistical profile of doctorate recipients in life sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All life sciences fields	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences
All doctorate recipients (number)[a]	12,561	1,472	8,418	2,671
Sex (%)				
Male	44.2	50.7	46.2	34.3
Female	55.8	49.3	53.8	65.7
Unknown	*	0.1	0.0	0.0
Citizenship (%)				
U.S. citizen or permanent resident	69.3	54.1	71.4	71.2
Temporary visa holder	27.3	43.0	25.8	23.2
Unknown	3.4	2.9	2.8	5.5
Marital status (%)				
Never married	37.8	32.4	42.5	26.1
Married	41.5	48.6	37.7	49.5
Marriage-like relationship	8.2	5.8	9.5	5.7
Separated, divorced, widowed	3.0	2.6	2.3	5.5
Unknown	9.4	10.5	8.0	13.3
Bachelor's in same field as doctorate (%)[b]	51.9	43.5	55.4	45.8
Master's earned (%)	52.6	75.8	41.7	74.0
Age at doctorate (median years)	31.1	32.0	30.4	34.1
Time to doctorate (median years)				
From bachelor's	8.3	8.8	7.9	10.9
From graduate school start	6.9	7.3	6.7	8.8
From doctoral program start[c]	5.5	5.0	5.8	5.0
Male doctorate recipients (number)	5,553	746	3,892	915
Citizenship (%)				
U.S. citizen or permanent resident	65.9	49.7	70.0	61.5
Temporary visa holder	30.6	48.1	26.6	33.3
Unknown	3.5	2.1	3.4	5.1
Marital status (%)				
Never married	38.5	29.6	42.3	29.4
Married	42.1	53.8	38.1	49.8
Marriage-like relationship	7.5	4.8	8.5	5.4
Separated, divorced, widowed	2.3	2.5	2.1	2.8
Unknown	9.6	9.2	9.0	12.6
Bachelor's in same field as doctorate (%)[b]	50.0	43.7	52.7	43.9
Master's earned (%)	50.0	77.7	40.1	69.8
Age at doctorate (median years)	31.2	32.6	30.7	33.2
Time to doctorate (median years)				
From bachelor's	8.2	9.0	8.0	9.7
From graduate school start	6.9	7.6	6.8	7.9
From doctoral program start[c]	5.5	5.0	5.8	5.0
Female doctorate recipients (number)	7,007	725	4,526	1,756
Citizenship (%)				
U.S. citizen or permanent resident	72.0	58.6	72.5	76.3

Table 56

Statistical profile of doctorate recipients in life sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All life sciences fields	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences
Temporary visa holder	24.7	37.8	25.2	18.0
Unknown	3.3	3.6	2.3	5.7
Marital status (%)				
Never married	37.2	35.3	42.6	24.3
Married	41.0	43.4	37.4	49.4
Marriage-like relationship	8.8	6.8	10.3	5.9
Separated, divorced, widowed	3.6	2.8	2.5	6.8
Unknown	9.3	11.7	7.2	13.6
Bachelor's in same field as doctorate (%)[b]	53.5	43.3	57.7	46.8
Master's earned (%)	54.6	73.9	43.2	76.1
Age at doctorate (median years)	30.9	31.3	30.2	35.0
Time to doctorate (median years)				
From bachelor's	8.3	8.3	7.8	11.6
From graduate school start	7.0	7.3	6.5	9.5
From doctoral program start[c]	5.4	5.0	5.8	5.0

* = value between 0.00% and 0.05%.

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 57

Statistical profile of postgraduation plans of doctorate recipients in life sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All life sciences fields	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences
All doctorate recipients (number)[a]	12,561	1,472	8,418	2,671
Postgraduation status (number)[b]				
Definite postgraduation study	4,432	404	3,448	580
Definite employment	3,352	515	1,733	1,104
Seeking employment or study	3,313	412	2,252	649
Other[c]	597	20	514	63
Definite postgraduation study (%)[d]				
Postdoc fellowship or research associateship	93.2	95.8	93.6	89.0
Other or unknown[e]	6.8	4.2	6.4	11.0
Definite employment (%)[f]				
Academe	39.0	41.7	29.2	53.0
Government	10.7	20.4	7.7	10.7
Industry or business[g]	39.4	28.2	54.5	21.0
Nonprofit organization	8.0	6.0	5.7	12.5
Other or unknown[h]	3.0	3.7	2.9	2.8
Primary activity[i]				
R&D	46.2	54.7	54.2	29.9
Teaching	25.2	24.1	16.8	38.6
Management or administration	9.1	8.7	6.5	13.4
Professional services	18.9	11.9	21.9	17.7
Other	0.6	0.6	0.7	0.4
Secondary activity[j]				
R&D	25.6	26.2	17.8	37.5
Teaching	10.8	12.5	6.8	16.2
Management or administration	13.9	17.3	14.6	11.3
Professional services	7.2	8.3	6.3	8.1
Other	0.7	0.2	1.0	0.4
No secondary activity	41.8	35.6	53.6	26.6
Activity unknown	6.3	6.6	6.8	5.3
Postgraduation location (%)[k]				
United States[l]	91.7	83.2	93.7	90.3
New England	10.9	5.7	12.9	7.4
Middle Atlantic	12.4	5.3	13.7	12.2
East North Central	10.6	11.1	10.0	12.2
West North Central	5.7	12.5	4.4	5.8
South Atlantic	17.8	14.1	17.1	21.7
East South Central	4.1	5.7	3.3	5.8
West South Central	6.6	7.7	6.0	8.0
Mountain	5.1	6.1	4.7	5.6
Pacific and insular	17.9	14.0	20.8	11.0
Not in United States	8.2	16.6	6.3	9.6
Location unknown	*	0.1	*	0.1
Male doctorate recipients (number)	5,553	746	3,892	915
Postgraduation status (number)[b]				
Definite postgraduation study	2,053	204	1,629	220
Definite employment	1,440	278	774	388

Table 57

Statistical profile of postgraduation plans of doctorate recipients in life sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All life sciences fields	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences
Seeking employment or study	1,376	203	981	192
Other[c]	305	9	276	20
Definite postgraduation study (%)[d]				
Postdoc fellowship or research associateship	91.4	96.6	91.9	82.7
Other or unknown[e]	8.6	3.4	8.1	17.3
Definite employment (%)[f]				
Academe	36.9	42.8	27.5	51.5
Government	10.7	23.0	5.7	11.9
Industry or business[g]	43.4	26.3	58.9	24.7
Nonprofit organization	6.3	3.2	5.3	10.3
Other or unknown[h]	2.7	4.7	2.6	1.5
Primary activity[i]				
R&D	52.1	55.4	58.0	38.6
Teaching	23.3	25.0	15.4	37.2
Management or administration	8.0	10.8	6.3	9.3
Professional services	15.9	8.1	19.3	14.9
Other	0.7	0.8	1.0	0.0
Secondary activity[j]				
R&D	24.6	29.6	16.8	35.9
Teaching	11.4	13.1	7.3	18.1
Management or administration	14.4	18.8	14.1	12.0
Professional services	7.2	7.3	6.8	8.0
Other	0.7	0.0	1.1	0.3
No secondary activity	41.7	31.2	53.9	25.8
Activity unknown	6.5	6.5	8.3	3.1
Postgraduation location (%)[k]				
United States[l]	90.5	79.9	93.5	87.0
New England	11.5	3.7	14.1	7.1
Middle Atlantic	11.3	4.1	12.9	10.4
East North Central	11.3	13.5	10.1	14.1
West North Central	6.0	12.4	4.7	5.8
South Atlantic	16.2	13.3	16.1	18.8
East South Central	4.1	7.1	3.3	5.1
West South Central	6.4	6.8	5.8	8.2
Mountain	5.4	6.0	5.4	5.3
Pacific and insular	17.9	12.0	20.6	11.8
Not in United States	9.5	20.1	6.5	12.8
Location unknown	*	0.0	0.0	0.2
Female doctorate recipients (number)	7,007	725	4,526	1,756
Postgraduation status (number)[b]				
Definite postgraduation study	2,379	200	1,819	360
Definite employment	1,912	237	959	716
Seeking employment or study	1,937	209	1,271	457
Other[c]	292	11	238	43
Definite postgraduation study (%)[d]				
Postdoc fellowship or research associateship	94.8	95.0	95.2	92.8

Table 57

Statistical profile of postgraduation plans of doctorate recipients in life sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All life sciences fields	Agricultural sciences and natural resources	Biological and biomedical sciences	Health sciences
Other or unknown[e]	5.2	5.0	4.8	7.2
Definite employment (%)[f]				
Academe	40.5	40.5	30.6	53.8
Government	10.6	17.3	9.4	10.1
Industry or business[g]	36.5	30.4	51.0	19.0
Nonprofit organization	9.3	9.3	5.9	13.7
Other or unknown[h]	3.2	2.5	3.1	3.5
Primary activity[i]				
R&D	41.8	53.8	51.2	25.1
Teaching	26.6	23.1	17.9	39.4
Management or administration	10.0	6.3	6.6	15.7
Professional services	21.2	16.3	23.9	19.3
Other	0.5	0.5	0.4	0.6
Secondary activity[j]				
R&D	26.4	22.2	18.6	38.4
Teaching	10.3	11.8	6.4	15.1
Management or administration	13.5	15.4	15.0	10.9
Professional services	7.2	9.5	5.9	8.2
Other	0.7	0.5	0.9	0.4
No secondary activity	41.9	40.7	53.3	27.0
Activity unknown	6.1	6.8	5.6	6.4
Postgraduation location (%)[k]				
United States[l]	92.8	87.0	93.9	92.2
New England	10.4	7.8	11.9	7.6
Middle Atlantic	13.3	6.6	14.4	13.2
East North Central	10.0	8.5	9.9	11.1
West North Central	5.5	12.6	4.2	5.8
South Atlantic	19.1	15.1	18.0	23.4
East South Central	4.1	4.1	3.4	6.1
West South Central	6.8	8.7	6.1	7.9
Mountain	4.8	6.2	4.1	5.9
Pacific and insular	17.9	16.2	21.1	10.6
Not in United States	7.2	12.8	6.1	7.8
Location unknown	*	0.2	*	0.0

* = value between 0.00% and 0.05%.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 58

Statistical profile of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
All doctorate recipients (number)[a]	6,247	2,763	1,243	2,241
Sex (%)				
Male	66.9	60.4	59.3	79.0
Female	33.1	39.5	40.7	21.0
Unknown	*	0.1	0.0	0.0
Citizenship (%)				
U.S. citizen or permanent resident	59.9	61.4	65.2	55.1
Temporary visa holder	37.0	36.0	31.5	41.3
Unknown	3.1	2.6	3.3	3.6
Marital status (%)				
Never married	47.4	48.5	41.5	49.2
Married	32.9	31.6	37.2	32.1
Marriage-like relationship	8.4	8.3	10.0	7.6
Separated, divorced, widowed	1.8	1.6	2.7	1.4
Unknown	9.6	10.0	8.6	9.7
Bachelor's in same field as doctorate (%)[b]	69.9	72.8	51.6	76.4
Master's earned (%)	53.3	37.9	66.2	65.2
Age at doctorate (median years)	29.6	29.0	30.5	29.7
Time to doctorate (median years)				
From bachelor's	7.0	6.3	7.7	7.2
From graduate school start	6.3	5.8	6.8	6.7
From doctoral program start[c]	5.5	5.3	5.3	6.0
Male doctorate recipients (number)	4,177	1,669	737	1,771
Citizenship (%)				
U.S. citizen or permanent resident	58.2	61.3	59.0	54.8
Temporary visa holder	38.5	36.1	36.9	41.4
Unknown	3.4	2.6	4.1	3.7
Marital status (%)				
Never married	48.0	49.3	41.2	49.5
Married	32.9	31.2	38.8	32.1
Marriage-like relationship	7.6	7.5	8.5	7.2
Separated, divorced, widowed	1.5	1.6	1.8	1.4
Unknown	10.1	10.5	9.6	9.9
Bachelor's in same field as doctorate (%)[b]	70.1	72.4	52.1	75.6
Master's earned (%)	54.5	38.8	68.9	63.3
Age at doctorate (median years)	29.7	29.2	30.7	29.8
Time to doctorate (median years)				
From bachelor's	7.0	6.4	7.8	7.2
From graduate school start	6.3	5.8	7.0	6.8
From doctoral program start[c]	5.7	5.3	5.3	6.0

Table 58

Statistical profile of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Female doctorate recipients (number)	2,068	1,092	506	470
Citizenship (%)				
U.S. citizen or permanent resident	63.4	61.6	74.3	56.0
Temporary visa holder	34.0	35.9	23.5	40.9
Unknown	2.6	2.5	2.2	3.2
Marital status (%)				
Never married	46.2	47.4	41.9	47.9
Married	32.8	32.2	34.8	32.1
Marriage-like relationship	10.1	9.5	12.1	9.1
Separated, divorced, widowed	2.3	1.6	4.2	1.7
Unknown	8.7	9.2	7.1	9.1
Bachelor's in same field as doctorate (%)[b]	69.5	73.6	51.0	79.8
Master's earned (%)	51.0	36.5	62.3	72.6
Age at doctorate (median years)	29.3	28.8	30.3	29.5
Time to doctorate (median years)				
From bachelor's	6.8	6.2	7.5	7.1
From graduate school start	6.0	5.7	6.4	6.5
From doctoral program start[c]	5.3	5.3	5.4	5.9

* = value between 0.00% and 0.05%.

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctorate institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 59

Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
All doctorate recipients (number)[a]	6,247	2,763	1,243	2,241
Postgraduation status (number)[b]				
Definite postgraduation study	2,374	931	537	906
Definite employment	1,673	761	308	604
Seeking employment or study	1,645	809	301	535
Other[c]	113	55	16	42
Definite postgraduation study (%)[d]				
Postdoc fellowship or research associateship	97.9	98.3	98.1	97.2
Other or unknown[e]	2.1	1.7	1.9	2.8
Definite employment (%)[f]				
Academe	17.9	16.4	26.9	15.1
Government	10.1	5.0	26.6	8.1
Industry or business[g]	67.1	74.6	39.6	71.7
Nonprofit organization	3.0	2.5	3.2	3.6
Other or unknown[h]	1.9	1.4	3.6	1.5
Primary activity[i]				
R&D	70.8	70.3	59.5	77.3
Teaching	12.7	13.3	15.3	10.6
Management or administration	3.7	4.1	6.5	1.6
Professional services	11.9	11.9	16.3	9.7
Other	0.9	0.4	2.4	0.9
Secondary activity[j]				
R&D	12.8	11.0	20.7	10.9
Teaching	3.0	1.9	6.8	2.5
Management or administration	14.1	15.9	14.3	11.6
Professional services	5.4	3.7	7.8	6.2
Other	0.6	0.6	1.7	0.2
No secondary activity	64.1	66.9	48.6	68.7
Activity unknown	5.2	4.9	4.5	6.0
Postgraduation location (%)[k]				
United States[l]	90.1	92.8	87.7	88.5
New England	9.9	12.3	7.7	8.3
Middle Atlantic	11.3	12.9	6.5	12.1
East North Central	9.7	12.2	5.3	9.3
West North Central	3.0	3.8	3.1	2.1
South Atlantic	14.3	14.9	13.8	14.0
East South Central	2.6	2.5	2.8	2.5
West South Central	6.1	4.7	12.7	4.0
Mountain	8.5	5.1	14.1	9.1
Pacific and insular	24.3	23.7	21.3	26.6
Not in United States	9.9	7.2	12.3	11.5
Location unknown	0.0	0.0	0.0	0.0
Male doctorate recipients (number)	4,177	1,669	737	1,771
Postgraduation status (number)[b]				
Definite postgraduation study	1,648	613	322	713
Definite employment	1,102	427	181	494

Table 59

Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Seeking employment or study	1,055	475	168	412
Other[c]	67	30	8	29
Definite postgraduation study (%)[d]				
Postdoc fellowship or research associateship	97.9	98.9	98.1	97.1
Other or unknown[e]	2.1	1.1	1.9	2.9
Definite employment (%)[f]				
Academe	16.0	14.3	24.9	14.2
Government	8.6	4.9	D	D
Industry or business[g]	71.2	78.2	48.6	73.5
Nonprofit organization	2.7	1.9	D	D
Other or unknown[h]	1.5	0.7	2.2	1.8
Primary activity[i]				
R&D	74.8	74.6	63.2	79.2
Teaching	10.2	10.9	12.6	8.7
Management or administration	3.1	3.7	D	D
Professional services	11.2	10.7	16.1	9.7
Other	0.8	0.0	D	D
Secondary activity[j]				
R&D	11.7	10.2	19.0	10.2
Teaching	3.1	D	8.0	D
Management or administration	13.8	D	12.1	D
Professional services	5.2	3.7	6.9	5.8
Other	0.4	0.5	1.1	0.0
No secondary activity	65.9	67.9	52.9	69.0
Activity unknown	5.8	5.9	3.9	6.5
Postgraduation location (%)[k]				
United States[l]	89.3	92.4	86.5	87.7
New England	9.4	11.4	6.6	8.9
Middle Atlantic	10.9	13.0	5.6	11.4
East North Central	9.7	12.2	4.6	9.8
West North Central	2.6	3.6	2.2	1.9
South Atlantic	12.9	14.0	10.9	12.8
East South Central	2.6	D	2.4	D
West South Central	6.6	D	15.9	D
Mountain	8.4	4.2	15.5	9.1
Pacific and insular	25.7	25.7	22.7	26.9
Not in United States	10.7	7.6	13.5	12.3
Location unknown	0.0	0.0	0.0	0.0
Female doctorate recipients (number)	2,068	1,092	506	470
Postgraduation status (number)[b]				
Definite postgraduation study	726	318	215	193
Definite employment	571	334	127	110
Seeking employment or study	590	334	133	123
Other[c]	46	25	8	13
Definite postgraduation study (%)[d]				

Table 59

Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Postdoc fellowship or research associateship	97.7	97.2	98.1	97.9
Other or unknown[e]	2.3	2.8	1.9	2.1
Definite employment (%)[f]				
Academe	21.5	19.2	29.9	19.1
Government	13.0	5.1	D	D
Industry or business[g]	59.2	70.1	26.8	63.6
Nonprofit organization	3.7	3.3	D	D
Other or unknown[h]	2.6	2.4	5.5	0.0
Primary activity[i]				
R&D	63.3	64.9	54.2	68.9
Teaching	17.3	16.1	19.2	18.9
Management or administration	4.7	4.7	D	D
Professional services	13.3	13.4	16.7	9.4
Other	1.3	0.9	D	D
Secondary activity[j]				
R&D	15.0	12.1	23.3	14.2
Teaching	2.9	D	5.0	D
Management or administration	14.6	D	17.5	D
Professional services	5.7	3.7	9.2	7.5
Other	1.1	0.6	2.5	0.9
No secondary activity	60.8	65.5	42.5	67.0
Activity unknown	4.0	3.6	5.5	3.6
Postgraduation location (%)[k]				
United States[l]	92.0	93.6	89.5	91.4
New England	10.8	13.7	9.4	6.3
Middle Atlantic	12.0	12.9	7.9	14.5
East North Central	9.6	12.3	6.4	7.6
West North Central	4.0	4.3	4.4	3.0
South Atlantic	17.3	16.3	18.1	18.5
East South Central	2.5	D	3.5	D
West South Central	5.0	D	7.9	D
Mountain	8.6	6.4	12.0	9.2
Pacific and insular	21.3	20.6	19.3	25.1
Not in United States	8.0	6.4	10.5	8.6
Location unknown	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on the number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 60

Statistical profile of doctorate recipients in mathematics and computer sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All mathematics and computer sciences fields	Computer and information sciences	Mathematics and statistics
All doctorate recipients (number)[a]	4,392	2,361	2,031
Sex (%)			
Male	75.1	78.7	70.8
Female	24.9	21.3	29.2
Unknown	0.0	0.0	0.0
Citizenship (%)			
U.S. citizen or permanent resident	39.5	34.2	45.7
Temporary visa holder	56.4	61.5	50.4
Unknown	4.1	4.3	3.9
Marital status (%)			
Never married	43.9	39.7	48.9
Married	37.9	42.1	33.0
Marriage-like relationship	5.4	4.3	6.6
Separated, divorced, widowed	1.8	2.1	1.5
Unknown	11.0	11.8	10.0
Bachelor's in same field as doctorate (%)[b]	61.5	49.2	75.7
Master's earned (%)	72.3	73.8	70.6
Age at doctorate (median years)	30.4	31.3	29.4
Time to doctorate (median years)			
From bachelor's	7.9	8.6	7.0
From graduate school start	7.0	7.7	6.3
From doctoral program start[c]	5.6	5.8	5.3
Male doctorate recipients (number)	3,297	1,859	1,438
Citizenship (%)			
U.S. citizen or permanent resident	39.1	32.7	47.4
Temporary visa holder	56.8	63.0	48.7
Unknown	4.2	4.3	4.0
Marital status (%)			
Never married	44.0	39.8	49.5
Married	38.0	42.2	32.6
Marriage-like relationship	5.0	4.3	5.9
Separated, divorced, widowed	1.4	1.4	1.5
Unknown	11.6	12.4	10.5
Bachelor's in same field as doctorate (%)[b]	61.1	50.4	74.8
Master's earned (%)	71.2	73.0	68.8
Age at doctorate (median years)	30.6	31.3	29.5
Time to doctorate (median years)			
From bachelor's	7.9	8.6	7.0
From graduate school start	7.0	7.7	6.4
From doctoral program start[c]	5.7	5.8	5.3
Female doctorate recipients (number)	1,095	502	593
Citizenship (%)			
U.S. citizen or permanent resident	40.9	40.0	41.7
Temporary visa holder	55.1	55.8	54.5
Unknown	4.0	4.2	3.9
Marital status (%)			

Table 60

Statistical profile of doctorate recipients in mathematics and computer sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All mathematics and computer sciences fields	Computer and information sciences	Mathematics and statistics
Never married	43.7	39.4	47.4
Married	37.7	42.0	34.1
Marriage-like relationship	6.5	4.4	8.3
Separated, divorced, widowed	2.9	4.6	1.5
Unknown	9.1	9.6	8.8
Bachelor's in same field as doctorate (%)[b]	62.7	44.8	77.9
Master's earned (%)	75.8	76.7	75.0
Age at doctorate (median years)	30.1	31.4	29.2
Time to doctorate (median years)			
From bachelor's	7.8	9.0	6.9
From graduate school start	6.9	7.8	6.1
From doctoral program start[c]	5.3	5.8	5.0

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 61

Statistical profile of postgraduation plans of doctorate recipients in mathematics and computer sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All mathematics and computer sciences fields	Computer and information sciences	Mathematics and statistics
All doctorate recipients (number)[a]	4,392	2,361	2,031
Postgraduation status (number)[b]			
Definite postgraduation study	906	337	569
Definite employment	2,182	1,350	832
Seeking employment or study	886	440	446
Other[c]	67	32	35
Definite postgraduation study (%)[d]			
Postdoc fellowship or research associateship	95.7	93.2	97.2
Other or unknown[e]	4.3	6.8	2.8
Definite employment (%)[f]			
Academe	29.5	25.8	35.6
Government	4.3	3.9	4.9
Industry or business[g]	61.9	66.1	55.0
Nonprofit organization	1.8	1.9	1.7
Other or unknown[h]	2.4	2.2	2.8
Primary activity[i]			
R&D	69.5	77.0	57.3
Teaching	20.2	14.6	29.2
Management or administration	2.0	2.3	1.4
Professional services	7.9	5.8	11.3
Other	0.5	0.3	0.8
Secondary activity[j]			
R&D	17.3	13.6	23.2
Teaching	10.1	11.7	7.5
Management or administration	5.7	6.5	4.4
Professional services	5.4	4.4	7.0
Other	0.7	0.2	1.6
No secondary activity	60.8	63.6	56.2
Activity unknown	4.6	4.8	4.2
Postgraduation location (%)[k]			
United States[l]	88.1	88.7	87.2
New England	6.9	6.8	7.1
Middle Atlantic	13.6	12.1	15.5
East North Central	9.4	6.8	12.6
West North Central	2.7	2.3	3.1
South Atlantic	12.1	9.8	14.8
East South Central	1.8	1.3	2.5
West South Central	5.3	5.3	5.3
Mountain	4.3	3.4	5.4
Pacific and insular	31.0	40.0	20.1
Not in United States	11.8	11.1	12.6
Location unknown	0.1	0.1	0.1
Male doctorate recipients (number)	3,297	1,859	1,438
Postgraduation status (number)[b]			
Definite postgraduation study	692	267	425
Definite employment	1,627	1,077	550

Table 61

Statistical profile of postgraduation plans of doctorate recipients in mathematics and computer sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All mathematics and computer sciences fields	Computer and information sciences	Mathematics and statistics
Seeking employment or study	653	325	328
Other[c]	54	26	28
Definite postgraduation study (%)[d]			
Postdoc fellowship or research associateship	95.5	92.9	97.2
Other or unknown[e]	4.5	7.1	2.8
Definite employment (%)[f]			
Academe	27.4	24.1	33.8
Government	3.9	3.8	4.0
Industry or business[g]	64.5	68.0	57.8
Nonprofit organization	1.8	1.9	1.6
Other or unknown[h]	2.4	2.2	2.7
Primary activity[i]			
R&D	72.0	78.1	60.2
Teaching	18.5	13.7	27.8
Management or administration	1.9	D	D
Professional services	7.1	D	D
Other	0.5	0.3	1.0
Secondary activity[j]			
R&D	15.8	12.8	21.5
Teaching	10.4	11.2	8.8
Management or administration	6.0	6.6	4.8
Professional services	5.6	4.7	7.3
Other	0.5	0.0	1.5
No secondary activity	61.8	64.7	56.1
Activity unknown	5.2	5.3	5.1
Postgraduation location (%)[k]			
United States[l]	87.5	88.8	85.6
New England	6.6	7.1	6.1
Middle Atlantic	13.5	12.1	15.6
East North Central	9.7	D	D
West North Central	2.7	2.5	3.0
South Atlantic	11.5	9.5	14.2
East South Central	1.9	D	D
West South Central	5.1	4.9	5.3
Mountain	4.2	3.6	5.0
Pacific and insular	31.5	40.0	19.8
Not in United States	12.4	11.0	14.3
Location unknown	0.1	0.1	0.1
Female doctorate recipients (number)	1,095	502	593
Postgraduation status (number)[b]			
Definite postgraduation study	214	70	144
Definite employment	555	273	282
Seeking employment or study	233	115	118
Other[c]	13	6	7
Definite postgraduation study (%)[d]			

Table 61

Statistical profile of postgraduation plans of doctorate recipients in mathematics and computer sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All mathematics and computer sciences fields	Computer and information sciences	Mathematics and statistics
Postdoc fellowship or research associateship	96.3	94.3	97.2
Other or unknown[e]	3.7	5.7	2.8
Definite employment (%)[f]			
Academe	35.7	32.2	39.0
Government	5.6	4.4	6.7
Industry or business[g]	54.2	59.0	49.6
Nonprofit organization	2.0	2.2	1.8
Other or unknown[h]	2.5	2.2	2.8
Primary activity[i]			
R&D	62.2	72.8	52.0
Teaching	25.0	17.7	32.0
Management or administration	2.2	D	D
Professional services	10.2	D	D
Other	0.4	0.4	0.4
Secondary activity[j]			
R&D	21.7	16.6	26.5
Teaching	9.3	13.6	5.1
Management or administration	5.0	6.4	3.6
Professional services	5.0	3.4	6.5
Other	1.3	0.8	1.8
No secondary activity	57.8	59.2	56.4
Activity unknown	2.7	2.9	2.5
Postgraduation location (%)[k]			
United States[l]	89.7	88.3	90.8
New England	7.8	5.8	9.4
Middle Atlantic	13.9	12.2	15.3
East North Central	8.3	D	D
West North Central	2.7	1.7	3.5
South Atlantic	14.0	11.1	16.4
East South Central	1.7	D	D
West South Central	5.9	6.7	5.2
Mountain	4.8	2.9	6.3
Pacific and insular	29.4	39.9	20.9
Not in United States	10.1	11.7	8.9
Location unknown	0.1	0.0	0.2

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on the number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 62

Statistical profile of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
All doctorate recipients (number)[a]	8,946	3,879	448	1,216	637	607	2,159
Sex (%)							
Male	40.1	27.9	32.4	66.5	60.9	40.0	42.7
Female	59.9	72.1	67.6	33.5	39.1	60.0	57.3
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship (%)							
U.S. citizen or permanent resident	73.8	85.5	81.7	37.7	72.2	80.4	70.2
Temporary visa holder	20.5	6.6	14.1	56.8	23.9	16.6	26.3
Unknown	5.7	7.9	4.2	5.4	3.9	3.0	3.5
Marital status (%)							
Never married	31.9	31.0	29.9	40.4	31.6	32.0	29.2
Married	40.7	35.4	43.8	38.7	46.5	44.6	47.8
Marriage-like relationship	9.6	10.6	12.9	7.0	7.4	11.5	8.5
Separated, divorced, widowed	4.1	4.4	4.5	2.1	3.6	5.1	4.5
Unknown	13.8	18.6	8.9	11.9	11.0	6.8	10.0
Bachelor's in same field as doctorate (%)[b]	51.9	64.7	49.8	57.9	61.4	41.2	26.1
Master's earned (%)	83.0	80.1	85.9	79.2	84.0	92.4	86.8
Age at doctorate (median years)	32.3	31.2	34.4	31.2	32.8	33.8	34.7
Time to doctorate (median years)							
From bachelor's	9.3	8.3	11.2	8.4	10.0	11.0	11.3
From graduate school start	7.9	7.0	9.1	7.7	8.7	9.0	9.5
From doctoral program start[c]	6.0	5.9	7.2	5.8	6.0	6.8	6.0
Male doctorate recipients (number)	3,588	1,082	145	809	388	243	921
Citizenship (%)							
U.S. citizen or permanent resident	68.5	86.0	75.9	38.8	75.8	75.3	68.0
Temporary visa holder	26.4	6.7	17.9	55.7	20.4	21.4	28.9
Unknown	5.1	7.3	6.2	5.4	3.9	3.3	3.1
Marital status (%)							
Never married	32.2	32.4	27.6	40.0	30.7	30.5	26.7
Married	43.8	35.2	46.9	39.1	49.0	49.8	53.6
Marriage-like relationship	8.4	10.0	11.0	6.4	7.0	11.5	7.7
Separated, divorced, widowed	3.0	3.9	D	D	2.6	2.5	2.9
Unknown	12.7	18.5	D	D	10.8	5.8	9.0
Bachelor's in same field as doctorate (%)[b]	50.3	60.6	46.2	57.2	61.9	46.1	29.1
Master's earned (%)	82.2	78.2	83.4	77.8	83.2	93.0	87.5
Age at doctorate (median years)	32.8	31.6	35.6	31.4	32.8	33.8	35.2

Table 62

Statistical profile of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
Time to doctorate (median years)							
From bachelor's	9.4	8.3	12.2	8.5	10.0	10.3	11.5
From graduate school start	7.9	6.9	10.1	7.7	8.3	9.0	9.5
From doctoral program start[c]	5.8	5.8	7.3	5.8	6.0	6.8	5.8
Female doctorate recipients (number)	5,358	2,797	303	407	249	364	1,238
Citizenship (%)							
U.S. citizen or permanent resident	77.4	85.3	84.5	35.6	66.7	83.8	71.8
Temporary visa holder	16.5	6.6	12.2	59.0	29.3	13.5	24.4
Unknown	6.1	8.1	3.3	5.4	4.0	2.7	3.8
Marital status (%)							
Never married	31.7	30.4	31.0	41.0	32.9	33.0	31.1
Married	38.6	35.5	42.2	37.8	42.6	41.2	43.4
Marriage-like relationship	10.3	10.9	13.9	8.1	8.0	11.5	9.0
Separated, divorced, widowed	4.9	4.6	D	D	5.2	6.9	5.7
Unknown	14.5	18.6	D	D	11.2	7.4	10.7
Bachelor's in same field as doctorate (%)[b]	52.9	66.3	51.5	59.2	60.6	37.9	23.9
Master's earned (%)	83.5	80.9	87.1	82.1	85.1	92.0	86.3
Age at doctorate (median years)	32.1	31.1	33.6	30.8	32.8	33.9	34.3
Time to doctorate (median years)							
From bachelor's	9.3	8.4	11.0	8.4	10.3	11.0	11.2
From graduate school start	7.9	7.0	9.0	7.7	9.0	9.0	9.5
From doctoral program start[c]	6.0	6.0	7.0	5.8	6.0	6.9	6.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 63

Statistical profile of postgraduation plans of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
All doctorate recipients (number)[a]	8,946	3,879	448	1,216	637	607	2,159
Postgraduation status (number)[b]							
Definite postgraduation study	2,450	1,594	90	157	152	122	335
Definite employment	3,592	1,061	156	763	292	306	1,014
Seeking employment or study	1,765	589	152	168	129	129	598
Other[c]	188	63	21	18	12	18	56
Definite postgraduation study (%)[d]							
Postdoc fellowship or research associateship	90.0	86.1	95.6	95.5	98.7	D	96.7
Other or unknown[e]	10.0	13.9	4.4	4.5	1.3	D	3.3
Definite employment (%)[f]							
Academe	53.1	40.8	64.1	49.7	67.1	77.5	55.5
Government	12.6	10.3	14.1	15.9	8.6	4.9	15.7
Industry or business[g]	20.3	29.2	7.7	26.6	11.6	8.8	14.1
Nonprofit organization	9.2	12.3	11.5	5.2	9.6	5.2	9.7
Other or unknown[h]	4.8	7.4	2.6	2.6	3.1	3.6	5.0
Primary activity[i]							
R&D	38.1	25.1	32.0	64.2	34.9	36.8	33.4
Teaching	33.7	26.8	46.3	19.8	48.4	51.0	40.0
Management or administration	8.5	9.5	10.9	1.6	8.5	7.8	12.7
Professional services	19.1	38.1	10.2	14.1	7.8	4.4	12.9
Other	0.6	0.5	0.7	0.3	0.4	0.0	1.0
Secondary activity[j]							
R&D	29.5	27.3	40.8	21.1	37.7	35.8	32.3
Teaching	19.6	13.7	13.6	29.5	19.9	22.0	18.1
Management or administration	9.7	9.9	6.1	8.9	9.3	7.4	11.3
Professional services	7.8	10.1	7.5	7.6	6.0	7.1	6.4
Other	0.5	0.7	0.0	0.4	0.7	0.3	0.3
No secondary activity	32.9	38.3	32.0	32.4	26.3	27.4	31.6
Activity unknown	5.5	7.7	5.8	3.3	3.8	3.3	5.8
Postgraduation location (%)[k]							
United States[l]	89.4	96.9	83.7	75.3	86.9	89.7	85.8
New England	9.1	9.3	7.7	7.7	11.5	8.6	9.0
Middle Atlantic	14.1	14.7	12.2	12.3	18.7	15.9	12.7
East North Central	10.5	11.9	11.4	7.3	11.3	13.3	8.7
West North Central	5.2	6.1	6.9	3.6	4.1	4.7	5.0
South Atlantic	17.9	17.6	10.2	19.7	17.6	14.5	19.9
East South Central	3.2	3.7	2.0	2.2	3.4	3.0	3.3
West South Central	6.9	7.9	4.5	4.2	5.6	9.6	6.6
Mountain	5.8	6.8	12.6	2.5	3.4	4.7	6.2
Pacific and insular	15.9	18.4	15.9	15.3	10.8	15.0	13.5

Table 63

Statistical profile of postgraduation plans of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
Not in United States	10.6	3.1	16.3	24.7	12.8	10.0	14.2
Location unknown	*	0.0	0.0	0.0	0.2	0.2	0.0
Male doctorate recipients (number)	3,588	1,082	145	809	388	243	921
Postgraduation status (number)[b]							
Definite postgraduation study	841	420	24	109	85	52	151
Definite employment	1,602	318	53	502	178	124	427
Seeking employment or study	727	170	50	115	83	49	260
Other[c]	65	14	7	10	8	7	19
Definite postgraduation study (%)[d]							
Postdoc fellowship or research associateship	92.0	86.7	95.8	94.5	98.8	D	98.0
Other or unknown[e]	8.0	13.3	4.2	5.5	1.2	D	2.0
Definite employment (%)[f]							
Academe	52.6	41.2	64.2	48.8	66.3	79.0	50.8
Government	14.6	9.4	D	D	11.2	5.6	17.3
Industry or business[g]	20.6	30.8	D	D	11.8	5.6	17.1
Nonprofit organization	8.4	12.3	13.2	4.6	8.4	6.5	9.8
Other or unknown[h]	3.8	6.3	0.0	2.4	2.2	3.2	4.9
Primary activity[i]							
R&D	43.7	29.7	29.2	66.9	30.4	34.7	35.8
Teaching	33.0	29.0	45.8	D	52.6	52.1	D
Management or administration	7.2	8.7	10.4	D	8.2	7.4	D
Professional services	15.5	31.8	14.6	13.1	8.2	5.8	12.8
Other	0.6	0.7	0.0	0.0	0.6	0.0	1.5
Secondary activity[j]							
R&D	28.7	30.1	37.5	20.1	40.9	37.2	29.1
Teaching	20.5	12.6	16.7	30.0	13.5	23.1	17.3
Management or administration	9.7	9.4	D	8.6	D	7.4	12.6
Professional services	8.6	14.0	D	7.6	D	7.4	6.4
Other	0.5	1.4	0.0	0.0	0.6	0.0	0.5
No secondary activity	32.1	32.5	31.3	33.7	27.5	24.8	34.1
Activity unknown	5.2	10.1	9.4	3.0	3.9	2.4	5.2
Postgraduation location (%)[k]							
United States[l]	85.3	95.4	83.1	73.6	87.8	86.9	83.4
New England	8.8	9.3	11.7	6.9	10.6	9.1	8.7
Middle Atlantic	13.4	14.2	13.0	12.8	15.6	15.3	11.4
East North Central	10.0	11.5	13.0	7.5	12.9	12.5	8.1
West North Central	4.6	5.8	D	3.3	D	4.5	4.3
South Atlantic	17.8	16.4	11.7	19.3	17.1	15.9	19.7
East South Central	3.4	3.9	0.0	D	D	4.0	3.5
West South Central	6.1	6.8	D	D	6.8	8.0	6.9

Table 63

Statistical profile of postgraduation plans of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
Mountain	5.4	7.5	11.7	2.6	3.4	3.4	6.2
Pacific and insular	15.2	19.2	15.6	13.9	11.4	13.6	13.7
Not in United States	14.7	4.6	16.9	26.4	11.8	13.1	16.6
Location unknown	*	0.0	0.0	0.0	0.4	0.0	0.0
Female doctorate recipients (number)	5,358	2,797	303	407	249	364	1,238
Postgraduation status (number)[b]							
Definite postgraduation study	1,609	1,174	66	48	67	70	184
Definite employment	1,990	743	103	261	114	182	587
Seeking employment or study	1,038	419	102	53	46	80	338
Other[c]	123	49	14	8	4	11	37
Definite postgraduation study (%)[d]							
Postdoc fellowship or research associateship	88.9	85.9	95.5	97.9	98.5	D	95.7
Other or unknown[e]	11.1	14.1	4.5	2.1	1.5	D	4.3
Definite employment (%)[f]							
Academe	53.5	40.6	64.1	51.3	68.4	76.4	58.9
Government	10.9	10.6	D	D	4.4	4.4	14.5
Industry or business[g]	20.1	28.5	D	D	11.4	11.0	11.9
Nonprofit organization	9.8	12.2	10.7	6.5	11.4	4.4	9.5
Other or unknown[h]	5.7	7.9	3.9	3.1	4.4	3.8	5.1
Primary activity[i]							
R&D	33.5	23.2	33.3	59.0	41.8	38.3	31.6
Teaching	34.3	25.8	46.5	D	41.8	50.3	D
Management or administration	9.6	9.8	11.1	D	9.1	8.0	D
Professional services	22.1	40.7	8.1	15.9	7.3	3.4	12.9
Other	0.5	0.4	1.0	0.8	0.0	0.0	0.7
Secondary activity[j]							
R&D	30.2	26.1	42.4	23.1	32.7	34.9	34.5
Teaching	18.9	14.1	12.1	28.7	30.0	21.1	18.7
Management or administration	9.6	10.1	D	9.6	D	7.4	10.4
Professional services	7.2	8.5	D	7.6	D	6.9	6.4
Other	0.5	0.4	0.0	1.2	0.9	0.6	0.2
No secondary activity	33.6	40.7	32.3	29.9	24.5	29.1	29.8
Activity unknown	5.6	6.7	3.9	3.8	3.5	3.8	6.3
Postgraduation location (%)[k]							
United States[l]	92.1	97.5	84.0	78.6	85.6	91.7	87.5
New England	9.3	9.3	5.9	9.4	12.7	8.3	9.3
Middle Atlantic	14.6	14.8	11.8	11.3	23.2	16.3	13.6
East North Central	10.9	12.1	10.7	6.8	8.8	13.9	9.1
West North Central	5.7	6.2	D	4.2	D	4.8	5.4
South Atlantic	17.9	18.0	9.5	20.4	18.2	13.5	20.1

Table 63

Statistical profile of postgraduation plans of doctorate recipients in psychology and social sciences fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All psychology and social sciences fields	Psychology	Anthropology	Economics	Political science and government	Sociology	Other social sciences
East South Central	3.1	3.7	3.0	D	D	2.4	3.1
West South Central	7.4	8.4	D	D	3.9	10.7	6.4
Mountain	6.2	6.5	13.0	2.3	3.3	5.6	6.2
Pacific and insular	16.4	18.1	16.0	18.1	9.9	15.9	13.4
Not in United States	7.9	2.5	16.0	21.4	14.4	7.9	12.5
Location unknown	*	0.0	0.0	0.0	0.0	0.4	0.0

* = value between 0.00% and 0.05%; D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.

[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 64

Statistical profile of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
All doctorate recipients (number)[a]	10,476	399	1,083	994	796	1,973	304	880	1,634	2,413
Sex (%)										
Male	75.2	82.5	60.3	69.9	73.6	82.6	68.8	72.5	84.0	73.3
Female	24.8	17.5	39.7	30.1	26.4	17.4	31.3	27.5	16.0	26.6
Unknown	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*
Citizenship (%)										
U.S. citizen or permanent resident	39.7	55.4	63.6	46.8	30.8	28.0	27.0	45.2	36.8	37.3
Temporary visa holder	56.8	40.9	33.6	48.5	64.4	68.1	65.8	52.6	60.2	59.8
Unknown	3.5	3.8	2.8	4.7	4.8	3.9	7.2	2.2	3.1	2.9
Marital status (%)										
Never married	45.3	47.4	50.5	54.1	35.7	43.7	35.9	54.1	44.7	41.9
Married	38.3	34.1	33.3	29.9	45.4	40.1	43.8	29.1	39.0	43.0
Marriage-like relationship	4.4	4.8	7.2	4.8	4.0	2.9	3.0	6.4	3.9	3.9
Separated, divorced, widowed	1.4	D	1.0	0.9	2.1	1.6	D	1.3	1.2	1.7
Unknown	10.7	D	7.9	10.3	12.8	11.7	D	9.2	11.3	9.5
Bachelor's in same field as doctorate (%)[b]	78.8	80.5	73.3	84.1	81.8	84.4	66.1	69.3	87.9	72.1
Master's earned (%)	73.0	81.2	57.8	48.9	85.8	79.2	80.9	59.2	77.1	80.3
Age at doctorate (median years)	30.2	30.0	29.4	28.8	31.5	30.6	31.1	29.4	30.2	30.8
Time to doctorate (median years)										

Table 64

Statistical profile of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
From bachelor's	7.5	7.1	7.0	6.2	8.6	7.9	8.6	6.8	7.3	8.2
From graduate school start	6.8	6.6	6.3	5.7	7.7	7.3	7.8	6.1	6.8	7.3
From doctoral program start[c]	5.3	5.3	5.3	5.0	5.0	5.4	5.0	5.0	5.3	5.0
Male doctorate recipients (number)	7,882	329	653	695	586	1,630	209	638	1,373	1,769
Citizenship (%)										
U.S. citizen or permanent resident	38.4	55.9	63.4	48.5	27.6	28.4	25.4	45.6	35.3	36.2
Temporary visa holder	58.1	40.4	34.0	46.8	67.4	67.8	67.5	52.4	61.7	61.1
Unknown	3.4	3.6	2.6	4.7	4.9	3.8	7.2	2.0	3.1	2.7
Marital status (%)										
Never married	45.1	47.4	50.5	55.3	36.2	44.3	32.5	54.1	44.6	41.0
Married	39.0	34.0	35.1	28.8	46.4	40.1	47.8	29.5	39.3	44.3
Marriage-like relationship	4.1	D	D	D	3.2	3.0	D	D	D	3.7
Separated, divorced, widowed	1.2	D	D	D	1.5	1.5	D	D	D	1.4
Unknown	10.6	12.5	6.9	10.8	12.6	11.1	16.3	9.2	11.3	9.6
Bachelor's in same field as doctorate (%)[b]	80.7	82.7	75.5	84.5	82.3	85.3	71.8	70.4	88.3	74.7
Master's earned (%)	73.4	80.2	58.2	47.6	85.2	78.7	82.8	58.3	77.0	80.7

Table 64

Statistical profile of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Age at doctorate (median years)	30.3	29.9	29.8	29.0	31.4	30.6	31.7	29.6	30.3	30.8
Time to doctorate (median years)										
From bachelor's	7.6	7.0	7.0	6.3	8.4	7.9	9.0	7.0	7.4	8.2
From graduate school start	6.9	6.6	6.5	5.7	7.7	7.3	8.0	6.3	6.8	7.3
From doctoral program start[c]	5.3	5.3	5.3	5.0	5.0	5.4	5.0	5.0	5.3	5.0
Female doctorate recipients (number)	2,593	70	430	299	210	343	95	242	261	643
Citizenship (%)										
U.S. citizen or permanent resident	43.4	52.9	64.0	42.8	39.5	25.9	30.5	44.2	44.8	40.6
Temporary visa holder	52.9	42.9	33.0	52.5	56.2	69.7	62.1	53.3	52.1	56.3
Unknown	3.7	4.3	3.0	4.7	4.3	4.4	7.4	2.5	3.1	3.1
Marital status (%)										
Never married	46.0	47.1	50.5	51.5	34.3	40.8	43.2	54.1	45.2	44.5
Married	36.0	34.3	30.7	32.4	42.4	40.2	34.7	28.1	37.5	39.5
Marriage-like relationship	5.2	D	D	D	6.2	2.6	D	D	D	4.2

Table 64

Statistical profile of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Separated, divorced, widowed	1.9	D	D	D	3.8	1.7	D	D	D	2.6
Unknown	10.9	D	9.5	9.0	13.3	14.6	D	9.1	11.1	9.2
Bachelor's in same field as doctorate (%)[b]	73.1	70.0	70.0	83.3	80.5	79.9	53.7	66.5	85.8	65.0
Master's earned (%)	71.7	85.7	57.2	51.8	87.6	81.3	76.8	61.6	77.4	79.3
Age at doctorate (median years)	29.8	30.3	29.1	28.6	31.5	30.5	30.1	28.8	29.4	30.5
Time to doctorate (median years)										
From bachelor's	7.3	7.4	6.9	6.0	9.0	8.0	7.4	6.4	7.0	8.1
From graduate school start	6.6	6.8	6.1	5.5	7.8	7.3	6.8	6.0	6.3	7.3
From doctoral program start[c]	5.2	5.3	5.3	5.0	5.0	5.3	4.8	5.0	5.0	5.3

* = value between 0.00% and 0.05%; D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 65

Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
All doctorate recipients (number)[a]	10,476	399	1,083	994	796	1,973	304	880	1,634	2,413
Postgraduation status (number)[b]										
Definite postgraduation study	2,332	77	330	239	181	323	36	236	404	506
Definite employment	4,275	186	301	359	280	1,025	150	277	603	1,094
Seeking employment or study	2,875	95	361	307	231	434	74	294	473	606
Other[c]	175	4	32	9	22	26	4	16	22	40
Definite postgraduation study (%)[d]										
Postdoc fellowship or research associateship	95.7	96.1	95.2	95.8	94.5	93.5	86.1	98.7	97.5	95.5
Other or unknown[e]	4.3	3.9	4.8	4.2	5.5	6.5	13.9	1.3	2.5	4.5
Definite employment (%)[f]										
Academe	14.1	17.2	13.6	5.3	21.8	10.0	35.3	4.7	15.9	17.0
Government	8.8	24.7	4.0	D	16.8	5.6	D	6.5	8.1	11.7
Industry or business[g]	72.6	50.5	76.7	90.0	54.6	80.2	54.7	83.8	72.3	66.6
Nonprofit organization	3.1	5.9	4.3	D	3.9	3.1	D	3.6	2.3	2.8
Other or unknown[h]	1.5	1.6	1.3	0.3	2.9	1.1	2.0	1.4	1.3	1.8
Primary activity[i]										
R&D	74.3	83.5	65.0	80.2	41.3	85.1	63.2	82.8	78.6	68.7
Teaching	7.8	5.1	7.4	2.9	12.1	6.3	18.8	2.7	9.1	9.3
Management or administration	3.6	D	6.0	2.0	8.0	1.7	5.6	D	2.5	5.0
Professional services	13.7	D	21.2	14.9	38.3	6.0	11.8	D	9.7	16.1
Other	0.6	0.0	0.4	0.0	0.4	0.8	0.7	1.1	0.2	1.0
Secondary activity[j]										
R&D	12.0	7.4	13.1	7.5	26.5	7.9	22.9	7.7	10.4	14.6
Teaching	6.4	7.4	3.5	2.9	11.7	4.7	19.4	D	D	8.6
Management or administration	12.1	15.3	20.8	14.7	9.8	8.8	7.6	15.7	14.1	10.7
Professional services	6.2	5.7	6.0	5.2	8.7	5.2	10.4	5.7	6.3	6.6
Other	0.5	0.0	0.0	1.1	1.5	0.1	0.0	D	D	0.4
No secondary activity	62.8	64.2	56.5	68.7	41.7	73.3	39.6	67.8	63.8	59.1
Activity unknown	4.8	5.4	6.0	3.1	5.7	4.5	4.0	5.8	5.6	4.4
Postgraduation location (%)[k]										

Table 65

Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
United States[l]	90.6	93.2	93.5	92.1	85.7	90.9	84.4	92.2	91.2	89.4
New England	8.0	6.8	17.3	10.0	3.3	4.9	5.9	5.7	9.2	7.9
Middle Atlantic	9.1	4.6	14.3	10.4	9.3	6.6	9.1	8.2	9.8	9.1
East North Central	10.8	13.3	8.2	11.0	9.1	8.5	16.7	12.7	13.6	10.5
West North Central	3.4	D	D	3.3	5.4	1.2	6.5	2.3	5.4	3.8
South Atlantic	12.6	D	D	10.9	16.1	10.4	17.7	10.9	11.1	12.2
East South Central	3.2	3.8	1.6	2.3	4.6	2.0	2.7	4.3	3.9	4.0
West South Central	7.9	5.7	5.4	11.2	10.4	7.6	10.2	5.3	7.4	8.6
Mountain	7.6	12.9	4.1	7.7	8.2	6.4	3.2	10.3	9.6	7.4
Pacific and insular	27.5	20.2	23.5	25.1	18.9	42.5	12.4	32.0	20.5	25.6
Not in United States	9.4	6.8	6.3	7.7	14.1	9.1	15.6	7.8	8.8	10.6
Location unknown	0.1	0.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0
Male doctorate recipients (number)	7,882	329	653	695	586	1,630	209	638	1,373	1,769
Postgraduation status (number)[b]										
Definite postgraduation study	1,756	63	198	165	145	278	28	178	343	358
Definite employment	3,272	147	183	248	194	847	101	204	512	836
Seeking employment or study	2,130	87	221	220	167	359	49	207	393	427
Other[c]	120	1	22	5	17	18	3	10	16	28
Definite postgraduation study (%)[d]										
Postdoc fellowship or research associateship	95.9	95.2	95.5	97.0	95.2	93.9	85.7	98.9	97.1	95.8
Other or unknown[e]	4.1	4.8	4.5	3.0	4.8	6.1	14.3	1.1	2.9	4.2
Definite employment (%)[f]										
Academe	13.5	D	D	D	D	D	D	D	D	15.3
Government	9.2	23.1	3.8	D	16.0	D	5.9	D	8.2	12.2
Industry or business[g]	72.9	53.7	75.4	87.9	56.2	80.2	54.5	83.3	72.3	67.8
Nonprofit organization	3.0	D	D	D	D	2.8	D	D	D	2.8
Other or unknown[h]	1.4	2.0	1.6	0.4	3.1	0.9	1.0	0.5	1.4	1.9
Primary activity[i]										
R&D	75.8	85.7	66.3	80.3	39.5	84.5	57.1	83.9	81.0	71.4
Teaching	7.9	D	9.3	D	11.9	7.0	D	3.6	8.5	8.3
Management or administration	3.6	D	4.1	D	D	D	D	D	1.9	5.3

Table 65

Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Professional services	12.3	7.1	20.3	14.7	D	D	D	D	8.5	14.5
Other	0.5	0.0	0.0	0.0	0.5	0.9	0.0	1.0	0.2	0.5
Secondary activity[j]										
R&D	12.0	D	13.4	7.6	28.6	8.5	26.5	D	9.9	14.1
Teaching	5.9	5.0	D	D	9.2	4.1	D	D	5.6	8.1
Management or administration	12.4	D	22.7	16.0	9.2	9.1	D	16.1	D	10.6
Professional services	6.5	D	D	4.6	9.2	5.7	10.2	D	5.6	6.9
Other	0.4	0.0	0.0	D	1.1	0.1	0.0	1.0	D	0.5
No secondary activity	62.8	65.7	51.7	67.2	42.7	72.4	37.8	65.8	64.0	59.8
Activity unknown	4.9	4.8	6.0	4.0	4.6	4.5	3.0	5.4	5.5	5.0
Postgraduation location (%)[k]										
United States[l]	89.8	93.8	91.6	91.3	85.3	90.2	82.2	91.6	90.2	88.9
New England	7.4	D	14.4	10.2	D	4.8	3.9	5.5	9.0	7.6
Middle Atlantic	9.2	D	13.4	9.4	10.9	6.8	D	9.4	10.1	9.6
East North Central	10.8	12.9	8.7	10.9	10.3	8.8	17.1	12.8	13.6	10.0
West North Central	3.3	D	3.9	2.2	5.3	D	D	D	5.3	3.5
South Atlantic	12.3	D	D	10.2	16.5	10.4	17.8	9.7	11.2	11.6
East South Central	3.3	D	D	1.9	4.1	1.9	3.9	D	3.9	4.2
West South Central	7.7	D	4.7	12.1	D	7.4	7.0	5.2	7.1	8.7
Mountain	7.7	12.9	2.9	8.7	7.7	D	D	10.7	9.1	7.4
Pacific and insular	27.5	19.5	26.0	25.4	17.4	41.2	11.6	30.4	20.4	25.8
Not in United States	10.1	6.2	8.1	8.7	14.5	9.7	17.8	8.4	9.8	11.1
Location unknown	0.1	0.0	0.3	0.0	0.3	0.1	0.0	0.0	0.0	0.0
Female doctorate recipients (number)	2,593	70	430	299	210	343	95	242	261	643
Postgraduation status (number)[b]										
Definite postgraduation study	576	14	132	74	36	45	8	58	61	148
Definite employment	1,003	39	118	111	86	178	49	73	91	258
Seeking employment or study	745	8	140	87	64	75	25	87	80	179
Other[c]	55	3	10	4	5	8	1	6	6	12
Definite postgraduation study (%)[d]										
Postdoc fellowship or research associateship	95.0	100.0	94.7	93.2	91.7	91.1	87.5	98.3	100.0	94.6

Table 65

Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Other or unknown[e]	5.0	0.0	5.3	6.8	8.3	8.9	12.5	1.7	0.0	5.4
Definite employment (%)[f]										
Academe	16.1	D	D	D	D	D	D	D	D	22.5
Government	7.6	30.8	4.2	0.0	18.6	D	D	D	7.7	10.1
Industry or business[g]	71.5	38.5	78.8	94.6	51.2	80.3	55.1	84.9	72.5	62.8
Nonprofit organization	3.3	D	D	D	D	4.5	D	D	D	3.1
Other or unknown[h]	1.6	0.0	0.8	0.0	2.3	1.7	4.1	4.1	1.1	1.6
Primary activity[i]										
R&D	69.6	75.0	63.1	80.0	45.6	87.6	76.1	79.4	64.7	60.3
Teaching	7.4	D	4.5	D	12.7	2.9	D	0.0	12.9	12.3
Management or administration	3.8	D	9.0	D	D	D	D	D	5.9	4.0
Professional services	18.2	D	22.5	15.5	D	D	D	D	16.5	21.0
Other	1.0	0.0	0.9	0.0	0.0	0.6	2.2	1.5	0.0	2.4
Secondary activity[j]										
R&D	11.8	D	12.6	7.3	21.5	4.7	15.2	D	12.9	16.3
Teaching	8.0	16.7	D	D	17.7	7.6	D	0.0	D	10.3
Management or administration	11.3	D	18.0	11.8	11.4	7.1	D	14.7	D	11.1
Professional services	5.4	D	D	6.4	7.6	2.9	10.9	D	10.6	5.6
Other	0.7	0.0	0.0	D	2.5	0.0	0.0	D	0.0	0.0
No secondary activity	62.7	58.3	64.0	71.8	39.2	77.6	43.5	73.5	62.4	56.7
Activity unknown	4.6	7.7	5.9	0.9	8.1	4.5	6.1	6.8	6.6	2.3
Postgraduation location (%)[k]										
United States[l]	93.0	90.6	96.4	94.1	86.9	94.2	89.5	93.9	96.7	90.9
New England	9.9	D	21.6	9.7	D	5.4	10.5	6.1	10.5	8.6
Middle Atlantic	8.6	D	15.6	12.4	4.9	5.4	D	4.6	8.6	7.4
East North Central	10.5	15.1	7.6	11.4	5.7	7.2	15.8	12.2	13.8	12.1
West North Central	3.7	0.0	D	5.9	5.7	D	D	D	5.9	4.4
South Atlantic	13.5	20.8	14.4	12.4	14.8	10.3	17.5	14.5	10.5	14.0
East South Central	3.0	D	D	3.2	5.7	2.7	0.0	D	3.9	3.4
West South Central	8.6	D	6.4	9.2	D	8.5	17.5	5.3	9.2	8.4
Mountain	7.3	13.2	6.0	5.4	9.8	D	D	9.2	12.5	7.4
Pacific and insular	27.4	22.6	19.6	24.3	23.0	48.9	14.0	36.6	21.1	25.1

Table 65

Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Not in United States	6.9	9.4	3.6	5.4	13.1	5.8	10.5	6.1	3.3	9.1
Location unknown	0.1	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.
[b] Includes only respondents who reported postgraduation status.
[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.
[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.
[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.
[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.
[g] Includes doctorate recipients who indicated self-employment.
[h] Other is mainly composed of elementary and secondary schools.
[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 66

Statistical profile of doctorate recipients in education fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All education fields	Education administration	Education research	Teacher education	Teaching fields	Other education
All doctorate recipients (number)[a]	4,716	927	2,312	113	940	424
Sex (%)						
Male	30.9	37.3	29.2	24.8	31.1	27.1
Female	69.1	62.6	70.8	75.2	68.9	72.9
Unknown	*	0.1	0.0	0.0	0.0	0.0
Citizenship (%)						
U.S. citizen or permanent resident	82.6	88.2	81.0	83.2	79.9	85.1
Temporary visa holder	14.0	6.4	16.7	15.9	17.3	8.0
Unknown	3.4	5.4	2.3	0.9	2.8	6.8
Marital status (%)						
Never married	19.4	15.6	21.1	10.6	21.2	17.2
Married	56.1	55.8	56.7	66.4	56.4	49.8
Marriage-like relationship	5.0	3.0	5.8	D	5.1	D
Separated, divorced, widowed	7.5	9.4	6.6	D	7.4	D
Unknown	12.0	16.2	9.8	8.8	9.9	20.5
Bachelor's in same field as doctorate (%)[b]	24.7	25.8	22.6	36.3	30.2	18.2
Master's earned (%)	89.0	86.8	90.4	90.3	91.0	81.1
Age at doctorate (median years)	38.5	42.2	37.4	40.2	37.9	37.9
Time to doctorate (median years)						
From bachelor's	15.0	18.2	14.0	16.0	14.0	15.0
From graduate school start	12.0	14.8	11.3	12.9	11.5	11.8
From doctoral program start[c]	5.8	5.8	5.8	5.8	5.5	5.8
Male doctorate recipients (number)	1,456	346	675	28	292	115
Citizenship (%)						
U.S. citizen or permanent resident	81.0	86.7	77.9	82.1	78.4	87.8
Temporary visa holder	15.4	7.2	19.7	14.3	17.8	8.7
Unknown	3.6	6.1	2.4	3.6	3.8	3.5
Marital status (%)						
Never married	18.6	16.2	20.6	D	19.2	D
Married	58.1	58.4	59.6	64.3	56.8	50.4
Marriage-like relationship	5.0	2.9	5.5	0.0	6.2	7.0
Separated, divorced, widowed	5.2	4.6	5.3	D	5.5	D
Unknown	13.0	17.9	9.0	D	12.3	D
Bachelor's in same field as doctorate (%)[b]	21.8	22.8	18.8	D	32.5	D
Master's earned (%)	88.0	84.7	91.0	71.4	90.1	79.1
Age at doctorate (median years)	38.6	41.7	37.7	37.6	37.8	37.6
Time to doctorate (median years)						
From bachelor's	14.6	17.6	13.9	14.8	14.0	13.8
From graduate school start	12.0	14.2	11.3	11.6	11.7	11.4
From doctoral program start[c]	5.6	5.8	5.8	5.3	5.0	5.7
Female doctorate recipients (number)	3,259	580	1,637	85	648	309
Citizenship (%)						

Table 66

Statistical profile of doctorate recipients in education fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All education fields	Education administration	Education research	Teacher education	Teaching fields	Other education
U.S. citizen or permanent resident	83.4	89.3	82.2	83.5	80.6	84.1
Temporary visa holder	13.4	5.9	15.5	16.5	17.1	7.8
Unknown	3.2	4.8	2.3	0.0	2.3	8.1
Marital status (%)						
Never married	19.8	15.3	21.3	D	22.1	D
Married	55.2	54.3	55.5	67.1	56.2	49.5
Marriage-like relationship	5.0	3.1	5.9	D	4.6	D
Separated, divorced, widowed	8.5	12.2	7.1	11.8	8.3	8.1
Unknown	11.5	15.0	10.1	D	8.8	D
Bachelor's in same field as doctorate (%)[b]	26.0	27.6	24.1	D	29.2	D
Master's earned (%)	89.4	88.3	90.1	96.5	91.4	81.9
Age at doctorate (median years)	38.4	42.8	37.3	40.5	38.2	38.2
Time to doctorate (median years)						
From bachelor's	15.0	18.5	14.0	16.3	14.3	15.2
From graduate school start	12.0	15.2	11.3	13.0	11.3	11.8
From doctoral program start[c]	5.8	5.8	5.8	5.8	5.8	5.8

* = value between 0.00% and 0.05%; D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 67

Statistical profile of postgraduation plans of doctorate recipients in education fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All education fields	Education administration	Education research	Teacher education	Teaching fields	Other education
All doctorate recipients (number)[a]	4,716	927	2,312	113	940	424
Postgraduation status (number)[b]						
Definite postgraduation study	305	15	199	D	60	D
Definite employment	2,805	630	1,344	D	543	D
Seeking employment or study	1,050	149	534	37	245	85
Other[c]	127	15	67	1	30	14
Definite postgraduation study (%)[d]						
Postdoc fellowship or research associateship	92.5	93.3	90.5	D	95.0	D
Other or unknown[e]	7.5	6.7	9.5	D	5.0	D
Definite employment (%)[f]						
Academe	55.9	41.1	60.7	60.9	63.0	50.4
Government	4.1	4.1	4.4	D	2.9	D
Industry or business[g]	7.4	5.2	9.3	7.8	5.7	5.8
Nonprofit organization	6.4	6.5	6.8	D	3.9	D
Other or unknown[h]	26.2	43.0	18.8	25.0	24.5	27.2
Primary activity[i]						
R&D	12.8	6.3	17.3	D	10.6	D
Teaching	40.2	21.1	37.1	66.1	64.4	46.6
Management or administration	33.0	61.3	27.1	22.6	18.4	28.2
Professional services	13.5	11.2	18.0	D	5.9	D
Other	0.5	0.2	0.5	0.0	0.8	1.0
Secondary activity[j]						
R&D	25.6	14.8	27.4	35.5	35.8	17.5
Teaching	20.1	21.1	21.8	D	16.0	D
Management or administration	9.4	9.3	9.2	12.9	9.4	10.2
Professional services	7.2	6.3	8.7	D	5.1	D
Other	0.6	1.0	0.5	0.0	0.2	1.5
No secondary activity	37.0	47.5	32.4	25.8	33.5	48.1
Activity unknown	5.5	6.5	4.6	3.1	5.9	8.0
Postgraduation location (%)[k]						
United States[l]	93.5	96.7	93.5	89.4	90.2	94.1
New England	4.5	4.8	3.8	D	4.1	D
Middle Atlantic	10.8	8.2	9.5	12.1	15.4	14.2
East North Central	14.1	18.1	14.6	D	D	5.9
West North Central	6.4	6.0	6.4	0.0	7.6	5.9
South Atlantic	19.3	18.3	20.3	19.7	18.7	16.6
East South Central	8.4	11.2	8.0	22.7	6.5	4.3
West South Central	11.3	13.6	11.1	12.1	10.9	6.7
Mountain	7.6	8.5	7.5	D	D	6.7
Pacific and insular	10.8	7.4	11.9	D	6.5	D
Not in United States	6.5	3.3	6.5	10.6	9.8	5.9
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0
Male doctorate recipients (number)	1,456	346	675	28	292	115
Postgraduation status (number)[b]						
Definite postgraduation study	81	D	54	0	17	D
Definite employment	892	D	405	16	173	D

Table 67

Statistical profile of postgraduation plans of doctorate recipients in education fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All education fields	Education administration	Education research	Teacher education	Teaching fields	Other education
Seeking employment or study	296	44	153	5	70	24
Other[c]	37	9	17	0	6	5
Definite postgraduation study (%)[d]						
Postdoc fellowship or research associateship	93.8	D	92.6	D	94.1	D
Other or unknown[e]	6.2	0.0	7.4	D	5.9	D
Definite employment (%)[f]						
Academe	58.5	D	62.7	D	69.9	51.7
Government	4.9	3.8	5.7	0.0	4.0	8.6
Industry or business[g]	7.0	6.7	9.1	D	D	D
Nonprofit organization	6.7	7.1	7.4	0.0	D	D
Other or unknown[h]	22.9	38.8	15.1	12.5	21.4	19.0
Primary activity[i]						
R&D	14.1	5.4	18.4	D	D	18.5
Teaching	36.4	20.2	31.9	60.0	68.1	35.2
Management or administration	38.6	63.7	35.1	D	14.4	D
Professional services	10.6	10.8	14.3	D	D	D
Other	0.2	0.0	0.3	0.0	0.6	0.0
Secondary activity[j]						
R&D	23.8	14.3	26.2	D	D	14.8
Teaching	22.3	23.8	23.6	D	16.9	D
Management or administration	10.8	11.2	9.9	D	D	9.3
Professional services	7.8	7.2	9.4	D	D	D
Other	0.6	0.9	0.8	0.0	0.0	0.0
No secondary activity	34.8	42.6	30.1	40.0	30.6	46.3
Activity unknown	6.2	7.1	4.9	6.3	7.5	6.9
Postgraduation location (%)[k]						
United States[l]	91.9	96.7	90.4	D	88.4	92.3
New England	4.2	3.7	3.1	0.0	5.8	10.8
Middle Atlantic	10.7	7.8	D	D	16.8	12.3
East North Central	14.6	21.4	15.9	0.0	D	D
West North Central	6.8	7.4	6.5	0.0	6.8	7.7
South Atlantic	19.1	16.9	D	D	19.5	15.4
East South Central	8.1	9.9	8.1	43.8	D	D
West South Central	10.7	12.3	9.4	D	12.6	D
Mountain	7.4	9.1	6.5	D	D	10.8
Pacific and insular	10.0	7.4	10.9	0.0	7.9	21.5
Not in United States	8.1	3.3	9.6	D	11.6	7.7
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0
Female doctorate recipients (number)	3,259	580	1,637	85	648	309
Postgraduation status (number)[b]						
Definite postgraduation study	224	D	145	D	43	22
Definite employment	1,913	D	939	D	370	166
Seeking employment or study	754	105	381	32	175	61
Other[c]	90	6	50	1	24	9
Definite postgraduation study (%)[d]						
Postdoc fellowship or research associateship	92.0	D	89.7	D	95.3	D

Table 67

Statistical profile of postgraduation plans of doctorate recipients in education fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All education fields	Education administration	Education research	Teacher education	Teaching fields	Other education
Other or unknown[e]	8.0	8.3	10.3	D	4.7	D
Definite employment (%)[f]						
Academe	54.7	D	59.9	D	59.7	50.0
Government	3.7	4.4	3.8	D	2.4	D
Industry or business[g]	7.6	4.4	9.4	D	D	D
Nonprofit organization	6.3	6.2	6.5	D	D	9.6
Other or unknown[h]	27.7	45.6	20.4	29.2	25.9	30.1
Primary activity[i]						
R&D	12.1	6.8	16.8	D	D	D
Teaching	41.9	21.6	39.2	68.1	62.7	50.7
Management or administration	30.4	59.8	23.7	D	20.2	D
Professional services	14.9	11.5	19.6	D	D	13.8
Other	0.6	0.3	0.6	0.0	0.9	1.3
Secondary activity[j]						
R&D	26.5	15.0	27.9	D	D	18.4
Teaching	19.1	19.4	21.1	19.1	15.7	14.5
Management or administration	8.8	8.2	8.9	D	D	10.5
Professional services	6.9	5.7	8.5	D	D	5.9
Other	0.6	1.1	0.3	0.0	0.3	2.0
No secondary activity	38.1	50.5	33.3	21.3	34.8	48.7
Activity unknown	5.2	6.2	4.5	2.1	5.1	8.4
Postgraduation location (%)[k]						
United States[l]	94.2	96.8	94.7	D	91.0	94.7
New England	4.7	5.5	4.1	D	3.4	D
Middle Atlantic	10.9	8.5	D	D	14.8	14.9
East North Central	13.8	16.2	14.0	D	15.3	D
West North Central	6.2	5.2	6.4	0.0	8.0	5.3
South Atlantic	19.4	19.2	D	D	18.4	17.0
East South Central	8.5	11.9	7.9	16.0	D	D
West South Central	11.5	14.4	11.8	D	10.2	D
Mountain	7.6	8.2	7.9	D	D	5.3
Pacific and insular	11.1	7.5	12.3	D	5.8	D
Not in United States	5.8	3.2	5.3	D	9.0	5.3
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 68

Statistical profile of doctorate recipients in humanities and arts fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All humanities and arts fields	Foreign languages and literature	History	Letters	Other humanities and arts
All doctorate recipients (number)[a]	4,939	564	887	1,392	2,096
Sex (%)					
Male	50.9	39.5	57.7	42.3	56.9
Female	49.1	60.5	42.3	57.7	43.1
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship (%)					
U.S. citizen or permanent resident	79.3	61.9	84.1	83.7	79.0
Temporary visa holder	15.0	32.8	13.5	9.4	14.6
Unknown	5.7	5.3	2.4	6.9	6.4
Marital status (%)					
Never married	29.2	34.8	28.9	28.6	28.2
Married	44.2	36.9	50.2	42.1	44.9
Marriage-like relationship	8.1	8.3	8.0	9.4	7.3
Separated, divorced, widowed	4.9	5.5	5.0	4.7	4.9
Unknown	13.6	14.5	8.0	15.2	14.7
Bachelor's in same field as doctorate (%)[b]	52.2	44.0	62.2	41.7	57.2
Master's earned (%)	83.5	83.9	88.2	81.9	82.4
Age at doctorate (median years)	34.2	33.8	33.8	33.8	34.7
Time to doctorate (median years)					
From bachelor's	11.1	10.8	11.0	10.8	11.6
From graduate school start	9.6	9.0	9.3	9.0	9.9
From doctoral program start[c]	6.8	6.7	7.0	6.3	6.8
Male doctorate recipients (number)	2,516	223	512	589	1,192
Citizenship (%)					
U.S. citizen or permanent resident	79.7	58.7	85.0	82.2	80.0
Temporary visa holder	14.2	35.9	12.5	9.7	13.1
Unknown	6.2	5.4	2.5	8.1	6.9
Marital status (%)					
Never married	28.0	39.9	25.8	28.5	26.5
Married	46.6	33.6	53.9	42.8	47.8
Marriage-like relationship	7.2	9.4	7.2	8.8	6.0
Separated, divorced, widowed	4.2	4.0	4.9	3.9	4.1
Unknown	13.9	13.0	8.2	16.0	15.5
Bachelor's in same field as doctorate (%)[b]	54.9	44.4	65.2	43.3	58.1
Master's earned (%)	82.8	84.3	87.1	80.0	82.0
Age at doctorate (median years)	34.4	33.6	34.2	33.8	35.1
Time to doctorate (median years)					
From bachelor's	11.1	10.4	11.1	10.6	11.6
From graduate school start	9.7	8.8	9.3	9.0	9.9
From doctoral program start[c]	6.8	6.7	7.0	6.3	6.8
Female doctorate recipients (number)	2,423	341	375	803	904
Citizenship (%)					
U.S. citizen or permanent resident	78.9	63.9	82.9	84.8	77.5
Temporary visa holder	15.9	30.8	14.9	9.2	16.6
Unknown	5.2	5.3	2.1	6.0	5.9
Marital status (%)					
Never married	30.4	31.4	33.1	28.6	30.4

Table 68

Statistical profile of doctorate recipients in humanities and arts fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All humanities and arts fields	Foreign languages and literature	History	Letters	Other humanities and arts
Married	41.6	39.0	45.1	41.6	41.2
Marriage-like relationship	9.0	7.6	9.1	9.8	8.8
Separated, divorced, widowed	5.6	6.5	5.1	5.2	5.9
Unknown	13.4	15.5	7.7	14.7	13.7
Bachelor's in same field as doctorate (%)[b]	49.4	43.7	58.1	40.5	56.0
Master's earned (%)	84.2	83.6	89.6	83.3	83.0
Age at doctorate (median years)	33.8	33.8	33.6	33.7	34.2
Time to doctorate (median years)					
From bachelor's	11.0	11.0	10.5	11.0	11.4
From graduate school start	9.6	9.2	9.3	9.3	9.8
From doctoral program start[c]	6.8	6.8	7.0	6.4	6.8

[a] Includes respondents who did not report sex.

[b] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[c] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 69

Statistical profile of postgraduation plans of doctorate recipients in humanities and arts fields, by sex and field of doctorate: 2020

(Number and percent)

Characteristic	All humanities and arts fields	Foreign languages and literature	History	Letters	Other humanities and arts
All doctorate recipients (number)[a]	4,939	564	887	1,392	2,096
Postgraduation status (number)[b]					
Definite postgraduation study	533	48	153	107	225
Definite employment	2,071	254	356	607	854
Seeking employment or study	1,612	172	298	458	684
Other[c]	166	23	26	32	85
Definite postgraduation study (%)[d]					
Postdoc fellowship or research associateship	94.7	85.4	98.0	96.3	93.8
Other or unknown[e]	5.3	14.6	2.0	3.7	6.2
Definite employment (%)[f]					
Academe	70.4	81.9	66.3	79.4	62.2
Government	3.1	3.1	7.6	1.0	2.7
Industry or business[g]	7.3	5.1	8.1	6.8	8.0
Nonprofit organization	10.8	2.8	7.9	4.0	19.2
Other or unknown[h]	8.5	7.1	10.1	8.9	8.0
Primary activity[i]					
R&D	9.7	7.5	11.9	9.0	10.1
Teaching	67.5	81.7	66.8	70.0	61.8
Management or administration	10.6	5.0	10.4	12.7	10.8
Professional services	11.7	5.8	10.4	7.6	17.0
Other	0.5	0.0	0.6	0.7	0.4
Secondary activity[j]					
R&D	34.8	44.6	38.9	32.8	31.5
Teaching	12.9	6.7	8.0	14.0	16.0
Management or administration	9.1	8.8	8.6	10.6	8.4
Professional services	6.5	5.4	5.3	5.0	8.3
Other	0.5	0.0	0.3	0.7	0.5
No secondary activity	36.3	34.6	38.9	36.9	35.3
Activity unknown	5.8	5.5	5.3	4.9	6.8
Postgraduation location (%)[k]					
United States[l]	89.1	87.4	88.8	92.3	87.6
New England	8.1	9.9	11.4	8.1	6.0
Middle Atlantic	16.4	19.5	13.0	16.7	17.1
East North Central	11.7	11.9	10.2	11.6	12.3
West North Central	5.9	6.6	5.3	5.6	6.2
South Atlantic	14.6	13.9	17.1	15.1	13.3
East South Central	5.6	4.6	5.3	6.0	5.8
West South Central	9.2	5.6	9.0	9.1	10.4
Mountain	4.8	4.6	4.1	7.3	3.5
Pacific and insular	11.9	9.6	13.2	11.6	12.2
Not in United States	10.9	12.6	11.2	7.7	12.4
Location unknown	0.0	0.0	0.0	0.0	0.0
Male doctorate recipients (number)	2,516	223	512	589	1,192
Postgraduation status (number)[b]					
Definite postgraduation study	288	23	86	50	129
Definite employment	1,034	99	198	249	488

Table 69

Statistical profile of postgraduation plans of doctorate recipients in humanities and arts fields, by sex and field of doctorate: 2020

(Number and percent)

Characteristic	All humanities and arts fields	Foreign languages and literature	History	Letters	Other humanities and arts
Seeking employment or study	823	66	183	195	379
Other[c]	79	8	11	10	50
Definite postgraduation study (%)[d]					
Postdoc fellowship or research associateship	93.8	78.3	97.7	94.0	93.8
Other or unknown[e]	6.3	21.7	2.3	6.0	6.2
Definite employment (%)[f]					
Academe	65.6	85.9	61.6	74.7	58.4
Government	3.1	D	9.6	D	D
Industry or business[g]	9.1	D	11.1	D	9.0
Nonprofit organization	13.4	D	8.6	4.4	D
Other or unknown[h]	8.8	6.1	9.1	10.8	8.2
Primary activity[i]					
R&D	9.0	10.4	10.5	8.0	8.6
Teaching	66.5	77.1	63.7	73.5	61.8
Management or administration	9.8	5.2	10.5	10.5	10.1
Professional services	14.2	7.3	14.2	7.1	19.3
Other	0.5	0.0	1.1	0.8	0.2
Secondary activity[j]					
R&D	33.2	49.0	36.8	32.8	28.5
Teaching	14.7	9.4	7.9	10.9	20.6
Management or administration	10.0	9.4	9.5	12.2	9.2
Professional services	6.1	D	6.3	D	7.7
Other	0.5	0.0	0.5	1.3	0.2
No secondary activity	35.5	D	38.9	D	33.8
Activity unknown	5.2	3.0	4.0	4.4	6.6
Postgraduation location (%)[k]					
United States[l]	87.5	83.6	89.1	91.3	85.7
New England	7.9	11.5	9.9	9.7	5.3
Middle Atlantic	16.0	22.1	14.1	15.7	15.7
East North Central	11.3	13.9	8.8	11.0	12.2
West North Central	6.2	6.6	6.3	5.7	6.3
South Atlantic	14.6	10.7	18.7	15.7	13.0
East South Central	5.8	4.1	5.6	6.7	5.8
West South Central	9.4	D	9.5	D	11.5
Mountain	4.0	D	4.6	D	3.4
Pacific and insular	11.4	7.4	11.6	12.4	11.7
Not in United States	12.5	16.4	10.9	8.7	14.3
Location unknown	0.0	0.0	0.0	0.0	0.0
Female doctorate recipients (number)	2,423	341	375	803	904
Postgraduation status (number)[b]					
Definite postgraduation study	245	25	67	57	96
Definite employment	1,037	155	158	358	366
Seeking employment or study	789	106	115	263	305
Other[c]	87	15	15	22	35
Definite postgraduation study (%)[d]					
Postdoc fellowship or research associateship	95.9	92.0	98.5	98.2	93.8

Table 69

Statistical profile of postgraduation plans of doctorate recipients in humanities and arts fields, by sex and field of doctorate: 2020

(Number and percent)

Characteristic	All humanities and arts fields	Foreign languages and literature	History	Letters	Other humanities and arts
Other or unknown[e]	4.1	8.0	1.5	1.8	6.3
Definite employment (%)[f]					
Academe	75.1	79.4	72.2	82.7	67.2
Government	3.1	D	5.1	D	D
Industry or business[g]	5.5	D	4.4	D	6.6
Nonprofit organization	8.1	D	7.0	3.6	D
Other or unknown[h]	8.2	7.7	11.4	7.5	7.7
Primary activity[i]					
R&D	10.5	5.6	13.6	9.7	12.1
Teaching	68.6	84.7	70.7	67.6	61.8
Management or administration	11.3	4.9	10.2	14.2	11.8
Professional services	9.2	4.9	5.4	8.0	13.8
Other	0.4	0.0	0.0	0.6	0.6
Secondary activity[j]					
R&D	36.4	41.7	41.5	32.7	35.6
Teaching	11.0	4.9	8.2	16.2	9.7
Management or administration	8.2	8.3	7.5	9.4	7.4
Professional services	6.8	D	4.1	D	9.1
Other	0.4	0.0	0.0	0.3	0.9
No secondary activity	37.1	D	38.8	D	37.4
Activity unknown	6.5	7.1	7.0	5.3	7.1
Postgraduation location (%)[k]					
United States[l]	90.7	90.0	88.4	93.0	90.0
New England	8.3	8.9	13.3	7.0	6.9
Middle Atlantic	16.9	17.8	11.6	17.3	18.8
East North Central	12.0	10.6	12.0	12.0	12.6
West North Central	5.6	6.7	4.0	5.5	6.1
South Atlantic	14.7	16.1	15.1	14.7	13.9
East South Central	5.5	5.0	4.9	5.5	5.8
West South Central	9.0	D	8.4	D	8.9
Mountain	5.6	D	3.6	D	3.7
Pacific and insular	12.5	11.1	15.1	11.1	13.0
Not in United States	9.3	10.0	11.6	7.0	10.0
Location unknown	0.0	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report sex.

[b] Includes only respondents who reported postgraduation status.

[c] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

[d] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

[e] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

[f] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

[g] Includes doctorate recipients who indicated self-employment.

[h] Other is mainly composed of elementary and secondary schools.

[i] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[l] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 70

Statistical profile of doctorate recipients in other fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All other fields[a]	Business management and administration	Communication	Non-S&E fields nec
All doctorate recipients (number)[b]	3,006	1,466	593	947
Sex (%)				
Male	47.1	58.0	38.8	35.5
Female	52.9	42.0	61.2	64.5
Unknown	0.0	0.0	0.0	0.0
Citizenship (%)				
U.S. citizen or permanent resident	57.8	48.4	69.5	65.2
Temporary visa holder	35.8	44.9	26.0	27.9
Unknown	6.4	6.8	4.6	7.0
Marital status (%)				
Never married	26.0	26.6	29.7	22.7
Married	46.9	47.9	41.7	48.7
Marriage-like relationship	4.6	3.8	8.1	3.6
Separated, divorced, widowed	5.7	4.3	5.4	8.0
Unknown	16.9	17.5	15.2	17.0
Bachelor's in same field as doctorate (%)[c]	36.2	38.3	44.4	27.8
Master's earned (%)	81.4	76.9	87.2	84.7
Age at doctorate (median years)	34.8	33.8	33.5	37.1
Time to doctorate (median years)				
From bachelor's	11.3	10.6	10.3	13.0
From graduate school start	9.3	8.9	8.7	10.8
From doctoral program start[d]	5.3	5.0	5.3	5.8
Male doctorate recipients (number)	1,417	851	230	336
Citizenship (%)				
U.S. citizen or permanent resident	52.1	45.5	68.7	57.4
Temporary visa holder	41.3	46.9	27.0	36.9
Unknown	6.6	7.6	4.3	5.7
Marital status (%)				
Never married	26.0	26.6	28.7	22.6
Married	48.3	49.1	41.7	50.9
Marriage-like relationship	3.9	3.3	7.4	3.0
Separated, divorced, widowed	3.6	2.9	4.8	4.5
Unknown	18.2	18.1	17.4	19.0
Bachelor's in same field as doctorate (%)[c]	36.6	37.8	41.3	30.1
Master's earned (%)	79.5	76.1	85.7	83.6
Age at doctorate (median years)	34.8	33.9	34.8	36.0
Time to doctorate (median years)				
From bachelor's	11.0	10.6	11.0	12.0
From graduate school start	9.0	8.8	8.7	9.9
From doctoral program start[d]	5.0	5.0	5.3	5.8
Female doctorate recipients (number)	1,589	615	363	611
Citizenship (%)				
U.S. citizen or permanent resident	62.9	52.4	70.0	69.4
Temporary visa holder	30.9	42.1	25.3	22.9
Unknown	6.2	5.5	4.7	7.7
Marital status (%)				
Never married	26.0	26.7	30.3	22.7
Married	45.6	46.2	41.6	47.5
Marriage-like relationship	5.2	4.4	8.5	3.9

Table 70

Statistical profile of doctorate recipients in other fields, by sex and field of study: 2020

(Number, percent, and median years)

Characteristic	All other fields[a]	Business management and administration	Communication	Non-S&E fields nec
Separated, divorced, widowed	7.6	6.2	5.8	10.0
Unknown	15.7	16.6	13.8	15.9
Bachelor's in same field as doctorate (%)[c]	35.9	39.0	46.3	26.5
Master's earned (%)	83.1	77.9	88.2	85.3
Age at doctorate (median years)	34.9	33.7	32.9	37.5
Time to doctorate (median years)				
From bachelor's	11.5	10.6	10.0	13.8
From graduate school start	9.8	9.0	8.7	11.3
From doctoral program start[d]	5.3	5.0	5.3	5.8

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

[a] Includes other non-S&E fields not reported separately.

[b] Includes respondents who did not report sex.

[c] A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See table A-6 in the technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy.

[d] Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 71

Statistical profile of postgraduation plans of doctorate recipients in other fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All other fields[a]	Business management and administration	Communication	Non-S&E fields nec
All doctorate recipients (number)[b]	3,006	1,466	593	947
Postgraduation status (number)[c]				
Definite postgraduation study	214	61	57	96
Definite employment	1,793	988	324	481
Seeking employment or study	531	183	132	216
Other[d]	63	27	12	24
Definite postgraduation study (%)[e]				
Postdoc fellowship or research associateship	95.3	95.1	96.5	94.8
Other or unknown[f]	4.7	4.9	3.5	5.2
Definite employment (%)[g]				
Academe	73.2	78.9	80.9	56.3
Government	6.6	3.2	2.8	16.0
Industry or business[h]	13.7	13.4	11.4	15.8
Nonprofit organization	3.8	1.8	3.1	8.5
Other or unknown[i]	2.7	2.6	1.9	3.3
Primary activity[j]				
R&D	41.0	51.3	26.4	29.5
Teaching	38.9	33.9	61.6	33.7
Management or administration	10.9	9.5	5.9	17.2
Professional services	8.8	4.9	5.5	19.2
Other	0.5	0.4	0.7	0.4
Secondary activity[k]				
R&D	34.3	31.0	47.6	32.1
Teaching	36.8	47.7	17.6	27.2
Management or administration	4.8	3.2	4.9	8.0
Professional services	4.8	3.1	6.2	7.4
Other	0.2	0.2	0.0	0.2
No secondary activity	19.2	14.9	23.8	25.0
Activity unknown	5.5	4.9	5.2	6.9
Postgraduation location (%)[l]				
United States[m]	86.0	84.0	89.8	87.2
New England	6.9	7.7	6.0	5.9
Middle Atlantic	13.1	13.0	11.5	14.2
East North Central	11.9	11.4	14.4	11.1
West North Central	5.3	5.4	5.2	5.2
South Atlantic	17.6	15.3	17.6	21.8
East South Central	5.1	4.8	5.8	5.2
West South Central	10.0	11.2	10.0	7.8
Mountain	5.0	4.2	6.3	5.5
Pacific and insular	9.9	9.9	10.8	9.2
Not in United States	14.0	15.9	10.2	12.8
Location unknown	*	0.1	0.0	0.0
Male doctorate recipients (number)	1,417	851	230	336
Postgraduation status (number)[c]				
Definite postgraduation study	88	39	18	31
Definite employment	870	579	121	170

Table 71

Statistical profile of postgraduation plans of doctorate recipients in other fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All other fields[a]	Business management and administration	Communication	Non-S&E fields nec
Seeking employment or study	240	98	60	82
Other[d]	22	12	4	6
Definite postgraduation study (%)[e]				
Postdoc fellowship or research associateship	96.6	94.9	100.0	96.8
Other or unknown[f]	3.4	5.1	0.0	3.2
Definite employment (%)[g]				
Academe	73.3	77.7	75.2	57.1
Government	6.4	3.8	D	D
Industry or business[h]	14.3	13.8	14.0	15.9
Nonprofit organization	3.6	2.1	D	D
Other or unknown[i]	2.4	2.6	2.5	1.8
Primary activity[j]				
R&D	42.4	49.4	23.0	31.6
Teaching	39.3	36.2	59.3	35.5
Management or administration	9.6	8.6	8.0	14.5
Professional services	8.0	5.1	8.8	17.8
Other	0.7	0.7	0.9	0.7
Secondary activity[k]				
R&D	35.3	32.2	49.6	36.2
Teaching	37.2	45.9	15.9	21.7
Management or administration	5.2	3.7	5.3	10.5
Professional services	3.8	2.7	4.4	7.2
Other	0.2	0.4	0.0	0.0
No secondary activity	18.2	15.2	24.8	24.3
Activity unknown	6.7	5.5	6.6	10.6
Postgraduation location (%)[l]				
United States[m]	82.4	82.0	89.9	78.1
New England	6.2	6.8	D	D
Middle Atlantic	12.1	12.3	12.2	11.4
East North Central	12.6	11.5	D	D
West North Central	5.1	5.5	3.6	5.0
South Atlantic	15.2	13.8	17.3	18.4
East South Central	4.9	4.9	3.6	6.0
West South Central	9.7	11.0	10.1	5.5
Mountain	4.9	4.5	7.2	4.5
Pacific and insular	10.2	10.5	8.6	10.4
Not in United States	17.5	17.8	10.1	21.9
Location unknown	0.1	0.2	0.0	0.0
Female doctorate recipients (number)	1,589	615	363	611
Postgraduation status (number)[c]				
Definite postgraduation study	126	22	39	65
Definite employment	923	409	203	311
Seeking employment or study	291	85	72	134
Other[d]	41	15	8	18
Definite postgraduation study (%)[e]				
Postdoc fellowship or research associateship	94.4	95.5	94.9	93.8

Table 71

Statistical profile of postgraduation plans of doctorate recipients in other fields, by sex and field of study: 2020

(Number and percent)

Characteristic	All other fields[a]	Business management and administration	Communication	Non-S&E fields nec
Other or unknown[f]	5.6	4.5	5.1	6.2
Definite employment (%)[g]				
Academe	73.1	80.7	84.2	55.9
Government	6.7	2.4	D	D
Industry or business[h]	13.1	12.7	9.9	15.8
Nonprofit organization	4.1	1.5	D	D
Other or unknown[i]	2.9	2.7	1.5	4.2
Primary activity[j]				
R&D	39.8	53.9	28.4	28.4
Teaching	38.5	30.8	62.9	32.8
Management or administration	12.0	10.7	4.6	18.6
Professional services	9.5	4.6	3.6	19.9
Other	0.2	0.0	0.5	0.3
Secondary activity[k]				
R&D	33.3	29.3	46.4	30.1
Teaching	36.5	50.1	18.6	30.1
Management or administration	4.4	2.5	4.6	6.8
Professional services	5.7	3.6	7.2	7.4
Other	0.1	0.0	0.0	0.3
No secondary activity	20.0	14.5	23.2	25.3
Activity unknown	4.3	3.9	4.4	4.8
Postgraduation location (%)[l]				
United States[m]	89.3	86.8	89.7	92.0
New England	7.5	9.0	D	D
Middle Atlantic	13.9	13.9	11.2	15.7
East North Central	11.2	11.4	D	D
West North Central	5.5	5.3	6.2	5.3
South Atlantic	19.7	17.4	17.8	23.7
East South Central	5.2	4.6	7.0	4.8
West South Central	10.2	11.4	9.9	9.0
Mountain	5.1	3.7	5.8	6.1
Pacific and insular	9.5	9.0	12.0	8.5
Not in United States	10.7	13.2	10.3	8.0
Location unknown	0.0	0.0	0.0	0.0

* = value between 0.00% and 0.05%; D = suppressed to avoid disclosure of confidential information.

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

[a] Includes other non-S&E fields not reported separately.
[b] Includes respondents who did not report sex.
[c] Includes only respondents who reported postgraduation status.
[d] Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.
[e] Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.
[f] Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.
[g] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.
[h] Includes doctorate recipients who indicated self-employment.
[i] Other is mainly composed of elementary and secondary schools.

[j] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.
[k] Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.
[l] Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.
[m] Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):
Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table 72

Statistical profile of doctorate recipients, by ethnicity, race, and citizenship status: 2020

(Number, percent, and median years)

Characteristics	Total[a]	U.S. citizen	Non-U.S. citizen	Hispanic or Latino		Not Hispanic or Latino												Ethnicity not reported	
						American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported			
				U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen
All doctorate recipients (number)	55,283	34,492	18,482	2,851	1,254	97	D	3,218	11,852	2,458	625	23,944	3,783	1,136	D	353	454	435	395
Primary source of support (%)[b]																			
Teaching assistantships	21.5	20.5	23.2	16.8	19.3	8.4	0.0	18.5	24.0	12.5	28.0	22.1	21.8	20.3	14.3	18.4	17.5	19.2	30.9
Research or other assistantships or traineeships[c]	33.7	26.8	46.6	20.3	28.2	18.1	D	33.9	52.6	14.7	34.3	27.9	37.1	27.0	37.5	24.4	D	19.2	36.2
Fellowships, scholarships, or dissertation grants	24.4	26.9	19.8	36.2	28.4	32.5	0.0	32.5	16.6	25.8	21.3	25.0	25.9	31.4	28.6	26.4	24.9	20.0	21.3
Own resources	15.2	21.2	4.0	22.1	2.5	31.3	D	12.1	3.8	40.8	D	20.4	3.6	18.4	4.5	23.2	5.1	36.7	5.3
Employer	2.8	4.0	0.5	3.5	1.0	7.2	0.0	2.5	0.3	5.5	D	4.2	0.8	2.5	D	6.0	D	5.0	1.1
Other	2.4	0.5	5.9	1.1	20.6	2.4	33.3	0.4	2.6	0.8	3.1	0.4	10.8	0.5	14.3	1.6	15.3	0.0	5.3
Postgraduation status (number)[d]																			
Definite postgraduation study	13,546	8,435	5,064	718	382	13	0	806	3,379	372	119	6,137	1,077	306	32	59	43	24	32
Definite employment	21,743	14,498	7,159	1,128	474	49	D	1,258	4,803	1,138	245	10,289	1,460	450	D	113	84	73	42
Seeking employment or study	13,677	8,755	4,907	764	347	18	D	876	3,193	727	228	5,932	1,032	323	D	77	58	38	19
Other status[e]	1,496	1,174	311	107	27	3	0	162	164	78	15	747	83	48	4	18	12	11	6
Postgraduation study plans (%)[f]	38.4	36.8	41.4	38.9	44.6	21.0	0.0	39.1	41.3	24.6	32.7	37.4	42.5	40.5	39.5	34.3	33.9	24.7	43.2
Postgraduation employment plans (%)[g]																			
Academe	41.9	44.1	37.5	49.1	54.0	55.1	D	31.7	31.8	43.8	49.0	45.2	47.4	42.2	57.1	40.7	D	42.5	38.1
Government	8.0	10.0	4.1	10.0	6.5	14.3	0.0	7.1	2.9	13.2	11.4	9.9	5.9	10.9	D	13.3	D	9.6	2.4
Industry or business[h]	37.9	30.0	53.8	24.7	32.5	14.3	D	50.1	61.9	21.0	29.4	29.1	39.5	34.2	D	24.8	40.5	24.7	52.4
Nonprofit	5.9	7.4	3.0	7.0	4.9	D	0.0	6.8	2.4	7.6	5.7	7.5	3.8	D	D	8.0	D	11.0	2.4
Other or unknown plans[i]	6.3	8.5	1.7	9.1	2.1	D	0.0	4.4	1.0	14.5	4.5	8.4	3.4	D	2.0	13.3	1.2	12.3	4.8
Employment location (%)[j]																			
United States	89.9	98.2	73.2	98.6	59.1	D	D	96.3	79.7	99.4	60.0	98.3	60.6	98.2	D	D	54.8	100.0	64.3
Not United States	10.0	1.8	26.7	1.4	40.9	D	D	3.7	20.2	0.6	40.0	1.6	39.4	1.8	D	D	45.2	0.0	35.7

Table 72

Statistical profile of doctorate recipients, by ethnicity, race, and citizenship status: 2020

(Number, percent, and median years)

Characteristics	Total[a]	U.S. citizen	Non-U.S. citizen	Hispanic or Latino		Not Hispanic or Latino												Ethnicity not reported	
						American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported			
				U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen
Unknown	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Age at doctorate (median years)	31.5	31.8	31.1	32.3	33.0	36.5	48.6	31.1	30.5	36.2	35.2	31.6	32.3	30.8	32.3	32.5	31.3	33.3	32.6
Time to degree (median years)																			
From bachelor's	8.7	9.0	8.4	9.0	9.3	11.1	18.9	8.5	8.0	12.1	10.8	8.8	9.3	8.3	9.3	9.7	8.5	10.1	9.3
From graduate school start	7.5	7.3	7.7	7.6	8.0	9.7	18.7	7.3	7.3	10.2	8.2	7.3	8.3	7.0	8.3	8.3	7.8	9.6	7.6
From doctoral program start[k]	5.8	5.8	5.3	5.8	5.3	5.8	6.0	5.8	5.3	5.9	5.0	5.8	5.3	5.8	5.7	6.0	5.6	5.8	5.7

D = suppressed to avoid disclosure of confidential information.

[a] Includes respondents who did not report their citizenship.
[b] Percentages are based on the number of doctorate recipients who reported a primary source of financial support during graduate school.
[c] Includes research assistantships, other assistantships, traineeships, and internships or clinical residencies.
[d] Includes only respondents who reported postgraduation status.
[e] Includes respondents who indicated having no plans to work or study, respondents indicating another type of postgraduation plan, and respondents indicating definite plans for another full-time degree program.
[f] Excludes respondents who indicated plans for another full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.
[g] Percentages are based on the number of doctorate recipients who reported definite postgraduation plans for employment.
[h] Includes doctorate recipients who indicated self-employment.
[i] "Other" is mainly composed of elementary and secondary schools.
[j] Percentages are based on the number of doctorate recipients who reported definite postgraduation plan for employment and the location of employment.
[k] Time to doctorate from doctoral program start is based on master's program entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):
U.S. citizen refers to U.S. citizens and permanent residents. Non-U.S. citizen refers to temporary visa holders. Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Technical Notes

Data presented in *Doctorate Recipients from U.S. Universities: 2020* were collected by the Survey of Earned Doctorates (SED). The survey is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) and by three other federal agencies: the National Institutes of Health (NIH), Department of Education (ED), and National Endowment for the Humanities (NEH). This report presents the summary of these survey data.

Survey Overview (2020 survey cycle)

Purpose. SED collects data on the number and characteristics of individuals receiving research doctoral degrees from U.S. academic institutions.

Data collection authority. The information collected by the SED is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the America COMPETES Reauthorization Act of 2010. The Office of Management and Budget control number is 3145-0019, expiration date 30 April 2022.

Survey contractor. RTI International.

Survey sponsors. The SED is sponsored by NCSES within NSF and by NIH, ED, and NEH.

Key Survey Information

Frequency. Annual.

Initial survey year. Academic year 1957–58.

Reference period. Academic year 2019–20 (1 July 2019 to 30 June 2020).

Response unit. Individuals.

Sample or census. Census.

Population size. 55,283.

Sample size. Not applicable.

Survey Design

Target population. The population for the 2020 SED consists of all individuals receiving a research doctorate from a U.S. academic institution in the 12-month period beginning 1 July 2019 and ending 30 June 2020. A research doctorate is a doctoral degree that (1) requires completion of an original intellectual contribution in the form of a dissertation or an equivalent culminating project (e.g., musical composition) and (2) is not primarily intended as a degree for the practice of a profession. The SED recognized 18 distinct types of research doctorates in 2020 (table A-1). Recipients of professional doctoral degrees, such as MD, DDS, DVM, JD, DPharm, DMin, and PsyD, are not included in the SED.

The doctor of philosophy (PhD) constitutes the vast majority of research doctoral degrees. Of the 55,283 new research doctorates granted in 2020, 98.3% were PhDs (table A-2). The next most frequently occurring type of research doctorate was the doctor of education (EdD), which accounted for 0.9% of the total in 2020. No other type of doctoral degree accounted for more than 0.3% of the new research doctorates in 2020.

Sampling frame. The population eligible for the 2020 survey consisted of all individuals who received a research doctorate from a U.S. academic institution in the 12-month period ending 30 June 2020. Of the 456 institutions granting research doctorates, 7 institutions reported zero graduates, and 9 institutions refused to provide lists of graduates. For all 9 of the refusing institutions, the survey contractor was able to construct graduate lists using secondary data sources. Thus, the total universe consisted of 55,283 persons in 449 institutions that conferred research doctorates in 2020.

Sample design. The SED is a census.

Data Collection and Processing Methods

Data collection. In 2020, for the first time, the SED data collection did not use the self-administered paper questionnaire. The SED was completed primarily by self-administered Web survey with a small number of nonrespondents contacted to complete computer-assisted telephone interviewing (CATI).

When doctoral students apply for graduation, institutional coordinators at the universities give students the link to the SED Web survey registration website. Students who sign up at the survey registration website receive PIN and password information via e-mail, as well as the URL of the SED Web survey. The proportion of SED completions using the Web survey has increased each year since it was introduced in 2001, and it reached 97.3% in 2020.

Nonrespondents are contacted via e-mail and mail with the URL of the SED Web survey. If the series of follow-up emails and mailings is unsuccessful, the survey contractor attempts to reach nonrespondents to complete an abbreviated survey by CATI. Approximately 2.7% of SED completions were from CATI in 2020. At the end of data collection phase, institutional coordinators are contacted to obtain information on a small number of critical SED data items for nonrespondents from their institution.

A small but growing number of research doctoral degrees are awarded as a part of joint doctoral programs (i.e., a research doctorate recipient studied at more than one institution in pursuit of the doctoral degree). In these instances, the survey contractor relies on information provided by the institutions to appropriately attribute the doctorate to one of the doctorate-granting institutions.

The survey collects a complete college education history. To code U.S. postsecondary degree-granting institutions, survey staff use the Integrated Postsecondary Education Data System (IPEDS) institution codes. To code the degree-granting institutions of respondents from foreign countries, survey staff maintain a database of foreign institutions, updating it annually to include new entries for foreign institutions reported by SED respondents. About one-third of 2020 U.S. research doctorate recipients received undergraduate degrees from foreign institutions.

Mode. As noted earlier, two modes of data collection are used in the SED: Web survey and CATI. In 2020, 97.3% of survey responses were obtained via the Web survey and 2.7% via CATI.

Response rate. Of the 55,283 individuals who received a research doctorate in 2020, 92.1% completed the SED. Additional information on response rate can be found below, under “Nonresponse error.”

Data editing. Approved automated edits are applied to the SED, a number of which pertain to the education history section.

Imputation. No imputation was used in producing the 2020 SED Doctorate Records File (DRF) except for the following variables:

- *Age at doctorate*. Months (of birth and doctorate award) were included in the calculation of median age whenever available. If birth month was missing, the month value was randomly imputed.

- *Time to degree from bachelor's completion*. Months (of bachelor's completion and doctorate award) were included in the calculation of total time to degree. If months were missing, month values were logically imputed to the modal value for doctorate recipients who provided month of bachelor's completion and converted to the number of days corresponding to that month.
- *Time to degree from graduate school entry*. Months (of graduate school entry and doctorate award) were included in the calculation of graduate school time to degree. If months were missing, month values were logically imputed to the modal value for doctorate recipients who provided month of graduate entry.
- *Time to degree from doctoral program entry*. Doctoral program entry is based on master's degree program entry if the master's degree was at the doctoral institution in the same fine field of study or if it was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry. Months are included in the calculation of doctoral program time to degree. If the month of entry used in the calculation (master's degree program entry or doctoral program entry) was not reported, the entry month was logically imputed to the modal value for all cases that did report the entry month in the academic year the case was added to the doctoral records file (typically the academic year matching the graduation date of the case).

Weighting. Survey data were not weighted.

Variance estimation. The SED is a census of all research doctorates with no weights calculated, so no variance estimation techniques were used.

Disclosure protection. Two strategies are used in data table production to protect against the disclosure of confidential information provided by SED respondents. In the first, used since 2004, data cell values based on counts of respondents that fall below a predetermined threshold are deemed to be sensitive to potential disclosure and are suppressed. The symbol "D" replaces the cell value. If a suppressed cell does not provide sufficient disclosure protection in tables that include marginal totals, additional (complementary) suppressions of above-threshold data cells are necessary, and the suppression symbol "D" is used to replace those cell values as well.

The second disclosure protection strategy is field aggregation. Field aggregation was applied to data table 16 and table 22 in the current report, which present counts of doctorate recipients classified by fine fields of study and by either sex or race and ethnicity. Because some fine fields of study award relatively few doctorates in a single year, the degree counts by race, ethnicity, or sex within these fields can be quite small, leading to extensive cell suppression. The field aggregation technique combines data from small fields of study with the data from related fields, so that the degree counts in the aggregated fields are sufficiently large to protect the confidentiality of respondent information.

Data by race, ethnicity, and sex in the fine fields shown in table 16 and table 22 are reported for fields in which at least 25 U.S. citizen or permanent resident individuals earn a doctoral degree in a given year, regardless of how small the count may be in a particular cell. Counts of doctorate recipients in fields having fewer than 25 U.S. citizen or permanent resident doctorates awarded are aggregated with those of one or more related fields until the total number of doctorates in the aggregated field reaches at least 25 U.S. citizens and permanent residents. The related fields chosen for aggregation to protect below-threshold fields may or may not also be below-threshold. The degree count in each racial, ethnic, or sex category of these aggregated fields is reported in the tables, but the constituent fine fields of the aggregated fields are not displayed.

In 2020, fewer than 25 doctorates were awarded to U.S. citizens or permanent residents in 86 of the 336 fine fields of study collected in the SED. These below-threshold fine fields were combined with related fields of study to produce 48 aggregated fields in 2020. Table 16 and table 22 report data on the 48 aggregated fields (comprising 151 fine fields) and the remaining 185 unaggregated fine fields. Table A-5 lists the aggregated fields and their constituent fine fields.

Data reported for "other" fine fields are not considered confidential. However, a total of 24 "other" fine fields, including 7 that fall under the threshold, are used as aggregation partner fields.

Survey Quality Measures

Sampling error. Not applicable because the SED is a census.

Coverage error. Due to the availability of comprehensive lists of doctorate-granting institutions and the institutions' high levels of participation in the survey, coverage error of institutions is minimal. Because the graduate schools collect the survey data from degree recipients at the time of doctorate completion, coverage error for the universe of doctorate recipients is also minimal. Comparisons of the institutions and the number of research doctorate recipients covered by the SED with the total number of doctorate recipients (including nonresearch doctorate degree recipients) reported by institutions to the National Center for Education Statistics confirm that there is minimal coverage error of doctorate recipients. Institutions that begin to confer research doctorates are invited to join the SED. If a university that confers research doctorates does not wish to participate in the SED, slight undercounts may result. In 2020, nine doctorate-granting universities declined to fully enumerate their doctorate recipients for academic year 2020. Information on the graduates for all of these institutions were found from other sources, such as ProQuest.

Nonresponse error.

- *Unit nonresponse.* Of the 55,283 individuals who received a research doctorate in 2020, 92.1% completed the survey (table A-3). This percentage is referred to as the self-report rate. Skeletal records for nonrespondents appear on the data file and contain a limited number of SED critical data items (doctoral institution, year of doctorate, field of doctorate, type of doctorate, and, if available, baccalaureate institution, master's degree institution, and sex) that are constructed for nonrespondents from administrative records of the university, such as commencement programs, graduation lists, and other public records. These nonresponding cases are included in the reported total of 55,283 doctorate recipients for 2020.

  Nonresponse was concentrated in certain institutions: 7 of the 449 doctorate-granting institutions accounted for 24% of the total nonrespondents, and 43 of these institutions accounted for 70% of the total nonrespondents.

  Counts for previous years were corrected by the addition of data from surveys received after the close of data collection for a given year.

- *Item nonresponse.* Among the 55,283 individuals who received a research doctorate in 2020, item nonresponse rates for the key SED demographic variables—sex, citizenship, country of citizenship, race and ethnicity, and location after graduation—range from 0.0% for sex to 7.2% for location after graduation. Table A-4 shows item response rates for 2010–20 for all variables, by variable name (see clarifying notes in the table).

Measurement error. The most likely source of measurement error in the SED is attributable to incomplete or vague information for degree or dissertation field of study provided by respondents or degree-granting institutions, and for educational history provided by respondents. For field of degree, some respondents (or institutions) fail to provide a degree code and instead provide a text string that must be manually coded by the survey contractor. Similarly, some aspects of the educational history timeline—including the field of study for earned associate's, bachelor's or master's degrees—require manual coding. When manual coding is required, a pair of trained reviewers independently code each text entry, and any discrepancies between the two coders are resolved by a third, more expert reviewer. All manual coding is subject to a final review by NCSES. Generally, the percentage of responses in these areas requiring manual coding is low. In 2020, 3.1% of PhD fields of study were manually coded, as well as 7.5% of associate's degree fields of study, 1.4% of bachelor's degree fields of study, and 3.0% of master's degree fields of study.

Data Comparability

Changes in survey coverage and population. For the 2020 cycle, two institutions were added to the SED universe.

Changes in questionnaire. The following changes were made to the questionnaire in 2020:

New questions. None.

Questions dropped. None.

Question response options changed. None.

Changes in reporting procedures or classification.

- *Citizenship*. The citizenship status variable is used to identify the appropriate citizenship category of respondents, including the citizenship category of respondents who did not respond to the citizenship status survey item on the SED. The code framework for the citizenship status variable is outlined below.

Code	Citizenship category
0	U.S. native born
1	U.S. naturalized citizen
2	Non-U.S. immigrant (permanent resident)
3	Non-U.S. non-immigrant (temporary U.S. visa)
4	Non-U.S., visa status unknown
U	U.S. citizen, unspecified
Blank	Missing or citizenship unknown

  Respondents who indicated a U.S. birthplace, regardless of what they reported for citizenship status, were assigned code 0.

  In 1999, code 4 (non-U.S., visa status unknown) was introduced, and data were back-coded through 1997. Respondents who designated a non-U.S. country for the country of citizenship item but did not respond to the citizenship status item were assigned code 4 for citizenship status. From 1997 to 2003, non-U.S.-born respondents who did not indicate their country of citizenship or citizenship status were assigned to code 4 if three out of four geographic variables—place of birth, place of high school, place of college entry, and postgraduation location—were non-U.S. locations. Beginning with the 2004 SED, the variable “place of baccalaureate institution” replaced “place of college entry” in the assignment of a citizenship code for respondents who did not indicate citizenship status.

  For tabulations in this report, code 4 was combined with code 3—that is, counts of doctorate recipients in the temporary visa holder category include non-U.S. citizens with unknown visa status. This is consistent with coding procedures in previous data collections. However, the existence of code 4 allows the microdata user to exclude cases for which visa status is unknown. Prospective data users should note, however, that the number of cases in the code 4 group is not sufficient to warrant analysis as a separate citizenship category.

  Non-U.S. citizens who did not report a country of citizenship but reported the same non-U.S. country for three out of four geographic variables—place of birth, place of high school, place of baccalaureate institution, and postgraduation location—were assigned that reported country as their country of citizenship.

- *Debt*. Since 2001, respondents have been asked to indicate the amount of education-related debt they owe, with separate response categories for graduate and undergraduate education. To estimate overall debt, the midpoint of the chosen range for undergraduate and for graduate debt was selected and summed to yield a total debt amount. Where mean debt levels are presented in this report (i.e., table 38 and table 40), the individual values for debt are assigned as the midpoint of the chosen range for graduate and undergraduate debt. Doctorate recipients who chose the lowest

debt category (no debt) were assigned a value of $0 for the computation of mean debt levels. Doctorate recipients who chose the uppermost category available prior to 2019 ($90,001 or more) were assigned a value of $95,000 for the computation of mean debt levels. In 2019, additional response options were added at the upper range for graduate debt with the highest being $160,001 or more. Doctorate recipients who choose this uppermost category are assigned a value of $165,000 for the computation of mean debt levels. All valid responses, including "no debt," are included in the computation of all average debt figures in this report.

- *Field of study*. Beginning in 2015, the broad field of study of "physical sciences" was broken out into two separate broad fields: "physical sciences and earth sciences" and "mathematics and computer sciences." Also beginning in 2015, the major fields of "mathematics and statistics" and "computer and information sciences" are listed under the new broad field of "mathematics and computer sciences." Prior to 2015, these major fields were listed under physical sciences.
- *Functional limitations (previously, disability)*. Beginning in 2012, the functional limitations items assess both the presence and severity of functional limitations in each of several domains, which do not precisely overlap with the domains in prior surveys.
- *Median computation*. Since 1994, medians have been computed as outlined below. When months are included, they are converted to the number of days corresponding to the first day of the month. In 2017, the method for accounting for leap days changed to reflect the actual number leap days during the time period specified, rather than the prior method of adding 0.25 days to each year.
    - *Median age*. Months (of birth and doctorate award) are included in the calculation of median age whenever available. Beginning in 2015, if birth month is missing, the month value is randomly imputed. Prior to 2015, the missing month value was assigned to the month the doctorate was received.
    - *Time to degree from bachelor's completion*. Months are included in the calculation of total time to degree. If months are missing, month values are assigned to the modal value for doctorate recipients who provide month of bachelor's completion and converted to the number of days corresponding to that month.
    - *Time to degree from graduate school entry*. Months are included in the calculation of graduate school time to degree. If months are missing in the calculation of graduate school time to degree, month values are assigned to the modal value for doctorate recipients who provided month of graduate entry. Reports published before 2004 reported a different time-to-degree measure: registered time to degree. Comparisons of graduate school time-to-degree data with pre-2004 registered time-to-degree data should be interpreted cautiously. For an explanation of registered time to degree, see the technical notes of any *Doctorate Recipients from United States Universities: Summary Report* published before 2004.
    - *Time to degree from doctoral program entry*. This variable was first included in 2015. Doctoral program entry is based on master's degree program entry if the master's degree was at the doctoral institution in the same fine field of study or if it was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry. Months are included in the calculation of doctoral program time to degree. If the month of entry used in the calculation (master's degree program entry or doctoral program entry) was not reported, the entry month is assigned to the modal value for all cases that did report the entry month in the academic year the case was added to the doctoral records file (typically the academic year matching the graduation date of the case).
- *Race and Hispanic ethnicity*. Since 2001, respondents have been asked to first indicate whether they are Hispanic or Latino and then to check one or more racial group categories (i.e., American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African American, or White).

In data tables, doctorate recipients who report Hispanic or Latino ethnicity, regardless of race, are counted as Hispanic or Latino, and as of 2013, those who did not answer the Hispanic or Latino question are counted as "ethnicity not reported." Respondents who indicate that they are not Hispanic or Latino and indicate a single race are reported in their respective racial groups, except for those indicating Native Hawaiian or Other Pacific Islander, who are included in "other race or race not reported." Beginning in 2007, doctorate recipients who indicate they are not Hispanic or Latino and indicate more than one race are reported in the group "two or more races."

- *Research doctoral degree*. As doctoral degree programs change to meet the needs of students, the orientation of the degrees they award may change from research to professional, and vice versa. Survey staff review degree programs to ensure that the designation of research doctorate remains appropriate. As a result of degree reviews in past data collections, survey staff identified several research doctoral degrees that shifted to a professional orientation. The doctor of music (DM) and the doctor of industrial technology (DIT) were both dropped from the SED in 2008, and the graduates (approximately 40 to 60 per year) who earn these doctoral degrees are no longer included in the SED.

  After a multiyear review of doctoral programs offering the EdD degree, most were determined to have a professional orientation and were dropped from the SED in 2010 and 2011, and graduates earning EdD degrees from those programs are no longer included in the SED. As a result, the proportion of EdD degrees among the total number of research doctorate recipients fell from 5.5% in 2009 to 0.9% in 2020. Table A-1 lists the doctoral degrees that were eligible for inclusion in the SED in 2020.

- *Salary*. Median salary is calculated from exact salary values when provided by the respondent. Salary imputation was dropped as of 2015 due to the increase in exact salary response rate. From 2011–14, if a respondent selected a salary range instead of providing an exact salary value, exact salary values were imputed for median salary calculation purposes by applying hot-deck imputation based on salary range and other relevant respondent characteristics. Prior to 2011, median salary was calculated directly from the salary range values via interpolation methods, and exact salary values were not used in the calculation of median salary. Only salary data from doctorate recipients reporting definite commitments for employment or for a postdoc position in the United States are included in median salary calculations.

Definitions

- *Basic annual salary*. Annual salary expected to be earned from the doctorate recipient's principal job in the next year after receiving the doctorate, not including bonuses or additional compensation for summertime teaching or research.
- *Carnegie classification (institution categories).* In this report, four types of doctorate-granting institutions identified in the figures and tabulations are defined according to the Carnegie classification scheme as updated in 2018: doctoral very high research, doctoral high research, doctoral/professional universities, and other universities (comprised of all other classifications). Institutions are classified according to their aggregate and per-capita levels of research activity, using indicators of research and development expenditures, staffing (including postdoctoral appointees and other nonfaculty research staff with doctorates), and doctoral conferrals in science and engineering and other fields.
- *Definite plans to stay in the United States.* A respondent is coded as having definite plans to stay in the United States if the reported postgraduation location was in the United States and the reported postgraduation plans for employment or postdoc were coded "definite."
- *Definite postgraduation plans.* The status of postgraduation plans is coded using the values from item B2 of the survey questionnaire, which indicate whether the doctorate recipient's postgraduation plans for employment or a postdoc position were definite at the time the survey was completed.

- *Field of study.* The SED has 336 fine fields of doctoral study, which are grouped into 35 major fields of study. The major field groupings are further aggregated into eight broad fields: life sciences, psychology and social sciences, physical sciences and earth sciences, mathematics and computer sciences, engineering, education, humanities and arts, and other fields. The levels of this variable were derived by grouping related fine fields of study from the field of study taxonomy used in the SED (**table A-6**). See the survey questionnaire for a full listing of the fine fields of study in 2020.

  Doctorate recipients indicate their fields of specialty. Their choices may differ from departmental names. Field groupings may differ from those in other reports published by federal sponsors of the SED. The "general" field categories (e.g., "chemistry, general") include individuals who either received the doctorate in the general subject area or who did not indicate a particular specialty field. The "other" field categories (e.g., "chemistry, other") include individuals whose specified doctoral discipline was not among the specialty fields listed.

- *Median age at doctorate.* One-half of the respondents received the doctorate at or before this age. A recipient's age is obtained by subtracting the month and year of birth from the month and year of doctorate.

- *Percentage with master's.* This variable is the percentage of doctorate recipients in a field who received a master's degree in any field before earning the doctorate.

- *Research doctorate.* A research doctoral degree is oriented toward preparing students to make original intellectual contributions in a field of study and is not primarily intended for the practice of a profession. Research doctorates require the completion of a dissertation or equivalent project.

- *Time to doctorate.* The time it takes to complete a doctoral degree is measured in three ways: (1) the time elapsed from completion of the baccalaureate to completion of the doctorate (total time to degree), (2) the time elapsed from the start of any graduate school program to completion of the doctorate (graduate school time to degree), and (3) the time elapsed from the start of the doctoral program. Time-to-doctorate measures herein are reported as medians. In 2017, the method for accounting for leap days changed to reflect the actual number leap days during the time period specified, rather than the prior method of adding 0.25 days to each year.

  - *Total time to degree.* This variable is the total elapsed time between the baccalaureate and the doctorate, including time not enrolled in school. It can be computed only for individuals whose baccalaureate year is known. Baccalaureate year is often obtained from commencement programs or doctorate institutions when not reported by the recipient.

  - *Graduate school time to degree.* This variable is the elapsed time from the initiation of graduate study, in any program or capacity at any university, and the award of the doctorate. This variable can be computed only for individuals who provided the year they started graduate school. If an individual did not respond to this question, which asks for the month and year of first entry into any graduate school, then values for graduate school month and year of entry are imputed from the month and year of entry into the most recent master's degree program or, if that is missing, the month and year of entry into the doctoral degree program. Months are included in the computation.

  - *Doctoral program time to degree.* This variable is either (1) the elapsed time from the master's degree program entry, if the master's degree was awarded at the doctoral institution and was in the same fine field as the doctorate or if the master's degree was a prerequisite to the doctoral program until doctorate completion; otherwise, it is (2) the elapsed time from the doctoral program entry until doctorate completion. This variable is only computed for academic year 2015 and later doctorates.

- U.S. regions of employment. This variable is used to classify the location of U.S. employment after award of the doctorate.

New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Middle Atlantic	New Jersey, New York, Pennsylvania
East North Central	Illinois, Indiana, Michigan, Ohio, Wisconsin
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
East South Central	Alabama, Kentucky, Mississippi, Tennessee
West South Central	Arkansas, Louisiana, Oklahoma, Texas
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Pacific and Insular	Alaska, California, Hawaii, Oregon, Washington, American Samoa, Guam, Puerto Rico, Trust Territories, Virgin Islands

Technical Tables

Table A-1

Types of research doctoral degrees recognized by the Survey of Earned Doctorates: 2020

(Type)

Abbreviation	Degree title
PhD	Doctor of Philosophy
DA	Doctor of Arts
DBA	Doctor of Business Administration
DDes	Doctor of Design
DEng, DESc, DES	Doctor of Engineering or Engineering Science
DFA	Doctor of Fine Arts
DHL	Doctor of Hebrew Letters
DMA	Doctor of Musical Arts
DME	Doctor of Music Education
DML	Doctor of Modern Languages
DNSc	Doctor of Nursing Science
DPH	Doctor of Public Health
DSc, ScD	Doctor of Science
EdD	Doctor of Education
JCD	Doctor of Canon Law
JSD, SJD	Doctor of Juridical Science
STD	Doctor of Sacred Theology
ThD	Doctor of Theology

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table A-2

Research degrees included in the Survey of Earned Doctorates: 2016–20

(Number and percent)

Research degree	Degree title	2016		2017		2018		2019		2020	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All research doctorates		54,809	100.0	54,552	100.0	55,085	100.0	55,614	100.0	55,283	100.0
PhD	Doctor of Philosophy	53,778	98.1	53,471	98.0	54,136	98.3	54,712	98.4	54,331	98.3
EdD	Doctor of Education	616	1.1	589	1.1	571	1.0	473	0.9	482	0.9
DSc, ScD	Doctor of Science	103	0.2	109	0.2	92	0.2	92	0.2	68	0.1
DEng, DESc, DES	Doctor of Engineering or Engineering Science	33	0.1	28	0.1	21	*	43	0.1	55	0.1
DA	Doctor of Arts	7	*	4	*	5	*	1	*	1	*
DBA	Doctor of Business Administration	32	0.1	32	0.1	24	*	17	*	22	*
DMA	Doctor of Musical Arts	141	0.3	139	0.3	116	0.2	115	0.2	172	0.3
DDes	Doctor of Design	5	*	7	*	9	*	8	*	8	*
DPH	Doctor of Public Health	20	*	53	0.1	41	0.1	37	0.1	38	0.1
DHL	Doctor of Hebrew Letters	1	*	0	0.0	0	0.0	1	*	1	*
DME	Doctor of Music Education	0	0.0	3	*	0	0.0	1	*	2	*
DML	Doctor of Modern Languages	5	*	6	*	4	*	6	*	5	*
DNSc	Doctor of Nursing Science	2	*	10	*	0	0.0	2	*	4	*
ThD	Doctor of Theology	14	*	23	*	11	*	11	*	3	*
DFA	Doctor of Fine Arts	2	*	4	*	3	*	2	*	1	*
JSD, SJD	Doctor of Juridical Science	45	0.1	67	0.1	50	0.1	91	0.2	84	0.2
STD	Doctor of Sacred Theology	2	*	1	*	0	0.0	1	*	2	*
JCD	Doctor of Canon Law	2	*	6	*	2	*	1	*	4	*
All other research doctorates[a]		1	*	0	0.0	0	0.0	0	0.0	0	0.0

* = value < 0.05%.

[a] Includes doctorates awarded that were determined to be ineligible for Survey of Earned Doctorates after the doctoral program was begun but before doctorate was granted.

Note(s):
Due to rounding, percentages may not sum to 100.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table A-3

Survey response rates: 1970–2020

(Percent)

Year	Self-report rate
1970	98.1
1971	97.5
1972	97.3
1973	97.5
1974	94.2
1975	97.3
1976	97.2
1977	96.6
1978	96.3
1979	96.4
1980	96.2
1981	95.7
1982	95.3
1983	95.5
1984	95.1
1985	94.8
1986	93.5
1987	93.1
1988	92.9
1989	92.3
1990	93.6
1991	94.6
1992	95.1
1993	94.7
1994	94.6
1995	94.2
1996	93.0
1997	91.6
1998	91.9
1999	91.9
2000	92.4
2001	92.7
2002	91.3
2003	91.6
2004	91.3
2005	92.1
2006	93.1
2007	91.7
2008	92.3
2009	92.6
2010	93.0
2011	92.9
2012	92.5
2013	92.0
2014	90.6
2015	90.3
2016	92.0
2017	91.4
2018	92.2
2019	92.2

Table A-3

Survey response rates: 1970–2020

(Percent)

Year	Self-report rate
2020	92.1

Note(s):
Rates for 1970–2019 include late responses. Rate for 2020 may increase slightly in the next year if additional survey completions are submitted after survey closure.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table A-4

Item response rates: 2010–20

(Percent)

Variable name	Variable description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AAEMONTH	First associate's degree start month	na	na	na	na	na	na	na	96.9	96.2	95.2	96.0
AAEYEAR	First associate's degree start year	na	na	na	na	na	na	na	97.6	96.3	95.8	96.5
AAFIELD	First associate's degree field	na	na	na	na	na	na	na	85.0	94.4	95.1	95.0
AAINST	First associate's degree institution	na	na	na	na	na	na	na	93.4	92.0	97.6	98.4
AAMONTH	First associate's degree month	na	na	na	na	na	na	na	97.6	96.7	95.9	96.4
AANID	First associate's degree institution (NCSES institution identification)	na	na	na	na	na	na	na	93.3	92.0	97.6	98.4
AAYEAR	First associate's degree year	na	na	na	na	na	na	na	98.3	97.0	96.7	97.1
AADEGRN	Number of associate's degrees received	na	na	na	na	na	na	na	90.3	93.5	93.6	93.6
AGEDOC	Age at doctorate	na	na	na	na	na	92.1	94.1	94.6	95.1	94.8	94.4
AMERIND	American Indian or Alaska Native race indicator	91.6	91.6	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.1
ASIAN	Asian race indicator	91.6	91.6	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.1
AUDIDIS	Deaf or hearing disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
BA2EMONTH	Most recent baccalaureate start month	na	na	na	na	na	na	na	89.9	92.3	94.4	94.4
BA2EYEAR	Most recent baccalaureate start year	na	na	na	na	na	na	na	90.2	92.3	94.6	94.4
BA2FIELD	Most recent baccalaureate degree field	na	na	na	na	na	na	na	89.7	91.6	94.4	94.2
BA2INST	Most recent baccalaureate institution	na	na	na	na	na	na	na	88.5	90.5	94.5	95.0
BA2MONTH	Most recent baccalaureate month	na	na	na	na	na	na	na	90.0	92.4	94.4	94.5
BA2NID	Most recent baccalaureate institution (NCSES institution identification)	na	na	na	na	na	na	na	88.5	90.5	94.5	95.0
BA2YEAR	Most recent baccalaureate year	na	na	na	na	na	na	na	90.4	92.6	94.7	94.6
BADEGRN	Number of bachelor's degrees received	na	na	na	na	na	na	na	91.1	98.4	99.0	98.5
BADBLFIELD	First baccalaureate double major field	na	na	na	na	na	na	na	96.4	98.4	98.7	98.6
BADBLMAJ	First baccalaureate double major indicator	na	na	na	na	na	na	na	89.5	91.0	91.1	91.0
BAEMONTH	First baccalaureate start month	na	na	na	na	87.0	87.0	89.0	89.6	90.7	90.7	90.7
BAEYEAR[a]	First baccalaureate start year	86.9	87.6	88.2	88.8	87.3	87.3	89.4	89.7	90.7	90.7	90.7
BAFIELD	First baccalaureate field	88.5	89.0	88.5	89.5	87.9	87.9	89.7	90.4	90.7	90.9	90.9
BAINST	First baccalaureate institution	91.6	92.5	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6
BAMONTH	First baccalaureate month	87.6	88.3	88.9	89.2	87.7	87.6	89.4	89.7	90.8	90.8	90.8
BANID	First baccalaureate institution (NCSES institution identification)	91.6	92.5	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6
BANONE[b]	No bachelor's and/or master's degree indicator	14.6	16.4	18.2	20.4	21.4	21.7	22.4	85.5	91.7	91.8	91.8
BAPLACE	First baccalaureate institution location	91.6	92.5	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6
BAYEAR	First baccalaureate year	91.7	92.3	92.0	92.3	90.3	90.8	93.1	94.4	94.9	95.4	94.8
BIRTHMO	Month of birth	92.3	92.2	92.1	92.5	90.7	91.6	93.2	93.9	94.6	94.4	93.9
BIRTHPL	Place of birth	93.4	94.3	94.2	93.5	91.9	92.1	94.5	95.1	96.0	96.5	96.6
BIRTHYR	Year of birth	93.0	93.0	92.8	93.1	91.3	92.1	94.1	94.5	95.1	94.8	94.4
BLACK	Black race indicator	91.6	91.6	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.1
CITIZ	Type of citizenship	94.2	94.0	93.8	94.2	92.3	93.3	95.2	95.4	96.1	96.3	95.8
CNTRYCIT[c]	Country of citizenship	93.8	93.7	93.6	93.8	92.1	93.1	94.8	95.0	95.2	95.2	95.2
COGNDIS	Learning or cognitive disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
DDSDEG	Earned a professional dental degree	87.7	88.6	88.9	88.8	87.6	87.9	88.3	88.6	89.7	89.4	89.2
DDSSTUDY	Earning a professional dental degree	87.7	88.6	88.9	88.8	87.6	87.9	88.3	88.6	89.7	89.4	89.2
DEPEND18	Number of dependents-ages 6–18	88.3	89.2	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.7
DEPEND19	Number of dependents-ages 19 and older	88.3	89.2	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.7
DEPEND5	Number of dependents-ages 5 or younger	88.3	89.2	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.7

Table A-4

Item response rates: 2010–20

(Percent)

Variable name	Variable description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DIFAGE	Earliest age experienced difficulties	na	na	90.4	90.8	89.4	89.4	90.9	89.9	90.4	90.5	90.2
DIFCOGN	Degree of difficulty concentrating, remembering, or making decisions	na	na	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DIFHEAR	Degree of difficulty hearing	na	na	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DIFLIFT	Degree of difficulty lifting	na	na	90.5	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DIFSEE	Degree of difficulty seeing	na	na	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DIFWALK	Degree of difficulty walking	na	na	90.5	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DISABILITY1	Disability status	89.7	89.8	na	na	na	na	na	na	na	na	na
DISABILITY2	Moderate or greater degree of difficulty in any domain	na	na	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.4
DOCCODE	Type of doctorate (since 2004)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EDFATHER	Father/male guardian's education	90.8	90.8	90.7	90.0	88.6	88.4	89.9	89.9	89.4	88.7	88.4
EDMOTHER	Mother/female guardian's education	90.9	90.9	90.8	90.1	88.6	88.5	89.9	90.0	89.8	89.3	89.0
GDEBTLVL	Graduate debt level	92.7	93.3	92.9	89.7	88.2	90.1	93.1	92.3	92.7	93.4	93.5
GEMONTH	Month of graduate program entry	87.4	88.0	88.4	88.5	90.1	89.7	90.7	90.3	92.0	92.0	92.0
GEYEAR	Year of graduate program entry	87.8	88.3	88.6	88.7	90.3	89.9	90.9	90.4	92.0	92.0	92.0
HAWAIIAN	Native Hawaiian or Other Pacific Islander race indicator	91.6	91.6	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.1
HISPANIC	Hispanic origin indicator	91.4	92.2	92.0	92.1	90.3	91.5	93.0	93.7	94.7	94.7	94.6
HSPLACE	Place of high school	90.8	91.8	91.7	91.2	89.7	89.5	91.6	90.1	90.5	90.7	97.2
JRCOLL	Junior college indicator	91.2	93.1	93.0	92.6	91.1	90.8	93.4	93.2	93.8	94.1	94.2
MA1CRED	Credits from first master's degree counted toward doctoral degree	na	na	na	na	na	na	na	97.6	99.5	99.4	99.9
MA1EMONTH	First master's degree start month	na	na	na	na	na	na	na	99.6	98.9	98.5	98.3
MA1EYEAR	First master's degree start year	na	na	na	na	na	na	na	99.7	99.0	98.7	98.3
MA1FIELD	First master's degree field	na	na	na	na	na	na	na	99.4	98.8	98.8	98.5
MA1INST	First master's degree institution	na	na	na	na	na	na	na	97.9	97.8	98.8	98.4
MA1MONTH	First master's degree month	na	na	na	na	na	na	na	99.8	98.9	98.7	98.4
MA1NID	First master's degree institution (NCSES institution identification)	na	na	na	na	na	na	na	97.9	97.8	98.8	98.4
MA1PART	First master's degree was required for doctoral program	na	na	na	na	na	na	na	98.4	99.4	99.1	98.6
MA1YEAR	First master's degree year	na	na	na	na	na	na	na	99.9	99.0	98.9	98.4
MACRED	Credits from most recent master's degree counted toward doctoral degree	na	na	na	na	na	na	na	99.2	99.8	99.9	99.9
MADEGRN	Number of master's degrees received	na	na	na	na	na	na	na	99.3	93.8	94.0	94.1
MAEMONTH	Most recent master's degree start month	na	na	na	na	67.8	67.5	68.7	87.8	88.6	88.8	88.7
MAEYEAR[b]	Most recent master's degree start year	na	na	na	na	68.0	67.7	68.9	87.9	88.7	88.8	88.8
MAFIELD	Most recent master's degree field	71.1	70.8	70.5	70.1	68.6	68.3	69.3	87.9	88.7	88.8	88.9
MAINST	Most recent master's degree institution	71.6	71.5	70.8	70.0	68.5	68.0	69.2	88.2	88.3	88.9	89.0
MAMONTH	Most recent master's degree month	70.3	70.1	70.2	69.9	68.3	68.0	69.1	87.9	88.7	88.9	88.8
MANID[b]	Most recent master's degree institution (NCSES institution identification)	71.6	71.5	70.8	70.0	68.5	68.0	69.2	88.2	88.3	88.9	89.0
MAPART	Most recent master's degree was required for doctoral program	na	na	na	na	na	na	na	87.6	88.5	88.8	88.8
MARITAL	Marital status	91.0	91.0	91.0	90.4	89.0	88.9	90.5	90.3	90.9	90.8	90.7
MAYEAR	Most recent master's degree year	71.6	71.2	70.9	70.3	68.7	68.2	69.4	88.8	88.8	89.1	89.0
MDDEG	Earned a professional medical degree	87.7	88.6	88.9	88.8	87.6	87.9	88.3	83.7	89.6	89.4	89.2
MDSTUDY	Earning a professional medical degree	87.7	88.6	88.9	88.8	87.6	87.9	88.3	83.7	89.6	89.4	89.2
MEDDENT	Additional professional medical or dental degree	89.9	90.3	90.5	90.4	89.1	89.2	90.5	90.6	91.5	91.5	91.4

Table A-4

Item response rates: 2010–20

(Percent)

Variable name	Variable description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MSPREREQ	Prerequisite master's degree for doctoral program	91.5	91.5	91.1	90.7	89.2	89.1	90.8	88.0	89.0	89.0	88.9
ORTHDIS	Physical or orthopedic disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
OTHRDIS	Other or unknown disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
PDEMPLOY	Postgraduation employer type	97.8	98.6	98.5	99.0	99.5	99.3	98.1	99.7	98.8	98.8	98.8
PDFACULTY	Employment in faculty position	na	na	na	na	na	na	na	na	61.2	63.9	63.1
PDFORGN[b]	Postgraduation affiliation with a non-U.S. college or university	3.8	3.7	3.5	3.7	3.4	3.1	3.2	89.0	90.5	90.6	90.5
PDLOC	Postgraduation location	93.0	92.9	92.5	91.6	90.0	90.0	92.2	92.4	93.1	93.2	92.8
PDOCCODE[b]	Postgraduation institution affiliation in the U.S. (IPEDS)	31.9	31.1	30.6	28.4	26.7	26.1	26.4	78.9	87.1	89.2	90.1
PDOCNID[b]	Postgraduation institution affiliation in the U.S. (NCSES institution identification)	31.9	31.1	30.6	28.4	26.7	26.1	26.4	78.9	87.1	89.2	90.1
PDOCPLAN	Postgraduation plans	97.6	95.0	93.9	92.5	91.7	91.5	95.2	97.6	99.8	99.9	99.9
PDOCSTAT	Postgraduation status	91.3	91.4	91.4	90.8	89.3	89.3	90.9	90.8	91.4	91.4	91.4
PDSAMEEMP[b]	Postgraduation employer was employer before or during doctoral studies	na	na	na	na	na	na	na	6.9	51.3	55.4	55.2
PDSAMEPOSEMP	Employment in same position with same employer worked during doctoral studies	na	na	na	na	na	na	na	na	95.4	99.8	99.8
PDSEEKNEWEMP	Postgraduation plan to seek new employment	na	na	na	na	na	na	na	na	99.5	99.1	99.5
PDSTDSUP	Postdoctoral study support	93.9	94.6	95.8	96.7	97.5	97.8	95.5	96.9	97.0	96.5	96.2
PDUSFOR	Postgraduation location: U.S. or foreign	93.0	92.9	92.5	91.6	90.0	90.0	92.2	92.4	93.1	93.2	92.8
PDWK1ED	Edited primary work activity	92.8	91.8	91.5	90.7	90.8	90.5	91.3	97.7	98.6	98.8	98.7
PDWK2ED	Edited secondary work activity	50.6	50.1	50.8	50.2	49.8	49.4	50.6	93.2	96.5	96.8	96.9
PDWKPRIM	Primary work activity	92.8	91.8	91.5	90.7	90.8	90.5	91.3	97.7	98.6	98.8	98.7
PDWKSEC	Secondary work activity	50.6	50.1	50.8	50.2	49.8	49.4	50.6	93.2	96.5	96.8	96.9
PHDCY	Calendar year of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDDISS	Dissertation field	92.5	92.4	91.8	91.6	90.2	90.0	91.6	91.1	91.6	91.4	91.4
PHDDISS2[b]	Secondary dissertation field	30.2	32.1	34.7	36.2	35.0	35.0	41.0	86.7	89.9	90.1	90.1
PHDEMONTH	Doctoral program start month	na	na	na	na	89.6	89.6	91.2	91.3	91.7	91.8	91.7
PHDEYEAR[d]	Doctoral program start year	90.4	90.7	90.8	90.9	89.9	89.7	91.4	91.3	91.7	91.8	91.7
PHDFIELD	Doctorate field	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDFY	Fiscal year of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDINST	Doctoral institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDMONTH	Month of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDNID	Doctoral institution (NCSES institution identification)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
POSTDOC	Intention to take postdoc position	91.5	91.5	91.6	91.1	89.6	89.6	91.5	na	na	na	na
PROFDEG[b]	Type of professional doctorate	0.9	1.0	0.8	0.8	0.9	1.0	1.0	96.0	100.0	100.0	100.0
PROFEARN	Earned or earning a professional doctoral degree	na	na	na	na	na	na	na	90.7	91.5	91.5	91.4
PROFEMONTH	Professional doctorate start month	na	na	na	na	na	na	na	99.7	99.3	99.4	99.6
PROFEYEAR	Professional doctorate start year	na	na	na	na	na	na	na	99.8	99.1	99.4	99.7
PROFINST	Professional doctorate institution	na	na	na	na	na	na	na	98.0	98.2	98.5	99.6
PROFMONTH	Professional doctorate month	na	na	na	na	na	na	na	99.8	99.2	99.4	99.5
PROFNID	Professional doctorate institution (NCSES institution identification)	na	na	na	na	na	na	na	99.2	98.2	98.5	99.6
PROFYEAR[b]	Professional doctorate year	0.9	0.9	0.7	0.8	0.9	0.9	1.0	99.7	99.0	99.4	99.6

Table A-4

Item response rates: 2010–20

(Percent)

Variable name	Variable description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
QUESTMON	Month questionnaire filled out	na	na	na	na	na	90.0	92.0	93.2	92.2	92.2	92.1
QUESTYR	Year questionnaire filled out	92.2	92.8	92.4	92.0	90.6	90.3	92.0	93.4	92.2	92.2	92.1
RACE	Edited race or ethnicity code	93.4	93.2	93.0	93.2	91.4	92.4	94.3	94.6	95.5	95.7	95.5
RACE2	Edited ethnicity or race code (NSF-revised)	93.4	93.2	93.0	93.2	91.4	92.4	94.3	94.9	95.5	95.7	95.5
SALARYR[e]	Range of expected basic annual salary	91.0	89.7	89.0	87.6	88.7	88.7	89.3	97.3	96.3	96.3	96.1
SALARYV	Expected basic annual salary	51.5	46.6	41.2	36.8	76.9	83.9	85.5	94.2	93.2	93.1	93.5
SALMONTH	Number of months expected basic annual salary covers	90.9	90.1	89.5	88.7	89.0	88.9	89.1	95.2	96.5	96.4	96.3
SEEKEMPBUS	Seeking or negotiating position in business or industry	na	na	na	na	na	na	na	na	98.8	98.9	98.8
SEEKEMPCHOICE	Top choice of employer seeking or negotiating	na	na	na	na	na	na	na	na	97.7	97.7	97.5
SEEKEMPEDU	Seeking or negotiating position at an educational institution	na	na	na	na	na	na	na	na	98.8	98.9	98.8
SEEKEMPGOV	Seeking or negotiating position in government	na	na	na	na	na	na	na	na	98.8	98.9	98.8
SEEKEMPNPO	Seeking or negotiating position in nonprofit organization	na	na	na	na	na	na	na	na	98.8	98.9	98.8
SEEKEMPOTHR	Seeking or negotiating position in other sector	na	na	na	na	na	na	na	na	98.8	98.9	98.8
SEEKEMPSTAT	Employment status while seeking or negotiating employment	na	na	na	na	na	na	na	na	98.9	98.9	98.8
SEEKPOSEMP	Seeking or negotiating an employment position other than a postdoc	na	na	na	na	na	na	na	na	99.0	99.0	99.0
SEEKPOSOTHR	Seeking or negotiating other position	na	na	na	na	na	na	na	na	99.0	99.0	99.0
SEEKPOSPDOC	Seeking or negotiating a postdoc position	na	na	na	na	na	na	na	na	99.0	99.0	99.0
SEX	Sex of doctorate recipient	100.0	100.0	99.9	100.0	99.7	100.0	100.0	100.0	99.9	100.0	100.0
SRCE1ED	Edited primary source of support	90.9	91.0	91.1	90.7	89.7	89.5	91.2	90.0	90.7	90.6	90.6
SRCEPRIM	Primary source of support	90.9	91.0	91.1	90.7	89.7	89.5	91.2	90.0	90.7	90.6	90.6
SRCESEC	Secondary source of support	80.8	80.8	80.3	79.6	79.2	78.8	83.0	78.5	80.1	80.4	80.6
TICEPHD	Time in from college entry to doctorate	86.9	87.6	88.2	88.8	87.3	87.3	89.4	89.7	90.7	90.7	90.7
TOBAGE	Time out between baccalaureate to graduate school entry	85.8	86.4	86.9	87.2	87.2	87.2	88.5	87.4	88.5	88.6	88.5
TTDBAPHD	Total time elapsed from baccalaureate to doctorate	91.7	92.3	92.0	92.3	90.3	90.8	93.1	94.4	94.9	95.4	94.8
TTDDOC	Total elapsed time in doctorate	na	na	na	na	89.9	89.8	91.5	91.3	91.6	91.7	91.7
TTDGEPHD	Total time elapsed from graduate entry to doctorate	87.9	88.3	88.6	88.7	90.3	89.9	90.9	90.3	92.0	92.0	92.0
TUITREMS	Tuition remission-full or partial	90.4	91.3	91.5	91.2	90.0	89.8	91.4	91.0	91.7	91.6	91.6
UDEBTLVL	Undergraduate debt level	92.7	93.4	93.3	86.1	84.7	90.9	93.7	92.6	93.1	93.4	93.5
VISUDIS	Blind or visual disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
VOCLDIS	Vocal or speech disability indicator	89.7	89.8	na	na	na	na	na	na	na	na	na
WHITE	White race indicator	91.6	91.6	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.1
YRSCOURS	Years of doctoral coursework	90.9	91.0	90.9	90.4	89.0	89.0	90.5	89.8	na	na	na
YRSDISST	Years preparing doctorate dissertation	91.0	91.1	91.0	90.5	89.0	89.0	90.5	89.7	na	na	na
YRSNOTWRK	Years not working on doctoral degree	91.0	91.2	91.0	90.8	89.2	89.2	90.8	90.9	na	na	na

na = not applicable; data either were not collected or derived, or were collected for the first time in that year (see "Notes").

IPEDS = Integrated Postsecondary Education Data System; NCSES = National Center for Science and Engineering Statistics.

[a] Methodology reports prior to 2014 reported BAEYEAR as CEYEAR.

[b] Logical skip edits to correct the universe of eligible respondents led to higher item response rates in the year it was implemented.

[c] Response rate counts respondents who reported being U.S. citizens or permanent residents or temporary visa holders and provided country of citizenship.

[d] Methodology reports prior to 2014 reported PHDEYEAR as PHDENTRY.

[e] Methodology reports prior to 2011 reported SALARYR as SALARY.

Note(s):
Item response rate is the percentage of cases providing data on an item divided by the universe of doctorate recipients eligible to answer that item. For most data items, all doctorate recipient respondents are in the universe of eligible respondents. For some data items introduced in the survey for the first time, not all eligible respondents were able to provide data because they completed earlier versions of the survey, leading to lower response rates.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Life sciences
Agricultural sciences and natural resources
Agricultural sciences
Agricultural economics
Agronomy, horticulture science, plant breeding, plant pathology, plant sciences-other†
Agricultural and horticultural plant breeding
Agronomy and crop science
Horticulture science
Plant pathology and phytopathology, agricultural
Plant sciences, other*
Animal nutrition, poultry science†
Animal nutrition*
Animal science, poultry or avian*
Animal sciences, other
Food science, food technology-other†
Food science
Food science and technology, other*
Soil chemistry and microbiology, soil sciences-other†
Soil chemistry, microbiology*
Soil sciences, other
Natural resources and conservation
Environmental science
Fishing and fisheries sciences and management
Forest biology, forest management, forestry sciences-other†
Forest management, forest resources management*
Forest sciences and biology*
Forestry, other
Natural resources policy and environmental economics†
Natural resource and environmental policy
Natural resources and environmental economics (agricultural sciences)*
Natural resources and conservation, wildlife and range management†
Natural resources and conservation
Wildlife, range management*
Agricultural sciences and natural resources, aggregated†
Agricultural sciences and natural resources, general*
Agricultural sciences and natural resources, other*
Biological and biomedical sciences
Anatomy, developmental biology†
Anatomy*
Developmental biology and embryology
Bacteriology, parasitology, and virology†
Bacteriology*
Parasitology*
Virology
Biochemistry (biological sciences)
Bioinformatics

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Biomedical sciences
Biometrics and biostatistics
Biophysics (biological sciences)
Botany, plant pathology, plant physiology†
Botany and plant biology
Plant pathology and phytopathology (biological sciences)*
Plant physiology*
Cancer biology
Cell, cellular biology, and histology
Computational biology
Ecology
Endocrinology, human / animal pathology†
Endocrinology*
Pathology, human and animal
Entomology
Environmental toxicology
Epidemiology
Evolutionary biology
Genetics and genomics, human and animal
Immunology
Microbiology
Molecular biology
Molecular medicine
Neurosciences, neurobiology
Nutrition sciences
Pharmacology, human and animal
Physiology, human and animal
Plant genetics
Structural biology
Toxicology
Wildlife biology, zoology†
Wildlife biology
Zoology*
Biological and biomedical sciences, general
Biotechnology, biology / biomedical sciences-other†
Biotechnology*
Biological and biomedical sciences, other
Health sciences
Environmental health
Health and behavior
Health services / systems administration†
Health systems administration*
Health services research
Kinesiology, exercise science
Medical physics, radiological science
Nursing science
Pharmaceutical sciences
Public health

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Rehabilitation, therapeutic services
Speech-language pathology and audiology
Health sciences, aggregated†
Gerontology (health sciences)*
Oral biology, oral pathology*
Veterinary sciences
Health sciences, general
Health sciences, other
Physical sciences and earth sciences
Chemistry
Analytical chemistry
Chemical biology
Inorganic chemistry
Medicinal chemistry
Organic chemistry
Physical chemistry
Polymer chemistry
Theoretical chemistry
Chemistry, general
Chemistry, other
Geosciences, atmospheric, and ocean sciences
Atmospheric science and meteorology
Atmospheric physics, meteorology†
Atmospheric physics and dynamics*
Meteorology*
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other†
Atmospheric chemistry and climatology
Atmospheric science and meteorology, general
Atmospheric science and meteorology, other*
Geological sciences
Geochemistry, mineralogy†
Geochemistry
Mineralogy and petrology*
Geology
Geomorphology, geological sciences-general, geological sciences-other†
Geomorphology, glacial geology*
Geological sciences, general
Geological sciences, other
Geophysics and seismology
Paleontology, stratigraphy†
Paleontology*
Stratigraphy and sedimentation*
Ocean and marine sciences
Marine biology and biological oceanography
Oceanography, chemical and physical
Ocean / marine sciences, aggregated†
Hydrology and water resources
Marine sciences

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Ocean and marine sciences, other*
Physics and astronomy
Astronomy and astrophysics
Astronomy
Astrophysics
Astronomy and astrophysics, other*
Physics
Acoustics, optics / photonics†
Acoustics*
Optics, photonics
Applied physics
Atomic physics, polymer physics†
Atomic, molecular, chemical physics
Polymer physics*
Biophysics (physics)
Condensed matter, low-temperature physics
Elementary particle physics
Nuclear physics
Plasma, high-temperature physics
Physics, general
Physics, other
Mathematics and computer sciences
Computer and information sciences
Computer science
Information science, systems
Computer and information sciences, general
Computer and information sciences, other
Mathematics and statistics
Algebra
Analysis and functional analysis
Applied mathematics, computing theory†
Applied mathematics
Computing theory and practice*
Computational mathematics
Geometry, geometric analysis
Logic, topology / foundations†
Logic*
Topology and foundations*
Number theory
Operations research, mathematics / statistics-general, mathematics / statistics-other†
Operations research (mathematics)*
Mathematics and statistics, general
Mathematics and statistics, other
Statistics (mathematics)
Psychology and social sciences
Psychology
Behavioral analysis
Clinical psychology

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Cognitive neuroscience
Cognitive psychology and psycholinguistics
Community psychology
Counseling
Developmental and child psychology
Educational psychology (psychology)
Experimental psychology
Family psychology, human development and family studies†
Family psychology*
Human development and family studies
Health, medical psychology
Industrial and organizational psychology
Marriage and family therapy, counseling
Neuropsychology, physiological psychology
School psychology (psychology)
Social psychology
Psychology, general
Psychology, aggregated†
Personality psychology*
Psychometrics and quantitative psychology
Psychology, other
Social sciences
Anthropology
Anthropology, cultural
Anthropology, general
Anthropology, physical and biological
Economics
Econometrics, economics†
Econometrics*
Other economics
Natural resources and environmental economics (social sciences)
Political science and government
Sociology
Other social sciences
American, U.S. studies
Applied linguistics
Archaeology (social sciences)
Area, ethnic, and cultural studies
Criminal justice and corrections
Criminology
Demography, gerontology, statistics, urban affairs, social sciences-general, social sciences-other†
Demography and population studies*
Gerontology (social sciences)*
Statistics (social sciences)*
Urban studies, affairs
Social sciences, general
Social sciences, other
Gender and women's studies
Geography

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Health policy analysis
History, science and technology and society
International relations, international affairs
Linguistics
Public policy analysis
Urban, city, community and regional planning
Engineering
Aerospace, aeronautical, and astronautical engineering
Bioengineering and biomedical engineering
Chemical engineering
Civil engineering
Electrical, electronics, and communications engineering
Industrial and manufacturing engineering
Materials science engineering
Mechanical engineering
Other engineering
Computer engineering
Environmental, environmental health engineering
Nuclear engineering
Robotics
Structural engineering
Systems engineering
Other engineering, aggregated†
Agricultural engineering*
Communications engineering*
Engineering management, administration*
Engineering mechanics*
Engineering physics*
Engineering science
Geotechnical and geoenvironmental engineering*
Metallurgical engineering*
Ocean engineering*
Operations research (engineering)
Petroleum engineering*
Polymer, plastics engineering*
Transportation and highway engineering*
Engineering, general
Engineering, other
Education
Education administration
Educational administration and supervision
Educational and human resource studies, development
Educational leadership
Urban education and leadership
Education research
Counseling education, counseling and guidance
Curriculum, instruction, educational assessment/ measurement†
Curriculum and instruction

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Educational assessment, testing, measurement*
Educational policy analysis
Educational psychology (education)
Educational statistics, research methods
Educational / instructional technology, media design†
Educational and instructional media design*
Educational and instructional technology
Higher education evaluation and research
Learning sciences
School psychology (education)
Social and philosophical foundations of education
Special education
Teacher education†
Adult and continuing teacher education
Elementary teacher education*
Pre-elementary, early childhood teacher education
Secondary teacher education*
Teaching fields
Health education
Literacy and reading education
Mathematics education
Music education
Science education
Teaching fields, aggregated†
Agricultural education
Art education*
Bilingual and multilingual education
English as a second or foreign language*
English education
Family, consumer, and human sciences*
Foreign languages education*
Nursing education
Physical education and coaching*
Social science education*
Teacher education and professional development, other
Other education
Education, general
Other education, aggregated†
International education*
Workforce education and development*
Education, other
Humanities and arts
Foreign languages and literature
French
German
Spanish
Other languages and literature, aggregated†

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Arabic*
Chinese*
Italian*
Japanese*
Latin American*
Russian*
Foreign languages and literatures, other
History
American history, United States and Canada
Asian history
European history
Latin American history
Middle, Near East history
History, general
History, aggregated†
African history*
History, other
Letters
American literature, United States and Canada
Classics
Comparative literature
English language
English literature, British and Commonwealth
Rhetoric and composition
Speech and rhetorical studies
Letters, aggregated†
Creative writing
Letters, general*
Letters, other*
Other humanities and arts
African American studies, literature, and history
Art history, criticism, and conservation
Dance, drama†
Dance*
Drama, theater arts
Film, cinema, video studies
Music
Musicology and ethnomusicology
Music performance
Music theory and composition
Philosophy, ethics†
Ethics*
Philosophy
Religion / religious studies, Jewish / Judaic studies†
Jewish, Judaic studies*
Religion, religious studies
Theology, religious education

Table A-5

SED taxonomy of disciplines including aggregated fields and their constituent fine fields: 2020

(Field)

Aggregated field name and constituent fields
Other humanities, aggregated†
Archaeology (humanities)
Bible, biblical studies
Music, other*
Humanities, general
Humanities, other
Other[a]
Business management and administration
Accounting
Business administration and management
Finance
Human resources, organizational behavior†
Human resources development*
Organizational behavior
Management information systems, business statistics
Marketing management and research
Other aggregated business fields†
Business, managerial economics*
Hospitality, food service, and tourism management*
International business, trade, commerce*
Operations research (business)*
Business management and administration, general
Business management and administration, other
Communication
Communication research
Mass communication, media studies
Communication, general
Communication, aggregated†
Communication theory*
Film, radio, TV and digital communication*
Communication, other
Non-S&E fields nec
Architecture and environmental design
Family, consumer sciences and human sciences
Parks, sports, recreation, leisure and fitness
Public administration
Social work
Fields nec, aggregated†
Law*
Library science*
Other fields nec*
Unknown field

† = aggregated field in 2020; * = fine field with fewer than 25 U.S. citizen or permanent resident doctorate recipients in 2020.

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

[a] Includes other non-S&E fields not shown separately.

Note(s):
Aggregated fields appear in tables 16 and 22 only.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Table A-6

Aggregations used to determine major fields of study: 2020

(Field code)

Field of study	Survey of Earned Doctorates field code
Life sciences	000–299 (excluding 152, 217), 577, 685
Agricultural sciences and natural resources	000–099, 685
Biological and biomedical sciences	100–199 (excluding 152)
Health sciences	200–299 (excluding 217), 577
Physical sciences and earth sciences	500–599 (excluding 577), 152
Chemistry	520–539
Geosciences, atmospheric sciences, and ocean sciences	510–519, 540–559, 580–599, 152
Physics and astronomy	500–509, 560–579 (excluding 577)
Mathematics and computer sciences	400-499 (excluding 415)
Computer and information sciences	400–419 (excluding 415)
Mathematics and statistics	420–499
Psychology and social sciences	600–699, (excluding 685), 217, 770
Psychology	600–649
Anthropology	650, 655, 656
Economics	665, 667, 668
Political science and government	678
Sociology	686
Other social sciences	651-654, 657-662, 670-676, 682, 684, 690-699, 217, 710, 770
Engineering	300–399, 415
Aerospace, aeronautical, and astronautical engineering	300
Bioengineering and biomedical engineering	306
Chemical engineering	312
Civil engineering	315
Electrical, electronics, and communications engineering	324
Industrial and manufacturing engineering	339
Materials science engineering	342
Mechanical engineering	345
Other engineering	303, 309, 316-321, 327-337, 348-399, 415
Education	800–899
Education administration	804–807
Education research	800, 801, 808–845
Teacher education	850–858
Teaching fields	860–889
Other education	895–899
Humanities and arts	700–799 (excluding 770), 984
Foreign languages and literature	740–769
History	700–719 (excluding 710)
Letters	720–739 (excluding 731)
Other humanities and arts	731, 773–799, 984
Other[a]	900–999 (excluding 984)
Business management and administration	900–939
Communication	940–959
Non-S&E fields nec	960–989 (excluding 984)
Unknown field	999

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

[a] Includes other non-science and engineering fields not shown separately.

Note(s):
Major fields appear in tables 7, 8, 12, 15, 18, 24, 48, 49, 51, 52, and 56–71.

Source(s):
National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

Additional Resources

The National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation has a wealth of information on the U.S. science and engineering (S&E) enterprise, including additional data and analysis on degree recipients and degree-granting institutions. The latest information from NCSES is available at https://ncses.nsf.gov/.

Interactive data tool

NCSES's interactive data tool (https://ncsesdata.nsf.gov/home) allows for the creation of custom tables from the Survey of Earned Doctorates (SED) and other NCSES surveys.

Publications

Survey of Earned Doctorates

The SED questionnaire, all editions of *Doctorate Recipients from U.S. Universities*, and other products related to the SED are available at https://nsf.gov/statistics/srvydoctorates/.

Science and Engineering Indicators

Science and Engineering Indicators is a biennial report that offers a comprehensive look at the U.S. S&E enterprise, including education, demographics, employment, research and development expenditures, science and technology capabilities, and public attitudes and understanding about science. SED data are included in the *Science and Engineering Indicators* report *Higher Education in Science and Engineering* available at https://ncses.nsf.gov/indicators.

Women, Minorities, and Persons with Disabilities in Science and Engineering

The biennial report *Women, Minorities, and Persons with Disabilities in Science and Engineering* looks at the participation of these three groups in S&E education and employment. Topics in the report include enrollment; field of degree; employment status; and occupation, including academic careers. SED data are included in the report, which is available at https://ncses.nsf.gov/wmpd.

Related survey

Survey of Doctorate Recipients

The SED serves as a sampling frame for the Survey of Doctorate Recipients (SDR). The SDR provides demographic, education, and career history information from individuals with a U.S. research doctoral degree in a science, engineering, or health field. The SDR is a unique source of information about the educational and occupational achievements and career movement of U.S.-trained doctoral scientists and engineers in the United States and abroad. The survey description, questionnaires, data tables, and latest SDR publications are available at https://www.nsf.gov/statistics/srvydoctoratework/.

Contact Us

Thank you for visiting the *Doctorate Recipients from U.S. Universities* website from the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF).

To report an issue with this website, please e-mail ncsesweb@nsf.gov. For questions about NSF, please visit the NSF help page.

For information on the Survey of Earned Doctorates and the data tables in this report, contact the survey manager. You may also reach the report author or NCSES using the contact information below.

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