



National Center for Science and
Engineering Statistics

Doctorate Recipients from U.S. Universities: 2023 Data Tables

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General Notes

The Survey of Earned Doctorates (SED) is an annual census of all individuals receiving a research doctorate from an accredited U.S. institution in a given academic year. The 2023 data tables present detailed data on the educational history, time to degree, sources of financial support, education-related debt, and postgraduation plans of doctorate recipients, such as definite commitments for postdoc and other employment, employment sector, and median salary. The tables also report demographic characteristics of doctorate recipients, such as sex, race, ethnicity, and citizenship.

The SED data tables were reorganized and renumbered in the 2021 cycle; see [technical table B-1](#) for a crosswalk comparing the current data tables with those prior to 2021. Explore SED data further via the [interactive data tool](#) and the [Restricted Data Analysis System](#).

The National Center for Science and Engineering Statistics has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN24-046).

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Research doctorate recipients from U.S. colleges and universities: 1958–2023

(Number and percent)

Year	Doctorate recipients (number)	% 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
2008	48,776	1.3

TABLE 1-1

Research doctorate recipients from U.S. colleges and universities: 1958–2023

(Number and percent)

Year	Doctorate recipients (number)	% change from previous year
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	54,550	-0.5
2018	55,078	1.0
2019	55,599	0.9
2020	55,203	-0.7
2021	52,160	-5.5
2022	57,448	10.1
2023	57,862	0.7

* = value between -0.05% and 0.05% and not equal to 0.0%.

Source(s):

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

TABLE 1-2

Research doctorate recipients, by trend broad field of doctorate and 2021 Carnegie Classification of doctorate institution: 2013–23

(Number)

Field and 2021 Carnegie Classification	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
All doctorate recipients	52,703	53,986	54,886	54,809	54,550	55,078	55,599	55,203	52,160	57,448	57,862
R1: doctoral universities - very high research	43,852	44,487	45,006	44,840	44,678	45,039	45,359	44,978	42,383	47,070	47,445
R2: doctoral universities - high research	5,347	5,788	6,012	6,063	6,131	6,073	6,180	6,188	5,768	6,060	6,208
Doctoral/ professional universities	1,492	1,755	1,747	1,870	1,756	1,908	1,822	1,967	1,998	1,932	1,810
Other universities	2,012	1,956	2,121	2,036	1,985	2,058	2,238	2,070	2,011	2,386	2,399
Science and engineering	39,084	40,708	41,247	41,306	41,364	42,144	42,897	42,564	40,819	45,402	45,533
R1: doctoral universities - very high research	32,935	33,960	34,307	34,343	34,530	35,017	35,545	35,281	33,844	37,847	37,975
R2: doctoral universities - high research	3,686	4,059	4,194	4,175	4,210	4,330	4,440	4,480	4,190	4,433	4,582
Doctoral/ professional universities	912	1,129	1,060	1,141	1,058	1,162	1,108	1,171	1,165	1,180	1,075
Other universities	1,551	1,560	1,686	1,647	1,566	1,635	1,804	1,632	1,620	1,942	1,901
Agricultural sciences and natural resources	1,391	1,380	1,490	1,428	1,543	1,499	1,538	1,531	1,412	1,509	1,477
R1: doctoral universities - very high research	1,240	1,212	1,328	1,258	1,375	1,349	1,392	1,353	1,259	1,340	1,332
R2: doctoral universities - high research	140	152	148	151	145	137	130	153	135	143	130
Doctoral/ professional universities	0	1	3	1	5	1	5	7	4	7	4
Other universities	11	15	11	18	18	12	11	18	14	19	11
Biological and biomedical sciences	8,707	8,868	8,783	8,863	8,567	8,782	8,678	8,403	8,131	9,208	9,575
R1: doctoral universities - very high research	7,023	7,031	6,905	7,048	6,889	6,958	6,855	6,743	6,460	7,328	7,647
R2: doctoral universities - high research	584	705	700	666	675	706	697	681	645	705	752
Doctoral/ professional universities	107	105	93	157	78	97	45	60	72	56	58
Other universities	993	1,027	1,085	992	925	1,021	1,081	919	954	1,119	1,118
Computer and information sciences	1,843	1,988	2,003	2,082	1,998	2,000	2,220	2,363	2,360	2,607	2,687
R1: doctoral universities - very high research	1,620	1,748	1,752	1,798	1,719	1,752	1,902	2,036	2,046	2,276	2,330
R2: doctoral universities - high research	192	215	207	242	230	197	274	277	271	276	281
Doctoral/ professional universities	8	7	18	14	15	25	10	6	6	10	35
Other universities	23	18	26	28	34	26	34	44	37	45	41
Engineering	9,000	9,626	9,875	9,459	9,774	10,164	10,298	10,468	10,230	11,519	11,403
R1: doctoral universities - very high research	8,123	8,734	8,850	8,478	8,760	8,971	9,126	9,279	9,048	10,208	10,104
R2: doctoral universities - high research	774	808	930	891	894	1,071	1,047	1,072	1,049	1,140	1,122
Doctoral/ professional universities	20	27	27	28	38	33	30	25	30	27	37
Other universities	83	57	68	62	82	89	95	92	103	144	140
Geosciences, atmospheric, and ocean sciences	989	1,098	1,057	1,227	1,169	1,185	1,272	1,241	1,064	1,181	1,231
R1: doctoral universities - very high research	892	955	958	1,084	1,027	1,070	1,126	1,096	933	1,046	1,086
R2: doctoral universities - high research	88	132	92	127	132	103	137	136	119	126	129
Doctoral/ professional universities	1	2	1	2	1	2	2	3	2	2	3
Other universities	8	9	6	14	9	10	7	6	10	7	13
Health sciences	2,109	2,236	2,220	2,248	2,443	2,473	2,532	2,606	2,250	2,473	2,435

TABLE 1-2

Research doctorate recipients, by trend broad field of doctorate and 2021 Carnegie Classification of doctorate institution: 2013–23

(Number)

Field and 2021 Carnegie Classification	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
R1: doctoral universities - very high research	1,600	1,572	1,537	1,557	1,705	1,750	1,749	1,828	1,538	1,686	1,657
R2: doctoral universities - high research	216	272	300	285	288	325	368	333	345	338	371
Doctoral/ professional universities	166	214	208	213	258	231	232	271	209	240	204
Other universities	127	178	175	193	192	167	183	174	158	209	203
Mathematics and statistics	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,024	2,010	2,247	2,167
R1: doctoral universities - very high research	1,664	1,727	1,679	1,707	1,675	1,835	1,846	1,802	1,839	2,082	1,974
R2: doctoral universities - high research	132	133	121	157	160	175	154	212	156	140	176
Doctoral/ professional universities	4	8	2	2	1	5	2	5	9	9	10
Other universities	17	6	13	6	8	7	8	5	6	16	7
Physical sciences	4,595	4,812	4,859	5,024	4,913	5,144	5,306	5,000	4,710	5,468	5,460
R1: doctoral universities - very high research	4,141	4,323	4,376	4,539	4,461	4,634	4,805	4,487	4,285	4,971	4,963
R2: doctoral universities - high research	393	436	423	419	397	438	430	441	357	421	430
Doctoral/ professional universities	5	16	13	8	7	7	5	9	12	7	1
Other universities	56	37	47	58	48	65	66	63	56	69	66
Psychology	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,868	3,777	3,952	3,899
R1: doctoral universities - very high research	2,192	2,245	2,246	2,342	2,465	2,295	2,314	2,281	2,237	2,362	2,369
R2: doctoral universities - high research	692	701	737	767	731	719	716	699	656	696	695
Doctoral/ professional universities	515	616	597	589	531	611	608	630	648	636	594
Other universities	193	162	196	212	198	196	271	258	236	258	241
Social sciences	5,041	5,102	5,369	5,193	5,188	5,054	5,134	5,060	4,875	5,238	5,199
R1: doctoral universities - very high research	4,440	4,413	4,676	4,532	4,454	4,403	4,430	4,376	4,199	4,548	4,513
R2: doctoral universities - high research	475	505	536	470	558	459	487	476	457	448	496
Doctoral/ professional universities	86	133	98	127	124	150	169	155	173	186	129
Other universities	40	51	59	64	52	42	48	53	46	56	61
Non-science and engineering	13,619	13,278	13,639	13,503	13,186	12,934	12,702	12,639	11,341	12,046	12,329
R1: doctoral universities - very high research	10,917	10,527	10,699	10,497	10,148	10,022	9,814	9,697	8,539	9,223	9,470
R2: doctoral universities - high research	1,661	1,729	1,818	1,888	1,921	1,743	1,740	1,708	1,578	1,627	1,626
Doctoral/ professional universities	580	626	687	729	698	746	714	796	833	752	735
Other universities	461	396	435	389	419	423	434	438	391	444	498
Business	1,551	1,584	1,582	1,509	1,566	1,473	1,529	1,466	1,389	1,447	1,560
R1: doctoral universities - very high research	1,220	1,204	1,239	1,184	1,145	1,096	1,146	1,118	1,018	1,135	1,265
R2: doctoral universities - high research	143	185	147	163	194	165	165	172	171	160	160
Doctoral/ professional universities	135	160	169	129	193	181	173	145	173	134	106
Other universities	53	35	27	33	34	31	45	31	27	18	29
Education	4,934	4,789	5,098	5,146	4,825	4,818	4,628	4,712	4,239	4,471	4,562
R1: doctoral universities - very high research	3,602	3,467	3,569	3,573	3,378	3,373	3,229	3,284	2,892	3,143	3,162

TABLE 1-2

Research doctorate recipients, by trend broad field of doctorate and 2021 Carnegie Classification of doctorate institution: 2013–23

(Number)

Field and 2021 Carnegie Classification	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
R2: doctoral universities - high research	924	922	1,087	1,074	1,066	989	994	953	887	879	896
Doctoral/ professional universities	317	336	372	421	317	375	328	400	396	371	392
Other universities	91	64	70	78	64	81	77	75	64	78	112
Humanities and arts	5,662	5,446	5,522	5,416	5,209	5,139	5,051	4,924	4,132	4,456	4,453
R1: doctoral universities - very high research	4,827	4,632	4,684	4,562	4,362	4,342	4,273	4,108	3,436	3,703	3,713
R2: doctoral universities - high research	466	477	450	513	487	437	406	430	342	368	368
Doctoral/ professional universities	78	66	80	103	71	81	80	86	85	86	65
Other universities	291	271	308	238	289	279	292	300	269	299	307
Other non-science and engineering	1,472	1,459	1,437	1,432	1,586	1,504	1,494	1,537	1,581	1,672	1,754
R1: doctoral universities - very high research	1,268	1,224	1,207	1,178	1,263	1,211	1,166	1,187	1,193	1,242	1,330
R2: doctoral universities - high research	128	145	134	138	174	152	175	153	178	220	202
Doctoral/ professional universities	50	64	66	76	117	109	133	165	179	161	172
Other universities	26	26	30	40	32	32	20	32	31	49	50

Note(s):

Carnegie classification is based on the 2021 Carnegie Classifications: Doctoral universities - very high research (R1), Doctoral universities - high research (R2), Doctoral/professional universities, and other universities, which includes all other Carnegie classifications (e.g., special focus institutions) and institutions without Carnegie classifications. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

Source(s):

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

TABLE 1-3

Research doctorate recipients, by trend major field of doctorate: Selected years, 1993–2023

(Number and percent)

Field of doctorate	1993		1998		2003		2008		2013		2018		2023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	39,800	100.0	42,636	100.0	40,762	100.0	48,776	100.0	52,703	100.0	55,078	100.0	57,862	100.0
Science and engineering	26,486	66.5	28,636	67.2	26,759	65.6	34,765	71.3	39,084	74.2	42,144	76.5	45,533	78.7
Agricultural sciences and natural resources	1,235	3.1	1,315	3.1	1,226	3.0	1,252	2.6	1,391	2.6	1,499	2.7	1,477	2.6
Agricultural sciences	939	2.4	981	2.3	845	2.1	782	1.6	873	1.7	960	1.7	1,007	1.7
Natural resources and conservation	296	0.7	334	0.8	381	0.9	470	1.0	518	1.0	539	1.0	470	0.8
Biological and biomedical sciences	5,212	13.1	6,011	14.1	5,927	14.5	8,145	16.7	8,707	16.5	8,782	15.9	9,575	16.5
Biochemistry and biophysics	949	2.4	966	2.3	933	2.3	1,066	2.2	1,005	1.9	963	1.7	893	1.5
Biology and biomedical sciences, general	305	0.8	399	0.9	375	0.9	418	0.9	657	1.2	888	1.6	1,328	2.3
Bioinformatics, biostatistics, and computational biology	74	0.2	75	0.2	84	0.2	269	0.6	426	0.8	580	1.1	794	1.4
Cellular and developmental biology, and anatomy	364	0.9	462	1.1	460	1.1	586	1.2	597	1.1	427	0.8	225	0.4
Ecology, evolutionary biology, and epidemiology	297	0.7	458	1.1	578	1.4	922	1.9	1,030	2.0	1,059	1.9	1,118	1.9
Genetics and genomics	172	0.4	197	0.5	226	0.6	413	0.8	396	0.8	363	0.7	459	0.8
Microbiology and immunology	633	1.6	657	1.5	645	1.6	1,007	2.1	1,142	2.2	1,042	1.9	1,092	1.9
Molecular biology	582	1.5	736	1.7	615	1.5	786	1.6	646	1.2	596	1.1	851	1.5
Neurobiology and neurosciences	276	0.7	413	1.0	474	1.2	883	1.8	1,016	1.9	1,033	1.9	1,086	1.9
Pharmacology and toxicology	374	0.9	410	1.0	397	1.0	461	0.9	418	0.8	361	0.7	409	0.7
Physiology, pathology, and cancer biology	417	1.0	378	0.9	337	0.8	657	1.3	723	1.4	690	1.3	608	1.1
Biology and biomedical sciences, other	769	1.9	860	2.0	803	2.0	677	1.4	651	1.2	780	1.4	712	1.2
Computer and information sciences	880	2.2	927	2.2	866	2.1	1,787	3.7	1,843	3.5	2,000	3.6	2,687	4.6
Computer science	825	2.1	821	1.9	699	1.7	1,499	3.1	1,568	3.0	1,628	3.0	1,937	3.3
Computer and information sciences, other	55	0.1	106	0.2	167	0.4	288	0.6	275	0.5	372	0.7	750	1.3
Engineering	5,698	14.3	5,922	13.9	5,279	13.0	7,863	16.1	9,000	17.1	10,164	18.5	11,403	19.7
Aerospace, aeronautical, and astronautical engineering	228	0.6	241	0.6	200	0.5	266	0.5	348	0.7	383	0.7	586	1.0
Bioengineering and biomedical engineering	171	0.4	208	0.5	281	0.7	762	1.6	1,039	2.0	1,133	2.1	1,302	2.3
Chemical and petroleum engineering	737	1.9	777	1.8	649	1.6	966	2.0	977	1.9	1,168	2.1	1,245	2.2
Civil, environmental, and transportation engineering	624	1.6	650	1.5	673	1.7	866	1.8	1,023	1.9	1,178	2.1	1,368	2.4
Electrical and computer engineering	1,543	3.9	1,595	3.7	1,465	3.6	2,300	4.7	2,345	4.4	2,393	4.3	2,653	4.6
Industrial engineering and operations research	349	0.9	359	0.8	340	0.8	439	0.9	474	0.9	492	0.9	578	1.0
Materials and mining engineering	559	1.4	586	1.4	488	1.2	678	1.4	872	1.7	1,018	1.8	1,159	2.0
Mechanical engineering	902	2.3	936	2.2	752	1.8	1,082	2.2	1,336	2.5	1,610	2.9	1,653	2.9
Engineering, other	585	1.5	570	1.3	431	1.1	504	1.0	586	1.1	789	1.4	859	1.5
Geosciences, atmospheric, and ocean sciences	721	1.8	766	1.8	682	1.7	865	1.8	989	1.9	1,185	2.2	1,231	2.1
Geological sciences	454	1.1	470	1.1	348	0.9	458	0.9	489	0.9	591	1.1	592	1.0
Ocean, marine, and atmospheric sciences	267	0.7	296	0.7	334	0.8	407	0.8	500	0.9	594	1.1	639	1.1
Health sciences	1,016	2.6	1,285	3.0	1,353	3.3	1,689	3.5	2,109	4.0	2,473	4.5	2,435	4.2

TABLE 1-3

Research doctorate recipients, by trend major field of doctorate: Selected years, 1993–2023

(Number and percent)

Field of doctorate	1993		1998		2003		2008		2013		2018		2023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Nursing science	373	0.9	399	0.9	413	1.0	504	1.0	510	1.0	584	1.1	554	1.0
Pharmaceutical sciences	146	0.4	156	0.4	118	0.3	277	0.6	332	0.6	344	0.6	358	0.6
Public health	191	0.5	208	0.5	259	0.6	298	0.6	501	1.0	702	1.3	682	1.2
Health sciences, other	306	0.8	522	1.2	563	1.4	610	1.3	766	1.5	843	1.5	841	1.5
Mathematics and statistics	1,146	2.9	1,177	2.8	993	2.4	1,400	2.9	1,817	3.4	2,022	3.7	2,167	3.7
Applied mathematics	188	0.5	265	0.6	223	0.5	360	0.7	455	0.9	455	0.8	460	0.8
Mathematics	366	0.9	405	0.9	322	0.8	507	1.0	641	1.2	524	1.0	231	0.4
Statistics	228	0.6	204	0.5	191	0.5	303	0.6	364	0.7	412	0.7	574	1.0
Mathematics and statistics, other	364	0.9	303	0.7	257	0.6	230	0.5	357	0.7	631	1.1	902	1.6
Physical sciences	3,681	9.2	3,800	8.9	3,289	8.1	4,081	8.4	4,595	8.7	5,144	9.3	5,460	9.4
Astronomy and astrophysics	145	0.4	206	0.5	167	0.4	249	0.5	301	0.6	351	0.6	603	1.0
Chemistry	2,137	5.4	2,216	5.2	2,041	5.0	2,246	4.6	2,484	4.7	2,807	5.1	3,001	5.2
Physics	1,399	3.5	1,378	3.2	1,081	2.7	1,586	3.3	1,810	3.4	1,986	3.6	1,856	3.2
Psychology	3,420	8.6	3,673	8.6	3,277	8.0	3,357	6.9	3,592	6.8	3,821	6.9	3,899	6.7
Clinical psychology	1,373	3.4	1,344	3.2	1,193	2.9	1,142	2.3	1,140	2.2	1,260	2.3	1,208	2.1
Counseling and applied psychology	833	2.1	855	2.0	813	2.0	880	1.8	965	1.8	1,003	1.8	1,001	1.7
Research and experimental psychology	711	1.8	861	2.0	757	1.9	850	1.7	969	1.8	952	1.7	1,003	1.7
Psychology, other	503	1.3	613	1.4	514	1.3	485	1.0	518	1.0	606	1.1	687	1.2
Social sciences	3,477	8.7	3,760	8.8	3,867	9.5	4,326	8.9	5,041	9.6	5,054	9.2	5,199	9.0
Anthropology	342	0.9	425	1.0	472	1.2	483	1.0	550	1.0	424	0.8	389	0.7
Economics	930	2.3	1,001	2.3	932	2.3	1,091	2.2	1,183	2.2	1,244	2.3	1,290	2.2
Political science and government	507	1.3	662	1.6	661	1.6	628	1.3	803	1.5	734	1.3	665	1.1
Public policy analysis	98	0.2	96	0.2	145	0.4	196	0.4	348	0.7	323	0.6	299	0.5
Sociology, demography, and population studies	535	1.3	579	1.4	612	1.5	624	1.3	663	1.3	695	1.3	627	1.1
Social sciences, other	1,065	2.7	997	2.3	1,045	2.6	1,304	2.7	1,494	2.8	1,634	3.0	1,929	3.3
Non-science and engineering	13,314	33.5	14,000	32.8	14,003	34.4	14,011	28.7	13,619	25.8	12,934	23.5	12,329	21.3
Business	1,281	3.2	1,175	2.8	1,036	2.5	1,421	2.9	1,551	2.9	1,473	2.7	1,560	2.7
Education	6,689	16.8	6,569	15.4	6,651	16.3	6,561	13.5	4,934	9.4	4,818	8.7	4,562	7.9
Education leadership and administration	2,123	5.3	2,066	4.8	2,362	5.8	2,238	4.6	965	1.8	895	1.6	735	1.3
Education research	2,446	6.1	2,584	6.1	2,720	6.7	2,640	5.4	2,703	5.1	2,500	4.5	2,324	4.0
Teacher education and teaching fields	1,371	3.4	1,296	3.0	956	2.3	1,186	2.4	1,001	1.9	1,055	1.9	1,020	1.8
Education, other	749	1.9	623	1.5	613	1.5	497	1.0	265	0.5	368	0.7	483	0.8
Humanities and arts	4,372	11.0	5,308	12.4	5,226	12.8	4,688	9.6	5,662	10.7	5,139	9.3	4,453	7.7
Letters	1,328	3.3	1,599	3.8	1,416	3.5	1,420	2.9	1,606	3.0	1,439	2.6	1,322	2.3
Foreign languages and literature	575	1.4	643	1.5	623	1.5	627	1.3	701	1.3	617	1.1	440	0.8

TABLE 1-3

Research doctorate recipients, by trend major field of doctorate: Selected years, 1993–2023

(Number and percent)

Field of doctorate	1993		1998		2003		2008		2013		2018		2023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
History	689	1.7	946	2.2	895	2.2	923	1.9	1,095	2.1	948	1.7	763	1.3
Philosophy and religious studies	531	1.3	737	1.7	696	1.7	733	1.5	828	1.6	758	1.4	614	1.1
Music and performing arts	704	1.8	788	1.8	959	2.4	423	0.9	591	1.1	486	0.9	471	0.8
Humanities and arts, other	545	1.4	595	1.4	637	1.6	562	1.2	841	1.6	891	1.6	843	1.5
Other non-science and engineering	972	2.4	948	2.2	1,090	2.7	1,341	2.7	1,472	2.8	1,504	2.7	1,754	3.0
Communication	321	0.8	373	0.9	415	1.0	557	1.1	645	1.2	630	1.1	631	1.1
Public administration and social services	354	0.9	339	0.8	394	1.0	452	0.9	457	0.9	496	0.9	535	0.9
Non-science and engineering, other	297	0.7	236	0.6	281	0.7	332	0.7	370	0.7	378	0.7	588	1.0

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

Source(s):

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

TABLE 1-4
Research doctorate recipients, by trend broad field of doctorate and sex: Selected years, 1993–2023

(Number and percent)

Field and sex	1993		1998		2003		2008		2013		2018		2023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields ^a	39,800	100.0	42,636	100.0	40,762	100.0	48,776	100.0	52,703	100.0	55,078	100.0	57,862	100.0
Male	24,384	61.3	24,628	57.8	22,256	54.6	26,271	53.9	28,326	53.7	29,742	54.0	30,356	52.5
Female	15,121	38.0	17,847	41.9	18,506	45.4	22,494	46.1	24,365	46.2	25,308	45.9	27,499	47.5
Science and engineering	26,486	100.0	28,636	100.0	26,759	100.0	34,765	100.0	39,084	100.0	42,144	100.0	45,533	100.0
Male	17,885	67.5	18,234	63.7	16,219	60.6	20,447	58.8	22,471	57.5	24,239	57.5	25,421	55.8
Female	8,370	31.6	10,281	35.9	10,540	39.4	14,309	41.2	16,603	42.5	17,886	42.4	20,106	44.2
Agricultural sciences and natural resources	1,235	100.0	1,315	100.0	1,226	100.0	1,252	100.0	1,391	100.0	1,499	100.0	1,477	100.0
Male	934	75.6	928	70.6	788	64.3	725	57.9	730	52.5	770	51.4	669	45.3
Female	293	23.7	386	29.4	438	35.7	527	42.1	661	47.5	726	48.4	808	54.7
Biological and biomedical sciences	5,212	100.0	6,011	100.0	5,927	100.0	8,145	100.0	8,707	100.0	8,782	100.0	9,575	100.0
Male	3,061	58.7	3,349	55.7	3,170	53.5	3,970	48.7	4,058	46.6	4,079	46.4	4,251	44.4
Female	2,123	40.7	2,647	44.0	2,757	46.5	4,173	51.2	4,646	53.4	4,700	53.5	5,323	55.6
Computer and information sciences	880	100.0	927	100.0	866	100.0	1,787	100.0	1,843	100.0	2,000	100.0	2,687	100.0
Male	737	83.8	765	82.5	690	79.7	1,387	77.6	1,502	81.5	1,565	78.3	1,978	73.6
Female	138	15.7	159	17.2	176	20.3	400	22.4	341	18.5	434	21.7	709	26.4
Engineering	5,698	100.0	5,922	100.0	5,279	100.0	7,863	100.0	9,000	100.0	10,164	100.0	11,403	100.0
Male	5,097	89.5	5,111	86.3	4,368	82.7	6,167	78.4	6,946	77.2	7,710	75.9	8,381	73.5
Female	522	9.2	773	13.1	911	17.3	1,693	21.5	2,052	22.8	2,450	24.1	3,022	26.5
Geosciences, atmospheric, and ocean sciences	721	100.0	766	100.0	682	100.0	865	100.0	989	100.0	1,185	100.0	1,231	100.0
Male	566	78.5	564	73.6	469	68.8	548	63.4	539	54.5	659	55.6	676	54.9
Female	146	20.2	198	25.8	213	31.2	316	36.5	449	45.4	526	44.4	554	45.0
Health sciences	1,016	100.0	1,285	100.0	1,353	100.0	1,689	100.0	2,109	100.0	2,473	100.0	2,435	100.0
Male	317	31.2	405	31.5	440	32.5	528	31.3	704	33.4	799	32.3	734	30.1
Female	688	67.7	875	68.1	913	67.5	1,159	68.6	1,405	66.6	1,674	67.7	1,701	69.9
Mathematics and statistics	1,146	100.0	1,177	100.0	993	100.0	1,400	100.0	1,817	100.0	2,022	100.0	2,167	100.0
Male	865	75.5	873	74.2	729	73.4	966	69.0	1,290	71.0	1,471	72.7	1,571	72.5
Female	264	23.0	297	25.2	264	26.6	433	30.9	527	29.0	548	27.1	595	27.5
Physical sciences	3,681	100.0	3,800	100.0	3,289	100.0	4,081	100.0	4,595	100.0	5,144	100.0	5,460	100.0
Male	2,866	77.9	2,865	75.4	2,397	72.9	2,957	72.5	3,178	69.2	3,552	69.1	3,612	66.2
Female	776	21.1	917	24.1	892	27.1	1,124	27.5	1,415	30.8	1,589	30.9	1,847	33.8
Psychology	3,420	100.0	3,673	100.0	3,277	100.0	3,357	100.0	3,592	100.0	3,821	100.0	3,899	100.0
Male	1,322	38.7	1,205	32.8	1,044	31.9	999	29.8	997	27.8	1,095	28.7	985	25.3
Female	2,088	61.1	2,456	66.9	2,233	68.1	2,358	70.2	2,594	72.2	2,726	71.3	2,913	74.7
Social sciences	3,477	100.0	3,760	100.0	3,867	100.0	4,326	100.0	5,041	100.0	5,054	100.0	5,199	100.0
Male	2,120	61.0	2,169	57.7	2,124	54.9	2,200	50.9	2,527	50.1	2,539	50.2	2,564	49.3

TABLE 1-4
Research doctorate recipients, by trend broad field of doctorate and sex: Selected years, 1993–2023

(Number and percent)

Field and sex	1993		1998		2003		2008		2013		2018		2023	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Female	1,332	38.3	1,573	41.8	1,743	45.1	2,126	49.1	2,513	49.9	2,513	49.7	2,634	50.7
Non-science and engineering	13,314	100.0	14,000	100.0	14,003	100.0	14,011	100.0	13,619	100.0	12,934	100.0	12,329	100.0
Male	6,499	48.8	6,394	45.7	6,037	43.1	5,824	41.6	5,855	43.0	5,503	42.5	4,935	40.0
Female	6,751	50.7	7,566	54.0	7,966	56.9	8,185	58.4	7,762	57.0	7,422	57.4	7,393	60.0
Business	1,281	100.0	1,175	100.0	1,036	100.0	1,421	100.0	1,551	100.0	1,473	100.0	1,560	100.0
Male	918	71.7	790	67.2	681	65.7	861	60.6	909	58.6	863	58.6	856	54.9
Female	354	27.6	375	31.9	355	34.3	560	39.4	641	41.3	607	41.2	704	45.1
Education	6,689	100.0	6,569	100.0	6,651	100.0	6,561	100.0	4,934	100.0	4,818	100.0	4,562	100.0
Male	2,748	41.1	2,421	36.9	2,256	33.9	2,158	32.9	1,570	31.8	1,494	31.0	1,222	26.8
Female	3,921	58.6	4,131	62.9	4,395	66.1	4,402	67.1	3,364	68.2	3,323	69.0	3,340	73.2
Humanities and arts	4,372	100.0	5,308	100.0	5,226	100.0	4,688	100.0	5,662	100.0	5,139	100.0	4,453	100.0
Male	2,377	54.4	2,770	52.2	2,640	50.5	2,280	48.6	2,806	49.6	2,564	49.9	2,211	49.7
Female	1,971	45.1	2,529	47.6	2,586	49.5	2,408	51.4	2,855	50.4	2,572	50.0	2,241	50.3
Other non-science and engineering	972	100.0	948	100.0	1,090	100.0	1,341	100.0	1,472	100.0	1,504	100.0	1,754	100.0
Male	456	46.9	413	43.6	460	42.2	525	39.1	570	38.7	582	38.7	646	36.8
Female	505	52.0	531	56.0	630	57.8	815	60.8	902	61.3	920	61.2	1,108	63.2

^a All fields includes doctorate recipients who did not report sex.

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
All doctorate recipients ^a	52,703	53,986	54,886	54,809	54,550	55,078	55,599	55,203	52,160	57,448	57,862	9.8
Science and engineering	39,084	40,708	41,247	41,306	41,364	42,144	42,897	42,564	40,819	45,402	45,533	16.5
Agricultural sciences and natural resources	1,391	1,380	1,490	1,428	1,543	1,499	1,538	1,531	1,412	1,509	1,477	6.2
Agricultural sciences	873	854	903	851	969	960	1,002	1,013	956	1,001	1,007	15.3
Natural resources and conservation	518	526	587	577	574	539	536	518	456	508	470	-9.3
Biological and biomedical sciences	8,707	8,868	8,783	8,863	8,567	8,782	8,678	8,403	8,131	9,208	9,575	10.0
Biochemistry and biophysics	1,005	1,006	930	997	999	963	966	859	797	925	893	-11.1
Biology and biomedical sciences, general	657	683	674	1,100	808	888	914	1,056	978	1,234	1,328	102.1
Bioinformatics, biostatistics, and computational biology	426	465	452	525	549	580	647	600	622	763	794	86.4
Cellular and developmental biology, and anatomy	597	607	596	488	427	427	412	364	220	217	225	-62.3
Ecology, evolutionary biology, and epidemiology	1,030	956	1,041	1,025	1,017	1,059	1,033	952	947	1,080	1,118	8.5
Genetics and genomics	396	401	358	338	344	363	341	347	375	415	459	15.9
Microbiology and immunology	1,142	1,133	1,168	1,042	976	1,042	1,009	1,001	972	1,088	1,092	-4.4
Molecular biology	646	670	632	549	634	596	555	575	740	797	851	31.7
Neurobiology and neurosciences	1,016	1,048	1,089	997	984	1,033	1,033	972	911	1,046	1,086	6.9
Pharmacology and toxicology	418	458	381	337	371	361	350	325	311	386	409	-2.2
Physiology, pathology, and cancer biology	723	788	774	686	683	690	637	571	562	582	608	-15.9
Biology and biomedical sciences, other	651	653	688	779	775	780	781	781	696	675	712	9.4
Computer and information sciences	1,843	1,988	2,003	2,082	1,998	2,000	2,220	2,363	2,360	2,607	2,687	45.8
Computer science	1,568	1,664	1,658	1,650	1,592	1,628	1,814	1,953	1,808	1,822	1,937	23.5
Computer and information sciences, other	275	324	345	432	406	372	406	410	552	785	750	172.7
Engineering	9,000	9,626	9,875	9,459	9,774	10,164	10,298	10,468	10,230	11,519	11,403	26.7
Aerospace, aeronautical, and astronautical engineering	348	386	361	370	380	383	379	399	372	586	586	68.4
Bioengineering and biomedical engineering	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,082	1,063	1,228	1,302	25.3
Chemical and petroleum engineering	977	1,143	1,186	1,080	1,106	1,168	1,194	1,191	1,204	1,259	1,245	27.4
Civil, environmental, and transportation engineering	1,023	1,161	1,213	1,087	1,216	1,178	1,317	1,305	1,177	1,390	1,368	33.7
Electrical and computer engineering	2,345	2,446	2,437	2,243	2,319	2,393	2,260	2,461	2,510	2,722	2,653	13.1
Industrial engineering and operations research	474	510	436	499	485	492	505	567	580	612	578	21.9
Materials and mining engineering	872	856	905	1,015	962	1,018	1,016	901	950	1,161	1,159	32.9
Mechanical engineering	1,336	1,411	1,548	1,417	1,496	1,610	1,677	1,777	1,584	1,650	1,653	23.7
Engineering, other	586	667	664	659	778	789	787	785	790	911	859	46.6
Geosciences, atmospheric, and ocean sciences	989	1,098	1,057	1,227	1,169	1,185	1,272	1,241	1,064	1,181	1,231	24.5
Geological sciences	489	579	554	618	572	591	621	673	543	576	592	21.1
Ocean, marine, and atmospheric sciences	500	519	503	609	597	594	651	568	521	605	639	27.8
Health sciences	2,109	2,236	2,220	2,248	2,443	2,473	2,532	2,606	2,250	2,473	2,435	15.5
Nursing science	510	580	536	482	552	584	546	590	513	536	554	8.6

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Pharmaceutical sciences	332	279	270	274	292	344	358	382	329	371	358	7.8
Public health	501	565	641	694	769	702	768	714	615	713	682	36.1
Health sciences, other	766	812	773	798	830	843	860	920	793	853	841	9.8
Mathematics and statistics	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,024	2,010	2,247	2,167	19.3
Applied mathematics	455	476	435	474	493	455	427	419	426	460	460	1.1
Mathematics	641	635	635	350	392	524	445	378	235	226	231	-64.0
Statistics	364	407	381	265	368	412	365	402	488	596	574	57.7
Mathematics and statistics, other	357	356	364	783	591	631	773	825	861	965	902	152.7
Physical sciences	4,595	4,812	4,859	5,024	4,913	5,144	5,306	5,000	4,710	5,468	5,460	18.8
Astronomy and astrophysics	301	289	269	315	339	351	361	305	456	521	603	100.3
Chemistry	2,484	2,673	2,666	2,703	2,699	2,807	2,939	2,761	2,552	3,060	3,001	20.8
Physics	1,810	1,850	1,924	2,006	1,875	1,986	2,006	1,934	1,702	1,887	1,856	2.5
Psychology	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,868	3,777	3,952	3,899	8.5
Clinical psychology	1,140	1,220	1,173	1,207	1,193	1,260	1,249	1,278	1,241	1,135	1,208	6.0
Counseling and applied psychology	965	928	1,034	1,001	1,019	1,003	978	980	1,029	1,072	1,001	3.7
Research and experimental psychology	969	1,007	974	1,066	1,034	952	1,042	881	834	1,066	1,003	3.5
Psychology, other	518	569	595	636	679	606	640	729	673	679	687	32.6
Social sciences	5,041	5,102	5,369	5,193	5,188	5,054	5,134	5,060	4,875	5,238	5,199	3.1
Anthropology	550	523	492	460	446	424	445	447	399	415	389	-29.3
Economics	1,183	1,196	1,255	1,236	1,239	1,244	1,247	1,212	1,229	1,287	1,290	9.0
Political science and government	803	775	859	745	743	734	707	636	581	676	665	-17.2
Public policy analysis	348	327	374	291	293	323	287	306	269	306	299	-14.1
Sociology, demography, and population studies	663	710	762	650	705	695	650	630	578	624	627	-5.4
Social sciences, other	1,494	1,571	1,627	1,811	1,762	1,634	1,798	1,829	1,819	1,930	1,929	29.1
Non-science and engineering	13,619	13,278	13,639	13,503	13,186	12,934	12,702	12,639	11,341	12,046	12,329	-9.5
Business	1,551	1,584	1,582	1,509	1,566	1,473	1,529	1,466	1,389	1,447	1,560	0.6
Education	4,934	4,789	5,098	5,146	4,825	4,818	4,628	4,712	4,239	4,471	4,562	-7.5
Education leadership and administration	965	893	920	824	921	895	835	929	701	719	735	-23.8
Education research	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,308	2,198	2,274	2,324	-14.0
Teacher education and teaching fields	1,001	1,067	1,109	1,346	1,039	1,055	1,061	1,051	905	996	1,020	1.9
Education, other	265	269	297	592	447	368	428	424	435	482	483	82.3
Humanities and arts	5,662	5,446	5,522	5,416	5,209	5,139	5,051	4,924	4,132	4,456	4,453	-21.4
Letters	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,389	1,192	1,292	1,322	-17.7
Foreign languages and literature	701	674	656	599	619	617	610	564	377	442	440	-37.2
History	1,095	1,108	1,074	1,082	980	948	912	884	724	749	763	-30.3
Philosophy and religious studies	828	773	804	735	757	758	682	667	594	639	614	-25.8

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Music and performing arts	591	509	529	476	521	486	503	559	479	470	471	-20.3
Humanities and arts, other	841	831	876	993	870	891	958	861	766	864	843	0.2
Other non-science and engineering	1,472	1,459	1,437	1,432	1,586	1,504	1,494	1,537	1,581	1,672	1,754	19.2
Communication	645	663	667	672	622	630	543	591	508	580	631	-2.2
Public administration and social services	457	444	428	437	480	496	537	530	506	488	535	17.1
Non-science and engineering, other	370	352	342	323	484	378	414	416	567	604	588	58.9
Male	28,326	29,008	29,532	29,572	29,442	29,742	30,105	29,844	28,045	30,457	30,356	7.2
Science and engineering	22,471	23,341	23,741	23,949	23,877	24,239	24,801	24,467	23,263	25,569	25,421	13.1
Agricultural sciences and natural resources	730	719	766	776	786	770	775	768	703	719	669	-8.4
Agricultural sciences	450	444	463	461	512	499	512	506	480	485	454	0.9
Natural resources and conservation	280	275	303	315	274	271	263	262	223	234	215	-23.2
Biological and biomedical sciences	4,058	4,088	4,100	4,154	4,088	4,079	4,192	3,883	3,810	4,212	4,251	4.8
Biochemistry and biophysics	534	524	511	525	553	500	558	463	422	463	450	-15.7
Biology and biomedical sciences, general	287	302	296	474	376	410	411	453	447	527	566	97.2
Bioinformatics, biostatistics, and computational biology	274	275	279	333	310	343	405	338	365	442	438	59.9
Cellular and developmental biology, and anatomy	294	277	253	229	220	211	183	184	111	112	95	-67.7
Ecology, evolutionary biology, and epidemiology	436	414	473	439	421	447	439	378	373	418	431	-1.1
Genetics and genomics	184	175	158	139	159	145	158	148	172	189	214	16.3
Microbiology and immunology	489	487	507	477	439	469	462	436	425	475	495	1.2
Molecular biology	299	309	288	245	311	256	244	270	346	363	358	19.7
Neurobiology and neurosciences	447	518	516	485	483	467	535	484	417	502	466	4.3
Pharmacology and toxicology	188	203	164	155	175	159	149	150	147	159	180	-4.3
Physiology, pathology, and cancer biology	349	330	352	305	314	339	295	250	274	259	275	-21.2
Biology and biomedical sciences, other	277	274	303	348	327	333	353	329	311	303	283	2.2
Computer and information sciences	1,502	1,580	1,581	1,662	1,566	1,565	1,711	1,861	1,774	1,959	1,978	31.7
Computer science	1,315	1,360	1,346	1,361	1,300	1,331	1,451	1,572	1,400	1,389	1,462	11.2
Computer and information sciences, other	187	220	235	301	266	234	260	289	374	570	516	175.9
Engineering	6,946	7,401	7,578	7,267	7,447	7,710	7,830	7,875	7,575	8,407	8,381	20.7
Aerospace, aeronautical, and astronautical engineering	293	330	308	314	337	337	323	329	310	488	491	67.6
Bioengineering and biomedical engineering	684	660	698	686	613	687	720	652	630	671	737	7.7
Chemical and petroleum engineering	681	817	825	750	794	835	831	851	838	842	891	30.8
Civil, environmental, and transportation engineering	726	837	843	803	835	809	963	923	789	941	920	26.7
Electrical and computer engineering	2,003	2,044	2,081	1,886	1,928	1,964	1,905	2,015	2,064	2,200	2,128	6.2
Industrial engineering and operations research	346	372	300	363	363	365	379	399	417	442	406	17.3
Materials and mining engineering	646	634	677	746	716	737	720	654	658	794	814	26.0
Mechanical engineering	1,134	1,198	1,336	1,209	1,264	1,379	1,410	1,495	1,300	1,344	1,363	20.2

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Engineering, other	433	509	510	510	597	597	579	557	569	685	631	45.7
Geosciences, atmospheric, and ocean sciences	539	622	600	716	657	659	738	736	594	634	676	25.4
Geological sciences	278	329	317	369	338	342	392	408	308	338	332	19.4
Ocean, marine, and atmospheric sciences	261	293	283	347	319	317	346	328	286	296	344	31.8
Health sciences	704	707	697	698	787	799	839	891	718	785	734	4.3
Nursing science	42	44	33	36	62	51	65	73	59	63	57	35.7
Pharmaceutical sciences	174	144	148	145	149	189	182	216	154	179	165	-5.2
Public health	151	161	144	168	226	189	220	201	170	198	170	12.6
Health sciences, other	337	358	372	349	350	370	372	401	335	345	342	1.5
Mathematics and statistics	1,290	1,332	1,296	1,332	1,340	1,471	1,426	1,434	1,453	1,611	1,571	21.8
Applied mathematics	310	349	293	335	355	331	297	296	300	328	325	4.8
Mathematics	508	494	516	272	321	418	337	293	188	186	198	-61.0
Statistics	221	254	230	158	236	254	222	253	326	384	373	68.8
Mathematics and statistics, other	251	235	257	567	428	468	570	592	639	713	675	168.9
Physical sciences	3,178	3,346	3,328	3,569	3,446	3,552	3,624	3,437	3,156	3,666	3,612	13.7
Astronomy and astrophysics	204	209	193	218	229	245	251	202	311	360	426	108.8
Chemistry	1,497	1,642	1,592	1,712	1,676	1,741	1,788	1,668	1,471	1,806	1,713	14.4
Physics	1,477	1,495	1,543	1,639	1,541	1,566	1,585	1,567	1,374	1,500	1,473	-0.3
Psychology	997	1,063	1,057	1,133	1,132	1,095	1,113	1,079	1,063	1,042	985	-1.2
Clinical psychology	251	278	249	282	282	275	305	285	316	238	251	0.0
Counseling and applied psychology	256	272	282	296	282	273	235	271	264	275	234	-8.6
Research and experimental psychology	338	352	369	381	379	370	382	323	294	362	335	-0.9
Psychology, other	152	161	157	174	189	177	191	200	189	167	165	8.6
Social sciences	2,527	2,483	2,738	2,642	2,628	2,539	2,553	2,503	2,417	2,534	2,564	1.5
Anthropology	188	195	185	171	159	126	155	144	120	128	139	-26.1
Economics	767	785	821	819	827	848	818	808	820	850	854	11.3
Political science and government	469	433	527	462	456	429	433	387	339	398	384	-18.1
Public policy analysis	155	134	159	121	144	159	138	123	122	120	130	-16.1
Sociology, demography, and population studies	268	262	291	274	275	258	239	257	219	236	240	-10.4
Social sciences, other	680	674	755	795	767	719	770	784	797	802	817	20.1
Non-science and engineering	5,855	5,667	5,791	5,623	5,565	5,503	5,304	5,377	4,782	4,888	4,935	-15.7
Business	909	909	934	932	901	863	870	850	793	807	856	-5.8
Education	1,570	1,468	1,605	1,545	1,534	1,494	1,419	1,457	1,234	1,276	1,222	-22.2
Education leadership and administration	372	371	344	304	348	323	340	349	242	230	253	-32.0
Education research	826	723	849	718	778	762	654	674	640	629	578	-30.0
Teacher education and teaching fields	297	300	330	356	286	289	279	319	234	275	278	-6.4

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Education, other	75	74	82	167	122	120	146	115	118	142	113	50.7
Humanities and arts	2,806	2,721	2,725	2,605	2,564	2,564	2,478	2,506	2,112	2,184	2,211	-21.2
Letters	665	657	647	600	593	585	560	587	489	504	558	-16.1
Foreign languages and literature	271	248	238	228	239	247	215	223	170	177	171	-36.9
History	609	625	594	587	560	513	529	510	409	395	424	-30.4
Philosophy and religious studies	570	537	565	464	537	523	442	462	385	416	395	-30.7
Music and performing arts	300	288	278	239	252	262	271	298	257	256	254	-15.3
Humanities and arts, other	391	366	403	487	383	434	461	426	402	436	409	4.6
Other non-science and engineering	570	569	527	541	566	582	537	564	643	621	646	13.3
Communication	244	277	256	261	200	234	205	228	213	197	238	-2.5
Public administration and social services	142	129	110	130	150	157	160	164	163	154	148	4.2
Non-science and engineering, other	184	163	161	150	216	191	172	172	267	270	260	41.3
Female	24,365	24,813	25,347	25,222	25,086	25,308	25,484	25,353	24,105	26,986	27,499	12.9
Science and engineering	16,603	17,228	17,501	17,346	17,470	17,886	18,088	18,092	17,548	19,832	20,106	21.1
Agricultural sciences and natural resources	661	660	724	651	755	726	763	762	709	790	808	22.2
Agricultural sciences	423	409	440	389	456	460	490	507	476	516	553	30.7
Natural resources and conservation	238	251	284	262	299	266	273	255	233	274	255	7.1
Biological and biomedical sciences	4,646	4,747	4,682	4,707	4,477	4,700	4,485	4,520	4,319	4,996	5,323	14.6
Biochemistry and biophysics	469	477	419	472	446	463	407	396	375	462	443	-5.5
Biology and biomedical sciences, general	370	375	378	625	431	477	503	603	529	707	762	105.9
Bioinformatics, biostatistics, and computational biology	152	189	173	192	238	237	242	262	257	321	356	134.2
Cellular and developmental biology, and anatomy	303	326	343	259	207	216	229	180	109	105	130	-57.1
Ecology, evolutionary biology, and epidemiology	594	541	568	585	596	612	594	574	574	662	687	15.7
Genetics and genomics	212	226	200	199	185	218	183	199	203	226	245	15.6
Microbiology and immunology	653	644	661	565	537	573	547	565	547	613	597	-8.6
Molecular biology	347	357	344	304	323	340	311	305	394	434	492	41.8
Neurobiology and neurosciences	569	528	573	512	501	566	498	488	494	544	620	9.0
Pharmacology and toxicology	230	255	216	182	196	202	201	175	164	227	229	-0.4
Physiology, pathology, and cancer biology	373	453	422	381	369	351	342	321	288	323	333	-10.7
Biology and biomedical sciences, other	374	376	385	431	448	445	428	452	385	372	429	14.7
Computer and information sciences	341	400	422	420	432	434	508	502	586	648	709	107.9
Computer science	253	299	312	289	292	296	363	381	408	433	475	87.7
Computer and information sciences, other	88	101	110	131	140	138	145	121	178	215	234	165.9
Engineering	2,052	2,184	2,297	2,189	2,321	2,450	2,466	2,591	2,654	3,112	3,022	47.3
Aerospace, aeronautical, and astronautical engineering	55	55	53	56	43	46	56	70	62	98	95	72.7
Bioengineering and biomedical engineering	355	384	427	403	419	445	443	430	432	557	565	59.2

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Chemical and petroleum engineering	296	324	361	329	310	333	363	340	366	417	354	19.6
Civil, environmental, and transportation engineering	297	319	370	284	379	369	354	381	388	449	448	50.8
Electrical and computer engineering	340	389	356	356	390	429	354	446	446	522	525	54.4
Industrial engineering and operations research	128	137	136	136	121	127	126	168	163	170	172	34.4
Materials and mining engineering	226	217	228	268	246	281	295	247	292	367	345	52.7
Mechanical engineering	202	205	212	208	232	229	267	282	284	306	290	43.6
Engineering, other	153	154	154	149	181	191	208	227	221	226	228	49.0
Geosciences, atmospheric, and ocean sciences	449	475	457	510	512	526	533	505	470	547	554	23.4
Geological sciences	211	250	237	248	234	249	229	265	235	238	260	23.2
Ocean, marine, and atmospheric sciences	238	225	220	262	278	277	304	240	235	309	294	23.5
Health sciences	1,405	1,523	1,523	1,550	1,655	1,674	1,693	1,715	1,532	1,688	1,701	21.1
Nursing science	468	536	503	446	490	533	481	517	454	473	497	6.2
Pharmaceutical sciences	158	132	122	129	143	155	176	166	175	192	193	22.2
Public health	350	402	497	526	543	513	548	513	445	515	512	46.3
Health sciences, other	429	453	401	449	479	473	488	519	458	508	499	16.3
Mathematics and statistics	527	534	517	539	503	548	584	590	557	636	595	12.9
Applied mathematics	145	125	142	139	138	123	130	123	126	132	135	-6.9
Mathematics	133	141	119	77	71	106	108	85	47	40	33	-75.2
Statistics	143	153	150	107	132	157	143	149	162	212	201	40.6
Mathematics and statistics, other	106	115	106	216	162	162	203	233	222	252	226	113.2
Physical sciences	1,415	1,449	1,530	1,453	1,466	1,589	1,679	1,561	1,552	1,802	1,847	30.5
Astronomy and astrophysics	97	79	76	97	110	106	110	103	145	161	177	82.5
Chemistry	985	1,021	1,074	991	1,022	1,066	1,151	1,091	1,081	1,254	1,287	30.7
Physics	333	349	380	365	334	417	418	367	326	387	383	15.0
Psychology	2,594	2,648	2,719	2,776	2,793	2,726	2,796	2,789	2,714	2,910	2,913	12.3
Clinical psychology	888	934	924	924	911	985	944	993	925	897	957	7.8
Counseling and applied psychology	709	652	752	705	737	730	743	709	765	797	767	8.2
Research and experimental psychology	631	654	605	685	655	582	660	558	540	704	668	5.9
Psychology, other	366	408	438	462	490	429	449	529	484	512	521	42.3
Social sciences	2,513	2,608	2,630	2,551	2,556	2,513	2,581	2,557	2,455	2,703	2,634	4.8
Anthropology	362	328	307	289	287	298	290	303	279	287	250	-30.9
Economics	416	404	434	417	410	396	429	404	408	437	435	4.6
Political science and government	333	341	332	283	287	304	274	249	242	278	281	-15.6
Public policy analysis	193	193	214	170	148	164	149	183	147	186	169	-12.4
Sociology, demography, and population studies	395	448	471	376	429	437	411	373	359	388	387	-2.0
Social sciences, other	814	894	872	1,016	995	914	1,028	1,045	1,020	1,127	1,112	36.6

TABLE 1-5

Research doctorate recipients, by trend major field of doctorate and sex: 2013–23

(Number)

Field and sex	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Non-science and engineering	7,762	7,585	7,846	7,876	7,616	7,422	7,396	7,261	6,557	7,154	7,393	-4.8
Business	641	669	648	575	664	607	659	616	596	640	704	9.8
Education	3,364	3,311	3,492	3,601	3,289	3,323	3,209	3,254	3,004	3,195	3,340	-0.7
Education leadership and administration	593	522	576	520	573	572	495	579	459	489	482	-18.7
Education research	1,877	1,828	1,922	1,666	1,639	1,737	1,650	1,634	1,558	1,645	1,746	-7.0
Teacher education and teaching fields	704	766	779	990	752	766	782	732	670	721	742	5.4
Education, other	190	195	215	425	325	248	282	309	317	340	370	94.7
Humanities and arts	2,855	2,721	2,796	2,810	2,644	2,572	2,571	2,418	2,019	2,270	2,241	-21.5
Letters	941	894	936	931	869	853	826	802	702	787	764	-18.8
Foreign languages and literature	430	424	418	371	380	370	394	341	207	265	269	-37.4
History	486	482	480	495	420	435	383	374	315	354	339	-30.2
Philosophy and religious studies	258	236	238	271	219	233	240	205	209	222	219	-15.1
Music and performing arts	290	220	251	237	269	224	231	261	222	214	217	-25.2
Humanities and arts, other	450	465	473	505	487	457	497	435	364	428	433	-3.8
Other non-science and engineering	902	884	910	890	1,019	920	957	973	938	1,049	1,108	22.8
Communication	401	383	411	410	422	395	338	363	295	383	393	-2.0
Public administration and social services	315	315	318	307	330	338	377	366	343	332	387	22.9
Non-science and engineering, other	186	186	181	173	267	187	242	244	300	334	328	76.3

^a All doctorate recipients includes doctorate recipients who did not report sex.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 1-6

Research doctorate recipients, by trend broad field of doctorate and citizenship status: Selected years, 1978–2023

(Number)

Field and citizenship status	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
All fields	30,875	31,280	33,497	39,800	42,636	40,762	48,776	52,703	55,078	57,862
U.S. citizen or permanent resident	26,683	25,698	24,932	28,722	31,204	28,170	30,844	33,964	35,349	35,566
Temporary visa holder	3,475	4,555	6,241	9,964	9,461	10,597	15,261	15,674	17,582	19,393
Unknown citizenship	717	1,027	2,324	1,114	1,971	1,995	2,671	3,065	2,147	2,903
Science and engineering	17,977	19,130	21,697	26,486	28,636	26,759	34,765	39,084	42,144	45,533
U.S. citizen or permanent resident	14,874	14,963	15,121	17,397	19,338	16,867	19,907	23,503	25,436	26,622
Temporary visa holder	2,656	3,532	5,078	8,332	8,012	8,694	13,053	13,444	15,204	16,768
Unknown citizenship	447	635	1,498	757	1,286	1,198	1,805	2,137	1,504	2,143
Agricultural sciences and natural resources	1,085	1,268	1,277	1,235	1,315	1,226	1,252	1,391	1,499	1,477
U.S. citizen or permanent resident	724	841	775	647	708	628	675	769	823	845
Temporary visa holder	342	400	423	567	562	524	516	539	630	580
Unknown citizenship	19	27	79	21	45	74	61	83	46	52
Biological and biomedical sciences	3,516	3,817	4,208	5,212	6,011	5,927	8,145	8,707	8,782	9,575
U.S. citizen or permanent resident	3,139	3,399	3,412	3,844	4,455	4,250	5,405	6,044	6,396	6,906
Temporary visa holder	297	338	566	1,277	1,351	1,434	2,364	2,211	2,157	2,299
Unknown citizenship	80	80	230	91	205	243	376	452	229	370
Computer and information sciences	121	286	515	880	927	866	1,787	1,843	2,000	2,687
U.S. citizen or permanent resident	90	208	326	510	563	447	697	758	742	965
Temporary visa holder	27	74	176	348	326	379	1,005	990	1,163	1,573
Unknown citizenship	4	4	13	22	38	40	85	95	95	149
Engineering	2,423	2,781	4,186	5,698	5,922	5,279	7,863	9,000	10,164	11,403
U.S. citizen or permanent resident	1,588	1,485	2,150	2,700	3,048	2,180	2,958	3,767	4,213	4,804
Temporary visa holder	781	1,191	1,730	2,791	2,581	2,913	4,492	4,759	5,575	6,034
Unknown citizenship	54	105	306	207	293	186	413	474	376	565
Geosciences, atmospheric, and ocean sciences	578	587	670	721	766	682	865	989	1,185	1,231
U.S. citizen or permanent resident	499	474	494	463	534	451	536	654	760	782
Temporary visa holder	69	97	131	228	202	201	293	290	392	395
Unknown citizenship	10	16	45	30	30	30	36	45	33	54
Health sciences	485	518	737	1,016	1,285	1,353	1,689	2,109	2,473	2,435
U.S. citizen or permanent resident	433	439	581	814	987	1,020	1,199	1,539	1,809	1,729
Temporary visa holder	36	58	97	163	244	268	372	427	573	564
Unknown citizenship	16	21	59	39	54	65	118	143	91	142
Mathematics and statistics	838	701	749	1,146	1,177	993	1,400	1,817	2,022	2,167
U.S. citizen or permanent resident	666	459	388	590	673	517	673	873	994	977
Temporary visa holder	157	208	307	518	444	440	651	843	965	1,112
Unknown citizenship	15	34	54	38	60	36	76	101	63	78

TABLE 1-6

Research doctorate recipients, by trend broad field of doctorate and citizenship status: Selected years, 1978–2023

(Number)

Field and citizenship status	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Physical sciences	2,611	2,801	3,316	3,681	3,800	3,289	4,081	4,595	5,144	5,460
U.S. citizen or permanent resident	2,167	2,189	2,239	2,317	2,444	1,953	2,138	2,593	3,008	3,176
Temporary visa holder	400	540	873	1,261	1,193	1,216	1,734	1,742	1,981	2,076
Unknown citizenship	44	72	204	103	163	120	209	260	155	208
Psychology	3,055	3,346	3,074	3,420	3,673	3,277	3,357	3,592	3,821	3,899
U.S. citizen or permanent resident	2,862	3,116	2,730	3,161	3,275	2,867	2,892	3,067	3,309	3,249
Temporary visa holder	61	81	85	150	168	196	249	282	284	366
Unknown citizenship	132	149	259	109	230	214	216	243	228	284
Social sciences	3,265	3,025	2,965	3,477	3,760	3,867	4,326	5,041	5,054	5,199
U.S. citizen or permanent resident	2,706	2,353	2,026	2,351	2,651	2,554	2,734	3,439	3,382	3,189
Temporary visa holder	486	545	690	1,029	941	1,123	1,377	1,361	1,484	1,769
Unknown citizenship	73	127	249	97	168	190	215	241	188	241
Non-science and engineering	12,898	12,150	11,800	13,314	14,000	14,003	14,011	13,619	12,934	12,329
U.S. citizen or permanent resident	11,809	10,735	9,811	11,325	11,866	11,303	10,937	10,461	9,913	8,944
Temporary visa holder	819	1,023	1,163	1,632	1,449	1,903	2,208	2,230	2,378	2,625
Unknown citizenship	270	392	826	357	685	797	866	928	643	760
Business	713	750	1,033	1,281	1,175	1,036	1,421	1,551	1,473	1,560
U.S. citizen or permanent resident	572	578	694	843	853	615	703	831	740	681
Temporary visa holder	131	151	258	394	268	356	619	600	642	770
Unknown citizenship	10	21	81	44	54	65	99	120	91	109
Education	7,194	7,174	6,361	6,689	6,569	6,651	6,561	4,934	4,818	4,562
U.S. citizen or permanent resident	6,635	6,408	5,478	5,969	5,748	5,650	5,584	4,118	4,025	3,755
Temporary visa holder	414	563	485	554	487	588	567	515	611	546
Unknown citizenship	145	203	398	166	334	413	410	301	182	261
Humanities and arts	4,176	3,451	3,548	4,372	5,308	5,226	4,688	5,662	5,139	4,453
U.S. citizen or permanent resident	3,910	3,094	2,998	3,752	4,497	4,297	3,706	4,493	4,145	3,333
Temporary visa holder	174	229	309	506	556	694	715	770	739	849
Unknown citizenship	92	128	241	114	255	235	267	399	255	271
Other non-science and engineering	815	775	858	972	948	1,090	1,341	1,472	1,504	1,754
U.S. citizen or permanent resident	692	655	641	761	768	741	944	1,019	1,003	1,175
Temporary visa holder	100	80	111	178	138	265	307	345	386	460
Unknown citizenship	23	40	106	33	42	84	90	108	115	119

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

Source(s):

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

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
All doctorate recipients ^a	52,703	53,986	54,886	54,809	54,550	55,078	55,599	55,203	52,160	57,448	57,862	9.8
Science and engineering	39,084	40,708	41,247	41,306	41,364	42,144	42,897	42,564	40,819	45,402	45,533	16.5
Agricultural sciences and natural resources	1,391	1,380	1,490	1,428	1,543	1,499	1,538	1,531	1,412	1,509	1,477	6.2
Agricultural sciences	873	854	903	851	969	960	1,002	1,013	956	1,001	1,007	15.3
Natural resources and conservation	518	526	587	577	574	539	536	518	456	508	470	-9.3
Biological and biomedical sciences	8,707	8,868	8,783	8,863	8,567	8,782	8,678	8,403	8,131	9,208	9,575	10.0
Biochemistry and biophysics	1,005	1,006	930	997	999	963	966	859	797	925	893	-11.1
Biology and biomedical sciences, general	657	683	674	1,100	808	888	914	1,056	978	1,234	1,328	102.1
Bioinformatics, biostatistics, and computational biology	426	465	452	525	549	580	647	600	622	763	794	86.4
Cellular and developmental biology, and anatomy	597	607	596	488	427	427	412	364	220	217	225	-62.3
Ecology, evolutionary biology, and epidemiology	1,030	956	1,041	1,025	1,017	1,059	1,033	952	947	1,080	1,118	8.5
Genetics and genomics	396	401	358	338	344	363	341	347	375	415	459	15.9
Microbiology and immunology	1,142	1,133	1,168	1,042	976	1,042	1,009	1,001	972	1,088	1,092	-4.4
Molecular biology	646	670	632	549	634	596	555	575	740	797	851	31.7
Neurobiology and neurosciences	1,016	1,048	1,089	997	984	1,033	1,033	972	911	1,046	1,086	6.9
Pharmacology and toxicology	418	458	381	337	371	361	350	325	311	386	409	-2.2
Physiology, pathology, and cancer biology	723	788	774	686	683	690	637	571	562	582	608	-15.9
Biology and biomedical sciences, other	651	653	688	779	775	780	781	781	696	675	712	9.4
Computer and information sciences	1,843	1,988	2,003	2,082	1,998	2,000	2,220	2,363	2,360	2,607	2,687	45.8
Computer science	1,568	1,664	1,658	1,650	1,592	1,628	1,814	1,953	1,808	1,822	1,937	23.5
Computer and information sciences, other	275	324	345	432	406	372	406	410	552	785	750	172.7
Engineering	9,000	9,626	9,875	9,459	9,774	10,164	10,298	10,468	10,230	11,519	11,403	26.7
Aerospace, aeronautical, and astronautical engineering	348	386	361	370	380	383	379	399	372	586	586	68.4
Bioengineering and biomedical engineering	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,082	1,063	1,228	1,302	25.3
Chemical and petroleum engineering	977	1,143	1,186	1,080	1,106	1,168	1,194	1,191	1,204	1,259	1,245	27.4
Civil, environmental, and transportation engineering	1,023	1,161	1,213	1,087	1,216	1,178	1,317	1,305	1,177	1,390	1,368	33.7
Electrical and computer engineering	2,345	2,446	2,437	2,243	2,319	2,393	2,260	2,461	2,510	2,722	2,653	13.1
Industrial engineering and operations research	474	510	436	499	485	492	505	567	580	612	578	21.9
Materials and mining engineering	872	856	905	1,015	962	1,018	1,016	901	950	1,161	1,159	32.9
Mechanical engineering	1,336	1,411	1,548	1,417	1,496	1,610	1,677	1,777	1,584	1,650	1,653	23.7
Engineering, other	586	667	664	659	778	789	787	785	790	911	859	46.6
Geosciences, atmospheric, and ocean sciences	989	1,098	1,057	1,227	1,169	1,185	1,272	1,241	1,064	1,181	1,231	24.5
Geological sciences	489	579	554	618	572	591	621	673	543	576	592	21.1
Ocean, marine, and atmospheric sciences	500	519	503	609	597	594	651	568	521	605	639	27.8
Health sciences	2,109	2,236	2,220	2,248	2,443	2,473	2,532	2,606	2,250	2,473	2,435	15.5
Nursing science	510	580	536	482	552	584	546	590	513	536	554	8.6

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Pharmaceutical sciences	332	279	270	274	292	344	358	382	329	371	358	7.8
Public health	501	565	641	694	769	702	768	714	615	713	682	36.1
Health sciences, other	766	812	773	798	830	843	860	920	793	853	841	9.8
Mathematics and statistics	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,024	2,010	2,247	2,167	19.3
Applied mathematics	455	476	435	474	493	455	427	419	426	460	460	1.1
Mathematics	641	635	635	350	392	524	445	378	235	226	231	-64.0
Statistics	364	407	381	265	368	412	365	402	488	596	574	57.7
Mathematics and statistics, other	357	356	364	783	591	631	773	825	861	965	902	152.7
Physical sciences	4,595	4,812	4,859	5,024	4,913	5,144	5,306	5,000	4,710	5,468	5,460	18.8
Astronomy and astrophysics	301	289	269	315	339	351	361	305	456	521	603	100.3
Chemistry	2,484	2,673	2,666	2,703	2,699	2,807	2,939	2,761	2,552	3,060	3,001	20.8
Physics	1,810	1,850	1,924	2,006	1,875	1,986	2,006	1,934	1,702	1,887	1,856	2.5
Psychology	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,868	3,777	3,952	3,899	8.5
Clinical psychology	1,140	1,220	1,173	1,207	1,193	1,260	1,249	1,278	1,241	1,135	1,208	6.0
Counseling and applied psychology	965	928	1,034	1,001	1,019	1,003	978	980	1,029	1,072	1,001	3.7
Research and experimental psychology	969	1,007	974	1,066	1,034	952	1,042	881	834	1,066	1,003	3.5
Psychology, other	518	569	595	636	679	606	640	729	673	679	687	32.6
Social sciences	5,041	5,102	5,369	5,193	5,188	5,054	5,134	5,060	4,875	5,238	5,199	3.1
Anthropology	550	523	492	460	446	424	445	447	399	415	389	-29.3
Economics	1,183	1,196	1,255	1,236	1,239	1,244	1,247	1,212	1,229	1,287	1,290	9.0
Political science and government	803	775	859	745	743	734	707	636	581	676	665	-17.2
Public policy analysis	348	327	374	291	293	323	287	306	269	306	299	-14.1
Sociology, demography, and population studies	663	710	762	650	705	695	650	630	578	624	627	-5.4
Social sciences, other	1,494	1,571	1,627	1,811	1,762	1,634	1,798	1,829	1,819	1,930	1,929	29.1
Non-science and engineering	13,619	13,278	13,639	13,503	13,186	12,934	12,702	12,639	11,341	12,046	12,329	-9.5
Business	1,551	1,584	1,582	1,509	1,566	1,473	1,529	1,466	1,389	1,447	1,560	0.6
Education	4,934	4,789	5,098	5,146	4,825	4,818	4,628	4,712	4,239	4,471	4,562	-7.5
Education leadership and administration	965	893	920	824	921	895	835	929	701	719	735	-23.8
Education research	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,308	2,198	2,274	2,324	-14.0
Teacher education and teaching fields	1,001	1,067	1,109	1,346	1,039	1,055	1,061	1,051	905	996	1,020	1.9
Education, other	265	269	297	592	447	368	428	424	435	482	483	82.3
Humanities and arts	5,662	5,446	5,522	5,416	5,209	5,139	5,051	4,924	4,132	4,456	4,453	-21.4
Letters	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,389	1,192	1,292	1,322	-17.7
Foreign languages and literature	701	674	656	599	619	617	610	564	377	442	440	-37.2
History	1,095	1,108	1,074	1,082	980	948	912	884	724	749	763	-30.3
Philosophy and religious studies	828	773	804	735	757	758	682	667	594	639	614	-25.8

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Music and performing arts	591	509	529	476	521	486	503	559	479	470	471	-20.3
Humanities and arts, other	841	831	876	993	870	891	958	861	766	864	843	0.2
Other non-science and engineering	1,472	1,459	1,437	1,432	1,586	1,504	1,494	1,537	1,581	1,672	1,754	19.2
Communication	645	663	667	672	622	630	543	591	508	580	631	-2.2
Public administration and social services	457	444	428	437	480	496	537	530	506	488	535	17.1
Non-science and engineering, other	370	352	342	323	484	378	414	416	567	604	588	58.9
U.S. citizen or permanent resident	33,964	34,003	35,071	35,678	35,733	35,349	35,218	34,458	31,861	35,207	35,566	4.7
Science and engineering	23,503	23,943	24,571	25,112	25,495	25,436	25,673	24,919	23,609	26,358	26,622	13.3
Agricultural sciences and natural resources	769	770	794	803	850	823	849	829	791	854	845	9.9
Agricultural sciences	430	424	434	433	493	466	498	494	498	508	542	26.0
Natural resources and conservation	339	346	360	370	357	357	351	335	293	346	303	-10.6
Biological and biomedical sciences	6,044	5,993	6,029	6,215	6,148	6,396	6,368	5,999	5,826	6,627	6,906	14.3
Biochemistry and biophysics	632	612	582	621	655	647	666	582	529	618	613	-3.0
Biology and biomedical sciences, general	384	397	384	699	548	586	623	704	663	832	905	135.7
Bioinformatics, biostatistics, and computational biology	228	237	214	263	297	317	367	292	328	413	448	96.5
Cellular and developmental biology, and anatomy	407	397	409	318	288	294	292	259	159	152	151	-62.9
Ecology, evolutionary biology, and epidemiology	849	754	846	850	833	900	871	771	767	858	885	4.2
Genetics and genomics	283	275	247	246	243	278	272	261	281	322	344	21.6
Microbiology and immunology	858	825	881	810	748	816	795	774	766	887	845	-1.5
Molecular biology	448	462	400	395	448	410	411	410	525	583	632	41.1
Neurobiology and neurosciences	796	798	840	775	799	837	832	754	721	821	857	7.7
Pharmacology and toxicology	280	294	268	232	263	262	259	241	223	285	295	5.4
Physiology, pathology, and cancer biology	471	530	523	472	496	495	449	417	402	424	434	-7.9
Biology and biomedical sciences, other	408	412	435	534	530	554	531	534	462	432	497	21.8
Computer and information sciences	758	807	774	783	801	742	799	807	783	910	965	27.3
Computer science	606	642	604	598	595	577	622	644	587	659	686	13.2
Computer and information sciences, other	152	165	170	185	206	165	177	163	196	251	279	83.6
Engineering	3,767	4,066	4,219	4,181	4,307	4,213	4,251	4,153	4,093	4,726	4,804	27.5
Aerospace, aeronautical, and astronautical engineering	194	246	216	233	241	221	212	221	187	304	322	66.0
Bioengineering and biomedical engineering	637	674	723	746	695	743	771	688	733	842	854	34.1
Chemical and petroleum engineering	400	484	523	498	511	508	522	515	504	570	601	50.3
Civil, environmental, and transportation engineering	377	470	493	433	448	417	429	446	387	455	467	23.9
Electrical and computer engineering	734	714	750	672	697	655	627	681	707	752	760	3.5
Industrial engineering and operations research	193	187	165	184	202	167	195	180	201	208	208	7.8
Materials and mining engineering	371	373	397	473	482	477	511	411	425	554	539	45.3
Mechanical engineering	576	602	658	650	637	666	671	666	632	680	677	17.5

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Engineering, other	285	316	294	292	394	359	313	345	317	361	376	31.9
Geosciences, atmospheric, and ocean sciences	654	722	704	803	790	760	808	809	683	740	782	19.6
Geological sciences	327	366	363	387	363	383	397	430	340	343	358	9.5
Ocean, marine, and atmospheric sciences	327	356	341	416	427	377	411	379	343	397	424	29.7
Health sciences	1,539	1,627	1,647	1,665	1,830	1,809	1,818	1,871	1,637	1,734	1,729	12.3
Nursing science	445	493	457	416	466	484	459	490	430	434	438	-1.6
Pharmaceutical sciences	124	97	104	117	121	132	129	159	148	144	149	20.2
Public health	409	452	535	547	607	541	607	544	470	526	521	27.4
Health sciences, other	561	585	551	585	636	652	623	678	589	630	621	10.7
Mathematics and statistics	873	931	889	946	947	994	986	927	898	1,000	977	11.9
Applied mathematics	219	215	202	239	241	237	220	221	203	202	222	1.4
Mathematics	366	400	386	195	238	300	246	183	127	112	127	-65.3
Statistics	135	160	156	106	155	161	134	132	139	170	163	20.7
Mathematics and statistics, other	153	156	145	406	313	296	386	391	429	516	465	203.9
Physical sciences	2,593	2,578	2,777	2,866	2,925	3,008	3,092	2,930	2,682	3,129	3,176	22.5
Astronomy and astrophysics	212	199	190	236	238	253	250	213	292	335	377	77.8
Chemistry	1,443	1,447	1,572	1,581	1,696	1,710	1,780	1,696	1,515	1,800	1,862	29.0
Physics	938	932	1,015	1,049	991	1,045	1,062	1,021	875	994	937	-0.1
Psychology	3,067	3,042	3,103	3,341	3,376	3,309	3,326	3,309	3,154	3,338	3,249	5.9
Clinical psychology	1,034	1,005	1,039	1,099	1,091	1,136	1,130	1,151	1,091	1,012	1,073	3.8
Counseling and applied psychology	836	778	850	866	861	884	843	849	893	938	854	2.2
Research and experimental psychology	809	849	809	903	882	806	867	748	680	874	811	0.2
Psychology, other	388	410	405	473	542	483	486	561	490	514	511	31.7
Social sciences	3,439	3,407	3,635	3,509	3,521	3,382	3,376	3,285	3,062	3,300	3,189	-7.3
Anthropology	457	405	397	360	349	336	360	366	300	335	302	-33.9
Economics	505	469	552	522	547	483	491	458	438	476	457	-9.5
Political science and government	593	574	621	579	572	544	504	459	408	463	438	-26.1
Public policy analysis	262	254	294	227	222	245	224	222	204	214	224	-14.5
Sociology, demography, and population studies	535	566	613	531	578	574	522	501	470	494	494	-7.7
Social sciences, other	1,087	1,139	1,158	1,290	1,253	1,200	1,275	1,279	1,242	1,318	1,274	17.2
Non-science and engineering	10,461	10,060	10,500	10,566	10,238	9,913	9,545	9,539	8,252	8,849	8,944	-14.5
Business	831	849	892	845	860	740	744	708	609	660	681	-18.1
Education	4,118	3,934	4,196	4,303	4,051	4,025	3,843	3,895	3,465	3,649	3,755	-8.8
Education leadership and administration	844	763	797	727	791	783	751	820	604	632	646	-23.5
Education research	2,216	2,104	2,273	1,981	2,029	2,056	1,909	1,870	1,800	1,847	1,903	-14.1
Teacher education and teaching fields	831	864	896	1,108	860	872	856	844	717	789	816	-1.8

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Education, other	227	203	230	487	371	314	327	361	344	381	390	71.8
Humanities and arts	4,493	4,301	4,425	4,398	4,244	4,145	3,988	3,908	3,154	3,460	3,333	-25.8
Letters	1,354	1,304	1,353	1,314	1,277	1,232	1,187	1,163	950	1,073	1,053	-22.2
Foreign languages and literature	467	469	463	399	431	405	383	350	237	271	252	-46.0
History	905	908	891	898	836	800	741	745	569	603	597	-34.0
Philosophy and religious studies	655	606	643	603	596	609	531	537	456	511	475	-27.5
Music and performing arts	458	390	383	380	406	376	395	422	359	336	328	-28.4
Humanities and arts, other	654	624	692	804	698	723	751	691	583	666	628	-4.0
Other non-science and engineering	1,019	976	987	1,020	1,083	1,003	970	1,028	1,024	1,080	1,175	15.3
Communication	471	473	479	472	458	434	349	411	347	377	432	-8.3
Public administration and social services	345	319	327	349	379	378	414	402	371	352	409	18.6
Non-science and engineering, other	203	184	181	199	246	191	207	215	306	351	334	64.5
Temporary visa holder	15,674	15,839	16,129	16,477	16,288	17,582	18,324	18,473	17,768	19,620	19,393	23.7
Science and engineering	13,444	13,743	14,027	14,325	14,134	15,204	15,777	15,997	15,333	17,083	16,768	24.7
Agricultural sciences and natural resources	539	522	582	574	629	630	668	658	578	610	580	7.6
Agricultural sciences	394	384	413	386	453	475	495	486	432	469	436	10.7
Natural resources and conservation	145	138	169	188	176	155	173	172	146	141	144	-0.7
Biological and biomedical sciences	2,211	2,229	2,266	2,304	2,180	2,157	2,129	2,173	2,029	2,287	2,299	4.0
Biochemistry and biophysics	313	339	312	341	318	287	278	245	253	282	244	-22.0
Biology and biomedical sciences, general	183	177	196	341	208	252	249	288	253	324	333	82.0
Bioinformatics, biostatistics, and computational biology	180	192	201	227	239	252	272	297	275	327	319	77.2
Cellular and developmental biology, and anatomy	173	168	163	140	123	121	105	86	52	54	51	-70.5
Ecology, evolutionary biology, and epidemiology	146	153	161	152	169	150	150	169	162	201	210	43.8
Genetics and genomics	92	102	90	73	89	73	65	77	81	84	97	5.4
Microbiology and immunology	257	256	241	207	209	210	205	214	179	178	214	-16.7
Molecular biology	160	162	188	136	176	177	138	156	192	192	201	25.6
Neurobiology and neurosciences	176	180	211	190	163	171	181	196	157	191	195	10.8
Pharmacology and toxicology	116	114	80	88	97	92	79	75	73	86	93	-19.8
Physiology, pathology, and cancer biology	216	197	213	194	166	177	177	138	136	138	144	-33.3
Biology and biomedical sciences, other	199	189	210	215	223	195	230	232	216	230	198	-0.5
Computer and information sciences	990	1,029	1,094	1,201	1,105	1,163	1,328	1,455	1,431	1,587	1,573	58.9
Computer science	880	914	950	977	932	980	1,124	1,235	1,115	1,090	1,150	30.7
Computer and information sciences, other	110	115	144	224	173	183	204	220	316	497	423	284.5
Engineering	4,759	4,961	5,108	4,842	5,039	5,575	5,680	5,950	5,672	6,250	6,034	26.8
Aerospace, aeronautical, and astronautical engineering	138	124	132	121	124	146	153	163	163	250	227	64.5
Bioengineering and biomedical engineering	352	318	348	301	300	362	359	364	302	343	387	9.9

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Chemical and petroleum engineering	525	605	601	524	550	616	638	620	650	638	593	13.0
Civil, environmental, and transportation engineering	609	635	661	604	700	719	845	810	742	877	834	36.9
Electrical and computer engineering	1,452	1,544	1,521	1,446	1,527	1,642	1,533	1,690	1,696	1,839	1,764	21.5
Industrial engineering and operations research	263	298	253	295	271	306	294	360	358	369	340	29.3
Materials and mining engineering	466	425	459	506	440	509	475	473	484	552	571	22.5
Mechanical engineering	693	719	827	704	782	879	951	1,061	875	911	897	29.4
Engineering, other	261	293	306	341	345	396	432	409	402	471	421	61.3
Geosciences, atmospheric, and ocean sciences	290	326	307	390	332	392	429	391	345	392	395	36.2
Geological sciences	138	178	159	205	174	185	201	217	179	204	200	44.9
Ocean, marine, and atmospheric sciences	152	148	148	185	158	207	228	174	166	188	195	28.3
Health sciences	427	418	416	474	520	573	598	596	482	594	564	32.1
Nursing science	42	35	37	45	62	70	62	71	57	69	76	81.0
Pharmaceutical sciences	181	142	132	134	157	192	205	195	161	191	183	1.1
Public health	53	81	82	124	138	152	141	143	112	148	141	166.0
Health sciences, other	151	160	165	171	163	159	190	187	152	186	164	8.6
Mathematics and statistics	843	821	823	852	821	965	975	1,020	1,041	1,155	1,112	31.9
Applied mathematics	224	245	222	224	243	208	200	193	214	242	229	2.2
Mathematics	261	227	243	141	147	214	195	190	101	113	97	-62.8
Statistics	211	214	207	150	190	240	218	251	327	392	390	84.8
Mathematics and statistics, other	147	135	151	337	241	303	362	386	399	408	396	169.4
Physical sciences	1,742	1,870	1,792	1,923	1,828	1,981	2,055	1,920	1,851	2,140	2,076	19.2
Astronomy and astrophysics	79	72	68	74	93	92	106	83	152	177	208	163.3
Chemistry	888	1,000	929	1,000	919	1,021	1,071	993	944	1,150	1,043	17.5
Physics	775	798	795	849	816	868	878	844	755	813	825	6.5
Psychology	282	249	260	305	286	284	339	257	338	344	366	29.8
Clinical psychology	38	43	33	40	34	38	48	36	58	42	44	15.8
Counseling and applied psychology	61	60	58	71	62	74	70	52	70	61	88	44.3
Research and experimental psychology	132	107	126	134	129	124	154	112	135	176	170	28.8
Psychology, other	51	39	43	60	61	48	67	57	75	65	64	25.5
Social sciences	1,361	1,318	1,379	1,460	1,394	1,484	1,576	1,577	1,566	1,724	1,769	30.0
Anthropology	76	86	68	76	65	70	66	63	81	60	70	-7.9
Economics	615	627	606	656	641	707	708	690	731	760	773	25.7
Political science and government	163	145	178	128	140	159	173	152	139	187	196	20.2
Public policy analysis	73	54	62	56	53	72	58	77	55	69	61	-16.4
Sociology, demography, and population studies	100	96	105	101	99	98	111	113	91	113	113	13.0
Social sciences, other	334	310	360	443	396	378	460	482	469	535	556	66.5

TABLE 1-7

Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23

(Number)

Field and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2013–23
Non-science and engineering	2,230	2,096	2,102	2,152	2,154	2,378	2,547	2,476	2,435	2,537	2,625	17.7
Business	600	589	546	553	588	642	689	658	689	702	770	28.3
Education	515	478	539	562	534	611	615	659	557	581	546	6.0
Education leadership and administration	44	39	35	33	51	52	54	59	47	55	50	13.6
Education research	319	265	327	279	308	366	317	385	310	310	294	-7.8
Teacher education and teaching fields	133	148	158	194	144	163	181	181	154	158	163	22.6
Education, other	19	26	19	56	31	30	63	34	46	58	39	105.3
Humanities and arts	770	713	696	700	680	739	826	742	737	762	849	10.3
Letters	150	140	122	126	122	139	149	132	175	162	202	34.7
Foreign languages and literature	179	142	151	164	159	181	202	185	120	154	159	-11.2
History	125	129	114	130	113	112	130	120	130	109	131	4.8
Philosophy and religious studies	121	101	92	73	97	111	113	88	103	102	110	-9.1
Music and performing arts	75	80	92	72	66	77	83	97	87	101	94	25.3
Humanities and arts, other	120	121	125	135	123	119	149	120	122	134	153	27.5
Other non-science and engineering	345	316	321	337	352	386	417	417	452	492	460	33.3
Communication	133	137	137	160	122	165	163	153	142	174	155	16.5
Public administration and social services	84	61	62	70	71	84	87	97	101	106	99	17.9
Non-science and engineering, other	128	118	122	107	159	137	167	167	209	212	206	60.9

^a All doctorate recipients includes doctorate recipients who did not report citizenship status.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 1-8

Research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
All doctorate recipients	52,703	53,986	54,886	54,809	54,550	55,078	55,599	55,203	52,160	57,448	57,862
U.S. citizen or permanent resident	33,964	34,003	35,071	35,678	35,733	35,349	35,218	34,458	31,861	35,207	35,566
Temporary visa holder	15,674	15,839	16,129	16,477	16,288	17,582	18,324	18,473	17,768	19,620	19,393
Unknown citizenship	3,065	4,144	3,686	2,654	2,529	2,147	2,057	2,272	2,531	2,621	2,903
Hispanic or Latino	3,073	3,147	3,422	3,572	3,566	3,592	4,000	4,108	4,038	4,612	4,815
U.S. citizen or permanent resident	2,135	2,190	2,449	2,548	2,536	2,572	2,844	2,850	2,873	3,348	3,449
Temporary visa holder	921	944	964	1,016	997	1,016	1,146	1,253	1,152	1,261	1,346
Unknown citizenship	17	13	9	8	33	4	10	5	13	3	20
Not Hispanic or Latino											
American Indian or Alaska Native	126	109	141	136	111	116	124	100	105	105	121
U.S. citizen or permanent resident	119	103	131	128	109	115	119	97	100	98	115
Temporary visa holder ^a	7	6	10	8	D	D	5	D	D	7	6
Unknown citizenship	0	0	0	0	D	D	0	D	D	0	0
Asian	13,430	13,556	13,833	14,052	14,261	14,801	15,181	15,086	14,637	16,461	16,678
U.S. citizen or permanent resident	2,892	2,881	3,072	3,084	3,500	3,302	3,418	3,212	3,028	3,581	3,828
Temporary visa holder	10,514	10,662	10,741	10,931	10,731	11,464	11,718	11,842	11,585	12,864	12,821
Unknown citizenship	24	13	20	37	30	35	45	32	24	16	29
Black or African American	2,655	2,654	2,773	2,866	2,949	3,050	3,091	3,090	3,070	3,378	3,451
U.S. citizen or permanent resident	2,172	2,172	2,275	2,358	2,398	2,449	2,511	2,453	2,458	2,637	2,725
Temporary visa holder	479	477	493	502	529	595	570	625	596	739	721
Unknown citizenship	4	5	5	6	22	6	10	12	16	2	5
White	27,871	27,947	28,619	28,766	28,346	28,553	28,073	27,766	24,806	26,804	26,227
U.S. citizen or permanent resident	24,749	24,829	25,375	25,502	24,842	24,924	24,209	23,925	21,423	23,247	23,057
Temporary visa holder	3,070	3,086	3,180	3,224	3,429	3,595	3,770	3,785	3,345	3,549	3,148
Unknown citizenship	52	32	64	40	75	34	94	56	38	8	22
More than one race	929	939	971	1,116	1,110	1,211	1,266	1,250	1,201	1,329	1,420
U.S. citizen or permanent resident	858	879	903	1,033	1,015	1,100	1,121	1,134	1,087	1,206	1,296
Temporary visa holder	71	60	67	83	D	D	145	D	D	123	124
Unknown citizenship	0	0	1	0	D	D	0	D	D	0	0
Other race or race not reported	447	411	458	470	788	861	894	831	981	957	1,099
U.S. citizen or permanent resident	279	272	249	272	471	371	381	353	388	421	459
Temporary visa holder	147	125	171	174	279	476	475	454	541	529	631
Unknown citizenship	21	14	38	24	38	14	38	24	52	7	9
Ethnicity not reported	4,172	5,223	4,669	3,831	3,419	2,894	2,970	2,972	3,322	3,802	4,051
U.S. citizen or permanent resident	760	677	617	753	862	516	615	434	504	669	637
Temporary visa holder	465	479	503	539	228	324	495	395	430	548	596

TABLE 1-8

Research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unknown citizenship	2,947	4,067	3,549	2,539	2,329	2,054	1,860	2,143	2,388	2,585	2,818

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 1-9

Male research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male doctorate recipients	28,326	29,008	29,532	29,572	29,442	29,742	30,105	29,844	28,045	30,457	30,356
U.S. citizen or permanent resident	16,550	16,660	17,218	17,530	17,561	17,312	17,258	16,769	15,304	16,756	16,669
Temporary visa holder	10,103	10,204	10,395	10,671	10,601	11,308	11,767	11,868	11,475	12,359	12,194
Unknown citizenship	1,673	2,144	1,919	1,371	1,280	1,122	1,080	1,207	1,266	1,342	1,493
Hispanic or Latino	1,523	1,588	1,758	1,766	1,804	1,865	2,011	2,047	2,017	2,288	2,383
U.S. citizen or permanent resident	905	999	1,119	1,134	1,151	1,196	1,302	1,266	1,288	1,513	1,549
Temporary visa holder	612	580	634	630	634	666	706	778	726	773	827
Unknown citizenship	6	9	5	2	19	3	3	3	3	2	7
Not Hispanic or Latino											
American Indian or Alaska Native	62	54	64	63	49	44	58	39	40	43	43
U.S. citizen or permanent resident	56	49	58	57	48	43	56	39	38	39	39
Temporary visa holder ^a	D	D	D	6	D	D	D	0	D	D	D
Unknown citizenship	D	D	D	0	D	D	D	0	D	D	D
Asian	8,038	8,091	8,235	8,538	8,669	8,902	9,182	9,187	8,951	9,855	9,948
U.S. citizen or permanent resident	1,264	1,243	1,359	1,432	1,656	1,562	1,626	1,532	1,445	1,714	1,845
Temporary visa holder	6,761	6,842	6,867	7,081	6,997	7,315	7,532	7,636	7,490	8,132	8,090
Unknown citizenship	13	6	9	25	16	25	24	19	16	9	13
Black or African American	1,101	1,151	1,113	1,205	1,204	1,324	1,260	1,317	1,249	1,417	1,452
U.S. citizen or permanent resident	801	821	807	863	849	923	892	917	884	946	1,006
Temporary visa holder	297	329	306	341	347	398	365	396	359	470	443
Unknown citizenship	3	1	0	1	8	3	3	4	6	1	3
White	14,608	14,624	15,101	15,155	14,949	14,982	14,883	14,565	12,915	13,642	13,104
U.S. citizen or permanent resident	12,582	12,590	12,978	13,033	12,665	12,608	12,363	12,084	10,713	11,403	11,109
Temporary visa holder	2,005	2,021	2,101	2,103	2,247	2,360	2,477	2,449	2,186	2,238	1,988
Unknown citizenship	21	13	22	19	37	14	43	32	16	1	7
More than one race	432	451	436	511	517	556	588	606	548	624	649
U.S. citizen or permanent resident	388	411	394	455	462	485	495	530	483	557	575
Temporary visa holder	44	40	42	56	D	D	D	76	D	D	D
Unknown citizenship	0	0	0	0	D	D	D	0	D	D	D
Other race or race not reported	243	249	291	278	476	528	521	478	615	570	658
U.S. citizen or permanent resident	148	162	152	149	269	215	207	175	215	225	238
Temporary visa holder	D	D	D	118	191	305	298	293	375	341	417
Unknown citizenship	D	D	D	11	16	8	16	10	25	4	3
Ethnicity not reported	2,319	2,800	2,534	2,056	1,774	1,541	1,602	1,605	1,710	2,018	2,119
U.S. citizen or permanent resident	406	385	351	407	461	280	317	226	238	359	308
Temporary visa holder	290	305	320	336	129	192	294	240	272	334	351

TABLE 1-9

Male research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unknown citizenship	1,623	2,110	1,863	1,313	1,184	1,069	991	1,139	1,200	1,325	1,460

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 1-10

Female research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female doctorate recipients	24,365	24,813	25,347	25,222	25,086	25,308	25,484	25,353	24,105	26,986	27,499
U.S. citizen or permanent resident	17,414	17,343	17,853	18,147	18,171	18,036	17,959	17,689	16,555	18,446	18,893
Temporary visa holder	5,571	5,633	5,734	5,805	5,686	6,274	6,556	6,605	6,293	7,261	7,198
Unknown citizenship	1,380	1,837	1,760	1,270	1,229	998	969	1,059	1,257	1,279	1,408
Hispanic or Latino	1,550	1,559	1,664	1,806	1,762	1,726	1,989	2,061	2,021	2,324	2,432
U.S. citizen or permanent resident	1,230	1,191	1,330	1,414	1,385	1,375	1,542	1,584	1,585	1,835	1,900
Temporary visa holder	309	364	330	386	363	350	440	475	426	488	519
Unknown citizenship	11	4	4	6	14	1	7	2	10	1	13
Not Hispanic or Latino											
American Indian or Alaska Native	64	55	77	73	62	72	66	61	65	62	78
U.S. citizen or permanent resident	63	54	73	71	61	72	63	58	62	59	76
Temporary visa holder ^a	D	D	D	D	D	0	D	D	D	D	D
Unknown citizenship	D	D	D	D	D	0	D	D	D	D	D
Asian	5,392	5,465	5,598	5,513	5,590	5,899	5,999	5,899	5,686	6,605	6,730
U.S. citizen or permanent resident	1,628	1,638	1,713	1,652	1,843	1,740	1,792	1,680	1,583	1,866	1,983
Temporary visa holder	3,753	3,820	3,874	3,849	3,733	4,149	4,186	4,206	4,095	4,732	4,731
Unknown citizenship	11	7	11	12	14	10	21	13	8	7	16
Black or African American	1,554	1,503	1,660	1,661	1,745	1,726	1,831	1,773	1,821	1,961	1,998
U.S. citizen or permanent resident	1,371	1,351	1,468	1,495	1,549	1,526	1,619	1,536	1,574	1,691	1,718
Temporary visa holder	182	148	187	161	182	197	205	229	237	269	278
Unknown citizenship	1	4	5	5	14	3	7	8	10	1	2
White	13,263	13,323	13,518	13,611	13,397	13,571	13,189	13,201	11,889	13,159	13,119
U.S. citizen or permanent resident	12,167	12,239	12,397	12,469	12,177	12,316	11,845	11,841	10,708	11,841	11,945
Temporary visa holder	1,065	1,065	1,079	1,121	1,182	1,235	1,293	1,336	1,159	1,311	1,159
Unknown citizenship	31	19	42	21	38	20	51	24	22	7	15
More than one race	497	488	535	605	593	655	678	644	653	704	771
U.S. citizen or permanent resident	470	468	509	578	553	615	626	604	604	648	721
Temporary visa holder	27	20	25	27	D	40	D	D	D	D	D
Unknown citizenship	0	0	1	0	D	0	D	D	D	D	D
Other race or race not reported	204	162	167	192	312	333	373	353	366	387	441
U.S. citizen or permanent resident	131	110	97	123	202	156	174	178	173	196	221
Temporary visa holder	D	D	D	D	88	171	177	161	166	188	214
Unknown citizenship	D	D	D	D	22	6	22	14	27	3	6
Ethnicity not reported	1,841	2,258	2,128	1,761	1,625	1,326	1,359	1,361	1,604	1,784	1,930
U.S. citizen or permanent resident	354	292	266	345	401	236	298	208	266	310	329
Temporary visa holder	175	172	183	203	99	132	200	155	158	214	245

TABLE 1-10

Female research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23

(Number)

Ethnicity, race, and citizenship status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unknown citizenship	1,312	1,794	1,679	1,213	1,125	958	861	998	1,180	1,260	1,356

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 1-11

U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
All fields	26,683	25,698	24,932	28,722	31,204	28,170	30,844	33,964	35,349	35,566
Hispanic or Latino	553	611	694	974	1,332	1,435	1,773	2,135	2,572	3,449
Not Hispanic or Latino										
American Indian or Alaska Native	60	82	94	120	190	136	115	119	115	115
Asian ^a	1,018	1,043	1,235	2,005	2,728	2,033	2,507	2,892	3,302	3,828
Black or African American	1,089	1,009	965	1,278	1,603	1,723	1,961	2,172	2,449	2,725
White	22,250	22,288	21,461	24,040	24,284	21,162	22,835	24,749	24,924	23,057
More than one race	na	na	na	na	na	363	506	858	1,100	1,296
Other race or race not reported ^b	153	94	139	135	416	354	343	279	371	459
Ethnicity not reported	1,560	571	344	170	651	964	804	760	516	637
Science and engineering	14,874	14,963	15,121	17,397	19,338	16,867	19,907	23,503	25,436	26,622
Hispanic or Latino	235	290	408	563	793	787	1,135	1,425	1,845	2,566
Not Hispanic or Latino										
American Indian or Alaska Native	23	33	46	48	101	73	62	71	76	66
Asian ^a	853	816	942	1,643	2,236	1,601	2,014	2,320	2,733	3,230
Black or African American	338	346	386	517	698	713	898	1,313	1,441	1,597
White	12,402	13,043	12,989	14,426	14,848	12,761	14,738	17,038	17,877	17,335
More than one race	na	na	na	na	na	228	338	622	826	1,048
Other race or race not reported ^b	92	57	89	95	271	246	230	180	288	342
Ethnicity not reported	931	378	261	105	391	458	492	534	350	438
Agricultural sciences and natural resources	724	841	775	647	708	628	675	769	823	845
Hispanic or Latino	14	12	22	22	39	30	27	55	51	70
Not Hispanic or Latino										
American Indian or Alaska Native	2	1	7	2	9	4	5	4	1	3
Asian ^a	45	42	35	37	67	32	45	30	44	48
Black or African American	18	13	26	21	27	26	31	43	46	33
White	608	752	666	563	541	504	533	609	634	638
More than one race	na	na	na	na	na	4	7	10	25	26
Other race or race not reported ^b	5	3	3	1	13	6	9	4	7	9
Ethnicity not reported	32	18	16	1	12	22	18	14	15	18
Biological and biomedical sciences	3,139	3,399	3,412	3,844	4,455	4,250	5,405	6,044	6,396	6,906
Hispanic or Latino	32	43	79	119	174	186	323	430	498	716
Not Hispanic or Latino										
American Indian or Alaska Native	5	4	8	7	12	11	20	17	11	12
Asian ^a	146	165	174	371	673	545	620	712	777	916

TABLE 1-11

U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Black or African American	55	46	49	79	116	112	209	281	306	346
White	2,684	3,064	3,042	3,221	3,361	3,183	3,968	4,301	4,455	4,444
More than one race	na	na	na	na	na	63	99	169	210	328
Other race or race not reported ^b	27	9	12	22	62	58	62	47	77	74
Ethnicity not reported	190	68	48	25	57	92	104	87	62	70
Computer and information sciences	90	208	326	510	563	447	697	758	742	965
Hispanic or Latino	0	0	2	7	15	11	20	30	42	54
Not Hispanic or Latino										
American Indian or Alaska Native	0	1	1	1	4	2	0	0	2	1
Asian ^a	4	20	44	78	91	81	116	125	112	220
Black or African American	0	3	2	6	14	17	26	31	39	53
White	76	175	265	409	413	296	498	519	496	562
More than one race	na	na	na	na	na	9	8	20	21	27
Other race or race not reported ^b	1	2	2	4	6	8	8	11	10	21
Ethnicity not reported	9	7	10	5	20	23	21	22	20	27
Engineering	1,588	1,485	2,150	2,700	3,048	2,180	2,958	3,767	4,213	4,804
Hispanic or Latino	33	29	63	66	111	104	134	190	279	418
Not Hispanic or Latino										
American Indian or Alaska Native	2	1	4	2	13	12	7	5	8	5
Asian ^a	272	247	332	527	557	346	487	570	678	772
Black or African American	13	29	31	50	81	77	110	171	165	222
White	1,163	1,129	1,654	2,024	2,169	1,544	2,065	2,596	2,827	3,056
More than one race	na	na	na	na	na	16	45	87	129	182
Other race or race not reported ^b	8	7	17	15	44	29	36	30	59	63
Ethnicity not reported	97	43	49	16	73	52	74	118	68	86
Geosciences, atmospheric, and ocean sciences	499	474	494	463	534	451	536	654	760	782
Hispanic or Latino	4	9	6	11	17	14	17	36	49	61
Not Hispanic or Latino										
American Indian or Alaska Native	0	2	2	3	3	2	2	3	3	4
Asian ^a	22	22	13	21	45	22	25	22	42	57
Black or African American	2	1	2	4	5	13	9	10	11	16
White	429	419	457	417	443	377	466	550	617	602
More than one race	na	na	na	na	na	8	4	16	27	29
Other race or race not reported ^b	5	1	4	3	9	8	4	4	4	5
Ethnicity not reported	37	20	10	4	12	7	9	13	7	8

TABLE 1-11

U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Health sciences	433	439	581	814	987	1,020	1,199	1,539	1,809	1,729
Hispanic or Latino	8	6	11	19	31	35	49	60	113	144
Not Hispanic or Latino										
American Indian or Alaska Native	1	3	3	6	4	2	4	9	9	7
Asian ^a	27	35	26	39	72	65	103	135	176	172
Black or African American	12	16	29	54	58	72	78	199	234	221
White	359	367	504	691	794	798	922	1,067	1,179	1,056
More than one race	na	na	na	na	na	14	18	33	50	56
Other race or race not reported ^b	2	1	4	3	12	8	8	12	20	23
Ethnicity not reported	24	11	4	2	16	26	17	24	28	50
Mathematics and statistics	666	459	388	590	673	517	673	873	994	977
Hispanic or Latino	7	7	4	16	27	17	29	35	51	67
Not Hispanic or Latino										
American Indian or Alaska Native	1	0	2	1	3	2	0	0	2	0
Asian ^a	42	34	33	79	72	51	62	108	119	142
Black or African American	13	3	4	8	16	16	29	26	25	26
White	561	397	332	476	528	405	523	653	735	679
More than one race	na	na	na	na	na	10	5	20	37	43
Other race or race not reported ^b	3	4	1	3	10	7	7	6	12	12
Ethnicity not reported	39	14	12	7	17	9	18	25	13	8
Physical sciences	2,167	2,189	2,239	2,317	2,444	1,953	2,138	2,593	3,008	3,176
Hispanic or Latino	23	27	63	79	55	72	100	132	172	298
Not Hispanic or Latino										
American Indian or Alaska Native	4	6	6	5	9	2	2	3	6	6
Asian ^a	179	136	137	259	334	184	212	205	314	351
Black or African American	35	25	33	40	56	54	65	80	92	97
White	1,745	1,924	1,927	1,901	1,901	1,530	1,642	2,034	2,287	2,212
More than one race	na	na	na	na	na	24	37	71	74	109
Other race or race not reported ^b	10	7	18	17	33	32	21	21	22	47
Ethnicity not reported	171	64	55	16	56	55	59	47	41	56
Psychology	2,862	3,116	2,730	3,161	3,275	2,867	2,892	3,067	3,309	3,249
Hispanic or Latino	53	95	93	131	208	172	278	224	326	391
Not Hispanic or Latino										
American Indian or Alaska Native	3	9	7	15	31	22	12	14	12	12
Asian ^a	26	44	47	73	113	118	144	158	199	242

TABLE 1-11

U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Black or African American	96	112	103	118	158	161	159	206	244	288
White	2,515	2,788	2,446	2,803	2,646	2,204	2,103	2,239	2,334	2,060
More than one race	na	na	na	na	na	43	62	87	114	142
Other race or race not reported ^b	16	8	12	11	36	44	27	16	30	41
Ethnicity not reported	153	60	22	10	83	103	107	123	50	73
Social sciences	2,706	2,353	2,026	2,351	2,651	2,554	2,734	3,439	3,382	3,189
Hispanic or Latino	61	62	65	93	116	146	158	233	264	347
Not Hispanic or Latino										
American Indian or Alaska Native	5	6	6	6	13	14	10	16	22	16
Asian ^a	90	71	101	159	212	157	200	255	272	310
Black or African American	94	98	107	137	167	165	182	266	279	295
White	2,262	2,028	1,696	1,921	2,052	1,920	2,018	2,470	2,313	2,026
More than one race	na	na	na	na	na	37	53	109	139	106
Other race or race not reported ^b	15	15	16	16	46	46	48	29	47	47
Ethnicity not reported	179	73	35	19	45	69	65	61	46	42
Non-science and engineering	11,809	10,735	9,811	11,325	11,866	11,303	10,937	10,461	9,913	8,944
Hispanic or Latino	318	321	286	411	539	648	638	710	727	883
Not Hispanic or Latino										
American Indian or Alaska Native	37	49	48	72	89	63	53	48	39	49
Asian ^a	165	227	293	362	492	432	493	572	569	598
Black or African American	751	663	579	761	905	1,010	1,063	859	1,008	1,128
White	9,848	9,245	8,472	9,614	9,436	8,401	8,097	7,711	7,047	5,722
More than one race	na	na	na	na	na	135	168	236	274	248
Other race or race not reported ^b	61	37	50	40	145	108	113	99	83	117
Ethnicity not reported	629	193	83	65	260	506	312	226	166	199
Business	572	578	694	843	853	615	703	831	740	681
Hispanic or Latino	8	4	9	14	22	30	23	51	31	40
Not Hispanic or Latino										
American Indian or Alaska Native	0	0	4	5	9	1	2	1	1	2
Asian ^a	18	45	65	69	67	49	65	107	102	128
Black or African American	19	20	19	25	46	59	67	68	108	64
White	498	499	584	723	672	431	500	550	454	402
More than one race	na	na	na	na	na	4	11	24	16	15
Other race or race not reported ^b	3	1	4	3	12	9	11	9	12	12
Ethnicity not reported	26	9	9	4	25	32	24	21	16	18

TABLE 1-11

U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023

(Number)

Field, ethnicity, and race	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Education	6,635	6,408	5,478	5,969	5,748	5,650	5,584	4,118	4,025	3,755
Hispanic or Latino	165	186	158	222	290	341	351	270	298	395
Not Hispanic or Latino										
American Indian or Alaska Native	29	45	36	51	50	39	36	24	23	28
Asian ^a	85	120	130	142	177	148	202	219	204	206
Black or African American	597	523	416	556	655	707	714	518	582	660
White	5,393	5,423	4,669	4,961	4,409	3,994	4,001	2,876	2,714	2,267
More than one race	na	na	na	na	na	63	64	81	116	94
Other race or race not reported ^b	38	22	26	17	56	37	51	40	28	32
Ethnicity not reported	328	89	43	20	111	321	165	90	60	73
Humanities and arts	3,910	3,094	2,998	3,752	4,497	4,297	3,706	4,493	4,145	3,333
Hispanic or Latino	123	116	105	150	200	251	206	330	348	333
Not Hispanic or Latino										
American Indian or Alaska Native	6	4	6	12	22	15	11	20	12	15
Asian ^a	46	44	70	117	205	196	168	186	203	171
Black or African American	86	73	82	105	143	158	170	165	205	209
White	3,399	2,774	2,690	3,317	3,749	3,437	2,931	3,534	3,164	2,380
More than one race	na	na	na	na	na	58	82	114	111	92
Other race or race not reported ^b	17	12	19	20	68	56	37	42	29	57
Ethnicity not reported	233	71	26	31	110	126	101	102	73	76
Other non-science and engineering	692	655	641	761	768	741	944	1,019	1,003	1,175
Hispanic or Latino	22	15	14	25	27	26	58	59	50	115
Not Hispanic or Latino										
American Indian or Alaska Native	2	0	2	4	8	8	4	3	3	4
Asian ^a	16	18	28	34	43	39	58	60	60	93
Black or African American	49	47	62	75	61	86	112	108	113	195
White	558	549	529	613	606	539	665	751	715	673
More than one race	na	na	na	na	na	10	11	17	31	47
Other race or race not reported ^b	3	2	1	0	9	6	14	8	14	16
Ethnicity not reported	42	24	5	10	14	27	22	13	17	32

na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

^a Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.^b Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 1-12

Median years to research doctorate, by trend broad field of doctorate: Selected years, 1973–2023

(Median years)

Field and time to degree	1973	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
All fields											
Since earning bachelor's	8.5	9.0	9.9	10.6	10.7	10.5	10.2	9.4	9.0	8.6	8.6
Since starting graduate school	7.2	7.7	8.2	8.7	8.7	8.3	8.5	7.7	7.5	7.3	7.2
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.8	5.7
Science and engineering											
Since earning bachelor's	7.3	7.6	8.2	8.9	9.3	9.0	8.9	8.4	8.1	8.0	8.0
Since starting graduate school	6.4	6.7	6.9	7.2	7.7	7.2	7.5	7.0	6.9	6.8	6.8
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.7	5.6
Agricultural sciences and natural resources											
Since earning bachelor's	8.2	8.2	8.7	10.0	10.9	11.1	10.5	9.7	9.4	8.9	8.8
Since starting graduate school	6.7	6.3	6.9	7.8	8.7	8.7	8.2	7.9	7.7	7.3	7.3
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.0	5.0
Biological and biomedical sciences											
Since earning bachelor's	7.0	7.0	7.5	8.3	8.7	8.3	8.1	8.0	8.0	7.8	7.9
Since starting graduate school	6.1	6.1	6.7	6.9	7.2	6.8	6.7	6.7	6.7	6.5	6.4
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.8	5.7
Computer and information sciences											
Since earning bachelor's	-	7.7	8.5	9.5	9.6	10.3	9.6	8.7	8.5	8.6	8.2
Since starting graduate school	-	6.9	7.2	7.7	7.9	8.2	8.2	7.3	7.6	7.8	7.0
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.8	5.6
Engineering											
Since earning bachelor's	7.9	7.6	8.1	8.2	9.0	8.9	8.6	7.9	7.4	7.3	7.4
Since starting graduate school	6.7	6.2	6.7	6.7	7.2	7.2	7.3	6.7	6.7	6.7	6.6
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.3	5.3
Geosciences, atmospheric, and ocean sciences											
Since earning bachelor's	7.8	8.0	8.5	9.3	10.4	10.5	9.4	8.6	8.2	8.0	8.1
Since starting graduate school	6.8	6.7	7.5	8.2	8.7	8.4	8.0	7.3	7.0	7.0	6.8
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.5	5.7
Health sciences											
Since earning bachelor's	8.3	8.7	11.2	13.0	14.5	14.9	13.6	12.6	11.9	11.0	11.0
Since starting graduate school	6.7	7.2	9.5	10.8	11.8	11.7	10.9	9.7	9.2	8.9	8.8
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.0	5.0
Mathematics and statistics											
Since earning bachelor's	7.0	7.2	7.3	8.2	8.6	8.0	8.0	7.6	7.0	6.8	7.0
Since starting graduate school	6.2	6.2	6.7	6.9	7.2	6.7	6.9	6.7	6.3	6.2	6.0

TABLE 1-12

Median years to research doctorate, by trend broad field of doctorate: Selected years, 1973–2023

(Median years)

Field and time to degree	1973	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.3	5.3
Physical sciences											
Since earning bachelor's	6.6	6.9	6.7	6.9	7.6	7.2	7.2	7.2	7.0	6.6	6.7
Since starting graduate school	5.9	5.9	5.9	6.0	6.7	6.2	6.2	6.3	6.2	6.0	6.0
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.7	5.7
Psychology											
Since earning bachelor's	6.7	7.5	9.0	10.2	10.0	9.2	9.2	8.6	8.4	8.3	8.5
Since starting graduate school	5.9	6.2	7.7	8.3	8.2	7.3	7.2	6.9	6.9	6.9	6.9
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.9	5.9
Social sciences											
Since earning bachelor's	8.4	9.0	10.0	11.1	11.0	10.6	10.9	10.4	10.3	10.2	10.3
Since starting graduate school	7.4	7.9	8.7	9.4	9.2	8.7	9.0	8.7	8.6	8.7	8.7
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.0	6.0
Non-science and engineering											
Since earning bachelor's	10.9	11.6	13.0	14.9	16.0	15.0	14.0	13.7	12.2	12.2	12.3
Since starting graduate school	8.9	9.7	10.9	12.3	12.7	11.7	11.2	10.7	9.9	10.0	10.0
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.0	5.9
Business											
Since earning bachelor's	9.0	10.0	11.1	11.8	12.0	12.6	12.6	11.3	11.1	10.4	10.3
Since starting graduate school	7.2	8.0	9.0	9.2	9.7	9.7	9.9	8.4	8.7	8.9	8.8
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.0	5.0
Education											
Since earning bachelor's	12.6	12.9	14.2	17.0	19.3	20.0	18.1	17.0	15.0	14.7	15.0
Since starting graduate school	9.9	10.2	11.7	13.9	15.7	15.0	13.2	12.7	11.7	11.9	12.0
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.8	5.6
Humanities and arts											
Since earning bachelor's	9.3	10.4	11.3	12.3	12.1	11.7	11.5	11.4	11.0	11.0	11.3
Since starting graduate school	8.4	9.3	9.9	10.7	10.2	9.7	9.7	9.3	9.3	9.4	9.7
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.8	6.8
Other non-science and engineering											
Since earning bachelor's	11.6	11.0	12.6	14.8	15.5	15.0	13.5	12.8	11.9	12.0	12.0
Since starting graduate school	9.2	8.7	10.3	12.2	12.2	10.9	10.7	10.0	9.6	9.8	9.4
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.7	5.3

- = not calculable. na = not applicable; data were not collected prior to 2014.

^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 field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 1-13

Education-related debt of research doctorate recipients, by trend broad field of doctorate: 2013–23

(Number)

Education-related debt level and field	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
All fields	46,449	46,819	48,759	49,778	49,229	50,041	50,725	50,364	47,251	51,989	51,964
No debt	28,883	29,333	30,890	31,987	32,602	33,847	34,710	35,079	33,825	38,216	38,115
\$10,000 or less	3,931	3,842	4,189	4,071	3,802	3,831	3,469	3,399	2,739	2,858	3,128
\$10,001–\$30,000	4,609	4,435	4,464	4,376	3,897	3,720	3,790	3,411	2,941	3,232	3,223
\$30,001–\$70,000	4,782	4,735	4,500	4,528	4,108	3,902	3,673	3,481	3,174	3,212	3,184
\$70,001 or more	4,244	4,474	4,716	4,816	4,820	4,741	5,083	4,994	4,572	4,471	4,314
Science and engineering	34,598	35,488	36,787	37,658	37,578	38,541	39,402	39,139	37,244	41,359	41,181
No debt	23,240	24,040	25,188	26,072	26,758	27,926	28,674	29,060	28,174	32,074	31,738
\$10,000 or less	2,854	2,860	3,072	3,039	2,852	2,861	2,630	2,574	2,124	2,178	2,450
\$10,001–\$30,000	3,077	3,036	3,006	2,953	2,657	2,506	2,639	2,340	2,107	2,265	2,312
\$30,001–\$70,000	2,945	2,916	2,792	2,797	2,522	2,434	2,323	2,149	2,037	2,100	2,071
\$70,001 or more	2,482	2,636	2,729	2,797	2,789	2,814	3,136	3,016	2,802	2,742	2,610
Agricultural sciences and natural resources	1,235	1,234	1,336	1,312	1,392	1,362	1,416	1,400	1,276	1,367	1,305
No debt	785	781	889	874	968	953	985	989	938	1,022	969
\$10,000 or less	143	128	138	130	132	127	119	129	108	115	108
\$10,001–\$30,000	138	137	131	122	111	104	124	98	95	89	87
\$30,001–\$70,000	93	107	117	105	102	96	94	74	62	58	82
\$70,001 or more	76	81	61	81	79	82	94	110	73	83	59
Biological and biomedical sciences	7,781	7,764	8,003	8,268	8,012	8,196	8,218	7,940	7,566	8,609	8,845
No debt	5,585	5,695	5,981	6,216	6,149	6,287	6,338	6,212	6,083	6,989	7,072
\$10,000 or less	616	607	637	618	605	605	566	531	405	428	495
\$10,001–\$30,000	667	611	582	596	489	497	501	394	344	415	477
\$30,001–\$70,000	560	507	441	481	408	411	424	427	361	396	394
\$70,001 or more	353	344	362	357	361	396	389	376	373	381	407
Computer and information sciences	1,659	1,767	1,774	1,892	1,803	1,802	2,043	2,161	2,127	2,363	2,390
No debt	1,337	1,373	1,408	1,499	1,464	1,485	1,704	1,802	1,801	2,035	2,025
\$10,000 or less	104	122	119	106	111	110	112	110	110	107	122
\$10,001–\$30,000	85	101	89	113	94	80	86	115	87	94	94
\$30,001–\$70,000	66	98	81	90	59	61	74	57	66	69	75
\$70,001 or more	67	73	77	84	75	66	67	77	63	58	74
Engineering	7,964	8,445	8,827	8,549	8,852	9,288	9,429	9,649	9,391	10,421	10,288
No debt	5,981	6,426	6,787	6,555	7,032	7,488	7,573	7,876	7,732	8,683	8,562
\$10,000 or less	706	746	774	759	679	716	639	635	549	566	609
\$10,001–\$30,000	615	617	613	568	520	516	577	494	492	519	528
\$30,001–\$70,000	422	413	420	416	362	341	345	317	339	373	356
\$70,001 or more	240	243	233	251	259	227	295	327	279	280	233

TABLE 1-13

Education-related debt of research doctorate recipients, by trend broad field of doctorate: 2013–23

(Number)

Education-related debt level and field	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Geosciences, atmospheric, and ocean sciences	896	997	969	1,163	1,085	1,117	1,199	1,157	1,001	1,094	1,132
No debt	664	715	714	877	835	858	926	912	796	937	928
\$10,000 or less	79	89	91	100	88	96	83	102	72	56	64
\$10,001–\$30,000	73	84	67	84	65	82	73	66	55	40	59
\$30,001–\$70,000	51	68	61	55	59	45	58	39	43	36	42
\$70,001 or more	29	41	36	47	38	36	59	38	35	25	39
Health sciences	1,851	1,919	1,967	2,056	2,213	2,230	2,265	2,342	2,006	2,197	2,147
No debt	948	951	942	1,010	1,096	1,161	1,166	1,228	1,086	1,277	1,174
\$10,000 or less	145	125	165	166	176	143	151	143	133	114	134
\$10,001–\$30,000	211	249	230	222	218	214	227	232	147	179	171
\$30,001–\$70,000	292	303	299	318	336	329	273	289	253	255	280
\$70,001 or more	255	291	331	340	387	383	448	450	387	372	388
Mathematics and statistics	1,614	1,648	1,633	1,697	1,665	1,873	1,846	1,875	1,857	2,035	1,980
No debt	1,296	1,312	1,339	1,386	1,371	1,560	1,546	1,602	1,574	1,761	1,750
\$10,000 or less	100	116	103	84	107	105	99	98	93	74	93
\$10,001–\$30,000	97	88	86	104	81	90	83	74	79	81	65
\$30,001–\$70,000	76	79	63	75	56	78	67	55	56	56	42
\$70,001 or more	45	53	42	48	50	40	51	46	55	63	30
Physical sciences	4,109	4,206	4,359	4,585	4,540	4,753	4,924	4,644	4,366	5,049	5,002
No debt	3,167	3,308	3,450	3,653	3,749	3,966	4,097	3,997	3,810	4,367	4,283
\$10,000 or less	342	315	369	384	304	350	311	257	209	261	285
\$10,001–\$30,000	307	281	257	251	233	187	244	168	169	188	211
\$30,001–\$70,000	193	200	176	188	158	155	148	132	110	128	127
\$70,001 or more	100	102	107	109	96	95	124	90	68	105	96
Psychology	3,017	3,040	3,091	3,345	3,356	3,288	3,359	3,288	3,190	3,401	3,330
No debt	1,125	1,112	1,161	1,384	1,426	1,487	1,568	1,518	1,519	1,771	1,727
\$10,000 or less	196	207	228	243	242	205	202	218	166	170	186
\$10,001–\$30,000	349	340	357	370	370	303	270	297	278	285	274
\$30,001–\$70,000	569	568	523	489	458	416	386	361	356	369	346
\$70,001 or more	778	813	822	859	860	877	933	894	871	806	797
Social sciences	4,472	4,468	4,828	4,791	4,660	4,632	4,703	4,683	4,464	4,823	4,762
No debt	2,352	2,367	2,517	2,618	2,668	2,681	2,771	2,924	2,835	3,232	3,248
\$10,000 or less	423	405	448	449	408	404	348	351	279	287	354
\$10,001–\$30,000	535	528	594	523	476	433	454	402	361	375	346
\$30,001–\$70,000	623	573	611	580	524	502	454	398	391	360	327
\$70,001 or more	539	595	658	621	584	612	676	608	598	569	487

TABLE 1-13

Education-related debt of research doctorate recipients, by trend broad field of doctorate: 2013–23

(Number)

Education-related debt level and field	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Non-science and engineering	11,851	11,331	11,972	12,120	11,651	11,500	11,323	11,225	10,007	10,630	10,783
No debt	5,643	5,293	5,702	5,915	5,844	5,921	6,036	6,019	5,651	6,142	6,377
\$10,000 or less	1,077	982	1,117	1,032	950	970	839	825	615	680	678
\$10,001–\$30,000	1,532	1,399	1,458	1,423	1,240	1,214	1,151	1,071	834	967	911
\$30,001–\$70,000	1,837	1,819	1,708	1,731	1,586	1,468	1,350	1,332	1,137	1,112	1,113
\$70,001 or more	1,762	1,838	1,987	2,019	2,031	1,927	1,947	1,978	1,770	1,729	1,704
Business	1,346	1,349	1,372	1,329	1,344	1,274	1,350	1,254	1,210	1,275	1,351
No debt	784	756	816	821	841	822	882	861	852	916	1,022
\$10,000 or less	97	106	79	86	66	72	77	65	47	74	60
\$10,001–\$30,000	119	118	127	111	112	117	102	76	86	89	91
\$30,001–\$70,000	180	143	150	139	136	103	114	95	71	65	58
\$70,001 or more	166	226	200	172	189	160	175	157	154	131	120
Education	4,300	4,079	4,490	4,621	4,299	4,356	4,199	4,266	3,769	3,919	4,025
No debt	1,898	1,725	1,942	2,038	1,892	1,952	1,976	2,003	1,868	1,918	2,006
\$10,000 or less	361	347	396	369	340	339	267	292	227	240	262
\$10,001–\$30,000	574	502	555	557	483	480	421	433	337	382	382
\$30,001–\$70,000	728	732	711	718	673	667	621	600	494	528	537
\$70,001 or more	739	773	886	939	911	918	914	938	843	851	838
Humanities and arts	4,927	4,698	4,873	4,890	4,676	4,614	4,507	4,369	3,659	3,976	3,913
No debt	2,400	2,277	2,394	2,515	2,507	2,550	2,564	2,511	2,231	2,492	2,528
\$10,000 or less	521	447	537	461	439	457	402	355	244	269	258
\$10,001–\$30,000	663	621	629	599	503	483	476	429	286	371	315
\$30,001–\$70,000	721	723	640	652	549	513	466	473	409	362	342
\$70,001 or more	622	630	673	663	678	611	599	601	489	482	470
Other non-science and engineering	1,278	1,205	1,237	1,280	1,332	1,256	1,267	1,336	1,369	1,460	1,494
No debt	561	535	550	541	604	597	614	644	700	816	821
\$10,000 or less	98	82	105	116	105	102	93	113	97	97	98
\$10,001–\$30,000	176	158	147	156	142	134	152	133	125	125	123
\$30,001–\$70,000	208	221	207	222	228	185	149	164	163	157	176
\$70,001 or more	235	209	228	245	253	238	259	282	284	265	276

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

Source(s):

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

TABLE 1-14

Highest educational attainment of either parent of research doctorate recipients: 1970–2023

(Percent)

Year	High school or less	Some college ^a	Bachelor's degree	Master's degree	Professional doctorate ^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	22.8	13.4	23.9	18.8	8.9	12.1
2005	22.3	13.5	24.8	19.0	8.8	11.6
2006	21.8	13.4	25.6	19.4	8.6	11.3
2007	21.3	13.5	26.0	19.7	9.3	10.3
2008	20.9	13.4	25.5	20.5	9.3	10.4
2009	20.2	13.0	25.4	21.3	10.0	10.2
2010	19.2	13.1	25.5	21.3	10.4	10.5
2011	19.2	13.0	25.6	21.7	9.9	10.6
2012	19.0	12.5	25.7	21.8	10.3	10.7
2013	18.6	12.7	25.5	22.5	10.0	10.6
2014	18.2	12.3	26.2	22.3	10.3	10.6
2015	18.1	12.3	26.7	22.2	10.0	10.7
2016	17.7	12.8	26.1	22.7	10.0	10.7
2017	17.4	13.4	26.2	22.1	9.4	11.4
2018	16.3	12.9	26.5	22.2	9.6	12.4
2019	16.6	13.1	26.6	22.3	9.4	12.1
2020	16.1	13.2	27.1	22.5	9.2	11.9

TABLE 1-14

Highest educational attainment of either parent of research doctorate recipients: 1970–2023

(Percent)

Year	High school or less	Some college ^a	Bachelor's degree	Master's degree	Professional doctorate ^b	Research doctoral degree
2021	14.9	13.1	26.1	22.0	8.7	15.2
2022	15.7	13.1	26.9	22.9	8.8	12.7
2023	17.3	13.2	27.2	22.3	8.6	11.3

na = not applicable; added to survey in 1990.

^a Some college includes those who attended college but did not earn a bachelor's degree.^b Professional doctorate includes MD, DDS, DVM, JD, PsyD, DDiv, etc.**Note(s):**

Excludes doctorate recipients who did not report parental education for either parent or reported "not applicable or unknown" for both parents' education. If data were provided for one parent, that response is used; when data were provided for two parents, the higher attainment is used. Due to rounding, percentages may not sum to 100.

Source(s):

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

TABLE 2-1
Postgraduation commitment of research doctorate recipients, by trend broad field of doctorate: Selected years, 1993–2023
 (Number and percent)

Commitment status and year	All fields	Science and engineering										Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities and arts	Other non-science and engineering
All doctorate recipients (number)																	
1993	39,800	26,486	1,235	5,212	880	5,698	721	1,016	1,146	3,681	3,420	3,477	13,314	1,281	6,689	4,372	972
1998	42,636	28,636	1,315	6,011	927	5,922	766	1,285	1,177	3,800	3,673	3,760	14,000	1,175	6,569	5,308	948
2003	40,762	26,759	1,226	5,927	866	5,279	682	1,353	993	3,289	3,277	3,867	14,003	1,036	6,651	5,226	1,090
2008	48,776	34,765	1,252	8,145	1,787	7,863	865	1,689	1,400	4,081	3,357	4,326	14,011	1,421	6,561	4,688	1,341
2013	52,703	39,084	1,391	8,707	1,843	9,000	989	2,109	1,817	4,595	3,592	5,041	13,619	1,551	4,934	5,662	1,472
2018	55,078	42,144	1,499	8,782	2,000	10,164	1,185	2,473	2,022	5,144	3,821	5,054	12,934	1,473	4,818	5,139	1,504
2023	57,862	45,533	1,477	9,575	2,687	11,403	1,231	2,435	2,167	5,460	3,899	5,199	12,329	1,560	4,562	4,453	1,754
All postgraduation commitments (number)																	
1993	36,546	24,320	1,120	4,890	804	5,165	658	931	1,033	3,388	3,123	3,208	12,226	1,173	6,116	4,057	880
1998	38,244	25,739	1,176	5,523	839	5,335	706	1,118	1,058	3,450	3,099	3,435	12,505	1,031	5,792	4,819	863
2003	36,868	24,504	1,099	5,534	775	4,872	641	1,232	926	3,055	2,825	3,545	12,364	881	5,749	4,776	958
2008	44,018	31,502	1,145	7,512	1,624	7,095	810	1,486	1,276	3,699	2,893	3,962	12,516	1,234	5,856	4,227	1,199
2013	47,836	35,631	1,268	8,068	1,692	8,149	927	1,908	1,649	4,222	3,105	4,643	12,205	1,370	4,441	5,073	1,321
2018	50,338	38,754	1,373	8,245	1,815	9,332	1,121	2,240	1,882	4,781	3,306	4,659	11,584	1,284	4,393	4,640	1,267
2023	52,109	41,273	1,308	8,867	2,402	10,294	1,134	2,160	1,984	5,010	3,338	4,776	10,836	1,350	4,046	3,931	1,509
Definite commitment for employment or postdoctoral training (%)																	
1993	67.0	65.8	62.9	75.9	67.9	55.7	66.6	72.0	59.7	67.4	68.1	63.2	69.3	79.2	73.0	60.5	71.6
1998	69.7	70.3	64.3	73.0	72.5	69.8	68.4	73.3	67.5	73.3	69.2	66.6	68.4	83.1	73.7	58.6	70.0
2003	71.3	71.2	68.2	72.5	72.8	64.6	74.9	73.7	74.7	73.2	73.6	72.9	71.5	83.3	75.7	64.2	72.3
2008	69.2	68.4	64.5	64.7	69.8	65.1	75.9	72.3	72.3	70.3	73.8	71.9	71.2	81.7	73.7	64.5	72.5
2013	62.6	62.7	62.2	56.7	68.7	59.5	67.6	63.7	62.3	63.2	72.3	66.5	62.4	76.3	65.8	54.9	65.7
2018	68.2	68.4	64.9	64.5	75.5	65.5	67.0	69.6	74.7	67.0	77.9	70.9	67.5	82.6	71.0	59.1	70.6
2023	73.6	73.8	74.5	68.2	78.2	73.6	77.8	74.4	77.5	73.3	80.0	75.4	73.1	85.9	76.3	65.8	72.4
No definite commitment for employment or postdoctoral training (%)^a																	
1993	33.0	34.2	37.1	24.1	32.1	44.3	33.4	28.0	40.3	32.6	31.9	36.8	30.7	20.8	27.0	39.5	28.4
1998	30.3	29.7	35.7	27.0	27.5	30.2	31.6	26.7	32.5	26.7	30.8	33.4	31.6	16.9	26.3	41.4	30.0
2003	28.7	28.8	31.8	27.5	27.2	35.4	25.1	26.3	25.3	26.8	26.4	27.1	28.5	16.7	24.3	35.8	27.7
2008	30.8	31.6	35.5	35.3	30.2	34.9	24.1	27.7	27.7	29.7	26.2	28.1	28.8	18.3	26.3	35.5	27.5
2013	37.4	37.3	37.8	43.3	31.3	40.5	32.4	36.3	31.5	36.8	27.7	33.5	37.6	23.7	34.2	45.1	34.3
2018	31.8	31.6	35.1	35.5	24.5	34.5	33.0	30.4	22.1	33.0	22.1	29.1	32.5	17.4	29.0	40.9	29.4
2023	26.4	26.2	25.5	31.8	21.8	26.4	22.2	25.6	22.5	26.7	20.0	24.6	26.9	14.1	23.7	34.2	27.6

^a No definite commitment for employment or postdoctoral training includes doctorate recipients who indicated "other" in all years, doctorate recipients who indicated "do not plan to work or study" in 2004 and later years, and doctorate recipients who indicated definite plans for "other full-time degree program" in 2007 and later years.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE 2-2

Postgraduation commitment of research doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Commitment status and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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	
All doctorate recipients (number)													
1993	39,800	24,384	15,121	28,722	9,964	974	120	2,005	1,278	24,040	na	135	170
1998	42,636	24,628	17,847	31,204	9,461	1,332	190	2,728	1,603	24,284	na	416	651
2003	40,762	22,256	18,506	28,170	10,597	1,435	136	2,033	1,723	21,162	363	354	964
2008	48,776	26,271	22,494	30,844	15,261	1,773	115	2,507	1,961	22,835	506	343	804
2013	52,703	28,326	24,365	33,964	15,674	2,135	119	2,892	2,172	24,749	858	279	760
2018	55,078	29,742	25,308	35,349	17,582	2,572	115	3,302	2,449	24,924	1,100	371	516
2023	57,862	30,356	27,499	35,566	19,393	3,449	115	3,828	2,725	23,057	1,296	459	637
All postgraduation commitments (number)													
1993	36,546	22,534	14,006	27,366	9,170	918	113	1,839	1,181	23,120	na	110	85
1998	38,244	22,168	16,041	29,377	8,799	1,212	173	2,579	1,487	23,250	na	388	288
2003	36,868	20,192	16,676	26,824	9,980	1,364	124	1,979	1,614	20,700	362	335	346
2008	44,018	23,611	20,407	29,566	14,377	1,647	111	2,404	1,873	22,311	496	317	407
2013	47,836	25,717	22,118	32,771	14,925	2,052	115	2,845	2,110	24,305	852	250	242
2018	50,338	27,265	23,073	33,652	16,530	2,433	101	3,180	2,332	24,046	1,099	293	168
2023	52,109	27,420	24,683	33,702	18,143	3,255	94	3,697	2,597	22,255	1,283	335	186
Definite commitment for employment or postdoctoral training (%)													
1993	67.0	66.2	68.2	70.1	57.8	68.2	67.3	59.2	65.1	71.4	na	61.8	56.5
1998	69.7	70.5	68.5	71.0	65.5	70.3	62.4	66.2	65.6	72.2	na	63.1	63.9
2003	71.3	72.3	70.2	72.5	68.2	70.6	66.1	65.9	69.0	73.8	70.7	63.6	68.2
2008	69.2	70.1	68.2	70.6	66.4	65.9	73.9	61.9	65.0	72.5	67.9	64.7	64.4
2013	62.6	64.0	61.1	63.7	60.3	58.0	58.3	55.0	55.6	66.1	60.4	60.4	59.5
2018	68.2	69.0	67.2	68.2	68.0	66.6	66.3	63.8	62.5	69.5	69.6	68.9	64.3
2023	73.6	74.0	73.3	72.3	76.0	71.2	80.9	69.7	71.0	73.1	74.0	64.5	69.9
No definite commitment for employment or postdoctoral training (%) ^d													
1993	33.0	33.8	31.8	29.9	42.2	31.8	32.7	40.8	34.9	28.6	na	38.2	43.5
1998	30.3	29.5	31.5	29.0	34.5	29.7	37.6	33.8	34.4	27.8	na	36.9	36.1
2003	28.7	27.7	29.8	27.5	31.8	29.4	33.9	34.1	31.0	26.2	29.3	36.4	31.8
2008	30.8	29.9	31.8	29.4	33.6	34.1	26.1	38.1	35.0	27.5	32.1	35.3	35.6
2013	37.4	36.0	38.9	36.3	39.7	42.0	41.7	45.0	44.4	33.9	39.6	39.6	40.5
2018	31.8	31.0	32.8	31.8	32.0	33.4	33.7	36.2	37.5	30.5	30.4	31.1	35.7
2023	26.4	26.0	26.7	27.7	24.0	28.8	19.1	30.3	29.0	26.9	26.0	35.5	30.1

na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

^a Total includes doctorate recipients who did not report sex or citizenship status.

^b Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.

^c Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

^d No definite commitment for employment or postdoctoral training includes doctorate recipients who indicated "other" in all years, doctorate recipients who indicated "do not plan to work or study" in 2004 and later years, and doctorate recipients who indicated definite plans for "other full-time degree program" in 2007 and later years.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Due to rounding, percentages may not sum to 100.

Source(s):

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

TABLE 2-3

Postgraduation plans of research doctorate recipients with definite commitments, by trend broad field of doctorate: Selected years, 1993–2023

(Number and percent)

Definite commitment, plan, and year	All fields	Science and engineering										Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities and arts	Other non-science and engineering
All definite commitments (number)																	
1993	24,480	16,002	705	3,712	546	2,876	438	670	617	2,283	2,127	2,028	8,478	929	4,464	2,455	630
1998	26,644	18,094	756	4,034	608	3,722	483	819	714	2,528	2,143	2,287	8,550	857	4,266	2,823	604
2003	26,299	17,454	750	4,011	564	3,148	480	908	692	2,237	2,080	2,584	8,845	734	4,354	3,064	693
2008	30,467	21,550	738	4,863	1,134	4,619	615	1,074	923	2,601	2,134	2,849	8,917	1,008	4,315	2,725	869
2013	29,969	22,348	789	4,573	1,163	4,850	627	1,215	1,130	2,668	2,245	3,088	7,621	1,045	2,922	2,786	868
2018	34,308	26,492	891	5,316	1,370	6,116	751	1,558	1,405	3,205	2,576	3,304	7,816	1,061	3,117	2,743	895
2023	38,375	30,450	974	6,049	1,879	7,578	882	1,607	1,538	3,671	2,670	3,602	7,925	1,159	3,089	2,585	1,092
Reported type of plan (number)																	
1993	24,362	15,952	699	3,709	545	2,867	436	667	615	2,280	2,118	2,016	8,410	924	4,429	2,431	626
1998	26,141	17,881	743	4,003	604	3,693	479	799	703	2,510	2,111	2,236	8,260	839	4,096	2,736	589
2003	26,213	17,410	746	4,001	561	3,138	478	906	689	2,236	2,078	2,577	8,803	731	4,325	3,057	690
2008	29,533	20,965	713	4,754	1,101	4,484	604	1,044	904	2,549	2,056	2,756	8,568	979	4,122	2,637	830
2013	27,703	20,918	719	4,344	1,086	4,531	585	1,122	1,087	2,566	2,090	2,788	6,785	935	2,643	2,469	738
2018	34,254	26,445	889	5,303	1,368	6,105	751	1,557	1,404	3,199	2,571	3,298	7,809	1,059	3,114	2,741	895
2023	38,328	30,415	969	6,038	1,879	7,575	882	1,605	1,535	3,669	2,664	3,599	7,913	1,158	3,086	2,577	1,092
Employment plans (%)																	
1993	71.0	57.8	69.1	21.2	84.0	74.7	51.6	84.7	72.8	35.0	72.1	88.5	96.1	98.7	96.9	94.0	94.4
1998	71.0	60.2	65.0	25.4	85.8	80.3	52.4	83.9	70.7	42.4	64.1	87.1	94.4	96.4	95.5	92.0	94.6
2003	67.2	54.4	63.0	23.5	78.8	68.4	47.3	77.2	53.8	36.9	57.8	83.7	92.5	96.7	94.0	89.8	91.3
2008	64.2	52.8	54.3	23.1	74.7	69.7	41.9	73.3	55.4	33.7	49.2	81.7	92.1	96.5	94.9	87.0	89.2
2013	60.6	51.2	53.3	23.6	76.8	64.7	34.2	70.9	52.9	33.4	44.1	78.6	89.6	95.2	92.2	85.1	88.1
2018	61.5	53.9	55.6	30.6	80.9	65.9	35.3	65.6	55.3	43.2	41.9	75.7	87.0	94.1	91.0	79.7	87.4
2023	63.4	58.1	55.7	41.9	79.4	69.9	35.3	66.7	57.3	51.7	41.2	71.0	83.9	90.3	88.7	75.5	83.7
Postdoctoral training plans (%)																	
1993	29.0	42.2	30.9	78.8	16.0	25.3	48.4	15.3	27.2	65.0	27.9	11.5	3.9	1.3	3.1	6.0	5.6
1998	29.0	39.8	35.0	74.6	14.2	19.7	47.6	16.1	29.3	57.6	35.9	12.9	5.6	3.6	4.5	8.0	5.4
2003	32.8	45.6	37.0	76.5	21.2	31.6	52.7	22.8	46.2	63.1	42.2	16.3	7.5	3.3	6.0	10.2	8.7
2008	35.8	47.2	45.7	76.9	25.3	30.3	58.1	26.7	44.6	66.3	50.8	18.3	7.9	3.5	5.1	13.0	10.8
2013	39.4	48.8	46.7	76.4	23.2	35.3	65.8	29.1	47.1	66.6	55.9	21.4	10.4	4.8	7.8	14.9	11.9
2018	38.5	46.1	44.4	69.4	19.1	34.1	64.7	34.4	44.7	56.8	58.1	24.3	13.0	5.9	9.0	20.3	12.6
2023	36.6	41.9	44.3	58.1	20.6	30.1	64.7	33.3	42.7	48.3	58.8	29.0	16.1	9.7	11.3	24.5	16.3

Note(s):

Percentages are based on the number of definite postgraduation commitments and the type of plan (employment or postdoctoral study [postdoc]). A definite postgraduation commitment includes accepting new employment or a postdoc position or returning to predoctoral employment. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

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

TABLE 2-4
Postgraduation plans of research doctorate recipients with definite commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Definite commitment, plan, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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	
All definite commitments (number)													
1993	24,480	14,919	9,559	19,176	5,298	626	76	1,088	769	16,501	na	68	48
1998	26,644	15,635	10,987	20,848	5,762	852	108	1,708	975	16,776	na	245	184
2003	26,299	14,595	11,704	19,449	6,804	963	82	1,304	1,114	15,281	256	213	236
2008	30,467	16,547	13,920	20,860	9,552	1,085	82	1,489	1,218	16,182	337	205	262
2013	29,969	16,459	13,509	20,880	8,994	1,190	67	1,565	1,173	16,075	515	151	144
2018	34,308	18,807	15,501	22,953	11,238	1,621	67	2,028	1,457	16,705	765	202	108
2023	38,375	20,285	18,086	24,382	13,792	2,317	76	2,577	1,844	16,272	950	216	130
Reported type of plan (number)													
1993	24,362	14,858	9,502	19,090	5,266	624	76	1,080	763	16,432	na	67	48
1998	26,141	15,386	10,736	20,459	5,654	832	105	1,691	928	16,488	na	240	175
2003	26,213	14,549	11,664	19,402	6,772	960	82	1,298	1,110	15,254	255	211	232
2008	29,533	16,102	13,431	20,174	9,305	1,042	77	1,452	1,164	15,664	324	199	252
2013	27,703	15,302	12,400	19,161	8,448	1,047	59	1,436	1,072	14,800	476	140	131
2018	34,254	18,775	15,479	22,915	11,223	1,618	67	2,025	1,454	16,679	764	200	108
2023	38,328	20,270	18,054	24,352	13,776	2,316	76	2,575	1,841	16,250	948	216	130
Employment plans (%)													
1993	71.0	68.4	75.1	73.9	60.7	74.0	85.5	60.9	83.5	74.3	na	64.2	64.6
1998	71.0	69.7	72.9	73.7	61.3	75.0	82.9	61.6	83.4	74.3	na	66.7	76.0
2003	67.2	64.7	70.4	70.9	56.7	72.9	81.7	59.2	77.7	71.6	62.4	63.5	66.8
2008	64.2	62.4	66.3	67.4	57.3	63.3	71.4	60.9	73.6	67.9	64.5	63.3	65.5
2013	60.6	60.5	60.7	63.1	54.9	59.4	62.7	58.6	70.7	63.4	56.3	66.4	64.9
2018	61.5	61.5	61.5	63.0	58.2	60.3	80.6	57.8	73.0	62.9	61.5	72.5	69.4
2023	63.4	63.8	63.0	64.9	60.7	61.7	73.7	64.4	75.3	64.5	56.8	68.5	75.4
Postdoctoral training plans (%)													
1993	29.0	31.6	24.9	26.1	39.3	26.0	14.5	39.1	16.5	25.7	na	35.8	35.4
1998	29.0	30.3	27.1	26.3	38.7	25.0	17.1	38.4	16.6	25.7	na	33.3	24.0
2003	32.8	35.3	29.6	29.1	43.3	27.1	18.3	40.8	22.3	28.4	37.6	36.5	33.2
2008	35.8	37.6	33.7	32.6	42.7	36.7	28.6	39.1	26.4	32.1	35.5	36.7	34.5
2013	39.4	39.5	39.3	36.9	45.1	40.6	37.3	41.4	29.3	36.6	43.7	33.6	35.1
2018	38.5	38.5	38.5	37.0	41.8	39.7	19.4	42.2	27.0	37.1	38.5	27.5	30.6
2023	36.6	36.2	37.0	35.1	39.3	38.3	26.3	35.6	24.7	35.5	43.2	31.5	24.6

na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

^a Total includes doctorate recipients who did not report sex or citizenship status.

^b Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.

^c Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

Note(s):

Percentages are based on the number of definite postgraduation commitments and the type of plan (employment or postdoctoral study [postdoc]). A definite postgraduation commitment includes accepting new employment or a postdoc position or returning to predoctoral employment.

Source(s):

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

TABLE 2-5

Sources of support for research doctorate recipients with postdoctoral training commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Postdoctoral training commitments, source of support, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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	
All postdoctoral training commitments (number)													
1993	7,060	4,697	2,362	4,990	2,068	162	11	422	126	4,228	na	24	17
1998	7,581	4,664	2,914	5,383	2,186	208	18	649	154	4,232	na	80	42
2003	8,588	5,141	3,447	5,642	2,933	260	15	530	248	4,339	96	77	77
2008	10,573	6,050	4,523	6,581	3,976	382	D	568	307	5,027	D	73	87
2013	10,913	6,044	4,869	7,079	3,811	425	22	595	314	5,422	208	47	46
2018	13,200	7,236	5,964	8,473	4,687	642	13	855	393	6,188	294	55	33
2023	14,026	7,344	6,681	8,555	5,412	887	20	917	455	5,766	410	68	32
U.S. government (%)													
1993	35.2	34.1	37.3	42.6	17.3	38.9	45.5	37.0	33.3	43.5	na	45.8	41.2
1998	36.4	36.6	36.0	42.3	22.0	34.6	50.0	39.1	36.4	43.6	na	27.5	45.2
2003	32.9	33.7	31.8	39.8	19.8	36.2	53.3	40.0	28.2	40.9	42.7	27.3	29.9
2008	29.2	28.9	29.5	35.3	19.1	35.6	D	34.2	32.2	36.2	D	30.1	17.2
2013	31.3	30.5	32.3	37.2	20.4	34.1	D	32.9	36.6	37.9	40.4	D	23.9
2018	30.1	29.0	31.4	37.1	17.5	36.9	38.5	33.6	28.8	38.2	35.4	40.0	39.4
2023	27.8	27.1	28.7	35.3	16.2	34.7	D	32.4	26.2	37.0	34.6	D	25.0
College or university (%)													
1993	28.7	31.3	23.5	21.5	46.2	19.1	D	27.0	25.4	21.0	na	D	17.6
1998	31.5	33.6	28.1	26.8	43.0	35.1	22.2	27.6	24.0	26.3	na	36.3	21.4
2003	41.5	42.8	39.7	35.0	54.1	37.3	20.0	36.2	39.5	34.6	30.2	40.3	29.9
2008	45.3	46.3	44.0	40.2	53.6	39.5	36.4	43.3	46.6	39.1	46.1	53.4	43.7
2013	43.6	45.3	41.4	38.9	52.3	41.6	40.9	40.3	41.1	38.5	40.4	34.0	32.6
2018	41.1	43.3	38.5	35.9	50.9	38.2	D	36.6	43.0	35.1	37.1	D	24.2
2023	44.3	47.2	41.1	37.3	55.5	38.9	D	41.3	44.6	35.4	39.5	D	34.4
Private foundation (%)													
1993	9.8	9.3	10.6	9.9	9.4	13.6	0.0	9.0	15.9	9.7	na	8.3	0.0
1998	9.8	9.5	10.3	9.7	10.0	8.7	5.6	10.8	10.4	9.5	na	11.3	9.5
2003	5.8	5.3	6.6	6.4	4.8	6.9	6.7	4.3	6.9	6.5	8.3	7.8	7.8
2008	5.0	4.7	5.5	5.5	4.3	5.0	D	4.0	3.9	5.7	D	0.0	10.3
2013	4.7	4.1	5.5	5.4	3.5	4.5	D	4.4	4.5	5.6	5.8	D	17.4
2018	4.5	4.1	5.0	5.3	3.1	4.2	0.0	5.3	4.6	5.6	4.4	0.0	3.0
2023	3.9	3.1	4.7	4.7	2.6	2.8	0.0	3.8	5.5	5.1	4.4	1.5	6.3
Nonprofit, other than private foundation (%)													
1993	2.5	2.5	2.6	2.2	3.3	2.5	0.0	0.9	1.6	2.4	na	4.2	0.0

TABLE 2-5
Sources of support for research doctorate recipients with postdoctoral training commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Postdoctoral training commitments, source of support, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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	
1998	3.1	2.8	3.4	2.6	4.2	1.0	0.0	2.5	3.2	2.7	na	0.0	2.4
2003	3.7	3.0	4.9	3.8	3.6	3.8	0.0	3.8	4.8	3.8	4.2	3.9	2.6
2008	3.1	2.6	3.8	2.8	3.5	2.9	D	1.9	4.6	2.8	D	4.1	4.6
2013	3.6	2.7	4.7	3.7	3.4	3.1	0.0	4.7	3.5	3.8	2.4	4.3	4.3
2018	3.1	2.4	3.8	3.5	2.3	4.0	D	2.8	5.6	3.4	3.1	D	6.1
2023	3.2	2.4	4.2	3.7	2.5	3.6	D	3.1	5.3	3.7	4.1	D	3.1
Other (%)													
1993	10.4	10.1	10.9	10.3	10.4	11.7	D	9.7	7.1	10.5	na	D	11.8
1998	7.4	6.8	8.4	7.0	8.4	10.1	5.6	6.3	5.8	7.1	na	8.8	2.4
2003	8.8	8.8	8.7	8.0	10.4	6.9	6.7	8.9	8.1	7.9	7.3	6.5	13.0
2008	10.2	11.0	9.2	9.2	12.0	7.3	D	8.5	5.2	9.5	D	6.8	14.9
2013	9.4	10.1	8.5	7.9	12.1	9.2	0.0	8.9	5.4	8.0	4.3	8.5	10.9
2018	9.0	9.4	8.7	7.5	11.8	5.0	7.7	8.2	7.9	7.7	7.5	7.3	9.1
2023	8.4	8.3	8.5	8.1	8.9	6.3	10.0	7.4	6.6	8.6	7.6	11.8	0.0
Unknown (%)													
1993	13.4	12.6	15.1	13.4	13.3	14.2	D	16.4	16.7	12.9	na	D	29.4
1998	11.9	10.6	13.9	11.6	12.4	10.6	16.7	13.7	20.1	10.8	na	16.3	19.0
2003	7.2	6.4	8.3	7.1	7.2	8.8	13.3	6.8	12.5	6.5	7.3	14.3	16.9
2008	7.2	6.6	8.0	7.1	7.5	9.7	D	8.1	7.5	6.7	D	5.5	9.2
2013	7.4	7.3	7.5	6.8	8.3	7.5	4.5	8.7	8.9	6.3	6.7	17.0	10.9
2018	12.2	11.8	12.6	10.7	14.5	11.7	0.0	13.6	10.2	10.0	12.6	23.6	18.2
2023	12.4	11.9	12.9	10.9	14.3	13.6	15.0	12.0	11.9	10.2	9.8	8.8	31.3

D = suppressed to avoid disclosure of confidential information. na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

^a Total includes doctorate recipients who did not report sex or citizenship status.

^b Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.

^c Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

Note(s):

Percentages are based on the number of definite commitments for a postdoctoral study (postdoc) position.

Source(s):

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

TABLE 2-6
Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by trend broad field of doctorate: Selected years, 1993–2023

(Number and percent)

Employment commitment, sector, and year	All fields	Science and engineering										Non-science and engineering						
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities and arts	Other non-science and engineering	
All U.S. employment commitments (number)																		
1993	15,029	7,626	309	657	371	1,660	178	508	370	722	1,474	1,377	7,403	761	4,052	2,075	515	
1998	16,603	9,425	331	892	479	2,586	222	594	438	982	1,305	1,596	7,178	713	3,678	2,285	502	
2003	15,636	8,098	327	818	400	1,744	198	610	325	772	1,161	1,743	7,538	614	3,829	2,549	546	
2008	17,273	9,896	298	984	761	2,805	228	713	458	793	967	1,889	7,377	825	3,760	2,127	665	
2013	15,033	9,496	309	921	779	2,595	179	741	531	786	869	1,786	5,537	730	2,321	1,916	570	
2018	18,907	12,743	382	1,500	1,007	3,625	239	933	709	1,278	1,016	2,054	6,164	812	2,650	1,996	706	
2023	22,462	16,353	484	2,426	1,385	4,943	293	970	814	1,798	1,069	2,171	6,109	880	2,615	1,780	834	
Academe (%)																		
1993	51.7	42.3	41.4	45.5	46.9	23.3	34.8	60.6	73.8	18.6	34.5	69.1	61.4	87.5	44.6	82.8	68.0	
1998	45.7	33.9	37.2	34.0	33.8	11.5	34.2	56.2	55.0	16.5	36.3	64.1	61.2	78.7	46.5	78.6	64.5	
2003	54.4	45.4	41.3	46.2	58.8	21.7	39.9	61.8	69.5	22.2	41.6	69.5	64.0	84.0	48.5	81.3	70.1	
2008	51.1	39.7	41.6	43.0	29.6	15.1	35.5	59.2	56.6	23.2	47.3	70.2	66.4	80.4	50.8	85.3	77.0	
2013	50.2	37.4	39.5	40.0	23.6	13.6	36.9	56.8	52.2	21.6	45.0	67.3	72.2	84.1	58.6	82.4	77.7	
2018	43.2	31.9	36.9	30.9	25.4	12.8	31.8	55.0	38.4	16.3	42.9	60.1	66.4	78.2	55.3	74.4	72.0	
2023	34.2	24.2	31.4	22.1	21.6	9.7	26.6	47.8	27.0	11.5	38.3	50.9	60.9	74.3	51.4	68.1	61.3	
Government (%)																		
1993	9.1	12.5	19.7	17.2	4.0	13.0	28.1	10.8	4.9	8.7	15.7	9.7	5.6	2.4	7.4	1.8	11.5	
1998	7.1	9.9	14.5	10.2	6.5	10.8	9.5	10.4	5.7	6.9	11.9	9.8	3.5	2.9	4.1	1.8	7.4	
2003	7.5	11.1	18.0	14.8	6.0	12.6	22.7	9.2	5.2	9.1	11.0	9.0	3.7	3.3	4.4	1.7	8.6	
2008	6.2	8.5	18.8	10.9	2.5	7.3	14.9	10.8	5.5	6.4	12.2	8.1	3.1	2.4	3.7	1.7	5.3	
2013	7.5	10.0	18.1	10.9	4.1	9.5	18.4	11.7	4.1	7.3	13.0	11.4	3.2	2.6	3.2	2.2	7.5	
2018	6.8	8.0	16.2	8.9	3.3	7.5	18.0	7.1	4.9	5.0	9.8	10.5	4.2	3.6	4.8	2.8	7.1	
2023	6.8	7.7	13.6	7.1	3.0	6.1	21.8	8.2	5.5	4.9	13.1	12.3	4.4	3.4	4.2	3.1	8.6	
Industry or business (%) ^a																		
1993	20.3	34.7	32.7	27.5	46.4	60.2	33.7	16.5	18.6	69.9	23.1	9.7	5.5	8.7	5.3	3.5	9.9	
1998	28.7	44.4	39.0	32.3	55.9	73.7	47.3	17.2	32.6	70.4	23.3	15.5	8.2	13.9	6.9	7.2	14.1	
2003	20.8	34.6	30.9	28.7	33.0	62.7	32.3	16.7	23.4	65.0	24.2	12.4	5.9	11.4	4.7	5.2	11.4	
2008	27.0	43.3	30.9	36.2	64.9	73.7	43.4	15.7	33.4	63.7	18.9	11.6	5.2	13.6	4.0	3.0	9.5	
2013	30.1	44.5	34.3	38.4	68.8	73.2	36.9	15.9	39.7	67.9	22.1	11.6	5.3	9.9	4.5	4.4	6.0	
2018	36.8	50.9	36.9	49.1	67.7	74.5	40.6	18.9	52.2	72.7	27.9	17.9	7.8	13.1	6.4	6.9	9.9	
2023	46.7	59.9	43.8	61.6	70.3	79.6	42.3	27.6	62.7	79.4	33.2	23.1	11.4	17.3	9.6	9.0	15.7	
Nonprofit organization (%)																		
1993	6.0	6.7	3.9	7.2	1.6	2.7	D	8.9	D	1.5	17.1	6.2	5.3	0.8	4.5	7.8	8.3	
1998	5.3	5.5	5.7	4.7	1.5	2.2	3.2	10.6	1.8	1.1	15.9	6.0	4.9	2.1	4.8	5.1	9.4	

TABLE 2-6
Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by trend broad field of doctorate: Selected years, 1993–2023

(Number and percent)

Employment commitment, sector, and year	All fields	Science and engineering											Non-science and engineering				
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities and arts	Other non-science and engineering
2003	6.0	6.4	8.0	6.8	2.3	2.5	3.5	11.1	1.8	2.7	14.6	6.5	5.5	1.1	4.4	7.7	7.1
2008	4.7	5.1	5.0	6.3	1.4	2.4	2.6	10.2	2.4	3.0	11.4	6.7	4.1	1.3	4.1	4.8	4.8
2013	5.6	5.8	7.1	6.7	2.1	2.9	3.9	13.4	2.6	1.7	13.1	7.3	5.1	2.1	5.1	5.8	6.5
2018	6.4	6.0	6.5	7.7	2.4	3.4	5.4	15.2	2.5	2.7	10.5	7.6	7.2	2.3	7.9	8.4	6.8
2023	6.5	5.9	7.6	7.3	3.3	3.3	6.1	13.0	2.8	2.8	10.3	10.0	8.1	2.5	7.8	10.9	8.9
Other or unknown (%) ^b																	
1993	12.9	3.8	2.3	2.6	1.1	0.8	D	3.1	D	1.2	9.5	5.3	22.2	0.7	38.2	4.0	2.3
1998	13.1	6.3	3.6	18.8	2.3	1.8	5.9	5.6	4.8	5.1	12.6	4.6	22.1	2.4	37.6	7.2	4.6
2003	11.4	2.5	1.8	3.4	0.0	0.5	1.5	1.1	0.0	1.0	8.5	2.6	20.9	0.2	38.0	4.1	2.7
2008	11.0	3.4	3.7	3.7	1.6	1.5	3.5	4.1	2.2	3.7	10.2	3.3	21.1	2.3	37.4	5.2	3.5
2013	6.6	2.2	1.0	4.0	1.4	0.7	3.9	2.2	1.3	1.5	6.8	2.4	14.2	1.4	28.5	5.2	2.3
2018	6.8	3.2	3.4	3.3	1.2	1.8	4.2	3.9	2.0	3.3	8.9	3.8	14.3	2.8	25.7	7.5	4.2
2023	5.8	2.2	3.5	1.8	1.8	1.3	3.1	3.3	2.0	1.4	5.1	3.6	15.2	2.5	27.0	8.8	5.5

D = suppressed to avoid disclosure of confidential information.

^a Industry or business includes self-employment.

^b Other is mainly composed of elementary and secondary schools.

Note(s): Percentages are based on the number of definite employment commitments in the United States. A definite postgraduation commitment for employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the field taxonomy changes, see the ["Technical Notes."](#)

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

TABLE 2-7

Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Employment commitment, sector, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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	
All U.S. employment commitments (number)													
1993	15,029	8,371	6,657	13,676	1,350	446	65	577	622	11,897	na	41	28
1998	16,603	9,334	7,266	14,568	2,022	590	85	957	754	11,909	na	151	122
2003	15,636	8,097	7,539	13,424	2,192	681	66	717	852	10,674	156	131	147
2008	17,273	9,001	8,272	13,283	3,961	644	53	843	849	10,407	204	123	160
2013	15,033	8,133	6,900	11,774	3,200	603	37	802	750	9,155	259	88	80
2018	18,907	10,152	8,755	14,118	4,726	966	54	1,121	1,049	10,263	456	138	71
2023	22,462	11,771	10,688	15,575	6,764	1,414	56	1,623	1,376	10,340	527	144	95
Academe (%)													
1993	51.7	47.0	57.6	51.6	52.3	57.8	56.9	43.7	55.5	51.6	na	48.8	46.4
1998	45.7	39.6	53.6	48.1	28.9	55.8	52.9	27.3	49.7	49.2	na	49.0	46.7
2003	54.4	50.4	58.6	54.9	51.1	58.7	48.5	42.0	54.0	55.5	60.9	53.4	59.2
2008	51.1	44.6	58.2	55.0	37.8	56.7	D	41.9	51.2	56.5	D	53.7	51.3
2013	50.2	43.2	58.6	54.5	34.8	57.0	62.2	42.3	54.0	55.6	54.8	45.5	45.0
2018	43.2	36.8	50.6	47.5	30.2	53.9	59.3	35.3	43.9	48.5	51.1	38.4	46.5
2023	34.2	27.5	41.5	38.5	24.4	39.5	51.8	28.2	39.0	39.8	39.7	38.2	35.8
Government (%)													
1993	9.1	10.2	7.8	9.8	2.3	11.7	16.9	7.8	9.3	9.8	na	7.3	17.9
1998	7.1	8.2	5.8	7.9	1.6	7.1	D	6.7	7.7	8.1	na	D	12.3
2003	7.5	8.6	6.3	8.5	1.6	7.0	D	9.6	8.8	8.4	D	11.5	5.4
2008	6.2	6.8	5.6	7.7	1.5	6.5	D	7.9	9.9	7.4	D	6.5	6.9
2013	7.5	8.2	6.8	9.2	1.4	9.6	D	7.0	11.7	9.2	6.9	D	10.0
2018	6.8	7.0	6.5	8.7	1.2	8.6	9.3	7.3	13.7	8.2	10.3	9.4	9.9
2023	6.8	6.8	6.9	9.2	1.3	9.5	8.9	7.6	11.8	9.2	8.2	5.6	12.6
Industry or business (%) ^d													
1993	20.3	26.5	12.5	18.5	38.8	15.7	7.7	40.0	8.2	18.1	na	22.0	17.9
1998	28.7	38.1	16.7	23.9	63.8	14.2	16.5	52.7	12.9	22.7	na	25.8	24.6
2003	20.8	27.7	13.3	17.2	42.4	12.5	16.7	38.1	10.3	16.8	13.5	19.8	12.2
2008	27.0	36.5	16.7	18.4	55.8	15.8	D	40.0	10.7	17.4	D	19.5	19.4
2013	30.1	39.4	19.1	21.9	60.1	19.1	D	41.6	13.6	21.0	22.4	D	22.5
2018	36.8	46.1	26.0	27.8	63.8	21.3	D	45.6	17.5	27.7	24.3	D	26.8
2023	46.7	56.6	35.9	36.8	69.6	34.0	21.4	53.2	25.3	36.1	39.7	41.0	30.5
Nonprofit organization (%)													
1993	6.0	5.8	6.3	6.4	2.1	4.5	D	4.3	3.7	6.8	na	D	3.6

TABLE 2-7
Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023

(Number and percent)

Employment commitment, sector, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents						Ethnicity not reported	
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	Not 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
1998	5.3	4.3	6.5	5.7	2.1	5.6	D	5.2	4.5	5.8	na	D	3.3
2003	6.0	5.4	6.6	6.5	2.7	6.6	D	6.6	5.0	6.7	D	6.1	4.1
2008	4.7	4.0	5.5	5.4	2.4	5.9	D	5.0	6.6	5.3	D	6.5	6.3
2013	5.6	4.5	6.8	6.4	2.5	6.0	13.5	5.5	6.1	6.4	8.1	10.2	12.5
2018	6.4	5.2	7.7	7.5	3.0	6.4	D	7.8	8.5	7.4	7.0	D	2.8
2023	6.5	4.9	8.3	8.0	3.2	7.9	8.9	7.4	11.3	7.6	8.7	4.9	6.3
Other or unknown (%) ^e													
1993	12.9	10.5	15.8	13.7	4.4	10.3	D	4.2	23.3	13.8	na	D	14.3
1998	13.1	9.9	17.3	14.5	3.6	17.3	18.8	8.2	25.2	14.2	na	13.2	13.1
2003	11.4	7.9	15.1	12.9	2.2	15.1	16.7	3.8	21.8	12.6	12.2	9.2	19.0
2008	11.0	8.2	14.0	13.5	2.5	15.1	D	5.2	21.6	13.5	D	13.8	16.3
2013	6.6	4.8	8.8	8.0	1.3	8.3	5.4	3.6	14.5	7.8	7.7	14.8	10.0
2018	6.8	4.8	9.2	8.6	1.6	9.7	7.4	4.0	16.4	8.2	7.2	10.9	14.1
2023	5.8	4.2	7.5	7.6	1.4	9.1	8.9	3.6	12.6	7.4	3.8	10.4	14.7

D = suppressed to avoid disclosure of confidential information. na = not applicable; doctorate recipients were instructed to indicate only one race before 2001.

^a Total includes doctorate recipients who did not report sex or citizenship status.

^b Asian includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.

^c Before 2001, other race included doctorate recipients who selected more than one race. Since 2001, other race has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.

^d Industry or business includes self-employment.

^e Other is mainly composed of elementary and secondary schools.

Note(s):
 Percentages are based on the number of definite commitments for a postdoctoral study (postdoc) position.

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

TABLE 2-8

Intention to stay in the U.S. after doctorate receipt among research doctorate recipients with temporary visas, by region and country or economy of citizenship: 2017–23

(Number and percent)

Region and country or economy of citizenship	2017–23		2017		2018		2019		2020		2021		2022		2023	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
All temporary visa holders	127,448	73.2	16,288	74.3	17,582	72.0	18,324	71.2	18,473	73.0	17,768	70.8	19,620	74.3	19,393	76.2
Africa	5,510	75.3	700	70.9	745	70.6	743	72.0	788	72.6	763	73.7	909	78.5	862	86.4
Nigeria	1,318	82.1	113	77.9	147	75.5	145	81.4	161	79.5	193	78.2	294	83.0	265	91.3
Egypt	1,024	77.7	156	69.9	156	73.7	163	74.8	127	81.1	134	79.9	143	81.8	145	84.8
Ghana	719	76.9	85	71.8	103	66.0	88	72.7	106	73.6	88	79.5	125	79.2	124	91.1
Libya	347	75.8	48	75.0	56	76.8	61	68.9	61	77.0	57	78.9	40	77.5	24	D
Kenya	336	70.2	57	63.2	50	68.0	38	78.9	57	70.2	53	58.5	43	79.1	38	81.6
Ethiopia	247	D	31	83.9	31	D	35	71.4	28	82.1	30	76.7	43	D	49	87.8
Uganda	170	54.7	19	47.4	20	50.0	20	45.0	30	53.3	28	42.9	29	72.4	24	66.7
South Africa	169	52.1	20	45.0	26	53.8	29	51.7	24	54.2	23	60.9	26	38.5	21	61.9
Zimbabwe	135	D	24	D	18	66.7	16	D	22	D	18	D	23	73.9	14	D
Cameroon	119	D	23	D	17	70.6	18	D	14	D	11	D	11	90.9	25	D
Tunisia	97	D	14	D	8	D	14	D	15	D	14	D	16	D	16	D
Rwanda	89	D	6	D	10	D	11	D	28	60.7	12	D	13	61.5	9	D
Tanzania	75	D	17	29.4	9	D	7	D	10	D	12	D	8	D	12	D
Other	665	66.8	87	65.5	94	67.0	98	57.1	105	59.0	90	67.8	95	70.5	96	81.3
Americas	11,066	63.1	1,444	56.5	1,474	60.0	1,536	60.7	1,669	60.1	1,512	64.3	1,714	68.0	1,717	70.2
Canada	2,913	59.7	409	59.2	431	62.2	427	62.3	398	57.8	369	54.5	474	59.1	405	62.5
Brazil	1,770	67.1	168	61.3	178	61.2	253	63.6	318	60.7	273	72.2	282	73.4	298	72.8
Mexico	1,467	71.0	180	69.4	185	71.4	187	64.2	236	64.0	218	71.6	226	76.1	235	79.1
Colombia	1,430	61.2	190	48.4	205	52.7	202	58.9	191	60.2	191	66.5	224	66.5	227	72.7
Chile	713	44.9	128	25.8	91	39.6	100	35.0	106	43.4	85	54.1	92	64.1	111	58.6
Argentina	384	66.4	52	69.2	60	66.7	52	61.5	64	68.8	46	63.0	42	71.4	68	64.7
Peru	379	70.7	50	70.0	46	50.0	51	76.5	55	72.7	48	72.9	63	76.2	66	72.7
Ecuador	345	55.9	49	36.7	44	38.6	50	42.0	49	63.3	54	59.3	44	77.3	55	72.7
Venezuela	221	D	31	67.7	26	76.9	28	82.1	32	D	30	D	43	D	31	D
Costa Rica	219	52.1	24	45.8	28	50.0	26	38.5	31	41.9	35	51.4	41	63.4	34	64.7
Jamaica	219	67.6	29	69.0	44	54.5	32	68.8	30	80.0	30	60.0	28	67.9	26	80.8
Trinidad and Tobago	123	D	17	64.7	21	D	15	66.7	26	57.7	16	68.8	12	58.3	16	62.5
Honduras	104	D	12	58.3	14	D	13	D	10	D	12	D	19	D	24	D
Uruguay	100	D	7	D	15	D	18	55.6	15	46.7	16	50.0	18	50.0	11	54.5
Guatemala	92	D	12	41.7	12	D	11	D	17	70.6	13	46.2	14	D	13	D
Dominican Republic	82	D	8	D	10	50.0	6	D	18	33.3	8	D	18	D	14	64.3
El Salvador	60	D	8	D	12	D	6	D	9	D	9	D	7	D	9	D
Bolivia	58	D	12	58.3	5	D	8	D	8	D	11	D	5	D	9	D

TABLE 2-8

Intention to stay in the U.S. after doctorate receipt among research doctorate recipients with temporary visas, by region and country or economy of citizenship: 2017–23

(Number and percent)

Region and country or economy of citizenship	2017–23		2017		2018		2019		2020		2021		2022		2023	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Other	387	D	58	60.3	47	66.0	51	66.7	56	D	48	62.5	62	64.5	65	69.2
Asia	82,895	78.2	10,640	80.0	11,323	77.5	11,622	77.2	11,813	79.0	11,638	75.0	12,854	78.3	13,005	79.9
China ^a	43,902	78.5	5,552	83.3	6,188	79.4	6,316	79.2	6,335	80.1	6,198	73.8	6,661	76.7	6,652	77.5
India	16,057	87.6	1,970	88.5	2,045	87.1	2,056	85.9	2,250	88.0	2,300	85.8	2,674	88.2	2,762	89.0
South Korea	7,611	66.4	1,129	68.5	1,039	63.6	1,168	65.3	1,055	66.9	1,036	63.8	1,075	65.1	1,109	71.1
Taiwan	3,282	77.0	520	76.7	514	78.0	492	73.4	468	76.9	410	73.9	416	80.5	462	79.7
Bangladesh	2,700	88.4	236	88.1	280	88.2	292	86.0	392	86.0	397	88.4	551	88.7	552	91.5
Nepal	1,804	92.1	221	91.9	225	88.9	241	89.6	226	94.7	252	92.9	313	92.0	326	94.2
Sri Lanka	1,238	84.0	146	81.5	150	85.3	151	83.4	174	85.1	181	76.8	207	81.6	229	92.1
Vietnam	1,136	79.7	133	75.9	122	80.3	168	76.2	166	74.1	152	79.6	207	86.5	188	82.4
Thailand	985	D	171	25.7	177	31.1	159	30.2	127	30.7	125	D	112	48.2	114	35.1
Pakistan	972	65.3	113	54.0	110	59.1	112	64.3	157	70.7	135	63.7	167	68.9	178	70.2
Japan	836	51.7	117	58.1	118	50.0	128	51.6	114	50.0	123	49.6	121	52.1	115	50.4
Singapore	607	42.2	101	41.6	81	25.9	100	38.0	107	49.5	72	37.5	77	50.6	69	52.2
Indonesia	533	43.0	69	50.7	81	34.6	79	43.0	77	44.2	78	47.4	76	38.2	73	D
Malaysia	470	63.0	65	47.7	83	59.0	71	50.7	59	52.5	61	70.5	70	78.6	61	83.6
Philippines	344	D	47	70.2	57	73.7	38	65.8	45	64.4	58	51.7	55	D	44	75.0
Kazakhstan	108	D	6	D	8	D	11	D	17	70.6	18	72.2	16	68.8	32	78.1
Burma	55	D	6	D	6	D	9	D	9	D	7	D	6	D	12	D
Other	255	71.4	38	57.9	39	69.2	31	71.0	35	60.0	35	68.6	50	80.0	27	D
Australia-Oceania	515	62.9	79	62.0	66	57.6	81	71.6	80	63.8	69	63.8	76	55.3	64	65.6
Australia	324	66.4	47	72.3	37	64.9	53	73.6	51	66.7	39	64.1	50	54.0	47	68.1
New Zealand	D	D	D	D	23	56.5	D	D	D	D	30	63.3	D	D	17	58.8
Other	D	D	D	D	6	16.7	D	D	D	D	0	0.0	D	D	0	0.0
Europe	12,196	66.0	1,785	67.4	1,807	63.3	1,755	64.4	1,705	67.4	1,668	63.7	1,734	68.9	1,742	67.2
Turkey	2,779	65.5	496	61.1	454	59.7	406	64.5	371	70.1	330	63.0	354	69.8	368	72.8
Italy	1,167	65.6	161	70.8	139	72.7	174	63.8	170	64.1	145	57.2	193	70.5	185	60.0
Germany	1,110	60.3	154	68.2	144	54.2	152	57.9	151	54.3	187	58.3	160	65.0	162	63.6
United Kingdom	874	62.6	103	60.2	110	60.0	128	62.5	119	66.4	152	59.2	138	63.8	124	66.1
Spain	835	65.6	100	74.0	104	61.5	128	57.8	116	64.7	115	71.3	134	68.7	138	63.0
France	827	66.5	107	69.2	133	64.7	118	67.8	118	66.9	106	67.0	133	65.4	112	65.2
Russia	826	74.8	112	81.3	154	73.4	111	73.0	120	82.5	112	66.1	105	72.4	112	75.0
Greece	731	76.1	89	73.0	114	78.1	90	73.3	89	77.5	112	75.0	115	75.7	122	78.7
Ukraine	251	D	37	83.8	35	74.3	43	81.4	43	83.7	32	75.0	23	D	38	73.7
Poland	242	66.1	30	66.7	33	60.6	34	70.6	34	61.8	34	73.5	33	75.8	44	56.8

TABLE 2-8

Intention to stay in the U.S. after doctorate receipt among research doctorate recipients with temporary visas, by region and country or economy of citizenship: 2017–23

(Number and percent)

Region and country or economy of citizenship	2017–23		2017		2018		2019		2020		2021		2022		2023	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Netherlands	241	58.5	27	55.6	30	66.7	38	55.3	39	59.0	40	42.5	32	68.8	35	65.7
Romania	235	D	43	81.4	47	61.7	48	D	25	D	27	77.8	22	D	23	69.6
Switzerland	180	50.0	32	65.6	42	38.1	21	38.1	22	63.6	28	64.3	21	33.3	14	42.9
Portugal	162	57.4	32	56.3	25	52.0	24	62.5	20	55.0	17	58.8	24	50.0	20	70.0
Serbia	152	D	20	70.0	16	D	21	71.4	24	D	21	D	22	77.3	28	D
Bulgaria	132	D	30	D	23	78.3	21	D	15	D	16	D	14	D	13	38.5
Austria	126	D	17	D	14	50.0	17	52.9	22	54.5	20	50.0	15	66.7	21	61.9
Hungary	125	D	20	D	20	40.0	17	D	24	66.7	15	60.0	10	D	19	52.6
Ireland	121	D	13	61.5	20	55.0	24	45.8	17	D	7	D	20	75.0	20	55.0
Belgium	113	D	16	31.3	18	55.6	13	53.8	16	50.0	16	D	16	62.5	18	50.0
Sweden	93	D	14	64.3	14	64.3	12	D	15	46.7	7	D	16	62.5	15	D
Czechia	82	D	8	D	13	D	17	64.7	11	D	15	60.0	10	D	8	D
Cyprus	76	D	16	68.8	11	45.5	9	D	11	D	10	D	9	D	10	50.0
Croatia	70	D	17	76.5	10	D	6	D	7	D	8	D	14	57.1	8	D
Albania	68	D	8	75.0	9	88.9	14	D	12	D	9	D	7	D	9	D
Denmark	66	D	6	D	7	D	8	D	8	D	14	35.7	15	D	8	D
Finland	62	D	11	54.5	6	D	7	D	10	50.0	7	D	8	D	13	D
Norway	62	D	8	D	8	D	12	D	10	D	8	D	10	D	6	D
Iceland	54	D	8	D	5	D	7	D	10	D	10	D	6	D	8	D
Other	334	D	50	D	49	65.3	35	71.4	56	57.1	48	68.8	55	74.5	41	68.3
Middle East	12,510	59.8	1,501	62.1	1,749	62.3	2,079	56.6	2,102	58.0	1,749	57.9	1,812	62.0	1,518	61.5
Iran	5,951	91.9	767	92.6	935	91.4	964	91.5	963	92.2	815	91.2	859	91.7	648	93.2
Saudi Arabia	3,370	13.1	339	10.3	403	14.9	554	12.8	614	14.3	485	10.1	492	11.6	483	16.6
Iraq	870	37.1	50	36.0	122	27.0	202	19.8	192	35.4	152	44.7	110	60.0	42	71.4
Jordan	646	58.2	115	44.3	77	57.1	89	56.2	114	51.8	83	57.8	93	72.0	75	76.0
Israel	497	51.3	77	49.4	64	50.0	80	53.8	69	50.7	65	55.4	71	50.7	71	49.3
Lebanon	373	D	52	78.8	51	76.5	53	79.2	39	84.6	42	D	65	83.1	71	90.1
Kuwait	319	D	38	D	46	D	68	7.4	45	11.1	46	10.9	45	11.1	31	D
Oman	72	D	10	D	13	D	7	D	8	D	10	D	12	D	12	D
Armenia	63	D	7	D	5	D	10	D	10	D	8	D	13	D	10	D
United Arab Emirates	62	D	7	D	9	D	13	D	10	D	5	D	6	D	12	D
Syria	59	D	9	D	7	D	12	D	10	D	6	D	6	D	9	D
Other	228	75.4	30	73.3	17	82.4	27	77.8	28	78.6	32	68.8	40	85.0	54	68.5
Region and country or economy unknown	2,756	52.7	139	62.6	418	45.5	508	49.4	316	48.4	369	54.7	521	52.6	485	61.0

D = suppressed to avoid disclosure of confidential information.

^a China includes Hong Kong.

Note(s):

Countries or economies with five or more doctoral recipients in every year on the table are listed separately; countries under each region are ordered based on the total number of doctorate recipients in the years shown. Percentages are based on the number of doctorate recipients on temporary visas and 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 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
All fields	52,160	57,448	57,862
Science and engineering	41,188	45,847	45,973
Agricultural sciences and natural resources	1,222	1,304	1,278
Agricultural, animal, plant, and veterinary sciences	806	857	856
Agronomy and crop science	69	68	76
Animal sciences	159	174	173
Food science and technology	175	156	178
Plant sciences	152	162	149
Soil sciences	79	100	86
Veterinary biomedical and clinical sciences	78	77	93
Agricultural, animal, plant, and veterinary sciences nec	94	120	101
Natural resources and conservation	416	447	422
Environmental science	117	145	132
Environmental/ natural resources management and policy	78	72	63
Forestry	74	69	69
Natural resources conservation and research	74	72	81
Natural resources and conservation nec	73	89	77
Biological and biomedical sciences	8,243	9,375	9,724
Biochemistry, biophysics, and molecular biology	1,346	1,554	1,509
Biochemistry	416	465	440
Biochemistry and molecular biology	263	325	311
Biophysics	234	251	254
Molecular biology	260	274	268
Biochemistry, biophysics, and molecular biology nec	173	239	236
Bioinformatics, biostatistics, and computational biology	562	688	735
Bioinformatics	136	169	181
Biostatistics	223	260	283
Computational biology	106	154	151
Bioinformatics, biostatistics, and computational biology nec	97	105	120
Biological and biomedical sciences, general	660	845	907
Biology/ biological sciences, general	330	471	522
Biomedical sciences, general	330	374	385
Cell/ cellular biology and anatomy	655	685	761
Cell/ cellular and molecular biology	480	523	583
Developmental biology and embryology	103	114	96
Cell/ cellular biology and anatomy nec	72	48	82
Ecology, evolutionary biology, and epidemiology	981	1,121	1,144
Ecology	227	238	246
Ecology and evolutionary biology	243	270	277
Epidemiology	296	386	382
Epidemiology and biostatistics	54	45	39
Evolutionary biology	68	83	84
Ecology, evolutionary biology, and epidemiology nec	93	99	116
Genetics and genomics	397	436	477
Genetics, general	121	122	128
Genome sciences and genomics	72	97	116
Human/ medical genetics	62	81	71
Molecular genetics	71	66	77
Genetics and genomics nec	71	70	85
Microbiology and immunology	972	1,088	1,092
Immunology	303	343	342

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Microbiology and immunology	215	265	271
Microbiology, general	257	270	275
Virology	107	123	111
Microbiology and immunology nec	90	87	93
Neurobiology and neurosciences	1,013	1,177	1,200
Cognitive neuroscience	102	131	114
Neurobiology	138	79	68
Neuroscience	685	823	877
Neurobiology and neurosciences nec	88	144	141
Pharmacology and toxicology	311	386	409
Pharmacology	131	164	186
Toxicology	106	125	95
Pharmacology and toxicology nec	74	97	128
Physiology, oncology, and cancer biology	711	764	821
Biomechanics	77	69	85
Exercise physiology and kinesiology	76	95	103
Oncology and cancer biology	314	318	336
Physiology, general	75	99	78
Physiology, oncology, and cancer biology nec	169	183	219
Biological and biomedical sciences, other	635	631	669
Botany and plant biology	62	45	59
Entomology	114	134	124
Plant pathology and phytopathology	119	98	105
Plant physiology and biology nec	60	70	67
Zoology and animal biology	96	84	88
Biological and biomedical sciences nec	184	200	226
Computer and information sciences	2,194	2,188	2,297
Computer science	1,545	1,485	1,605
Computer science	1,545	1,485	1,605
Computer and information sciences, other	649	703	692
Artificial intelligence	167	205	211
Computer and information sciences, general	109	129	108
Computer systems networking and telecommunications	113	116	91
Informatics and information technology	88	94	105
Information sciences/ studies	103	92	119
Computer and information sciences nec	69	67	58
Engineering	9,577	10,753	10,724
Aerospace, aeronautical, astronautical, and space engineering	372	586	584
Aerospace, aeronautical, astronautical, and space engineering, general	257	220	235
Mechanical and aerospace engineering	na	213	207
Aerospace, aeronautical, astronautical, and space engineering nec	115	153	142
Biological, biomedical, and biosystems engineering	1,070	1,236	1,313
Bioengineering and biomedical engineering	977	1,135	1,222
Biological/ biosystems engineering and biomedical technology	93	101	91
Chemical and petroleum engineering	1,202	1,253	1,245
Chemical and biomolecular engineering	189	205	211
Chemical engineering	801	883	862
Petroleum engineering	132	102	103
Chemical and petroleum engineering nec	80	63	69
Civil, environmental, and transportation engineering	1,011	1,314	1,279
Civil engineering	571	330	342

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Civil and environmental engineering	na	501	505
Environmental/ environmental health engineering	93	65	58
Geotechnical and geoenvironmental engineering	76	87	82
Structural engineering	127	131	133
Transportation and highway engineering	76	112	81
Civil, environmental, and transportation engineering nec	68	88	78
Electrical and computer engineering	2,047	2,130	2,119
Computer engineering	264	263	256
Electrical and computer engineering	1,205	1,359	1,359
Electrical and electronics engineering	512	433	436
Electrical and computer engineering nec	66	75	68
Engineering technologies	452	360	402
Electrical and electronic engineering technologies	80	55	71
Electromechanical technologies	59	90	90
Environmental control technologies	148	58	70
Engineering technologies nec	165	157	171
Industrial engineering and operations research	604	655	627
Industrial engineering	325	210	174
Industrial and systems engineering	na	128	134
Operations research	160	183	186
Systems and manufacturing engineering	119	134	133
Materials and mining engineering	670	925	912
Materials engineering	193	85	102
Materials science and engineering	429	783	762
Materials and mining engineering nec	48	57	48
Mechanical engineering	1,501	1,542	1,552
Mechanical engineering, general	1,413	1,437	1,472
Mechanical engineering nec	88	105	80
Engineering, other	648	752	691
Engineering mechanics, physics, and science	111	166	105
Nanotechnology	60	54	47
Nuclear engineering	155	163	162
Engineering nec	322	369	377
Geosciences, atmospheric, and ocean sciences	1,044	1,165	1,216
Geological and earth sciences	613	658	682
Geochemistry	60	42	47
Geology	109	79	91
Geology/ earth science, general	103	121	142
Geophysics and seismology	102	118	105
Hydrology and water resources science	81	89	96
Geological and earth sciences nec	158	209	201
Ocean, marine, and atmospheric sciences	431	507	534
Atmospheric sciences and meteorology, general	94	120	111
Atmospheric sciences and meteorology nec	47	95	123
Climatology, atmospheric chemistry/ physics	60	67	67
Marine biology and biological oceanography	89	97	92
Marine sciences	57	63	66
Oceanography, chemical/ physical	84	65	75
Health sciences	2,577	2,799	2,746
Nursing and nursing science	601	617	638
Nursing education	88	81	84

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Nursing science	358	381	396
Nursing specialties and practice	155	155	158
Pharmacy and pharmaceutical sciences	408	460	442
Medicinal and pharmaceutical chemistry	64	75	74
Pharmaceutical sciences	243	281	262
Pharmacy, pharmaceutical sciences, and administration nec	101	104	106
Public health	696	792	766
Environmental health	66	68	70
Health services research	86	118	105
Health/ medical physics	71	68	72
Public health education and promotion	94	111	112
Public health, general	179	211	203
Public health nec	200	216	204
Health sciences, other	872	930	900
Communication disorders sciences	127	134	109
Exercise science and kinesiology	92	102	90
Health sciences, general	65	61	61
Marriage and family therapy/ counseling	58	68	54
Medical clinical sciences	60	75	67
Medical, biomedical, and health informatics	60	75	59
Mental health, counseling, and therapy services and sciences	91	93	100
Rehabilitation and therapeutic sciences	120	149	159
Health sciences nec	199	173	201
Mathematics and statistics	1,906	2,143	2,056
Applied mathematics	475	478	490
Applied mathematics, general	265	275	267
Computational and applied mathematics	141	140	165
Applied mathematics nec	69	63	58
Mathematics	814	978	890
Algebra and number theory	69	75	71
Mathematics, general	639	763	687
Mathematics nec	106	140	132
Statistics	617	687	676
Applied statistics, general	55	70	58
Mathematics and statistics	128	101	70
Statistics	401	469	484
Statistics nec	33	47	64
Multidisciplinary/ interdisciplinary sciences	1,271	1,787	1,704
Interdisciplinary computer sciences	447	626	583
Computer science and engineering	118	230	188
Electrical engineering and computer science	224	276	250
Interdisciplinary computer sciences nec	105	120	145
Multidisciplinary/ interdisciplinary sciences, other	824	1,161	1,121
Behavioral and cognitive sciences	79	89	117
Computational science and engineering	104	111	132
Data mining and machine learning	na	259	234
Data science and data analytics	106	94	86
History/ philosophy of science, technology, and society	67	67	68
Nanoscience/ nanoscale science	57	53	33
Nutrition sciences	137	129	128
Multidisciplinary/ interdisciplinary sciences nec	274	359	323

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Physical sciences	4,807	5,428	5,443
Astronomy and astrophysics	263	289	323
Astronomy	71	109	107
Astrophysics	113	115	133
Astronomy and astrophysics nec	79	65	83
Chemistry	2,366	2,782	2,731
Analytical chemistry	320	366	344
Chemical biology	151	163	191
Chemistry, general	494	582	611
Inorganic chemistry	282	324	266
Organic chemistry	454	612	566
Physical chemistry	293	315	294
Polymer chemistry	121	98	81
Theoretical and computational chemistry	108	159	202
Chemistry nec	143	163	176
Materials sciences	429	385	389
Materials science	276	176	188
Materials chemistry and materials sciences nec	153	209	201
Physics	1,749	1,972	2,000
Applied physics	132	161	124
Atomic/ molecular physics	89	87	103
Condensed matter and materials physics	359	433	365
Elementary particle physics	166	151	164
Nuclear physics	79	104	91
Optics/ optical sciences	120	138	135
Physics and astronomy	193	232	280
Physics, general	337	401	430
Plasma and high-temperature physics	57	51	67
Theoretical and mathematical physics	99	101	117
Physics and physical sciences nec	118	113	124
Psychology	3,696	3,861	3,793
Clinical psychology	1,243	1,130	1,203
Clinical child psychology	52	55	53
Clinical psychology	1,191	1,075	1,150
Counseling and applied psychology	1,337	1,416	1,293
Applied behavior analysis	59	44	49
Counseling psychology	366	388	366
Educational psychology	229	245	247
Industrial and organizational psychology	181	197	171
School psychology	260	241	223
Counseling and applied psychology nec	242	301	237
Research and experimental psychology	651	852	803
Behavioral neuroscience	87	105	82
Cognitive psychology and psycholinguistics	106	100	111
Developmental and child psychology	78	114	103
Experimental psychology	98	130	111
Social psychology	143	221	189
Research and experimental psychology nec	139	182	207
Psychology, other	465	463	494
Human development	141	145	155
Psychology, general	256	265	283

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Psychology nec	68	53	56
Social sciences	4,651	5,044	4,992
Anthropology	387	409	379
Anthropology, general	78	102	99
Cultural anthropology	187	198	161
Physical and biological anthropology	72	75	69
Anthropology nec	50	34	50
Area, ethnic, cultural, gender, and group studies	383	442	452
Area studies	224	244	266
Ethnic studies	81	102	103
Area, ethnic, cultural, gender, and group studies nec	78	96	83
Economics	1,315	1,391	1,393
Agricultural economics	76	97	90
Applied economics	134	131	130
Development economics and international development	54	50	41
Econometrics and quantitative economics	146	179	202
Economics, general	801	826	815
Environmental/ natural resource economics	55	50	62
Economics nec	49	58	53
Political science and government	581	676	665
Political science and government, general	488	551	556
Political science and government nec	93	125	109
Public policy analysis	400	433	407
Education policy analysis	132	130	111
Health policy analysis	52	53	45
Public policy analysis, general	158	120	113
Public policy nec	58	130	138
Sociology, demography, and population studies	578	624	627
Sociology, general	501	553	556
Sociology, demography, and population studies nec	77	71	71
Social sciences, other	1,007	1,069	1,069
Applied linguistics	74	70	70
Archeology	83	105	91
Criminology	97	118	135
Geography and cartography	223	220	213
International relations and national security studies	104	129	115
Linguistics	203	192	194
Social sciences nec	223	235	251
Non-science and engineering	10,972	11,601	11,889
Business	1,344	1,398	1,510
Business administration and management	459	444	493
Business management and administration	235	297	312
Organizational leadership	117	54	68
Business administration and management nec	107	93	113
Business, other	885	954	1,017
Accounting and accounting-related	135	159	163
Finance and financial management	194	208	219
Management information systems	88	92	82
Management sciences	72	77	88
Marketing	119	146	145
Organizational behavior studies	103	94	100

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Business nec	174	178	220
Education	3,698	3,882	3,988
Education leadership and administration	1,073	1,150	1,179
Educational leadership and administration, general	491	478	501
Higher education and community college administration	391	436	452
Education leadership and administration nec	191	236	226
Education research	1,203	1,178	1,253
Curriculum and instruction	425	407	413
Educational assessment, evaluation, and research methods	222	218	203
Educational/ instructional technology and media design	155	170	199
Higher education evaluation and research	61	60	62
Student counseling and personnel services	266	245	283
Education research nec	74	78	93
Teacher education and teaching fields	1,007	1,094	1,098
Adult, continuing, and workforce education and development	66	64	61
Bilingual, multilingual, and multicultural education	76	62	72
Mathematics teacher education	75	49	73
Music teacher education	73	73	78
Special education and teaching	234	257	246
STEM educational methods	70	83	75
Teacher education, science and engineering	63	74	55
Teacher education, specific levels and methods	152	187	202
Teacher education, specific subject areas	198	245	236
Education, other	415	460	458
Education, general	267	323	324
Education nec	148	137	134
Humanities	3,108	3,367	3,358
English language and literature, letters	949	1,062	1,039
American literature (United States)	129	138	113
Creative writing	68	75	103
English language and literature, general	361	396	398
English literature (British and Commonwealth)	131	161	141
Rhetoric, composition, and writing studies	191	217	199
English language and literature nec	69	75	85
Foreign languages, literatures, and linguistics	505	538	571
Comparative literature	118	91	129
Hispanic/ Latin American languages, literatures, and linguistics	70	92	97
Romance languages, literatures, and linguistics	72	104	97
Spanish language and literature	79	92	97
Foreign languages, literatures, and linguistics nec	166	159	151
History	684	731	733
American history (United States)	222	245	240
European history	88	120	109
History, general	168	144	175
History, regional focus	133	145	139
History nec	73	77	70
Philosophy and religious studies	598	643	619
Philosophy	406	433	415
Religion/ religious studies	125	140	143
Philosophy and religious studies nec	67	70	61
Humanities, other	372	393	396

TABLE 3-1

Research doctorate recipients, by detailed field of doctorate: 2021–23

(Number)

Field of doctorate	2021	2022	2023
Bible/ biblical studies	71	90	99
Humanities and humanistic studies	62	79	98
Theological and ministerial studies	239	224	199
Visual and performing arts	770	835	824
Performing arts	490	489	487
Dance, drama, theatre arts, and stagecraft	82	85	83
Music performance	127	117	122
Music theory and composition	86	92	94
Musicology and ethnomusicology	116	112	109
Music nec	79	83	79
Visual arts, media studies, and design	280	346	337
Art history, criticism, and conservation	167	208	185
Film, cinema, and media studies	62	74	84
Visual arts, media studies, and design nec	51	64	68
Other non-science and engineering	2,052	2,119	2,209
Communications and journalism	521	586	635
Applied communication, advertising, and public relations	94	103	87
Communication and media studies	161	145	167
Communication, general	85	166	194
Mass communication/ media studies	95	94	94
Communications and journalism nec	86	78	93
Multidisciplinary/ interdisciplinary studies	303	372	380
Classical and ancient studies	91	100	126
Interdisciplinary leadership/ leadership studies	na	108	110
Multidisciplinary/ interdisciplinary studies nec	212	164	144
Public administration and social services	489	467	505
Public administration	175	178	169
Social work and human services	314	289	336
Non-science and engineering, other	739	694	689
Architecture and architectural studies	133	99	118
City/ urban, community, and regional planning	102	103	103
Family, consumer, and human sciences	139	128	132
Homeland security and protective services	169	154	138
Law/ legal studies and research	79	71	73
Parks, recreation, leisure, fitness, and sport studies and management	87	113	93
Other non-science and engineering nec	30	26	32

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

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

Note(s):

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

Source(s):

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

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
All fields	57,862	30,356	27,499	47.5
Science and engineering	45,973	25,480	20,486	44.6
Agricultural sciences and natural resources	1,278	572	706	55.2
Agricultural, animal, plant, and veterinary sciences	856	371	485	56.7
Agronomy and crop science	76	47	29	38.2
Animal sciences	173	69	104	60.1
Food science and technology	178	56	122	68.5
Plant sciences	149	92	57	38.3
Soil sciences	86	35	51	59.3
Veterinary biomedical and clinical sciences	93	30	63	67.7
Agricultural, animal, plant, and veterinary sciences nec	101	42	59	58.4
Natural resources and conservation	422	201	221	52.4
Environmental science	132	58	74	56.1
Environmental/ natural resources management and policy	63	32	31	49.2
Forestry	69	39	30	43.5
Natural resources conservation and research	81	29	52	64.2
Natural resources and conservation nec	77	43	34	44.2
Biological and biomedical sciences	9,724	4,433	5,290	54.4
Biochemistry, biophysics, and molecular biology	1,509	780	728	48.2
Biochemistry	440	229	211	48.0
Biochemistry and molecular biology	311	136	175	56.3
Biophysics	254	178	76	29.9
Molecular biology	268	116	151	56.3
Biochemistry, biophysics, and molecular biology nec	236	121	115	48.7
Bioinformatics, biostatistics, and computational biology	735	413	322	43.8
Bioinformatics	181	116	65	35.9
Biostatistics	283	129	154	54.4
Computational biology	151	100	51	33.8
Bioinformatics, biostatistics, and computational biology nec	120	68	52	43.3
Biological and biomedical sciences, general	907	370	537	59.2
Biology/ biological sciences, general	522	219	303	58.0
Biomedical sciences, general	385	151	234	60.8
Cell/ cellular biology and anatomy	761	313	448	58.9
Cell/ cellular and molecular biology	583	242	341	58.5
Developmental biology and embryology	96	39	57	59.4
Cell/ cellular biology and anatomy nec	82	32	50	61.0
Ecology, evolutionary biology, and epidemiology	1,144	447	697	60.9
Ecology	246	98	148	60.2
Ecology and evolutionary biology	277	128	149	53.8
Epidemiology	382	95	287	75.1
Epidemiology and biostatistics	39	12	27	69.2
Evolutionary biology	84	54	30	35.7
Ecology, evolutionary biology, and epidemiology nec	116	60	56	48.3
Genetics and genomics	477	225	252	52.8
Genetics, general	128	62	66	51.6
Genome sciences and genomics	116	66	50	43.1
Human/ medical genetics	71	20	51	71.8
Molecular genetics	77	37	40	51.9
Genetics and genomics nec	85	40	45	52.9
Microbiology and immunology	1,092	495	597	54.7
Immunology	342	170	172	50.3

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Microbiology and immunology	271	116	155	57.2
Microbiology, general	275	122	153	55.6
Virology	111	47	64	57.7
Microbiology and immunology nec	93	40	53	57.0
Neurobiology and neurosciences	1,200	524	676	56.3
Cognitive neuroscience	114	58	56	49.1
Neurobiology	68	31	37	54.4
Neuroscience	877	359	518	59.1
Neurobiology and neurosciences nec	141	76	65	46.1
Pharmacology and toxicology	409	180	229	56.0
Pharmacology	186	88	98	52.7
Toxicology	95	37	58	61.1
Pharmacology and toxicology nec	128	55	73	57.0
Physiology, oncology, and cancer biology	821	413	408	49.7
Biomechanics	85	48	37	43.5
Exercise physiology and kinesiology	103	66	37	35.9
Oncology and cancer biology	336	158	178	53.0
Physiology, general	78	33	45	57.7
Physiology, oncology, and cancer biology nec	219	108	111	50.7
Biological and biomedical sciences, other	669	273	396	59.2
Botany and plant biology	59	26	33	55.9
Entomology	124	50	74	59.7
Plant pathology and phytopathology	105	47	58	55.2
Plant physiology and biology nec	67	30	37	55.2
Zoology and animal biology	88	30	58	65.9
Biological and biomedical sciences nec	226	90	136	60.2
Computer and information sciences	2,297	1,710	587	25.6
Computer science	1,605	1,234	371	23.1
Computer science	1,605	1,234	371	23.1
Computer and information sciences, other	692	476	216	31.2
Artificial intelligence	211	168	43	20.4
Computer and information sciences, general	108	77	31	28.7
Computer systems networking and telecommunications	91	74	17	18.7
Informatics and information technology	105	59	46	43.8
Information sciences/ studies	119	55	64	53.8
Computer and information sciences nec	58	43	15	25.9
Engineering	10,724	7,873	2,851	26.6
Aerospace, aeronautical, astronautical, and space engineering	584	489	95	16.3
Aerospace, aeronautical, astronautical, and space engineering, general	235	202	33	14.0
Mechanical and aerospace engineering	207	177	30	14.5
Aerospace, aeronautical, astronautical, and space engineering nec	142	110	32	22.5
Biological, biomedical, and biosystems engineering	1,313	743	570	43.4
Bioengineering and biomedical engineering	1,222	695	527	43.1
Biological/ biosystems engineering and biomedical technology	91	48	43	47.3
Chemical and petroleum engineering	1,245	889	356	28.6
Chemical and biomolecular engineering	211	151	60	28.4
Chemical engineering	862	611	251	29.1
Petroleum engineering	103	89	14	13.6
Chemical and petroleum engineering nec	69	38	31	44.9
Civil, environmental, and transportation engineering	1,279	863	416	32.5
Civil engineering	342	246	96	28.1

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Civil and environmental engineering	505	306	199	39.4
Environmental/ environmental health engineering	58	30	28	48.3
Geotechnical and geoenvironmental engineering	82	62	20	24.4
Structural engineering	133	106	27	20.3
Transportation and highway engineering	81	61	20	24.7
Civil, environmental, and transportation engineering nec	78	52	26	33.3
Electrical and computer engineering	2,119	1,719	400	18.9
Computer engineering	256	200	56	21.9
Electrical and computer engineering	1,359	1,112	247	18.2
Electrical and electronics engineering	436	352	84	19.3
Electrical and computer engineering nec	68	55	13	19.1
Engineering technologies	402	317	85	21.1
Electrical and electronic engineering technologies	71	64	7	9.9
Electromechanical technologies	90	77	13	14.4
Environmental control technologies	70	40	30	42.9
Engineering technologies nec	171	136	35	20.5
Industrial engineering and operations research	627	436	191	30.5
Industrial engineering	174	112	62	35.6
Industrial and systems engineering	134	86	48	35.8
Operations research	186	134	52	28.0
Systems and manufacturing engineering	133	104	29	21.8
Materials and mining engineering	912	649	263	28.8
Materials engineering	102	75	27	26.5
Materials science and engineering	762	536	226	29.7
Materials and mining engineering nec	48	38	10	20.8
Mechanical engineering	1,552	1,277	275	17.7
Mechanical engineering, general	1,472	1,213	259	17.6
Mechanical engineering nec	80	64	16	20.0
Engineering, other	691	491	200	28.9
Engineering mechanics, physics, and science	105	87	18	17.1
Nanotechnology	47	33	14	29.8
Nuclear engineering	162	125	37	22.8
Engineering nec	377	246	131	34.7
Geosciences, atmospheric, and ocean sciences	1,216	668	547	45.0
Geological and earth sciences	682	384	298	43.7
Geochemistry	47	30	17	36.2
Geology	91	52	39	42.9
Geology/ earth science, general	142	82	60	42.3
Geophysics and seismology	105	66	39	37.1
Hydrology and water resources science	96	55	41	42.7
Geological and earth sciences nec	201	99	102	50.7
Ocean, marine, and atmospheric sciences	534	284	249	46.6
Atmospheric sciences and meteorology, general	111	75	35	31.5
Atmospheric sciences and meteorology nec	123	67	56	45.5
Climatology, atmospheric chemistry/ physics	67	45	22	32.8
Marine biology and biological oceanography	92	30	62	67.4
Marine sciences	66	29	37	56.1
Oceanography, chemical/ physical	75	38	37	49.3
Health sciences	2,746	789	1,957	71.3
Nursing and nursing science	638	69	569	89.2
Nursing education	84	12	72	85.7

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Nursing science	396	42	354	89.4
Nursing specialties and practice	158	15	143	90.5
Pharmacy and pharmaceutical sciences	442	211	231	52.3
Medicinal and pharmaceutical chemistry	74	43	31	41.9
Pharmaceutical sciences	262	116	146	55.7
Pharmacy, pharmaceutical sciences, and administration nec	106	52	54	50.9
Public health	766	218	548	71.5
Environmental health	70	24	46	65.7
Health services research	105	29	76	72.4
Health/ medical physics	72	45	27	37.5
Public health education and promotion	112	23	89	79.5
Public health, general	203	43	160	78.8
Public health nec	204	54	150	73.5
Health sciences, other	900	291	609	67.7
Communication disorders sciences	109	19	90	82.6
Exercise science and kinesiology	90	41	49	54.4
Health sciences, general	61	21	40	65.6
Marriage and family therapy/ counseling	54	13	41	75.9
Medical clinical sciences	67	30	37	55.2
Medical, biomedical, and health informatics	59	25	34	57.6
Mental health, counseling, and therapy services and sciences	100	20	80	80.0
Rehabilitation and therapeutic sciences	159	42	117	73.6
Health sciences nec	201	80	121	60.2
Mathematics and statistics	2,056	1,480	575	28.0
Applied mathematics	490	342	148	30.2
Applied mathematics, general	267	187	80	30.0
Computational and applied mathematics	165	119	46	27.9
Applied mathematics nec	58	36	22	37.9
Mathematics	890	703	186	20.9
Algebra and number theory	71	63	8	11.3
Mathematics, general	687	539	147	21.4
Mathematics nec	132	101	31	23.5
Statistics	676	435	241	35.7
Applied statistics, general	58	37	21	36.2
Mathematics and statistics	70	52	18	25.7
Statistics	484	312	172	35.5
Statistics nec	64	34	30	46.9
Multidisciplinary/ interdisciplinary sciences	1,704	1,044	660	38.7
Interdisciplinary computer sciences	583	409	174	29.8
Computer science and engineering	188	139	49	26.1
Electrical engineering and computer science	250	186	64	25.6
Interdisciplinary computer sciences nec	145	84	61	42.1
Multidisciplinary/ interdisciplinary sciences, other	1,121	635	486	43.4
Behavioral and cognitive sciences	117	50	67	57.3
Computational science and engineering	132	109	23	17.4
Data mining and machine learning	234	177	57	24.4
Data science and data analytics	86	55	31	36.0
History/ philosophy of science, technology, and society	68	31	37	54.4
Nanoscience/ nanoscale science	33	22	11	33.3
Nutrition sciences	128	26	102	79.7
Multidisciplinary/ interdisciplinary sciences nec	323	165	158	48.9

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Physical sciences	5,443	3,594	1,848	34.0
Astronomy and astrophysics	323	219	104	32.2
Astronomy	107	70	37	34.6
Astrophysics	133	90	43	32.3
Astronomy and astrophysics nec	83	59	24	28.9
Chemistry	2,731	1,550	1,180	43.2
Analytical chemistry	344	162	182	52.9
Chemical biology	191	100	91	47.6
Chemistry, general	611	315	295	48.3
Inorganic chemistry	266	158	108	40.6
Organic chemistry	566	366	200	35.3
Physical chemistry	294	181	113	38.4
Polymer chemistry	81	44	37	45.7
Theoretical and computational chemistry	202	138	64	31.7
Chemistry nec	176	86	90	51.1
Materials sciences	389	248	141	36.2
Materials science	188	125	63	33.5
Materials chemistry and materials sciences nec	201	123	78	38.8
Physics	2,000	1,577	423	21.2
Applied physics	124	99	25	20.2
Atomic/ molecular physics	103	84	19	18.4
Condensed matter and materials physics	365	302	63	17.3
Elementary particle physics	164	126	38	23.2
Nuclear physics	91	77	14	15.4
Optics/ optical sciences	135	109	26	19.3
Physics and astronomy	280	207	73	26.1
Physics, general	430	324	106	24.7
Plasma and high-temperature physics	67	56	11	16.4
Theoretical and mathematical physics	117	100	17	14.5
Physics and physical sciences nec	124	93	31	25.0
Psychology	3,793	885	2,907	76.6
Clinical psychology	1,203	242	961	79.9
Clinical child psychology	53	2	51	96.2
Clinical psychology	1,150	240	910	79.1
Counseling and applied psychology	1,293	288	1,005	77.7
Applied behavior analysis	49	18	31	63.3
Counseling psychology	366	86	280	76.5
Educational psychology	247	59	188	76.1
Industrial and organizational psychology	171	53	118	69.0
School psychology	223	15	208	93.3
Counseling and applied psychology nec	237	57	180	75.9
Research and experimental psychology	803	245	558	69.5
Behavioral neuroscience	82	25	57	69.5
Cognitive psychology and psycholinguistics	111	41	70	63.1
Developmental and child psychology	103	15	88	85.4
Experimental psychology	111	37	74	66.7
Social psychology	189	63	126	66.7
Research and experimental psychology nec	207	64	143	69.1
Psychology, other	494	110	383	77.5
Human development	155	16	138	89.0
Psychology, general	283	82	201	71.0

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Psychology nec	56	12	44	78.6
Social sciences	4,992	2,432	2,558	51.2
Anthropology	379	134	245	64.6
Anthropology, general	99	41	58	58.6
Cultural anthropology	161	56	105	65.2
Physical and biological anthropology	69	20	49	71.0
Anthropology nec	50	17	33	66.0
Area, ethnic, cultural, gender, and group studies	452	155	296	65.5
Area studies	266	114	152	57.1
Ethnic studies	103	33	69	67.0
Area, ethnic, cultural, gender, and group studies nec	83	8	75	90.4
Economics	1,393	907	485	34.8
Agricultural economics	90	54	36	40.0
Applied economics	130	68	62	47.7
Development economics and international development	41	23	18	43.9
Econometrics and quantitative economics	202	144	58	28.7
Economics, general	815	550	264	32.4
Environmental/ natural resource economics	62	33	29	46.8
Economics nec	53	35	18	34.0
Political science and government	665	384	281	42.3
Political science and government, general	556	318	238	42.8
Political science and government nec	109	66	43	39.4
Public policy analysis	407	161	246	60.4
Education policy analysis	111	31	80	72.1
Health policy analysis	45	16	29	64.4
Public policy analysis, general	113	45	68	60.2
Public policy nec	138	69	69	50.0
Sociology, demography, and population studies	627	240	387	61.7
Sociology, general	556	216	340	61.2
Sociology, demography, and population studies nec	71	24	47	66.2
Social sciences, other	1,069	451	618	57.8
Applied linguistics	70	18	52	74.3
Archeology	91	45	46	50.5
Criminology	135	50	85	63.0
Geography and cartography	213	102	111	52.1
International relations and national security studies	115	71	44	38.3
Linguistics	194	80	114	58.8
Social sciences nec	251	85	166	66.1
Non-science and engineering	11,889	4,876	7,013	59.0
Business	1,510	822	688	45.6
Business administration and management	493	265	228	46.2
Business management and administration	312	161	151	48.4
Organizational leadership	68	28	40	58.8
Business administration and management nec	113	76	37	32.7
Business, other	1,017	557	460	45.2
Accounting and accounting-related	163	93	70	42.9
Finance and financial management	219	160	59	26.9
Management information systems	82	43	39	47.6
Management sciences	88	54	34	38.6
Marketing	145	66	79	54.5
Organizational behavior studies	100	36	64	64.0

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Business nec	220	105	115	52.3
Education	3,988	1,089	2,899	72.7
Education leadership and administration	1,179	396	783	66.4
Educational leadership and administration, general	501	169	332	66.3
Higher education and community college administration	452	146	306	67.7
Education leadership and administration nec	226	81	145	64.2
Education research	1,253	317	936	74.7
Curriculum and instruction	413	91	322	78.0
Educational assessment, evaluation, and research methods	203	62	141	69.5
Educational/ instructional technology and media design	199	65	134	67.3
Higher education evaluation and research	62	13	49	79.0
Student counseling and personnel services	283	56	227	80.2
Education research nec	93	30	63	67.7
Teacher education and teaching fields	1,098	273	825	75.1
Adult, continuing, and workforce education and development	61	24	37	60.7
Bilingual, multilingual, and multicultural education	72	13	59	81.9
Mathematics teacher education	73	23	50	68.5
Music teacher education	78	39	39	50.0
Special education and teaching	246	42	204	82.9
STEM educational methods	75	19	56	74.7
Teacher education, science and engineering	55	18	37	67.3
Teacher education, specific levels and methods	202	37	165	81.7
Teacher education, specific subject areas	236	58	178	75.4
Education, other	458	103	355	77.5
Education, general	324	71	253	78.1
Education nec	134	32	102	76.1
Humanities	3,358	1,731	1,627	48.5
English language and literature, letters	1,039	420	619	59.6
American literature (United States)	113	55	58	51.3
Creative writing	103	35	68	66.0
English language and literature, general	398	174	224	56.3
English literature (British and Commonwealth)	141	50	91	64.5
Rhetoric, composition, and writing studies	199	78	121	60.8
English language and literature nec	85	28	57	67.1
Foreign languages, literatures, and linguistics	571	233	338	59.2
Comparative literature	129	60	69	53.5
Hispanic/ Latin American languages, literatures, and linguistics	97	42	55	56.7
Romance languages, literatures, and linguistics	97	38	59	60.8
Spanish language and literature	97	35	62	63.9
Foreign languages, literatures, and linguistics nec	151	58	93	61.6
History	733	404	329	44.9
American history (United States)	240	126	114	47.5
European history	109	60	49	45.0
History, general	175	99	76	43.4
History, regional focus	139	80	59	42.4
History nec	70	39	31	44.3
Philosophy and religious studies	619	397	222	35.9
Philosophy	415	271	144	34.7
Religion/ religious studies	143	88	55	38.5
Philosophy and religious studies nec	61	38	23	37.7
Humanities, other	396	277	119	30.1

TABLE 3-2

Research doctorate recipients, by detailed field of doctorate and sex: 2023

(Number)

Field of doctorate	Total ^a	Male	Female	% female
Bible/ biblical studies	99	85	14	14.1
Humanities and humanistic studies	98	42	56	57.1
Theological and ministerial studies	199	150	49	24.6
Visual and performing arts	824	356	468	56.8
Performing arts	487	257	230	47.2
Dance, drama, theatre arts, and stagecraft	83	23	60	72.3
Music performance	122	67	55	45.1
Music theory and composition	94	65	29	30.9
Musicology and ethnomusicology	109	53	56	51.4
Music nec	79	49	30	38.0
Visual arts, media studies, and design	337	99	238	70.6
Art history, criticism, and conservation	185	40	145	78.4
Film, cinema, and media studies	84	38	46	54.8
Visual arts, media studies, and design nec	68	21	47	69.1
Other non-science and engineering	2,209	878	1,331	60.3
Communications and journalism	635	247	388	61.1
Applied communication, advertising, and public relations	87	25	62	71.3
Communication and media studies	167	68	99	59.3
Communication, general	194	65	129	66.5
Mass communication/ media studies	94	49	45	47.9
Communications and journalism nec	93	40	53	57.0
Multidisciplinary/ interdisciplinary studies	380	160	220	57.9
Classical and ancient studies	126	60	66	52.4
Interdisciplinary leadership/ leadership studies	110	41	69	62.7
Multidisciplinary/ interdisciplinary studies nec	144	59	85	59.0
Public administration and social services	505	143	362	71.7
Public administration	169	75	94	55.6
Social work and human services	336	68	268	79.8
Non-science and engineering, other	689	328	361	52.4
Architecture and architectural studies	118	56	62	52.5
City/ urban, community, and regional planning	103	51	52	50.5
Family, consumer, and human sciences	132	27	105	79.5
Homeland security and protective services	138	73	65	47.1
Law/ legal studies and research	73	48	25	34.2
Parks, recreation, leisure, fitness, and sport studies and management	93	55	38	40.9
Other non-science and engineering nec	32	18	14	43.8

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

^a Total includes doctorate recipients who did not report sex.**Note(s):**

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported		
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race			
All fields	57,862	19,393	35,566	3,449	115	3,828	2,725	23,057	1,296	459	637	
Science and engineering	45,973	16,807	27,010	2,593	68	3,248	1,658	17,585	1,060	344	454	
Agricultural sciences and natural resources	1,278	454	778	63	2	46	34	578	27	9	19	
Agricultural, animal, plant, and veterinary sciences	856	335	497	32	0	32	25	372	16	7	13	
Agronomy and crop science	76	36	38	1	0	2	0	34	0	1	0	
Animal sciences	173	59	109	9	0	3	4	86	0	3	4	
Food science and technology	178	105	65	2	0	8	7	43	3	0	2	
Plant sciences	149	57	90	9	0	8	2	63	4	1	3	
Soil sciences	86	18	65	3	0	4	5	48	3	1	1	
Veterinary biomedical and clinical sciences	93	28	61	2	0	2	2	54	1	0	0	
Agricultural, animal, plant, and veterinary sciences nec	101	32	69	6	0	5	5	44	5	1	3	
Natural resources and conservation	422	119	281	31	2	14	9	206	11	2	6	
Environmental science	132	48	79	13	0	3	4	54	2	1	2	
Environmental/ natural resources management and policy	63	20	40	5	2	4	1	26	2	0	0	
Forestry	69	28	40	2	0	3	3	28	2	0	2	
Natural resources conservation and research	81	17	52	4	0	3	1	41	2	0	1	
Natural resources and conservation nec	77	6	70	7	0	1	0	57	3	1	1	
Biological and biomedical sciences	9,724	2,352	7,004	718	11	908	342	4,549	328	74	74	
Biochemistry, biophysics, and molecular biology	1,509	426	1,031	117	0	139	39	661	53	10	12	
Biochemistry	440	118	307	27	0	39	6	207	19	2	7	
Biochemistry and molecular biology	311	93	203	25	0	31	15	119	12	0	1	
Biophysics	254	82	163	14	0	19	4	120	3	2	1	
Molecular biology	268	61	202	25	0	24	5	133	9	3	3	
Biochemistry, biophysics, and molecular biology nec	236	72	156	26	0	26	9	82	10	3	0	
Bioinformatics, biostatistics, and computational biology	735	301	411	21	0	102	19	245	16	7	1	
Bioinformatics	181	71	105	7	0	27	5	60	3	3	0	
Biostatistics	283	137	132	6	0	35	4	80	6	1	0	
Computational biology	151	43	104	4	0	25	2	65	5	3	0	
Bioinformatics, biostatistics, and computational biology nec	120	50	70	4	0	15	8	40	2	0	1	
Biological and biomedical sciences, general	907	216	623	72	0	56	42	417	21	6	9	
Biology/ biological sciences, general	522	132	349	35	0	35	23	239	7	3	7	
Biomedical sciences, general	385	84	274	37	0	21	19	178	14	3	2	
Cell/ cellular biology and anatomy	761	182	546	74	0	79	22	343	22	4	2	
Cell/ cellular and molecular biology	583	140	430	59	0	64	22	265	18	1	1	

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported		
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race			
Developmental biology and embryology	96	26	69	10	0	12	0	43	2	2	0	
Cell/ cellular biology and anatomy nec	82	16	47	5	0	3	0	35	2	1	1	
Ecology, evolutionary biology, and epidemiology	1,144	214	907	68	2	85	48	635	46	13	10	
Ecology	246	30	209	13	0	7	3	162	11	6	7	
Ecology and evolutionary biology	277	50	226	23	1	8	5	171	15	2	1	
Epidemiology	382	83	290	18	1	57	31	164	14	3	2	
Epidemiology and biostatistics	39	8	30	3	0	6	5	15	1	0	0	
Evolutionary biology	84	22	61	9	0	4	1	44	1	2	0	
Ecology, evolutionary biology, and epidemiology nec	116	21	91	2	0	3	3	79	4	0	0	
Genetics and genomics	477	100	359	33	2	51	13	241	15	0	4	
Genetics, general	128	23	96	6	0	13	6	62	7	0	2	
Genome sciences and genomics	116	25	89	9	0	16	2	58	3	0	1	
Human/ medical genetics	71	11	60	8	1	9	0	39	3	0	0	
Molecular genetics	77	14	58	7	0	6	1	43	1	0	0	
Genetics and genomics nec	85	27	56	3	1	7	4	39	1	0	1	
Microbiology and immunology	1,092	214	845	94	2	108	48	533	42	12	6	
Immunology	342	72	263	24	0	49	11	156	14	6	3	
Microbiology and immunology	271	51	212	20	2	29	15	134	8	2	2	
Microbiology, general	275	53	212	27	0	16	15	139	12	2	1	
Virology	111	20	88	12	0	11	4	57	3	1	0	
Microbiology and immunology nec	93	18	70	11	0	3	3	47	5	1	0	
Neurobiology and neurosciences	1,200	218	947	112	3	113	45	599	52	10	13	
Cognitive neuroscience	114	23	90	9	0	9	2	67	1	1	1	
Neurobiology	68	8	60	8	0	7	2	35	3	1	4	
Neuroscience	877	143	705	86	2	84	38	436	43	8	8	
Neurobiology and neurosciences nec	141	44	92	9	1	13	3	61	5	0	0	
Pharmacology and toxicology	409	93	295	27	0	46	27	173	16	3	3	
Pharmacology	186	43	133	8	0	27	10	80	4	2	2	
Toxicology	95	27	62	10	0	6	7	33	4	1	1	
Pharmacology and toxicology nec	128	23	100	9	0	13	10	60	8	0	0	
Physiology, oncology, and cancer biology	821	198	580	53	2	83	26	376	29	2	9	
Biomechanics	85	27	58	7	1	5	0	41	3	1	0	
Exercise physiology and kinesiology	103	10	91	3	0	1	3	75	5	0	4	
Oncology and cancer biology	336	90	231	31	1	52	11	120	11	1	4	

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported		
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race			
Physiology, general	78	16	56	5	0	5	3	42	1	0	0	
Physiology, oncology, and cancer biology nec	219	55	144	7	0	20	9	98	9	0	1	
Biological and biomedical sciences, other	669	190	460	47	0	46	13	326	16	7	5	
Botany and plant biology	59	22	35	4	0	3	1	26	1	0	0	
Entomology	124	30	91	8	0	3	1	73	2	1	3	
Plant pathology and phytopathology	105	48	53	6	0	3	0	43	1	0	0	
Plant physiology and biology nec	67	15	52	6	0	7	3	33	2	1	0	
Zoology and animal biology	88	10	78	8	0	2	0	61	4	1	2	
Biological and biomedical sciences nec	226	65	151	15	0	28	8	90	6	4	0	
Computer and information sciences	2,297	1,337	820	47	1	190	44	475	21	19	23	
Computer science	1,605	962	554	33	1	129	19	333	13	14	12	
Computer science	1,605	962	554	33	1	129	19	333	13	14	12	
Computer and information sciences, other	692	375	266	14	0	61	25	142	8	5	11	
Artificial intelligence	211	136	68	1	0	20	3	40	1	1	2	
Computer and information sciences, general	108	71	26	1	0	6	1	13	1	1	3	
Computer systems networking and telecommunications	91	54	30	2	0	4	4	17	0	1	2	
Informatics and information technology	105	46	53	5	0	11	8	26	1	0	2	
Information sciences/ studies	119	40	63	4	0	15	8	29	3	2	2	
Computer and information sciences nec	58	28	26	1	0	5	1	17	2	0	0	
Engineering	10,724	5,646	4,542	401	6	732	210	2,875	175	60	83	
Aerospace, aeronautical, astronautical, and space engineering	584	226	322	28	1	34	12	222	12	7	6	
Aerospace, aeronautical, astronautical, and space engineering, general	235	85	131	8	0	12	5	92	6	3	5	
Mechanical and aerospace engineering	207	96	110	12	0	14	6	72	2	3	1	
Aerospace, aeronautical, astronautical, and space engineering nec	142	45	81	8	1	8	1	58	4	1	0	
Biological, biomedical, and biosystems engineering	1,313	392	860	79	2	178	27	504	48	6	16	
Bioengineering and biomedical engineering	1,222	353	810	74	2	170	27	471	45	6	15	
Biological/ biosystems engineering and biomedical technology	91	39	50	5	0	8	0	33	3	0	1	
Chemical and petroleum engineering	1,245	594	600	40	0	96	26	396	27	5	10	
Chemical and biomolecular engineering	211	87	121	10	0	18	5	79	6	1	2	
Chemical engineering	862	395	425	25	0	68	17	288	17	3	7	
Petroleum engineering	103	77	22	1	0	4	3	12	1	1	0	
Chemical and petroleum engineering nec	69	35	32	4	0	6	1	17	3	0	1	
Civil, environmental, and transportation engineering	1,279	769	444	55	1	58	25	279	14	3	9	
Civil engineering	342	214	94	8	1	12	7	57	1	2	6	

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents								Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino						
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Civil and environmental engineering	505	270	215	29	0	26	9	139	10	1	1
Environmental/ environmental health engineering	58	28	25	4	0	4	2	14	0	0	1
Geotechnical and geoenvironmental engineering	82	57	24	1	0	1	1	21	0	0	0
Structural engineering	133	90	43	10	0	8	0	24	1	0	0
Transportation and highway engineering	81	62	18	3	0	5	1	9	0	0	0
Civil, environmental, and transportation engineering nec	78	48	25	0	0	2	5	15	2	0	1
Electrical and computer engineering	2,119	1,423	586	43	0	120	26	358	15	14	10
Computer engineering	256	184	62	3	0	13	3	40	2	0	1
Electrical and computer engineering	1,359	915	400	33	0	84	20	240	12	7	4
Electrical and electronics engineering	436	279	102	6	0	22	3	59	1	6	5
Electrical and computer engineering nec	68	45	22	1	0	1	0	19	0	1	0
Engineering technologies	402	272	123	11	0	26	7	70	6	2	1
Electrical and electronic engineering technologies	71	57	12	0	0	3	1	7	1	0	0
Electromechanical technologies	90	48	41	2	0	8	2	27	0	1	1
Environmental control technologies	70	50	19	2	0	7	1	8	1	0	0
Engineering technologies nec	171	117	51	7	0	8	3	28	4	1	0
Industrial engineering and operations research	627	363	233	14	0	38	14	154	2	3	8
Industrial engineering	174	115	48	2	0	9	3	31	0	2	1
Industrial and systems engineering	134	81	53	4	0	5	4	35	1	0	4
Operations research	186	117	58	3	0	13	2	38	1	0	1
Systems and manufacturing engineering	133	50	74	5	0	11	5	50	0	1	2
Materials and mining engineering	912	447	417	37	0	58	21	274	18	3	6
Materials engineering	102	59	41	3	0	3	2	27	1	2	3
Materials science and engineering	762	364	356	33	0	53	18	234	15	1	2
Materials and mining engineering nec	48	24	20	1	0	2	1	13	2	0	1
Mechanical engineering	1,552	840	634	68	1	82	29	412	24	10	8
Mechanical engineering, general	1,472	801	596	65	1	77	27	387	23	9	7
Mechanical engineering nec	80	39	38	3	0	5	2	25	1	1	1
Engineering, other	691	320	323	26	1	42	23	206	9	7	9
Engineering mechanics, physics, and science	105	63	38	3	0	7	1	26	1	0	0
Nanotechnology	47	29	17	0	0	7	0	9	1	0	0
Nuclear engineering	162	46	111	10	0	9	2	76	5	4	5
Engineering nec	377	182	157	13	1	19	20	95	2	3	4
Geosciences, atmospheric, and ocean sciences	1,216	389	773	58	4	57	15	597	29	5	8

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
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Geological and earth sciences	682	235	412	35	2	33	10	317	10	2	3	
Geochemistry	47	11	36	5	0	3	0	26	2	0	0	
Geology	91	21	66	4	2	4	2	52	1	0	1	
Geology/ earth science, general	142	51	71	3	0	6	2	55	2	1	2	
Geophysics and seismology	105	57	42	4	0	5	3	29	1	0	0	
Hydrology and water resources science	96	37	58	7	0	5	1	45	0	0	0	
Geological and earth sciences nec	201	58	139	12	0	10	2	110	4	1	0	
Ocean, marine, and atmospheric sciences	534	154	361	23	2	24	5	280	19	3	5	
Atmospheric sciences and meteorology, general	111	55	53	1	0	2	1	45	2	0	2	
Atmospheric sciences and meteorology nec	123	22	98	3	1	5	2	82	2	1	2	
Climatology, atmospheric chemistry/ physics	67	18	46	6	1	7	0	30	2	0	0	
Marine biology and biological oceanography	92	14	76	5	0	6	1	58	6	0	0	
Marine sciences	66	17	43	5	0	1	1	32	4	0	0	
Oceanography, chemical/ physical	75	28	45	3	0	3	0	33	3	2	1	
Health sciences	2,746	623	1,953	162	9	199	240	1,199	60	25	59	
Nursing and nursing science	638	79	517	22	4	37	76	348	12	4	14	
Nursing education	84	3	79	2	1	1	8	64	2	1	0	
Nursing science	396	46	336	17	2	30	51	223	7	2	4	
Nursing specialties and practice	158	30	102	3	1	6	17	61	3	1	10	
Pharmacy and pharmaceutical sciences	442	211	204	23	0	28	11	130	7	2	3	
Medicinal and pharmaceutical chemistry	74	26	47	2	0	8	0	37	0	0	0	
Pharmaceutical sciences	262	132	119	15	0	14	8	71	7	2	2	
Pharmacy, pharmaceutical sciences, and administration nec	106	53	38	6	0	6	3	22	0	0	1	
Public health	766	165	578	60	3	75	106	289	23	12	10	
Environmental health	70	18	50	7	0	6	2	32	0	2	1	
Health services research	105	28	73	6	0	10	11	41	4	0	1	
Health/ medical physics	72	24	45	8	0	7	1	27	1	1	0	
Public health education and promotion	112	17	93	4	0	10	27	42	7	1	2	
Public health, general	203	47	149	19	0	23	33	59	4	7	4	
Public health nec	204	31	168	16	3	19	32	88	7	1	2	
Health sciences, other	900	168	654	57	2	59	47	432	18	7	32	
Communication disorders sciences	109	18	79	10	0	4	4	56	2	0	3	
Exercise science and kinesiology	90	25	57	4	0	1	2	44	2	2	2	
Health sciences, general	61	7	47	3	0	2	5	35	1	0	1	

TABLE 3-3
Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents								Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino						
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Marriage and family therapy/ counseling	54	2	45	7	1	1	3	26	1	1	5
Medical clinical sciences	67	11	51	4	0	9	2	27	1	1	7
Medical, biomedical, and health informatics	59	18	37	3	0	12	1	19	1	0	1
Mental health, counseling, and therapy services and sciences	100	2	82	8	0	4	13	48	5	1	3
Rehabilitation and therapeutic sciences	159	32	126	10	0	8	5	93	4	2	4
Health sciences nec	201	53	130	8	1	18	12	84	1	0	6
Mathematics and statistics	2,056	1,049	929	64	0	135	22	648	41	11	8
Applied mathematics	490	239	240	21	0	39	9	157	11	1	2
Applied mathematics, general	267	126	135	12	0	24	3	88	6	0	2
Computational and applied mathematics	165	84	78	5	0	9	4	57	3	0	0
Applied mathematics nec	58	29	27	4	0	6	2	12	2	1	0
Mathematics	890	351	495	31	0	51	6	373	22	8	4
Algebra and number theory	71	26	43	6	0	6	1	27	2	0	1
Mathematics, general	687	280	370	18	0	38	2	285	18	6	3
Mathematics nec	132	45	82	7	0	7	3	61	2	2	0
Statistics	676	459	194	12	0	45	7	118	8	2	2
Applied statistics, general	58	44	12	2	0	4	1	3	2	0	0
Mathematics and statistics	70	43	25	2	0	3	1	15	2	1	1
Statistics	484	323	143	7	0	36	3	92	3	1	1
Statistics nec	64	49	14	1	0	2	2	8	1	0	0
Multidisciplinary/ interdisciplinary sciences	1,704	813	826	75	2	110	62	526	24	8	19
Interdisciplinary computer sciences	583	332	230	17	0	49	11	140	9	2	2
Computer science and engineering	188	125	52	2	0	13	3	31	2	0	1
Electrical engineering and computer science	250	136	108	11	0	19	6	66	4	2	0
Interdisciplinary computer sciences nec	145	71	70	4	0	17	2	43	3	0	1
Multidisciplinary/ interdisciplinary sciences, other	1,121	481	596	58	2	61	51	386	15	6	17
Behavioral and cognitive sciences	117	32	82	9	0	5	5	58	2	1	2
Computational science and engineering	132	71	51	2	0	5	9	33	1	1	0
Data mining and machine learning	234	165	65	1	0	16	1	39	4	2	2
Data science and data analytics	86	46	36	4	0	6	5	18	1	0	2
History/ philosophy of science, technology, and society	68	15	52	7	1	5	3	33	1	0	2
Nanoscience/ nanoscale science	33	17	16	1	0	2	2	10	1	0	0
Nutrition sciences	128	32	92	9	1	10	5	63	3	1	0
Multidisciplinary/ interdisciplinary sciences nec	323	103	202	25	0	12	21	132	2	1	9

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported		
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Physical sciences	5,443	2,093	3,142	296	6	343	99	2,183	111	48	56	
Astronomy and astrophysics	323	98	215	23	0	19	4	153	11	2	3	
Astronomy	107	26	78	6	0	8	0	60	3	0	1	
Astrophysics	133	39	88	11	0	5	2	63	4	2	1	
Astronomy and astrophysics nec	83	33	49	6	0	6	2	30	4	0	1	
Chemistry	2,731	928	1,711	174	6	171	62	1,177	56	29	36	
Analytical chemistry	344	116	225	29	1	20	13	157	4	0	1	
Chemical biology	191	37	154	21	0	21	5	97	7	2	1	
Chemistry, general	611	203	339	30	3	28	12	218	7	14	27	
Inorganic chemistry	266	80	183	19	0	14	6	133	10	1	0	
Organic chemistry	566	205	355	29	0	42	13	251	13	6	1	
Physical chemistry	294	110	182	17	0	19	2	136	7	0	1	
Polymer chemistry	81	27	52	6	0	5	1	39	1	0	0	
Theoretical and computational chemistry	202	93	103	9	0	17	5	65	2	5	0	
Chemistry nec	176	57	118	14	2	5	5	81	5	1	5	
Materials sciences	389	191	192	13	0	25	7	135	8	4	0	
Materials science	188	96	88	7	0	10	3	64	2	2	0	
Materials chemistry and materials sciences nec	201	95	104	6	0	15	4	71	6	2	0	
Physics	2,000	876	1,024	86	0	128	26	718	36	13	17	
Applied physics	124	51	62	5	0	8	3	42	2	2	0	
Atomic/ molecular physics	103	38	64	6	0	6	1	44	6	0	1	
Condensed matter and materials physics	365	191	169	11	0	35	9	105	7	1	1	
Elementary particle physics	164	75	86	2	0	9	0	72	2	0	1	
Nuclear physics	91	32	58	5	0	5	0	46	0	1	1	
Optics/ optical sciences	135	82	48	2	0	6	1	36	1	0	2	
Physics and astronomy	280	110	162	15	0	14	2	122	6	2	1	
Physics, general	430	176	199	20	0	24	2	134	4	6	9	
Plasma and high-temperature physics	67	16	51	6	0	8	2	30	4	1	0	
Theoretical and mathematical physics	117	47	69	8	0	9	0	48	3	0	1	
Physics and physical sciences nec	124	58	56	6	0	4	6	39	1	0	0	
Psychology	3,793	335	3,178	380	12	237	298	2,005	141	39	66	
Clinical psychology	1,203	41	1,078	128	6	90	69	703	50	10	22	
Clinical child psychology	53	1	51	8	0	5	3	34	1	0	0	
Clinical psychology	1,150	40	1,027	120	6	85	66	669	49	10	22	

TABLE 3-3
Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents									Ethnicity not reported
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Counseling and applied psychology	1,293	121	1,099	141	3	66	155	654	47	16	17	
Applied behavior analysis	49	6	42	9	0	4	0	25	2	0	2	
Counseling psychology	366	28	316	45	1	17	51	173	16	9	4	
Educational psychology	247	43	189	17	1	13	30	119	2	1	6	
Industrial and organizational psychology	171	19	141	25	0	7	15	85	8	1	0	
School psychology	223	12	201	20	0	15	26	128	8	3	1	
Counseling and applied psychology nec	237	13	210	25	1	10	33	124	11	2	4	
Research and experimental psychology	803	126	655	64	2	60	36	447	26	9	11	
Behavioral neuroscience	82	5	67	8	0	3	3	52	1	0	0	
Cognitive psychology and psycholinguistics	111	19	92	6	0	13	2	63	5	1	2	
Developmental and child psychology	103	18	84	13	0	6	3	55	3	3	1	
Experimental psychology	111	20	89	7	0	6	2	74	0	0	0	
Social psychology	189	25	162	17	0	16	12	105	9	2	1	
Research and experimental psychology nec	207	39	161	13	2	16	14	98	8	3	7	
Psychology, other	494	47	346	47	1	21	38	201	18	4	16	
Human development	155	25	115	11	0	6	11	76	6	0	5	
Psychology, general	283	20	179	24	1	12	24	96	8	3	11	
Psychology nec	56	2	52	12	0	3	3	29	4	1	0	
Social sciences	4,992	1,716	3,065	329	15	291	292	1,950	103	46	39	
Anthropology	379	66	296	39	4	21	9	205	7	8	3	
Anthropology, general	99	9	75	8	1	4	0	50	4	5	3	
Cultural anthropology	161	43	116	17	1	12	7	76	1	2	0	
Physical and biological anthropology	69	8	61	6	1	4	0	48	1	1	0	
Anthropology nec	50	6	44	8	1	1	2	31	1	0	0	
Area, ethnic, cultural, gender, and group studies	452	108	316	59	8	32	47	152	7	7	4	
Area studies	266	81	168	21	0	15	12	112	2	3	3	
Ethnic studies	103	12	84	28	5	9	28	8	3	2	1	
Area, ethnic, cultural, gender, and group studies nec	83	15	64	10	3	8	7	32	2	2	0	
Economics	1,393	841	489	45	0	72	17	330	14	8	3	
Agricultural economics	90	63	26	2	0	2	2	19	1	0	0	
Applied economics	130	72	57	7	0	10	4	35	1	0	0	
Development economics and international development	41	24	17	1	0	3	3	10	0	0	0	
Econometrics and quantitative economics	202	171	28	2	0	5	1	17	1	2	0	
Economics, general	815	452	308	28	0	48	6	209	9	6	2	

TABLE 3-3
Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

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Environmental/ natural resource economics	62	30	30	2	0	2	0	24	1	0	1	
Economics nec	53	29	23	3	0	2	1	16	1	0	0	
Political science and government	665	196	438	42	0	39	30	298	12	6	11	
Political science and government, general	556	170	356	34	0	36	16	247	11	3	9	
Political science and government nec	109	26	82	8	0	3	14	51	1	3	2	
Public policy analysis	407	77	315	29	0	25	77	164	14	4	2	
Education policy analysis	111	16	94	10	0	4	16	54	7	2	1	
Health policy analysis	45	8	36	2	0	5	3	23	2	0	1	
Public policy analysis, general	113	31	76	6	0	9	15	44	2	0	0	
Public policy nec	138	22	109	11	0	7	43	43	3	2	0	
Sociology, demography, and population studies	627	113	494	58	0	35	58	320	16	2	5	
Sociology, general	556	101	436	51	0	30	47	288	14	1	5	
Sociology, demography, and population studies nec	71	12	58	7	0	5	11	32	2	1	0	
Social sciences, other	1,069	315	717	57	3	67	54	481	33	11	11	
Applied linguistics	70	34	32	1	0	7	1	22	0	1	0	
Archeology	91	19	72	5	1	2	0	59	4	1	0	
Criminology	135	16	115	12	0	9	15	69	9	0	1	
Geography and cartography	213	71	132	7	2	13	11	91	4	3	1	
International relations and national security studies	115	36	74	6	0	7	4	52	2	1	2	
Linguistics	194	76	107	7	0	8	1	84	3	1	3	
Social sciences nec	251	63	185	19	0	21	22	104	11	4	4	
Non-science and engineering	11,889	2,586	8,556	856	47	580	1,067	5,472	236	115	183	
Business	1,510	742	663	38	2	122	65	392	15	12	17	
Business administration and management	493	208	223	13	1	37	34	121	4	6	7	
Business management and administration	312	129	136	5	1	24	16	76	2	5	7	
Organizational leadership	68	8	49	8	0	3	12	23	2	1	0	
Business administration and management nec	113	71	38	0	0	10	6	22	0	0	0	
Business, other	1,017	534	440	25	1	85	31	271	11	6	10	
Accounting and accounting-related	163	77	81	0	0	18	3	55	1	1	3	
Finance and financial management	219	132	78	5	0	22	2	46	2	0	1	
Management information systems	82	56	24	1	0	9	2	12	0	0	0	
Management sciences	88	46	41	3	0	8	2	22	3	1	2	
Marketing	145	85	52	2	0	12	2	33	2	0	1	
Organizational behavior studies	100	32	66	6	0	4	7	46	0	3	0	

TABLE 3-3
Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

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Business nec	220	106	98	8	1	12	13	57	3	1	3
Education	3,988	461	3,291	356	25	180	594	1,967	76	26	67
Education leadership and administration	1,179	78	1,051	118	6	47	271	553	25	9	22
Educational leadership and administration, general	501	31	444	45	0	17	112	251	7	3	9
Higher education and community college administration	452	28	412	50	6	22	101	205	14	4	10
Education leadership and administration nec	226	19	195	23	0	8	58	97	4	2	3
Education research	1,253	188	985	92	6	59	162	619	22	9	16
Curriculum and instruction	413	60	330	32	2	12	43	224	3	6	8
Educational assessment, evaluation, and research methods	203	46	143	16	2	12	12	97	3	1	0
Educational/ instructional technology and media design	199	48	137	9	0	16	23	82	4	2	1
Higher education evaluation and research	62	4	56	7	1	3	14	30	0	0	1
Student counseling and personnel services	283	20	241	25	0	8	58	137	8	0	5
Education research nec	93	10	78	3	1	8	12	49	4	0	1
Teacher education and teaching fields	1,098	159	885	96	10	50	106	582	18	3	20
Adult, continuing, and workforce education and development	61	5	47	3	1	2	12	28	1	0	0
Bilingual, multilingual, and multicultural education	72	6	62	18	2	8	13	18	2	0	1
Mathematics teacher education	73	19	52	4	1	5	6	32	2	0	2
Music teacher education	78	8	70	9	0	4	4	51	0	0	2
Special education and teaching	246	31	200	16	2	8	22	142	5	2	3
STEM educational methods	75	9	62	3	0	6	7	45	1	0	0
Teacher education, science and engineering	55	4	47	2	0	2	7	35	0	0	1
Teacher education, specific levels and methods	202	30	169	16	3	8	24	111	2	0	5
Teacher education, specific subject areas	236	47	176	25	1	7	11	120	5	1	6
Education, other	458	36	370	50	3	24	55	213	11	5	9
Education, general	324	31	252	36	1	19	31	147	10	5	3
Education nec	134	5	118	14	2	5	24	66	1	0	6
Humanities	3,358	621	2,536	268	13	130	149	1,805	74	41	56
English language and literature, letters	1,039	124	870	59	7	41	55	646	29	14	19
American literature (United States)	113	14	98	9	0	1	15	71	2	0	0
Creative writing	103	6	95	3	0	7	7	73	4	0	1
English language and literature, general	398	48	322	19	5	18	16	232	14	10	8
English literature (British and Commonwealth)	141	23	115	4	0	5	0	101	2	2	1
Rhetoric, composition, and writing studies	199	22	174	7	2	5	14	131	5	2	8
English language and literature nec	85	11	66	17	0	5	3	38	2	0	1

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	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		
Foreign languages, literatures, and linguistics	571	205	322	86	2	15	10	195	8	1	5	
Comparative literature	129	44	70	6	0	3	2	55	4	0	0	
Hispanic/ Latin American languages, literatures, and linguistics	97	44	51	30	0	1	3	16	0	1	0	
Romance languages, literatures, and linguistics	97	32	57	8	0	3	4	41	1	0	0	
Spanish language and literature	97	25	63	37	0	0	0	22	1	0	3	
Foreign languages, literatures, and linguistics nec	151	60	81	5	2	8	1	61	2	0	2	
History	733	120	578	66	2	29	36	412	18	7	8	
American history (United States)	240	13	225	13	2	7	23	166	10	2	2	
European history	109	16	93	9	0	2	1	77	2	1	1	
History, general	175	37	110	17	0	7	6	73	2	1	4	
History, regional focus	139	45	91	19	0	11	4	49	4	3	1	
History nec	70	9	59	8	0	2	2	47	0	0	0	
Philosophy and religious studies	619	107	482	41	2	27	22	347	15	16	12	
Philosophy	415	82	312	33	1	13	14	219	10	12	10	
Religion/ religious studies	143	15	121	5	0	8	6	96	2	2	2	
Philosophy and religious studies nec	61	10	49	3	1	6	2	32	3	2	0	
Humanities, other	396	65	284	16	0	18	26	205	4	3	12	
Bible/ biblical studies	99	19	74	3	0	4	2	62	2	0	1	
Humanities and humanistic studies	98	22	72	9	0	2	7	49	0	0	5	
Theological and ministerial studies	199	24	138	4	0	12	17	94	2	3	6	
Visual and performing arts	824	185	575	50	2	38	22	423	16	9	15	
Performing arts	487	96	340	30	1	18	14	251	12	6	8	
Dance, drama, theatre arts, and stagecraft	83	11	66	4	0	3	3	47	1	4	4	
Music performance	122	27	73	9	1	6	2	50	3	0	2	
Music theory and composition	94	27	61	5	0	3	4	42	5	1	1	
Musicology and ethnomusicology	109	13	93	10	0	3	3	74	2	0	1	
Music nec	79	18	47	2	0	3	2	38	1	1	0	
Visual arts, media studies, and design	337	89	235	20	1	20	8	172	4	3	7	
Art history, criticism, and conservation	185	39	140	8	0	12	5	105	2	2	6	
Film, cinema, and media studies	84	22	59	7	0	2	2	47	1	0	0	
Visual arts, media studies, and design nec	68	28	36	5	1	6	1	20	1	1	1	
Other non-science and engineering	2,209	577	1,491	144	5	110	237	885	55	27	28	
Communications and journalism	635	152	440	38	1	32	55	288	17	6	3	
Applied communication, advertising, and public relations	87	19	62	6	0	6	8	38	3	1	0	

TABLE 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023

(Number)

Field of doctorate	All doctorate recipients ^a	Temporary visa holders	U.S. citizens and permanent residents								Ethnicity not reported
			Total	Hispanic or Latino	Not Hispanic or Latino						
					American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Communication and media studies	167	38	123	9	0	12	23	75	3	1	0
Communication, general	194	37	141	11	0	5	10	107	5	1	2
Mass communication/ media studies	94	33	52	2	0	1	3	39	4	2	1
Communications and journalism nec	93	25	62	10	1	8	11	29	2	1	0
Multidisciplinary/ interdisciplinary studies	380	72	281	28	2	15	34	180	4	5	13
Classical and ancient studies	126	28	91	6	0	3	3	76	2	1	0
Interdisciplinary leadership/ leadership studies	110	8	87	7	0	4	20	44	2	0	10
Multidisciplinary/ interdisciplinary studies nec	144	36	103	15	2	8	11	60	0	4	3
Public administration and social services	505	99	383	41	1	25	96	193	17	5	5
Public administration	169	62	105	9	0	8	26	53	8	0	1
Social work and human services	336	37	278	32	1	17	70	140	9	5	4
Non-science and engineering, other	689	254	387	37	1	38	52	224	17	11	7
Architecture and architectural studies	118	67	46	4	0	6	1	29	2	1	3
City/ urban, community, and regional planning	103	49	48	6	0	3	9	24	3	3	0
Family, consumer, and human sciences	132	35	91	7	0	11	7	57	5	2	2
Homeland security and protective services	138	26	94	7	0	8	24	51	3	1	0
Law/ legal studies and research	73	48	20	2	0	3	2	8	2	2	1
Parks, recreation, leisure, fitness, and sport studies and management	93	23	66	8	0	6	6	42	1	2	1
Other non-science and engineering nec	32	6	22	3	1	1	3	13	1	0	0

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

^a All doctorate recipients includes doctorate recipients who did not report citizenship status.**Note(s):**Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."**Source(s):**

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

TABLE 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2023

(Percent)

Field of doctorate	All U.S. citizens and permanent residents (number)	Total	U.S. citizen or permanent resident							Ethnicity not reported
			Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported	
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race		
All fields	35,566	100.0	9.7	0.3	10.8	7.7	64.8	3.6	1.3	1.8
Science and engineering	27,010	100.0	9.6	0.3	12.0	6.1	65.1	3.9	1.3	1.7
Agricultural sciences and natural resources	778	100.0	8.1	0.3	5.9	4.4	74.3	3.5	1.2	2.4
Agricultural, animal, plant, and veterinary sciences	497	100.0	6.4	0.0	6.4	5.0	74.8	3.2	1.4	2.6
Natural resources and conservation	281	100.0	11.0	0.7	5.0	3.2	73.3	3.9	0.7	2.1
Biological and biomedical sciences	7,004	100.0	10.3	0.2	13.0	4.9	64.9	4.7	1.1	1.1
Biochemistry, biophysics, and molecular biology	1,031	100.0	11.3	0.0	13.5	3.8	64.1	5.1	1.0	1.2
Bioinformatics, biostatistics, and computational biology	411	100.0	5.1	0.0	24.8	4.6	59.6	3.9	1.7	0.2
Biological and biomedical sciences, general	623	100.0	11.6	0.0	9.0	6.7	66.9	3.4	1.0	1.4
Cell/ cellular biology and anatomy	546	100.0	13.6	0.0	14.5	4.0	62.8	4.0	0.7	0.4
Ecology, evolutionary biology, and epidemiology	907	100.0	7.5	0.2	9.4	5.3	70.0	5.1	1.4	1.1
Genetics and genomics	359	100.0	9.2	0.6	14.2	3.6	67.1	4.2	0.0	1.1
Microbiology and immunology	845	100.0	11.1	0.2	12.8	5.7	63.1	5.0	1.4	0.7
Neurobiology and neurosciences	947	100.0	11.8	0.3	11.9	4.8	63.3	5.5	1.1	1.4
Pharmacology and toxicology	295	100.0	9.2	0.0	15.6	9.2	58.6	5.4	1.0	1.0
Physiology, oncology, and cancer biology	580	100.0	9.1	0.3	14.3	4.5	64.8	5.0	0.3	1.6
Biological and biomedical sciences, other	460	100.0	10.2	0.0	10.0	2.8	70.9	3.5	1.5	1.1
Computer and information sciences	820	100.0	5.7	0.1	23.2	5.4	57.9	2.6	2.3	2.8
Computer science	554	100.0	6.0	0.2	23.3	3.4	60.1	2.3	2.5	2.2
Computer and information sciences, other	266	100.0	5.3	0.0	22.9	9.4	53.4	3.0	1.9	4.1
Engineering	4,542	100.0	8.8	0.1	16.1	4.6	63.3	3.9	1.3	1.8
Aerospace, aeronautical, astronautical, and space engineering	322	100.0	8.7	0.3	10.6	3.7	68.9	3.7	2.2	1.9
Biological, biomedical, and biosystems engineering	860	100.0	9.2	0.2	20.7	3.1	58.6	5.6	0.7	1.9
Chemical and petroleum engineering	600	100.0	6.7	0.0	16.0	4.3	66.0	4.5	0.8	1.7
Civil, environmental, and transportation engineering	444	100.0	12.4	0.2	13.1	5.6	62.8	3.2	0.7	2.0
Electrical and computer engineering	586	100.0	7.3	0.0	20.5	4.4	61.1	2.6	2.4	1.7
Engineering technologies	123	100.0	8.9	0.0	21.1	5.7	56.9	4.9	1.6	0.8
Industrial engineering and operations research	233	100.0	6.0	0.0	16.3	6.0	66.1	0.9	1.3	3.4
Materials and mining engineering	417	100.0	8.9	0.0	13.9	5.0	65.7	4.3	0.7	1.4
Mechanical engineering	634	100.0	10.7	0.2	12.9	4.6	65.0	3.8	1.6	1.3
Engineering, other	323	100.0	8.0	0.3	13.0	7.1	63.8	2.8	2.2	2.8
Geosciences, atmospheric, and ocean sciences	773	100.0	7.5	0.5	7.4	1.9	77.2	3.8	0.6	1.0
Geological and earth sciences	412	100.0	8.5	0.5	8.0	2.4	76.9	2.4	0.5	0.7
Ocean, marine, and atmospheric sciences	361	100.0	6.4	0.6	6.6	1.4	77.6	5.3	0.8	1.4

TABLE 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2023

(Percent)

Field of doctorate	All U.S. citizens and permanent residents (number)	Total	U.S. citizen or permanent resident							
			Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported	Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race		
Health sciences	1,953	100.0	8.3	0.5	10.2	12.3	61.4	3.1	1.3	3.0
Nursing and nursing science	517	100.0	4.3	0.8	7.2	14.7	67.3	2.3	0.8	2.7
Pharmacy and pharmaceutical sciences	204	100.0	11.3	0.0	13.7	5.4	63.7	3.4	1.0	1.5
Public health	578	100.0	10.4	0.5	13.0	18.3	50.0	4.0	2.1	1.7
Health sciences, other	654	100.0	8.7	0.3	9.0	7.2	66.1	2.8	1.1	4.9
Mathematics and statistics	929	100.0	6.9	0.0	14.5	2.4	69.8	4.4	1.2	0.9
Applied mathematics	240	100.0	8.8	0.0	16.3	3.8	65.4	4.6	0.4	0.8
Mathematics	495	100.0	6.3	0.0	10.3	1.2	75.4	4.4	1.6	0.8
Statistics	194	100.0	6.2	0.0	23.2	3.6	60.8	4.1	1.0	1.0
Multidisciplinary/ interdisciplinary sciences	826	100.0	9.1	0.2	13.3	7.5	63.7	2.9	1.0	2.3
Interdisciplinary computer sciences	230	100.0	7.4	0.0	21.3	4.8	60.9	3.9	0.9	0.9
Multidisciplinary/ interdisciplinary sciences, other	596	100.0	9.7	0.3	10.2	8.6	64.8	2.5	1.0	2.9
Physical sciences	3,142	100.0	9.4	0.2	10.9	3.2	69.5	3.5	1.5	1.8
Astronomy and astrophysics	215	100.0	10.7	0.0	8.8	1.9	71.2	5.1	0.9	1.4
Chemistry	1,711	100.0	10.2	0.4	10.0	3.6	68.8	3.3	1.7	2.1
Materials sciences	192	100.0	6.8	0.0	13.0	3.6	70.3	4.2	2.1	0.0
Physics	1,024	100.0	8.4	0.0	12.5	2.5	70.1	3.5	1.3	1.7
Psychology	3,178	100.0	12.0	0.4	7.5	9.4	63.1	4.4	1.2	2.1
Clinical psychology	1,078	100.0	11.9	0.6	8.3	6.4	65.2	4.6	0.9	2.0
Counseling and applied psychology	1,099	100.0	12.8	0.3	6.0	14.1	59.5	4.3	1.5	1.5
Research and experimental psychology	655	100.0	9.8	0.3	9.2	5.5	68.2	4.0	1.4	1.7
Psychology, other	346	100.0	13.6	0.3	6.1	11.0	58.1	5.2	1.2	4.6
Social sciences	3,065	100.0	10.7	0.5	9.5	9.5	63.6	3.4	1.5	1.3
Anthropology	296	100.0	13.2	1.4	7.1	3.0	69.3	2.4	2.7	1.0
Area, ethnic, cultural, gender, and group studies	316	100.0	18.7	2.5	10.1	14.9	48.1	2.2	2.2	1.3
Economics	489	100.0	9.2	0.0	14.7	3.5	67.5	2.9	1.6	0.6
Political science and government	438	100.0	9.6	0.0	8.9	6.8	68.0	2.7	1.4	2.5
Public policy analysis	315	100.0	9.2	0.0	7.9	24.4	52.1	4.4	1.3	0.6
Sociology, demography, and population studies	494	100.0	11.7	0.0	7.1	11.7	64.8	3.2	0.4	1.0
Social sciences, other	717	100.0	7.9	0.4	9.3	7.5	67.1	4.6	1.5	1.5
Non-science and engineering	8,556	100.0	10.0	0.5	6.8	12.5	64.0	2.8	1.3	2.1
Business	663	100.0	5.7	0.3	18.4	9.8	59.1	2.3	1.8	2.6
Business administration and management	223	100.0	5.8	0.4	16.6	15.2	54.3	1.8	2.7	3.1
Business, other	440	100.0	5.7	0.2	19.3	7.0	61.6	2.5	1.4	2.3

TABLE 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2023

(Percent)

Field of doctorate	All U.S. citizens and permanent residents (number)	Total	U.S. citizen or permanent resident							Ethnicity not reported
			Hispanic or Latino	Not Hispanic or Latino					Other race or race not reported	
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race		
Education	3,291	100.0	10.8	0.8	5.5	18.0	59.8	2.3	0.8	2.0
Education leadership and administration	1,051	100.0	11.2	0.6	4.5	25.8	52.6	2.4	0.9	2.1
Education research	985	100.0	9.3	0.6	6.0	16.4	62.8	2.2	0.9	1.6
Teacher education and teaching fields	885	100.0	10.8	1.1	5.6	12.0	65.8	2.0	0.3	2.3
Education, other	370	100.0	13.5	0.8	6.5	14.9	57.6	3.0	1.4	2.4
Humanities	2,536	100.0	10.6	0.5	5.1	5.9	71.2	2.9	1.6	2.2
English language and literature, letters	870	100.0	6.8	0.8	4.7	6.3	74.3	3.3	1.6	2.2
Foreign languages, literatures, and linguistics	322	100.0	26.7	0.6	4.7	3.1	60.6	2.5	0.3	1.6
History	578	100.0	11.4	0.3	5.0	6.2	71.3	3.1	1.2	1.4
Philosophy and religious studies	482	100.0	8.5	0.4	5.6	4.6	72.0	3.1	3.3	2.5
Humanities, other	284	100.0	5.6	0.0	6.3	9.2	72.2	1.4	1.1	4.2
Visual and performing arts	575	100.0	8.7	0.3	6.6	3.8	73.6	2.8	1.6	2.6
Performing arts	340	100.0	8.8	0.3	5.3	4.1	73.8	3.5	1.8	2.4
Visual arts, media studies, and design	235	100.0	8.5	0.4	8.5	3.4	73.2	1.7	1.3	3.0
Other non-science and engineering	1,491	100.0	9.7	0.3	7.4	15.9	59.4	3.7	1.8	1.9
Communications and journalism	440	100.0	8.6	0.2	7.3	12.5	65.5	3.9	1.4	0.7
Multidisciplinary/ interdisciplinary studies	281	100.0	10.0	0.7	5.3	12.1	64.1	1.4	1.8	4.6
Public administration and social services	383	100.0	10.7	0.3	6.5	25.1	50.4	4.4	1.3	1.3
Non-science and engineering, other	387	100.0	9.6	0.3	9.8	13.4	57.9	4.4	2.8	1.8

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 3-5

Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Number and median years)

Time to degree and demographic characteristic	All fields		Science and engineering, total		Agricultural sciences and natural resources		Biological and biomedical sciences		Computer and information sciences		Engineering		Geosciences, atmospheric, and ocean sciences		Health sciences		Mathematics and statistics		Multidisciplinary/ interdisciplinary sciences		Physical sciences		Psychology		Social sciences		
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	
Years since bachelor's degree																											
Doctorate recipients reporting year of bachelor's degree	54,429	8.6	43,361	8.0	1,204	9.0	9,266	7.8	2,159	8.2	10,074	7.4	1,155	8.1	2,512	11.4	1,970	7.0	1,616	8.3	5,179	6.7	3,474	8.6	4,752	10.2	
Sex																											
Male	28,564	8.3	24,059	7.9	540	9.1	4,202	8.0	1,620	8.1	7,426	7.6	630	8.3	714	9.9	1,411	6.8	993	8.1	3,414	7.0	800	8.9	2,309	10.0	
Female	25,858	9.0	19,295	8.2	664	8.6	5,063	7.6	539	8.9	2,648	7.1	524	8.0	1,798	12.2	558	7.2	623	8.4	1,764	6.3	2,673	8.4	2,441	10.3	
Citizenship status																											
U.S. citizen or permanent resident	34,922	8.8	26,551	8.0	770	8.9	6,908	7.6	806	8.3	4,458	6.9	767	8.0	1,880	12.2	924	6.3	813	8.3	3,101	6.3	3,084	8.6	3,040	10.3	
Temporary visa holder	18,754	8.3	16,264	8.1	425	8.9	2,259	8.3	1,310	8.1	5,509	7.9	375	8.5	586	9.9	1,020	7.3	784	8.2	2,025	7.3	320	8.5	1,651	10.0	
Ethnicity and race (U.S. citizens and permanent residents)																											
Hispanic or Latino	3,370	8.6	2,552	7.9	63	8.3	713	7.6	47	7.4	398	6.6	58	8.3	155	10.7	64	6.3	73	8.4	294	6.6	361	8.6	326	10.5	
Not Hispanic or Latino																											
American Indian or Alaska Native	113	11.4	67	10.0	D	D	11	8.1	D	D	6	6.2	D	D	9	13.2	0	-	D	D	5	8.6	12	7.6	15	10.3	
Asian	3,765	8.3	3,196	8.0	46	10.1	890	8.0	189	8.3	721	7.3	57	9.3	189	11.6	135	6.3	109	8.0	342	6.7	229	9.2	289	10.3	
Black or African American	2,680	11.4	1,633	9.6	D	D	333	8.0	D	D	209	7.5	D	D	235	13.0	22	9.5	D	D	97	7.0	291	10.0	292	11.2	
White	22,814	8.6	17,402	7.8	574	8.4	4,511	7.6	469	8.3	2,846	6.8	594	7.9	1,170	12.6	644	6.3	521	8.1	2,166	6.3	1,966	8.3	1,941	10.3	
More than one race	1,291	8.0	1,055	7.3	27	10.0	325	7.3	21	7.2	175	6.3	29	7.4	60	11.7	40	6.1	24	6.8	111	6.2	140	8.6	103	9.4	
Other race or race not reported	435	9.2	326	8.3	9	12.3	72	8.0	17	9.3	54	7.8	5	7.5	24	13.4	11	6.3	7	12.9	46	6.3	37	8.8	44	10.3	
Ethnicity not reported	454	9.6	320	8.3	15	7.3	53	7.7	18	9.0	49	8.0	5	8.8	38	10.7	8	7.6	16	14.8	40	6.6	48	8.3	30	10.7	
Years since entering graduate school																											
Doctorate recipients reporting year of graduate school entry	52,827	7.2	42,184	6.8	1,149	7.3	9,108	6.4	2,071	7.0	9,775	6.6	1,131	6.8	2,451	9.0	1,906	6.0	1,577	7.0	5,032	6.0	3,329	6.9	4,655	8.7	
Sex																											
Male	27,788	7.0	23,449	6.8	515	7.3	4,143	6.7	1,561	6.9	7,197	6.7	626	6.9	703	7.8	1,372	6.0	981	6.9	3,319	6.0	779	7.0	2,253	8.3	
Female	25,032	7.4	18,728	6.8	634	7.3	4,964	6.3	510	7.7	2,578	6.3	504	6.8	1,748	9.3	533	6.1	596	7.3	1,712	5.8	2,549	6.8	2,400	8.8	
Citizenship status																											
U.S. citizen or permanent resident	33,766	7.1	25,736	6.7	721	7.2	6,760	6.3	771	7.0	4,313	6.0	751	6.6	1,824	9.8	897	5.8	772	7.0	2,995	5.8	2,950	6.9	2,982	8.6	
Temporary visa holder	18,200	7.3	15,815	7.0	409	7.8	2,251	7.0	1,251	7.0	5,321	6.9	364	7.5	580	7.7	975	6.3	777	7.0	1,974	6.3	303	7.0	1,610	8.7	
Ethnicity and race (U.S. citizens and permanent residents)																											
Hispanic or Latino	3,260	7.3	2,467	6.8	61	7.5	697	6.3	45	6.3	388	6.0	57	6.8	153	9.3	60	5.8	70	6.9	281	5.8	331	7.0	324	8.8	
Not Hispanic or Latino																											
American Indian or Alaska Native	95	8.8	59	7.9	D	D	11	7.0	D	D	D	D	D	D	9	12.8	0	-	D	D	D	D	9	6.9	15	8.0	
Asian	3,699	7.0	3,137	6.8	45	8.4	885	6.8	181	7.3	705	6.3	56	7.7	187	9.1	131	5.8	107	7.0	336	5.9	219	7.0	285	9.0	
Black or African American	2,596	9.7	1,578	8.0	D	D	321	6.8	D	D	D	D	D	D	232	10.0	21	7.8	D	D	D	D	282	8.3	284	9.8	
White	22,279	7.0	17,042	6.3	547	6.9	4,434	6.2	459	6.8	2,782	6.0	584	6.5	1,153	9.8	628	5.8	497	6.8	2,125	5.8	1,919	6.8	1,914	8.3	
More than one race	1,283	6.8	1,050	6.2	27	7.8	324	6.0	21	6.0	174	5.8	29	6.1	58	9.7	41	5.8	24	6.0	111	5.8	139	6.8	102	7.8	
Other race or race not reported	340	7.6	251	6.5	3	12.2	60	6.4	12	12.1	36	5.9	4	6.3	16	10.4	11	5.8	6	12.7	34	5.4	31	6.3	38	8.9	

TABLE 3-5

Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Number and median years)

Time to degree and demographic characteristic	All fields		Science and engineering, total		Agricultural sciences and natural resources		Biological and biomedical sciences		Computer and information sciences		Engineering		Geosciences, atmospheric, and ocean sciences		Health sciences		Mathematics and statistics		Multidisciplinary/ interdisciplinary sciences		Physical sciences		Psychology		Social sciences	
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median
Ethnicity not reported	214	8.1	152	7.0	5	7.6	28	5.9	10	6.3	21	8.3	2	6.6	16	11.5	5	5.8	10	6.5	15	6.8	20	8.5	20	10.1
Years since entering doctoral program ^a																										
Doctorate recipients reporting year of doctoral program entry ^b	52,050	5.7	41,586	5.6	1,132	5.0	8,995	5.8	2,031	5.7	9,615	5.3	1,119	5.7	2,415	5.0	1,880	5.3	1,560	5.3	4,967	5.7	3,270	5.9	4,602	6.0
Sex																										
Male	27,340	5.7	23,075	5.6	505	5.0	4,083	5.8	1,531	5.7	7,068	5.3	620	5.5	690	5.0	1,353	5.3	973	5.6	3,271	5.8	759	5.9	2,222	5.9
Female	24,703	5.8	18,504	5.7	627	5.0	4,911	5.7	500	5.7	2,547	5.3	498	5.8	1,725	5.0	526	5.3	587	5.3	1,695	5.3	2,510	5.9	2,378	6.0
Citizenship status																										
U.S. citizen or permanent resident	33,211	5.8	25,326	5.8	708	5.0	6,668	5.8	745	5.8	4,238	5.3	742	5.8	1,791	5.3	877	5.7	763	5.7	2,949	5.7	2,897	5.9	2,948	6.1
Temporary visa holder	17,993	5.3	15,637	5.3	405	4.8	2,231	5.7	1,236	5.4	5,241	5.2	362	5.3	579	5.0	971	5.1	769	5.3	1,955	5.6	297	5.7	1,591	5.8
Ethnicity and race (U.S. citizens and permanent residents)																										
Hispanic or Latino	3,200	5.8	2,419	5.8	57	5.3	685	5.8	43	5.9	381	5.3	57	5.8	149	5.2	59	5.3	68	5.3	275	5.5	323	6.0	322	6.3
Not Hispanic or Latino																										
American Indian or Alaska Native	92	5.8	59	6.0	D	D	11	6.0	D	D	D	D	D	D	9	5.0	0	-	D	D	D	D	9	6.9	15	6.2
Asian	3,638	5.8	3,085	5.8	45	4.8	871	5.8	174	5.9	692	5.6	56	5.8	184	5.0	129	5.3	106	5.8	333	5.8	211	5.9	284	6.0
Black or African American	2,527	5.8	1,545	5.8	D	D	313	5.8	D	D	D	D	D	D	228	5.6	20	5.9	D	D	D	D	276	6.0	281	5.9
White	21,955	5.8	16,791	5.8	540	5.0	4,379	5.7	445	5.8	2,740	5.3	577	5.8	1,133	5.2	612	5.7	491	5.7	2,090	5.7	1,894	5.9	1,890	6.3
More than one race	1,265	5.8	1,036	5.8	27	5.8	321	5.8	21	5.8	171	5.3	28	5.5	57	5.2	41	5.7	24	5.2	110	5.7	135	6.0	101	6.0
Other race or race not reported	325	5.8	242	5.8	3	7.1	60	5.8	11	6.3	33	5.5	4	5.8	16	5.5	11	5.8	6	5.5	34	5.4	29	5.9	35	6.0
Ethnicity not reported	209	5.8	149	5.8	4	7.4	28	5.5	9	4.8	21	5.6	2	5.6	15	6.8	5	5.8	10	5.3	15	6.3	20	6.0	20	6.8

- = not calculable; D = suppressed to avoid disclosure of confidential information.

^a 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 field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.^b Doctorate recipients reporting year of doctoral program entry includes only cases with valid year of entry into master's program if master's degree was at the doctoral institution in the same field of study or was a prerequisite to the doctorate; otherwise, includes only cases with valid year of doctoral program entry.**Note(s):**Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."**Source(s):**

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

TABLE 3-6

Median years to non-science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Number and median years)

Time to degree and demographic characteristic	All fields		Non-science and engineering, total		Business		Education		Humanities		Visual and performing arts		Other non-science and engineering	
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median
Doctorate recipients reporting year of doctoral program entry ^b	52,050	5.7	10,464	5.9	1,314	5.0	3,523	5.6	2,953	6.8	737	6.7	1,937	5.8
Sex														
Male	27,340	5.7	4,265	6.0	724	5.0	958	5.6	1,501	6.8	320	6.3	762	5.8
Female	24,703	5.8	6,199	5.9	590	5.0	2,565	5.7	1,452	6.8	417	6.8	1,175	5.8
Citizenship status														
U.S. citizen or permanent resident	33,211	5.8	7,885	6.0	603	5.0	3,029	5.8	2,336	6.9	550	6.8	1,367	5.8
Temporary visa holder	17,993	5.3	2,356	5.8	684	5.0	411	5.2	566	6.4	170	6.3	525	5.4
Ethnicity and race (U.S. citizens and permanent residents)														
Hispanic or Latino	3,200	5.8	781	6.3	35	5.0	330	5.8	235	7.0	48	6.9	133	5.3
Not Hispanic or Latino														
American Indian or Alaska Native	92	5.8	33	5.3	D	D	19	7.3	8	5.3	D	D	D	D
Asian	3,638	5.8	553	5.9	113	5.7	173	5.3	122	7.0	38	6.0	107	5.7
Black or African American	2,527	5.8	982	5.8	D	D	543	5.7	142	6.3	D	D	D	D
White	21,955	5.8	5,164	6.0	366	4.9	1,850	5.7	1,709	6.8	408	6.8	831	5.8
More than one race	1,265	5.8	229	6.7	15	5.7	76	6.2	70	7.0	15	6.6	53	6.0
Other race or race not reported	325	5.8	83	6.8	8	6.6	16	6.8	32	7.1	8	7.0	19	5.0
Ethnicity not reported	209	5.8	60	5.8	5	3.8	22	4.5	18	7.8	9	10.1	6	5.7

D = suppressed to avoid disclosure of confidential information.

^a 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 field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.^b Doctorate recipients reporting year of doctoral program entry includes only cases with valid year of entry into master's program if master's degree was at the doctoral institution in the same field of study or was a prerequisite to the doctorate; otherwise, includes only cases with valid year of doctoral program entry.

Note(s):

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

Source(s):

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

TABLE 3-7

Median age and age distribution of research doctorate recipients, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and demographic characteristic	Median age at doctorate (years)	All ages	25 and under	26–30	31–35	36–40	41–45	Over 45
Doctorate recipients reporting birth year	31.4	100.0	0.7	45.3	31.1	11.4	5.1	6.4
Science and engineering	30.7	100.0	0.9	52.3	30.6	9.1	3.3	3.8
Agricultural sciences and natural resources	31.9	100.0	0.5	41.0	36.0	12.8	5.3	4.4
Biological and biomedical sciences	30.4	100.0	0.7	56.3	32.4	7.1	2.1	1.4
Computer and information sciences	30.8	100.0	1.1	51.0	30.9	9.0	3.2	4.7
Engineering	30.1	100.0	1.2	59.1	28.7	7.1	2.0	1.9
Geosciences, atmospheric, and ocean sciences	30.8	100.0	0.8	50.0	32.0	10.5	2.9	3.7
Health sciences	34.8	100.0	0.7	26.0	29.0	16.4	9.2	18.6
Mathematics and statistics	29.2	100.0	2.1	66.9	23.3	4.8	1.7	1.2
Multidisciplinary/ interdisciplinary sciences	31.1	100.0	0.5	48.5	31.1	10.3	4.4	5.2
Physical sciences	29.3	100.0	1.2	70.3	21.4	4.9	1.6	0.6
Psychology	31.3	100.0	0.5	45.9	32.7	9.5	4.5	6.8
Social sciences	33.1	100.0	0.3	28.3	40.9	17.8	6.5	6.2
Non-science and engineering	35.8	100.0	0.1	17.5	33.2	20.3	12.2	16.7
Business	33.5	100.0	D	26.7	37.0	17.1	D	11.4
Education	39.2	100.0	0.1	10.4	24.9	21.3	16.6	26.6
Humanities	34.8	100.0	D	18.4	39.0	21.4	D	11.3
Visual and performing arts	34.2	100.0	0.0	21.0	41.2	20.0	11.1	6.7
Other non-science and engineering	35.0	100.0	D	21.5	33.6	19.0	D	14.4
Sex								
Male	31.2	100.0	0.7	47.1	32.0	10.9	4.5	4.7
Female	31.7	100.0	0.7	43.2	30.1	11.8	5.8	8.4
Citizenship status, ethnicity, and race								
U.S. citizen or permanent resident	31.6	100.0	0.8	44.1	27.9	11.9	6.3	9.0
Hispanic or Latino	31.9	100.0	0.4	42.1	29.6	12.3	6.3	9.3
Not Hispanic or Latino								
American Indian or Alaska Native	36.2	100.0	D	21.9	24.6	21.1	11.4	D
Asian	31.0	100.0	1.0	48.1	31.6	9.2	4.7	5.3
Black or African American	35.4	100.0	0.6	27.5	23.7	16.1	10.6	21.5
White	31.4	100.0	0.8	45.7	27.6	11.7	6.0	8.3
More than one race	30.7	100.0	1.6	51.5	25.5	11.7	4.5	5.2
Other race or race not reported	32.5	100.0	D	38.8	30.3	15.8	6.5	D
Ethnicity not reported	32.3	100.0	0.5	38.1	31.2	10.2	10.6	9.5
Temporary visa holder	31.2	100.0	0.7	47.4	37.0	10.3	3.0	1.6

D = suppressed to avoid disclosure of confidential information.

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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 doctorate recipients (number)	57,862	30,356	27,499	35,566	19,393	3,449	115	3,828	2,725	23,057	1,296	459	637
All doctorate recipients reporting primary source of support, all fields (number)	51,139	26,849	24,284	32,973	17,878	3,178	92	3,611	2,507	21,838	1,263	314	170
Teaching assistantships	21.2	22.0	20.2	19.7	23.8	18.3	10.9	18.1	11.4	21.2	18.1	19.7	20.0
Research assistantships or traineeships ^b	35.6	40.5	30.1	28.8	48.1	22.7	6.5	35.9	16.1	30.1	29.9	28.0	15.3
Fellowships, scholarships, or dissertation grants	24.6	22.7	26.6	26.7	20.7	35.3	42.4	30.2	26.7	24.6	30.6	27.7	29.4
Own resources	14.7	10.8	19.1	20.4	4.1	20.5	32.6	12.5	40.8	19.4	17.5	21.7	29.4
Employer or other sources	4.0	4.0	4.0	4.4	3.3	3.2	7.6	3.4	4.9	4.7	3.9	2.9	5.9
Science and engineering (number)	40,922	22,695	18,221	25,160	15,542	2,409	58	3,064	1,534	16,706	1,034	233	122
Teaching assistantships	20.2	21.0	19.1	18.3	23.2	16.5	D	17.1	12.3	19.4	16.4	D	17.2
Research assistantships or traineeships ^b	41.5	46.1	35.8	34.9	52.2	27.3	D	39.5	21.1	36.7	34.8	D	18.0
Fellowships, scholarships, or dissertation grants	24.2	21.5	27.5	28.0	18.1	38.9	53.4	29.9	31.3	25.4	32.3	27.5	34.4
Own resources	10.9	7.9	14.6	15.5	3.4	15.2	29.3	10.4	31.8	14.9	13.4	17.6	23.8
Employer or other sources	3.2	3.5	2.9	3.3	3.0	2.1	3.4	3.1	3.5	3.5	3.0	3.4	6.6
Agricultural sciences and natural resources (number)	1,118	498	620	705	407	58	D	44	D	537	27	3	4
Teaching assistantships	13.3	11.8	14.5	14.9	10.8	13.8	0.0	D	16.7	15.5	D	0.0	0.0
Research assistantships or traineeships ^b	53.3	55.0	51.9	46.4	65.1	34.5	0.0	50.0	50.0	47.5	44.4	33.3	50.0
Fellowships, scholarships, or dissertation grants	18.1	17.9	18.2	19.3	16.0	36.2	0.0	D	D	17.3	25.9	33.3	25.0
Own resources	10.3	9.0	11.3	14.3	3.4	13.8	D	15.9	16.7	14.2	D	33.3	0.0
Employer or other sources	5.0	6.2	4.0	5.1	4.7	1.7	0.0	0.0	6.7	5.6	7.4	0.0	25.0

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Biological and biomedical sciences (number)	8,843	4,006	4,836	6,598	2,210	680	11	860	311	4,338	319	57	22
Teaching assistantships	13.4	14.4	12.6	12.4	16.2	10.3	0.0	7.4	7.1	14.5	8.2	7.0	13.6
Research assistantships or traineeships ^b	39.8	41.2	38.6	36.9	48.8	27.6	0.0	37.8	28.6	38.9	36.1	47.4	4.5
Fellowships, scholarships, or dissertation grants	35.8	33.8	37.4	38.6	27.4	53.7	100.0	43.3	51.4	33.9	42.3	33.3	54.5
Own resources	8.5	8.0	8.9	9.9	4.4	7.2	0.0	8.8	11.9	10.3	11.0	10.5	18.2
Employer or other sources	2.5	2.6	2.4	2.2	3.3	1.2	0.0	2.7	1.0	2.4	2.5	1.8	9.1
Computer and information sciences (number)	1,994	1,501	493	746	1,228	43	D	175	D	448	21	9	8
Teaching assistantships	16.0	15.1	18.7	11.7	18.8	D	0.0	12.6	14.6	11.6	D	0.0	12.5
Research assistantships or traineeships ^b	57.2	59.4	50.5	47.1	63.4	D	0.0	56.6	D	48.7	33.3	55.6	62.5
Fellowships, scholarships, or dissertation grants	15.5	14.6	18.5	19.6	13.0	44.2	D	D	34.1	17.6	33.3	11.1	0.0
Own resources	7.3	7.1	8.1	15.8	2.0	18.6	0.0	D	34.1	15.4	D	22.2	0.0
Employer or other sources	3.9	3.8	4.3	5.9	2.7	2.3	0.0	4.0	7.3	6.7	0.0	11.1	25.0
Engineering (number)	9,475	6,968	2,507	4,215	5,211	380	D	688	D	2,730	171	32	16
Teaching assistantships	11.6	11.9	11.0	7.8	14.7	8.2	D	D	5.2	7.7	8.8	3.1	0.0
Research assistantships or traineeships ^b	59.3	60.2	56.6	49.9	66.9	41.1	D	D	32.0	51.3	46.8	D	31.3
Fellowships, scholarships, or dissertation grants	19.8	17.6	26.0	29.1	12.3	38.9	D	24.4	41.8	27.5	35.7	D	50.0
Own resources	5.3	5.6	4.4	8.3	2.9	8.2	D	7.6	D	8.2	5.8	6.3	18.8
Employer or other sources	4.0	4.7	1.9	4.8	3.2	3.7	0.0	3.5	6.7	5.3	2.9	3.1	0.0

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Geosciences, atmospheric, and ocean sciences (number)	1,107	609	498	739	362	57	D	54	D	576	28	4	2
Teaching assistantships	18.6	18.7	18.5	20.4	14.4	D	0.0	20.4	D	20.8	D	0.0	0.0
Research assistantships or traineeships ^b	47.7	51.2	43.4	42.4	58.8	21.1	D	D	D	44.1	53.6	0.0	50.0
Fellowships, scholarships, or dissertation grants	24.7	20.0	30.3	28.4	17.4	47.4	D	24.1	35.7	26.2	D	75.0	50.0
Own resources	5.3	5.3	5.4	6.5	3.0	D	D	D	D	6.8	D	0.0	0.0
Employer or other sources	3.7	4.8	2.4	2.3	6.4	1.8	0.0	5.6	0.0	2.1	0.0	25.0	0.0
Health sciences (number)	2,366	677	1,689	1,779	577	149	9	183	227	1,124	57	16	14
Teaching assistantships	10.8	15.1	9.1	8.8	17.0	9.4	0.0	9.3	4.0	9.6	10.5	0.0	21.4
Research assistantships or traineeships ^b	24.6	28.7	22.9	19.2	41.1	17.4	0.0	25.7	11.9	20.4	17.5	18.8	0.0
Fellowships, scholarships, or dissertation grants	22.0	22.6	21.7	21.6	23.2	32.2	D	28.4	D	19.9	21.1	12.5	7.1
Own resources	33.3	24.7	36.8	41.2	8.8	38.3	D	29.0	D	39.6	38.6	56.3	71.4
Employer or other sources	9.3	9.0	9.4	9.1	9.9	2.7	11.1	7.7	7.0	10.5	12.3	12.5	0.0
Mathematics and statistics (number)	1,849	1,324	524	875	958	60	0	129	20	612	41	11	2
Teaching assistantships	62.3	63.7	58.6	63.1	61.5	60.0	-	58.1	50.0	65.8	51.2	54.5	50.0
Research assistantships or traineeships ^b	16.0	15.0	18.5	13.1	18.7	D	-	D	D	12.7	12.2	18.2	0.0
Fellowships, scholarships, or dissertation grants	15.8	15.4	17.0	17.0	14.8	20.0	-	24.8	D	14.4	D	27.3	0.0
Own resources	4.4	4.3	4.6	5.5	3.3	D	-	D	D	6.0	D	0.0	50.0
Employer or other sources	1.5	1.5	1.3	1.3	1.7	3.3	-	1.6	0.0	1.0	2.4	0.0	0.0

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Multidisciplinary/interdisciplinary sciences (number)	1,527	951	576	756	764	69	D	106	D	486	24	6	8
Teaching assistantships	17.7	17.0	18.9	16.1	19.4	17.4	0.0	16.0	D	16.9	D	16.7	12.5
Research assistantships or traineeships ^b	47.5	52.8	38.9	35.7	59.6	24.6	0.0	47.2	29.1	35.6	37.5	33.3	37.5
Fellowships, scholarships, or dissertation grants	21.3	17.7	27.4	27.4	15.3	40.6	0.0	23.6	23.6	27.0	29.2	33.3	12.5
Own resources	9.9	8.5	12.2	15.9	3.8	13.0	D	8.5	D	15.6	D	16.7	12.5
Employer or other sources	3.5	4.0	2.6	4.9	2.0	4.3	50.0	4.7	0.0	4.9	8.3	0.0	25.0
Physical sciences (number)	4,900	3,227	1,672	2,931	1,942	274	D	331	D	2,080	110	33	11
Teaching assistantships	25.8	26.3	24.8	23.8	28.7	23.4	D	25.1	33.3	23.2	D	24.2	27.3
Research assistantships or traineeships ^b	52.8	55.4	47.5	49.5	57.6	40.9	0.0	51.1	32.2	51.3	50.0	42.4	36.4
Fellowships, scholarships, or dissertation grants	16.8	13.9	22.4	20.5	11.3	29.2	0.0	21.1	31.1	18.6	24.5	24.2	27.3
Own resources	3.6	3.4	3.8	5.0	1.3	5.1	0.0	1.8	D	5.7	D	9.1	9.1
Employer or other sources	1.1	1.0	1.4	1.1	1.1	1.5	0.0	0.9	1.1	1.2	0.0	0.0	0.0
Psychology (number)	3,192	733	2,458	2,874	297	318	8	211	274	1,884	135	28	16
Teaching assistantships	24.1	28.5	22.8	22.7	39.1	16.0	0.0	25.1	15.0	24.2	26.7	32.1	31.3
Research assistantships or traineeships ^b	22.9	19.0	24.1	22.9	23.2	20.8	0.0	17.5	14.2	25.3	25.9	14.3	6.3
Fellowships, scholarships, or dissertation grants	18.0	18.8	17.7	17.4	22.9	23.0	D	23.2	16.1	15.9	16.3	D	18.8
Own resources	33.3	31.0	34.0	35.3	13.5	37.7	D	31.8	53.6	32.9	30.4	D	43.8
Employer or other sources	1.7	2.7	1.4	1.7	1.3	2.5	0.0	2.4	1.1	1.7	0.7	0.0	0.0
Social sciences (number)	4,551	2,201	2,348	2,942	1,586	321	15	283	278	1,891	101	34	19

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Teaching assistantships	34.8	36.5	33.3	31.4	41.2	30.2	D	40.6	16.5	32.9	25.7	D	21.1
Research assistantships or traineeships ^b	14.6	13.9	15.4	14.5	14.8	12.5	0.0	12.7	12.6	15.5	16.8	14.7	0.0
Fellowships, scholarships, or dissertation grants	33.7	34.7	32.7	31.7	37.5	36.4	60.0	35.0	30.6	29.9	36.6	26.5	63.2
Own resources	13.7	11.7	15.5	19.0	3.8	19.6	D	8.8	35.6	18.1	15.8	D	10.5
Employer or other sources	3.2	3.3	3.1	3.4	2.6	1.2	0.0	2.8	4.7	3.5	5.0	5.9	5.3
Non-science and engineering (number)	10,217	4,154	6,063	7,813	2,336	769	34	547	973	5,132	229	81	48
Teaching assistantships	25.0	27.4	23.4	24.2	27.9	24.1	D	23.4	10.2	27.0	25.3	D	27.1
Research assistantships or traineeships ^b	11.8	10.1	12.9	9.1	20.7	8.2	D	15.5	8.1	8.7	7.9	D	8.3
Fellowships, scholarships, or dissertation grants	26.1	29.2	24.0	22.6	38.0	23.8	23.5	32.2	19.5	22.0	23.1	28.4	16.7
Own resources	30.0	26.5	32.4	36.4	8.6	37.3	38.2	23.9	55.0	34.0	35.8	33.3	43.8
Employer or other sources	7.0	6.9	7.1	7.7	4.8	6.6	14.7	4.9	7.2	8.3	7.9	1.2	4.2
Business (number)	1,289	710	579	598	680	35	D	112	D	364	15	8	4
Teaching assistantships	16.7	16.3	17.1	11.9	20.9	D	D	14.3	8.5	11.5	D	0.0	0.0
Research assistantships or traineeships ^b	22.9	22.3	23.7	14.9	30.1	D	0.0	18.8	D	17.0	D	12.5	25.0
Fellowships, scholarships, or dissertation grants	33.9	36.1	31.3	26.9	40.0	22.9	0.0	40.2	D	24.7	D	62.5	0.0
Own resources	22.4	21.0	24.2	40.1	6.8	51.4	0.0	25.0	64.4	39.3	60.0	25.0	50.0
Employer or other sources	4.1	4.4	3.8	6.2	2.2	D	0.0	1.8	8.5	7.4	D	0.0	25.0
Education (number)	3,424	920	2,504	2,995	404	325	19	169	542	1,831	76	15	18
Teaching assistantships	11.0	10.5	11.1	9.9	18.6	7.7	0.0	13.6	5.7	11.5	7.9	6.7	11.1
Research assistantships or traineeships ^b	15.7	13.9	16.4	13.4	33.4	14.2	D	22.5	11.3	12.9	D	20.0	16.7

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Fellowships, scholarships, or dissertation grants	13.0	13.2	12.9	11.7	22.0	14.5	D	20.7	14.0	9.3	D	13.3	16.7
Own resources	46.9	47.7	46.6	51.3	13.9	51.1	42.1	33.1	59.8	50.7	47.4	53.3	55.6
Employer or other sources	13.5	14.7	13.0	13.7	12.1	12.6	21.1	10.1	9.2	15.5	15.8	6.7	0.0
Humanities (number)	2,885	1,468	1,417	2,315	558	232	8	122	138	1,700	69	32	14
Teaching assistantships	39.8	39.3	40.2	40.3	37.5	44.4	D	30.3	D	41.8	44.9	40.6	50.0
Research assistantships or traineeships ^b	1.6	1.0	2.3	1.3	2.7	D	0.0	0.0	D	1.5	0.0	0.0	0.0
Fellowships, scholarships, or dissertation grants	36.0	35.8	36.1	32.5	50.5	30.2	D	49.2	33.3	31.8	D	28.1	14.3
Own resources	19.5	19.8	19.3	22.7	6.6	21.6	D	15.6	40.6	21.8	D	31.3	28.6
Employer or other sources	3.1	4.0	2.1	3.2	2.7	D	0.0	4.9	3.6	3.2	D	0.0	7.1
Visual and performing arts (number)	719	311	408	546	170	47	D	37	D	406	16	8	8
Teaching assistantships	35.0	36.7	33.8	36.6	30.0	D	0.0	D	D	38.7	D	37.5	37.5
Research assistantships or traineeships ^b	2.8	2.3	3.2	2.7	2.9	D	0.0	D	0.0	3.0	D	0.0	0.0
Fellowships, scholarships, or dissertation grants	42.6	41.2	43.6	39.4	52.4	34.0	0.0	43.2	59.1	38.7	43.8	37.5	37.5
Own resources	17.8	18.0	17.6	20.0	11.2	29.8	D	13.5	31.8	18.2	D	25.0	25.0
Employer or other sources	1.8	1.9	1.7	1.3	3.5	0.0	0.0	2.7	0.0	1.5	0.0	0.0	0.0
Other non-science and engineering (number)	1,900	745	1,155	1,359	524	130	4	107	212	831	53	18	4
Teaching assistantships	29.9	31.4	28.9	28.8	33.4	26.9	0.0	35.5	14.6	32.0	28.3	27.8	25.0
Research assistantships or traineeships ^b	15.9	14.8	16.7	12.8	23.7	7.7	25.0	23.4	7.5	13.4	13.2	22.2	0.0

TABLE 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023

(Percent)

Field and primary source of support	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	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	
Fellowships, scholarships, or dissertation grants	23.5	24.4	22.9	21.3	29.6	32.3	50.0	18.7	21.2	20.3	13.2	22.2	0.0
Own resources	25.3	22.1	27.4	31.7	8.2	30.0	0.0	21.5	51.9	27.7	39.6	27.8	75.0
Employer or other sources	5.4	7.2	4.2	5.4	5.2	3.1	25.0	0.9	4.7	6.6	5.7	0.0	0.0

- = not calculable; D = suppressed to avoid disclosure of confidential information.

^a Total includes doctorate recipients who did not report sex or citizenship status.

^b Research assistantships or traineeships includes research assistantships, other assistantships, traineeships, internships, or clinical residencies.

Note(s):

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 4-2

Research doctorate recipients' sources of financial support, by broad field of doctorate and sex: 2023

(Percent)

Sex and financial resource	All fields	Science and engineering														Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering		
All doctorate recipients reporting source of support (number)	51,181	40,949	1,118	8,849	1,998	9,484	1,108	2,367	1,850	1,527	4,901	3,194	4,553	10,232	1,290	3,428	2,893	720	1,901		
Fellowship or scholarship	67.0	66.6	67.3	72.1	54.8	61.8	74.6	59.8	63.8	64.9	62.6	62.7	80.8	68.9	72.6	51.1	83.7	88.8	68.5		
Dissertation grant	18.3	16.1	18.2	15.0	6.8	8.9	17.5	21.0	7.4	13.8	8.5	23.6	41.2	27.2	17.2	14.8	40.8	41.9	30.1		
Assistantship																					
Teaching	68.5	69.3	53.0	56.2	76.3	65.4	78.0	46.3	92.6	70.7	88.4	70.0	82.8	65.5	70.8	38.3	86.2	89.6	70.1		
Research	68.4	74.2	81.2	66.6	84.2	85.0	86.6	52.3	64.4	78.0	88.7	61.7	64.8	45.1	65.0	37.1	39.3	35.3	58.4		
Other	8.3	7.0	7.5	4.1	4.7	5.0	8.0	7.2	5.7	6.3	4.1	20.5	11.6	13.6	8.2	14.4	14.8	14.9	13.4		
Traineeship	4.0	4.8	2.0	11.5	1.5	2.6	1.5	6.5	1.6	2.5	2.0	6.7	2.3	0.8	0.5	0.6	1.0	1.0	1.2		
Internship or clinical residency	12.2	14.3	5.6	4.6	40.8	18.3	10.7	6.0	19.8	24.6	6.5	39.6	5.5	3.8	3.9	2.7	3.9	6.3	4.5		
Loan (any source)	20.4	16.9	17.5	14.6	8.8	9.8	11.7	36.2	7.3	13.3	9.3	45.1	24.7	34.4	18.2	45.0	29.5	32.1	34.7		
Personal sources																					
Savings	53.5	51.0	54.0	52.6	46.6	44.0	49.5	61.7	44.5	51.2	40.6	67.7	60.4	63.7	62.8	67.0	60.1	64.6	63.6		
Other earnings during graduate school	29.9	25.0	29.6	23.0	17.6	15.8	24.0	45.7	19.7	23.2	14.3	46.5	39.2	49.5	24.6	59.1	50.0	57.1	45.5		
Spouse's, partner's, or family's earnings or savings	40.5	38.7	34.7	41.0	32.4	33.3	36.7	45.8	33.0	36.2	30.9	57.7	44.4	47.8	48.2	46.2	49.3	50.7	47.0		
Employer reimbursement or assistance	10.2	8.6	10.5	7.6	10.4	7.3	9.9	21.5	7.3	9.2	5.8	8.4	8.5	16.7	12.2	27.7	9.9	6.0	14.3		
Foreign (non-U.S.) support	4.5	4.3	6.4	3.2	5.5	5.5	5.4	5.2	4.1	5.1	3.0	1.2	5.9	5.0	5.7	3.9	4.8	6.9	6.1		
Other	1.1	1.0	1.2	0.9	1.2	0.5	1.1	2.0	0.6	1.2	0.6	1.8	1.2	1.5	1.6	1.7	1.3	1.8	1.6		
Male doctorate recipients reporting source of support (number)	26,872	22,714	498	4,011	1,502	6,976	610	678	1,325	951	3,227	734	2,202	4,158	711	920	1,470	312	745		
Fellowship or scholarship	64.5	63.3	65.1	69.5	52.6	59.1	71.6	57.8	63.8	59.2	59.4	59.4	80.2	71.4	74.0	48.6	82.4	85.6	69.3		
Dissertation grant	14.6	12.4	15.9	13.2	6.0	8.1	14.8	11.7	7.1	11.1	7.7	17.3	36.7	26.3	14.5	12.2	38.0	31.4	29.9		
Assistantship																					
Teaching	70.7	71.0	48.8	56.8	75.7	65.0	76.1	53.2	92.5	69.9	88.6	71.5	83.2	69.5	70.0	36.0	85.4	88.1	71.0		
Research	72.0	77.0	85.3	66.9	84.7	84.9	85.6	56.2	62.9	79.9	89.0	57.5	63.7	44.3	66.1	33.7	37.7	27.6	56.9		
Other	7.0	6.0	10.0	4.1	4.3	4.9	7.9	7.7	6.0	6.0	4.6	16.6	10.0	12.4	6.6	15.7	12.0	13.1	14.5		
Traineeship	3.2	3.7	1.0	11.0	1.3	2.0	1.1	6.6	1.1	1.7	1.5	6.3	2.2	0.8	D	0.8	0.9	D	D		
Internship or clinical residency	12.7	14.4	4.6	4.3	41.5	18.7	9.7	7.1	18.3	26.1	5.9	31.7	5.8	3.6	3.9	2.1	4.1	3.2	4.0		
Loan (any source)	16.8	13.8	17.7	14.9	8.7	10.5	9.3	29.2	7.0	10.3	9.4	45.9	22.4	33.0	19.4	47.0	29.7	36.5	34.0		
Personal sources																					
Savings	49.9	47.4	53.8	50.3	45.8	43.9	42.6	60.2	44.5	49.8	38.3	65.1	58.4	63.3	63.7	68.2	60.5	64.4	61.7		
Other earnings during graduate school	25.0	20.9	30.1	22.1	17.7	15.6	18.5	35.7	19.6	20.3	13.2	47.0	35.4	47.2	24.9	61.3	49.6	58.3	41.6		
Spouse's, partner's, or family's earnings or savings	35.0	33.4	30.5	35.7	30.4	31.4	33.9	41.2	30.3	32.6	28.6	51.2	39.6	43.8	43.6	38.7	48.5	46.2	40.1		
Employer reimbursement or assistance	9.3	8.2	11.0	7.7	10.7	7.8	10.5	15.6	7.5	8.7	6.3	7.9	8.4	15.1	10.4	29.8	10.3	6.4	14.2		
Foreign (non-U.S.) support	5.1	5.0	8.4	3.4	5.5	6.1	6.4	7.8	4.1	5.7	2.8	1.0	6.6	5.7	5.8	4.7	5.0	6.7	7.8		
Other	1.0	0.9	1.2	0.9	1.2	0.5	1.5	1.6	0.7	1.1	0.4	1.9	1.4	1.8	1.8	1.6	1.6	2.6	2.1		
Female doctorate recipients reporting source of support (number)	24,303	18,229	620	4,837	496	2,508	498	1,689	524	576	1,673	2,459	2,349	6,074	579	2,508	1,423	408	1,156		

TABLE 4-2

Research doctorate recipients' sources of financial support, by broad field of doctorate and sex: 2023

(Percent)

Sex and financial resource	All fields	Science and engineering													Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Fellowship or scholarship	69.8	70.6	69.0	74.2	61.3	69.4	78.3	60.6	63.7	74.3	69.0	63.7	81.4	67.2	71.0	52.0	84.9	91.2	68.1	
Dissertation grant	22.5	20.7	20.0	16.5	9.3	11.2	20.9	24.7	8.0	18.2	10.2	25.5	45.4	27.9	20.6	15.8	43.7	50.0	30.3	
Assistantship																				
Teaching	66.1	67.2	56.3	55.6	78.0	66.8	80.3	43.5	92.9	71.9	88.0	69.6	82.5	62.7	71.7	39.2	87.1	90.7	69.5	
Research	64.4	70.7	77.9	66.3	82.7	85.1	88.0	50.7	68.3	74.8	88.3	63.0	65.9	45.6	63.7	38.4	41.0	41.2	59.4	
Other	9.8	8.3	5.5	4.1	5.8	5.2	8.2	7.0	4.8	6.8	3.2	21.6	13.0	14.4	10.2	14.0	17.6	16.2	12.7	
Traineeship	4.9	6.2	2.7	11.9	2.0	4.3	2.0	6.5	2.7	3.8	2.9	6.8	2.3	0.8	D	0.5	1.1	D	D	
Internship or clinical residency	11.6	14.2	6.5	4.9	38.7	17.1	12.0	5.6	23.7	22.0	7.7	42.0	5.2	3.9	3.8	3.0	3.7	8.6	4.8	
Loan (any source)	24.5	20.9	17.4	14.4	9.1	7.7	14.7	39.0	8.0	18.2	9.1	44.8	26.9	35.4	16.8	44.3	29.2	28.7	35.2	
Personal sources																				
Savings	57.5	55.4	54.2	54.4	49.0	44.2	57.8	62.3	44.5	53.5	44.9	68.4	62.2	64.0	61.7	66.5	59.7	64.7	64.8	
Other earnings during graduate school	35.4	30.1	29.2	23.7	17.1	16.2	30.7	49.7	20.0	28.0	16.4	46.3	42.8	51.1	24.2	58.3	50.4	56.1	48.0	
Spouse's, partner's, or family's earnings or savings	46.6	45.3	38.1	45.5	38.7	38.7	40.2	47.6	40.1	42.2	35.4	59.6	48.9	50.5	53.9	49.0	50.1	54.2	51.4	
Employer reimbursement or assistance	11.2	9.1	10.0	7.6	9.5	5.7	9.2	23.8	6.7	10.1	4.9	8.5	8.6	17.8	14.3	27.0	9.3	5.6	14.4	
Foreign (non-U.S.) support	3.7	3.5	4.7	3.0	5.2	3.5	4.2	4.2	4.2	4.2	3.3	1.2	5.3	4.5	5.7	3.6	4.5	7.1	5.0	
Other	1.2	1.1	1.1	0.9	1.2	0.4	0.6	2.1	0.6	1.6	0.9	1.7	1.0	1.4	1.2	1.7	1.0	1.2	1.3	

D = suppressed to avoid disclosure of confidential information.

Note(s):

In this table, a doctorate recipient counts once in each source category from which they received support. Doctorate recipients may indicate multiple sources of support; thus, percentages sum to more than 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 4-3

Research doctorate recipients' sources of financial support, by sex and broad field of doctorate: 2023

(Percent)

Sex and financial resource	All fields (number)	All fields (percent)	Science and engineering														Non-science and engineering				
			Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
All doctorate recipients reporting source of support	51,181	100.0	80.0	2.2	17.3	3.9	18.5	2.2	4.6	3.6	3.0	9.6	6.2	8.9	20.0	2.5	6.7	5.7	1.4	3.7	
Fellowship or scholarship	34,305	100.0	79.4	2.2	18.6	3.2	17.1	2.4	4.1	3.4	2.9	8.9	5.8	10.7	20.6	2.7	5.1	7.1	1.9	3.8	
Dissertation grant	9,385	100.0	70.3	2.2	14.2	1.4	9.0	2.1	5.3	1.4	2.2	4.5	8.0	20.0	29.7	2.4	5.4	12.6	3.2	6.1	
Assistantship																					
Teaching	35,082	100.0	80.9	1.7	14.2	4.3	17.7	2.5	3.1	4.9	3.1	12.3	6.4	10.8	19.1	2.6	3.7	7.1	1.8	3.8	
Research	35,008	100.0	86.8	2.6	16.8	4.8	23.0	2.7	3.5	3.4	3.4	12.4	5.6	8.4	13.2	2.4	3.6	3.3	0.7	3.2	
Other	4,250	100.0	67.3	2.0	8.5	2.2	11.2	2.1	4.0	2.5	2.3	4.8	15.4	12.4	32.7	2.5	11.6	10.0	2.5	6.0	
Traineeship	2,053	100.0	95.9	1.1	49.6	1.4	12.0	0.8	7.5	1.4	1.9	4.8	10.4	5.1	4.1	0.3	1.0	1.4	0.3	1.1	
Internship or clinical residency	6,245	100.0	93.8	1.0	6.5	13.1	27.8	1.9	2.3	5.9	6.0	5.1	20.3	4.0	6.2	0.8	1.5	1.8	0.7	1.4	
Loan (any source)	10,459	100.0	66.3	1.9	12.4	1.7	8.9	1.2	8.2	1.3	1.9	4.4	13.8	10.7	33.7	2.2	14.8	8.1	2.2	6.3	
Personal sources																					
Savings	27,389	100.0	76.2	2.2	17.0	3.4	15.2	2.0	5.3	3.0	2.9	7.3	7.9	10.0	23.8	3.0	8.4	6.3	1.7	4.4	
Other earnings during graduate school	15,317	100.0	66.9	2.2	13.3	2.3	9.8	1.7	7.1	2.4	2.3	4.6	9.7	11.7	33.1	2.1	13.2	9.4	2.7	5.6	
Spouse's, partner's, or family's earnings or savings	20,751	100.0	76.4	1.9	17.5	3.1	15.2	2.0	5.2	2.9	2.7	7.3	8.9	9.7	23.6	3.0	7.6	6.9	1.8	4.3	
Employer reimbursement or assistance	5,229	100.0	67.4	2.2	12.9	4.0	13.2	2.1	9.7	2.6	2.7	5.4	5.1	7.4	32.6	3.0	18.2	5.5	0.8	5.2	
Foreign (non-U.S.) support	2,280	100.0	77.5	3.1	12.3	4.8	22.7	2.6	5.4	3.3	3.4	6.4	1.6	11.8	22.5	3.2	5.9	6.1	2.2	5.1	
Other	553	100.0	71.4	2.4	14.3	4.3	8.7	2.2	8.5	2.2	3.4	5.2	10.3	9.9	28.6	3.6	10.3	6.7	2.4	5.6	
Male doctorate recipients reporting source of support	26,872	100.0	84.5	1.9	14.9	5.6	26.0	2.3	2.5	4.9	3.5	12.0	2.7	8.2	15.5	2.6	3.4	5.5	1.2	2.8	
Fellowship or scholarship	17,345	100.0	82.9	1.9	16.1	4.6	23.8	2.5	2.3	4.9	3.2	11.0	2.5	10.2	17.1	3.0	2.6	7.0	1.5	3.0	
Dissertation grant	3,910	100.0	72.0	2.0	13.5	2.3	14.5	2.3	2.0	2.4	2.7	6.3	3.2	20.7	28.0	2.6	2.9	14.3	2.5	5.7	
Assistantship																					
Teaching	19,010	100.0	84.8	1.3	12.0	6.0	23.8	2.4	1.9	6.4	3.5	15.0	2.8	9.6	15.2	2.6	1.7	6.6	1.4	2.8	
Research	19,341	100.0	90.5	2.2	13.9	6.6	30.6	2.7	2.0	4.3	3.9	14.8	2.2	7.2	9.5	2.4	1.6	2.9	0.4	2.2	
Other	1,870	100.0	72.4	2.7	8.7	3.5	18.4	2.6	2.8	4.3	3.0	8.0	6.5	11.8	27.6	2.5	7.7	9.5	2.2	5.8	
Traineeship	865	100.0	96.2	0.6	51.1	2.2	16.0	0.8	5.2	1.7	1.8	5.8	5.3	5.7	3.8	D	0.8	1.5	D	D	
Internship or clinical residency	3,416	100.0	95.7	0.7	5.0	18.3	38.1	1.7	1.4	7.1	7.3	5.5	6.8	3.7	4.3	0.8	0.6	1.8	0.3	0.9	
Loan (any source)	4,503	100.0	69.5	2.0	13.3	2.9	16.3	1.3	4.4	2.1	2.2	6.7	7.5	10.9	30.5	3.1	9.6	9.7	2.5	5.6	
Personal sources																					
Savings	13,400	100.0	80.4	2.0	15.1	5.1	22.9	1.9	3.0	4.4	3.5	9.2	3.6	9.6	19.6	3.4	4.7	6.6	1.5	3.4	
Other earnings during graduate school	6,715	100.0	70.8	2.2	13.2	4.0	16.2	1.7	3.6	3.9	2.9	6.4	5.1	11.6	29.2	2.6	8.4	10.9	2.7	4.6	
Spouse's, partner's, or family's earnings or savings	9,418	100.0	80.7	1.6	15.2	4.8	23.2	2.2	3.0	4.3	3.3	9.8	4.0	9.3	19.3	3.3	3.8	7.6	1.5	3.2	
Employer reimbursement or assistance	2,494	100.0	74.9	2.2	12.4	6.5	21.9	2.6	4.3	4.0	3.3	8.1	2.3	7.4	25.1	3.0	11.0	6.1	0.8	4.3	
Foreign (non-U.S.) support	1,370	100.0	82.7	3.1	10.1	6.1	31.2	2.8	3.9	3.9	3.9	6.6	0.5	10.6	17.3	3.0	3.1	5.4	1.5	4.2	
Other	271	100.0	72.3	2.2	13.3	6.6	14.0	3.3	4.1	3.3	3.7	5.2	5.2	11.4	27.7	4.8	5.5	8.5	3.0	5.9	
Female doctorate recipients reporting source of support	24,303	100.0	75.0	2.6	19.9	2.0	10.3	2.0	6.9	2.2	2.4	6.9	10.1	9.7	25.0	2.4	10.3	5.9	1.7	4.8	

TABLE 4-3

Research doctorate recipients' sources of financial support, by sex and broad field of doctorate: 2023

(Percent)

Sex and financial resource	All fields (number)	All fields (percent)	Science and engineering												Non-science and engineering					
			Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Fellowship or scholarship	16,956	100.0	75.9	2.5	21.2	1.8	10.3	2.3	6.0	2.0	2.5	6.8	9.2	11.3	24.1	2.4	7.7	7.1	2.2	4.6
Dissertation grant	5,474	100.0	69.1	2.3	14.6	0.8	5.1	1.9	7.6	0.8	1.9	3.1	11.5	19.5	30.9	2.2	7.3	11.4	3.7	6.4
Assistantship																				
Teaching	16,066	100.0	76.3	2.2	16.7	2.4	10.4	2.5	4.6	3.0	2.6	9.2	10.6	12.1	23.7	2.6	6.1	7.7	2.3	5.0
Research	15,662	100.0	82.3	3.1	20.5	2.6	13.6	2.8	5.5	2.3	2.8	9.4	9.9	9.9	17.7	2.4	6.1	3.7	1.1	4.4
Other	2,380	100.0	63.3	1.4	8.4	1.2	5.5	1.7	5.0	1.1	1.6	2.2	22.4	12.8	36.7	2.5	14.7	10.5	2.8	6.2
Traineeship	1,188	100.0	95.7	1.4	48.6	0.8	9.1	0.8	9.2	1.2	1.9	4.0	14.1	4.6	4.3	D	1.1	1.3	D	D
Internship or clinical residency	2,829	100.0	91.6	1.4	8.4	6.8	15.2	2.1	3.4	4.4	4.5	4.5	36.5	4.3	8.4	0.8	2.6	1.9	1.2	1.9
Loan (any source)	5,955	100.0	63.9	1.8	11.7	0.8	3.3	1.2	11.1	0.7	1.8	2.6	18.5	10.6	36.1	1.6	18.7	7.0	2.0	6.8
Personal sources																				
Savings	13,984	100.0	72.2	2.4	18.8	1.7	7.9	2.1	7.5	1.7	2.2	5.4	12.0	10.4	27.8	2.6	11.9	6.1	1.9	5.4
Other earnings during graduate school	8,599	100.0	63.9	2.1	13.3	1.0	4.7	1.8	9.8	1.2	1.9	3.2	13.2	11.7	36.1	1.6	17.0	8.3	2.7	6.5
Spouse's, partner's, or family's earnings or savings	11,330	100.0	72.9	2.1	19.4	1.7	8.6	1.8	7.1	1.9	2.1	5.2	12.9	10.1	27.1	2.8	10.8	6.3	2.0	5.2
Employer reimbursement or assistance	2,734	100.0	60.5	2.3	13.4	1.7	5.2	1.7	14.7	1.3	2.1	3.0	7.7	7.4	39.5	3.0	24.7	4.9	0.8	6.1
Foreign (non-U.S.) support	910	100.0	69.8	3.2	15.7	2.9	9.8	2.3	7.8	2.4	2.6	6.2	3.3	13.6	30.2	3.6	10.0	7.0	3.2	6.4
Other	282	100.0	70.6	2.5	15.2	2.1	3.5	1.1	12.8	1.1	3.2	5.3	15.2	8.5	29.4	2.5	14.9	5.0	1.8	5.3

D = suppressed to avoid disclosure of confidential information.

Note(s):

In this table, a doctorate recipient counts once in each source category from which they received support. Doctorate recipients may indicate multiple sources of support; thus, percentages sum to more than 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 4-4
Education-related debt of research doctorate recipients, by broad field of doctorate: 2023
(Median debt, number, and percent)

Debt level	All fields		Science and engineering																								Non-science and engineering																											
			Total		Agricultural sciences and natural resources				Biological and biomedical sciences				Computer and information sciences				Engineering				Geosciences, atmospheric, and ocean sciences				Health sciences				Mathematics and statistics				Multidisciplinary/ interdisciplinary sciences				Physical sciences		Psychology		Social sciences		Total		Business		Education		Humanities		Visual and performing arts		Other non-science and engineering	
Cumulative debt																																																						
All reporting education-related debt (number)	52,034		41,631		1,133				9,022				2,030				9,657				1,118				2,408				1,879				1,554				4,981		3,251		4,598		10,403		1,305		3,504		2,939		724		1,931	
Median debt (dollars)	35,000		35,000		35,000				30,000				25,000				25,000				25,000				70,000				25,000				30,000				25,000		70,000		45,000		60,000		45,000		75,000		45,000		45,000		65,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	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	32,224	61.9	26,777	64.3	697	61.5	5,527	61.3	1,621	79.9	7,148	74.0	726	64.9	1,150	47.8	1,464	77.9	1,117	71.9	3,331	66.9	1,296	39.9	2,700	58.7	5,447	52.4	930	71.3	1,598	45.6	1,568	53.4	381	52.6	970	50.2																
\$10,000 or less	3,664	7.0	2,983	7.2	D	D	649	7.2	134	6.6	719	7.4	81	7.2	159	6.6	D	D	103	6.6	368	7.4	209	6.4	345	7.5	681	6.5	64	4.9	215	6.1	207	7.0	58	8.0	137	7.1																
\$10,001-\$20,000	2,726	5.2	2,245	5.4	61	5.4	613	6.8	65	3.2	431	4.5	70	6.3	99	4.1	88	4.7	77	5.0	314	6.3	189	5.8	238	5.2	481	4.6	52	4.0	152	4.3	163	5.5	38	5.2	76	3.9																
\$20,001-\$30,000	2,389	4.6	1,932	4.6	47	4.1	557	6.2	50	2.5	342	3.5	68	6.1	106	4.4	66	3.5	45	2.9	274	5.5	167	5.1	210	4.6	457	4.4	33	2.5	149	4.3	142	4.8	44	6.1	89	4.6																
\$30,001-\$40,000	1,689	3.2	1,329	3.2	58	4.7	362	4.0	23	1.1	229	2.4	42	3.8	96	4.0	35	1.9	37	2.4	178	3.6	128	3.9	146	3.2	360	3.5	32	2.5	100	2.9	129	4.4	31	4.3	68	3.5																
\$40,001-\$50,000	1,198	2.3	891	2.1	22	1.9	199	2.2	17	0.8	170	1.8	23	2.1	66	2.7	23	1.2	32	2.1	102	2.0	124	3.8	113	2.5	307	3.0	23	1.8	121	3.5	91	3.1	20	2.8	52	2.7																
\$50,001-\$60,000	957	1.8	698	1.7	23	2.0	186	2.1	22	1.1	103	1.1	17	1.5	65	2.7	15	0.8	20	1.3	75	1.5	87	2.7	85	1.8	259	2.5	16	1.2	96	2.7	77	2.6	22	3.0	48	2.5																
\$60,001-\$70,000	841	1.6	600	1.4	15	1.3	138	1.5	11	0.5	81	0.8	18	1.6	65	2.7	16	0.9	10	0.6	71	1.4	84	2.6	91	2.0	241	2.3	13	1.0	103	2.9	72	2.4	46	2.4																		
\$70,001-\$80,000	744	1.4	539	1.3	14	1.2	124	1.4	8	0.4	60	0.6	10	0.9	64	2.7	14	0.7	18	1.2	64	1.3	71	2.2	92	2.0	205	2.0	10	0.8	91	2.6	51	1.7	9	1.2	44	2.3																
\$80,001-\$90,000	702	1.3	477	1.1	13	1.1	113	1.3	8	0.4	70	0.7	15	1.3	60	2.5	11	0.6	11	0.7	39	0.8	72	2.2	65	1.4	225	2.2	13	1.0	92	2.6	60	2.0	18	2.5	42	2.2																
\$90,001-\$100,000	848	1.6	616	1.5	20	1.8	154	1.7	12	0.6	84	0.9	11	1.0	65	2.7	6	0.3	15	1.0	68	1.4	112	3.4	69	1.5	232	2.2	16	1.2	89	2.5	60	2.0	24	3.3	43	2.2																
\$100,001-\$120,000	893	1.7	576	1.4	17	1.5	119	1.3	22	1.1	73	0.8	9	0.8	72	3.0	7	0.4	14	0.9	31	0.6	103	3.2	109	2.4	317	3.0	25	1.9	144	4.1	64	2.2	19	2.6	65	3.4																
\$120,001-\$140,000	675	1.3	435	1.0	12	1.1	81	0.9	12	0.6	29	0.3	11	1.0	67	2.8	5	0.3	18	1.2	19	0.4	107	3.3	74	1.6	240	2.3	17	1.3	115	3.3	54	1.8	10	1.4	44	2.3																
\$140,001-\$160,000	541	1.0	337	0.8	D	D	46	0.5	5	0.2	34	0.4	7	0.6	62	2.6	D	D	7	0.5	16	0.3	91	2.8	60	1.3	204	2.0	15	1.1	90	2.6	41	1.4	11	1.5	47	2.4																
\$160,001 or more	1,943	3.7	1,196	2.9	34	3.0	154	1.7	20	1.0	84	0.9	10	0.9	212	8.8	9	0.5	30	1.9	31	0.6	411	12.6	201	4.4	747	7.2	46	3.5	349	10.0	160	5.4	32	4.4	160	8.3																
Graduate debt																																																						
All reporting graduate debt (number)	51,964		41,577		1,133				9,012				2,028				9,646				1,117				2,401				1,877				1,549				4,975		3,244		4,595		10,387		1,304		3,498		2,934		723		1,928	
Median debt (dollars)	35,000		35,000		25,000				25,000				15,000				15,000				25,000				55,000				15,000				25,000				15,000		65,000		35,000		55,000		35,000		55,000		45,000		35,000		55,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	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	38,115	73.3	31,924	76.8	826	72.9	7,205	79.9	1,725	85.1	7,998	82.9	919	82.3	1,323	55.1	1,664	88.7	1,239	80.0	4,261	85.6	1,635	50.4	3,129	68.1	6,191	59.6	972	74.5	1,749	50.0	1,916	65.3	467	64.6	1,087	56.4																
\$10,000 or less	3,128	6.0	2,480	6.0	92	8.1	505	5.6	105	5.2	574	6.0	61	5.5	145	6.0	85	4.5	98	6.3	288	5.8	192	5.9	335	7.3	648	6.2	60	4.6	219	6.3	188	6.4	45	6.2	136	7.1																
\$10,001-\$20,000	1,819	3.5	1,361	3.3	50	4.4	283	3.1	48	2.4	305	3.2	31	2.8	97	4.0	36	1.9	55	3.6	123	2.5	157	4.8	176	3.8	458	4.4	50	3.8	182	5.2	114	3.9	36	5.0	76	3.9																
\$20,001-\$30,000	1,404	2.7	977	2.3	26	2.3	196	2.2	27	1.3	204	2.1	27	2.4	84	3.5	26	1.4	20	1.3	84	1.7	126	3.9	157	3.4	427	4.1	42	3.2	157	4.5	112	3.8	30	4.1	86	4.5																
\$30,001-\$40,000	965	1.9	659	1.6	25	2.2	141	1.6	13	0.6	117	1.2	11	1.0	95	4.0	18	1.0	20	1.3	35	0.7	96	3.0	88	1.9	306	2.9	20	1.5	132	3.8	81	2.8	19	2.6	54	2.8																
\$40,001-\$50,000	838	1.6	592	1.4	14	1.2	102	1.1	14	0.7	104	1.1	13	1.2	77	3.2	10	0.5	27	1.7	39	0.8	104	3.2	88	1.9	246	2.4	13	1.0	116	3.3	58	2.0	10	1.4	49	2.5																
\$50,001-\$60,000	767	1.5	496	1.2	D	D	103	1.1	21	1.0	81	0.8	8	0.7	68	2.8	D	D	12	0.8	25	0.5	76	2.3	81	1.8	271	2.6	14	1.1	117	3.3	57	1.9	17	2.4	66	3.4																
\$60,001-\$70,000	614	1.2	390	0.9	D	D	72	0.8	13	0.6	41	0.4	9	0.8	54	2.2	D	D	7	0.5	25	0.5	78	2.4	69	1.5	224	2.2	11	0.8	93	2.7	64	2.2	9	1.2	47	2.4																
\$70,001-\$80,000	509	1.0	314	0.8	5	0.4	60	0.7	D	D	24	0.2	D	D	55	2.3	6	0.3	D	D	15	0.3	60	1.8	65	1.4	195	1.9	15	1.2	86	2.5	41	1.4	16	2.2	37	1.9																
\$80,001-\$90,000	433	0.8	264	0.6	D	D	40	0.4	D	D	32	0.3	9	0.8	41	1.7	D	D	D	D																																		

TABLE 4-4

Education-related debt of research doctorate recipients, by broad field of doctorate: 2023

(Median debt, number, and percent)

Debt level	All fields		Science and engineering																		Non-science and engineering																			
			Total		Agricultural sciences and natural resources		Biological and biomedical sciences		Computer and information sciences		Engineering		Geosciences, atmospheric, and ocean sciences		Health sciences		Mathematics and statistics		Multidisciplinary/ interdisciplinary sciences		Physical sciences		Psychology		Social sciences		Total		Business		Education		Humanities		Visual and performing arts		Other non-science and engineering			
\$120,001–\$140,000	454	0.9	275	0.7	D	D	38	0.4	7	0.3	21	0.2	D	D	59	2.5	D	D	7	0.5	10	0.2	74	2.3	46	1.0	179	1.7	11	0.8	83	2.4	40	1.4	9	1.2	36	1.9		
\$140,001–\$160,000	583	1.1	355	0.9	D	D	47	0.5	5	0.2	21	0.2	6	0.5	69	2.9	D	D	11	0.7	13	0.3	103	3.2	66	1.4	228	2.2	16	1.2	105	3.0	49	1.7	8	1.1	50	2.6		
\$160,001 or more	1,140	2.2	739	1.8	D	D	87	1.0	10	0.5	48	0.5	D	D	125	5.2	5	0.3	12	0.8	10	0.2	301	9.3	119	2.6	401	3.9	32	2.5	160	4.6	99	3.4	19	2.6	91	4.7		
Undergraduate debt																																								
All reporting undergraduate debt (number)	51,993		41,601		1,131		9,017		2,029		9,646		1,118		2,405		1,878		1,554		4,977		3,249		4,597		10,392		1,304		3,499		2,936		724		1,929			
Median debt (dollars)	25,000		25,000		25,000		25,000		15,000		25,000		25,000		25,000		15,000		25,000		25,000		25,000		25,000		25,000		25,000		25,000		35,000		25,000		25,000		35,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	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	38,101	73.3	30,972	74.5	836	73.9	6,232	69.1	1,791	88.3	8,016	83.1	796	71.2	1,637	68.1	1,555	82.8	1,264	81.3	3,591	72.2	1,907	58.7	3,347	72.8	7,129	68.6	1,112	85.3	2,248	64.2	1,964	66.9	494	68.2	1,311	68.0		
\$10,000 or less	3,049	5.9	2,402	5.8	67	5.9	555	6.2	88	4.3	481	5.0	72	6.4	140	5.8	90	4.8	81	5.2	295	5.9	267	8.2	266	5.8	647	6.2	48	3.7	232	6.6	199	6.8	55	7.6	113	5.9		
\$10,001–\$20,000	2,622	5.0	2,096	5.0	57	5.0	587	6.5	48	2.4	322	3.3	68	6.1	124	5.2	83	4.4	48	3.1	287	5.8	245	7.5	227	4.9	526	5.1	34	2.6	177	5.1	177	6.0	38	5.2	100	5.2		
\$20,001–\$30,000	2,442	4.7	1,948	4.7	44	3.9	576	6.4	32	1.6	274	2.8	69	6.2	121	5.0	58	3.1	43	2.8	273	5.5	237	7.3	221	4.8	494	4.8	28	2.1	175	5.0	166	5.7	34	4.7	91	4.7		
\$30,001–\$40,000	1,756	3.4	1,318	3.2	49	4.3	361	4.0	24	1.2	167	1.7	45	4.0	96	4.0	34	1.8	37	2.4	192	3.9	167	5.1	146	3.2	438	4.2	27	2.1	151	4.3	149	5.1	39	5.4	72	3.7		
\$40,001–\$50,000	1,027	2.0	735	1.8	18	1.6	181	2.0	9	0.4	113	1.2	13	1.2	72	3.0	21	1.1	21	1.4	95	1.9	94	2.9	98	2.1	292	2.8	13	1.0	116	3.3	79	2.7	22	3.0	62	3.2		
\$50,001–\$60,000	835	1.6	607	1.5	19	1.7	150	1.7	15	0.7	69	0.7	16	1.4	61	2.5	10	0.5	14	0.9	64	1.3	94	2.9	95	2.1	228	2.2	11	0.8	91	2.6	64	2.2	13	1.8	49	2.5		
\$60,001–\$70,000	493	0.9	349	0.8	9	0.8	82	0.9	D	D	50	0.5	15	1.3	24	1.0	D	D	10	0.6	38	0.8	53	1.6	55	1.2	144	1.4	5	0.4	74	2.1	28	1.0	7	1.0	30	1.6		
\$70,001–\$80,000	370	0.7	262	0.6	D	D	71	0.8	D	D	34	0.4	6	0.5	16	0.7	7	0.4	6	0.4	44	0.9	33	1.0	37	0.8	108	1.0	6	0.5	51	1.5	22	0.7	5	0.7	24	1.2		
\$80,001–\$90,000	408	0.8	305	0.7	D	D	82	0.9	D	D	46	0.5	11	1.0	32	1.3	8	0.4	10	0.6	32	0.6	42	1.3	32	0.7	103	1.0	5	0.4	45	1.3	22	0.7	8	1.1	23	1.2		
\$90,001 or more	890	1.7	607	1.5	D	D	140	1.6	14	0.7	74	0.8	7	0.6	82	3.4	D	D	20	1.3	66	1.3	110	3.4	73	1.6	283	2.7	15	1.2	139	4.0	66	2.2	9	1.2	54	2.8		

D = suppressed to avoid disclosure of confidential information.

Note(s):

Median debt is the median debt of doctorate recipients with debt (debt > 0). Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 4-5
Education-related debt of research doctorate recipients, by sex, citizenship status, ethnicity, and race: 2023

(Median debt, number, and percent)

Debt level	Sex				Citizenship status				U.S. citizens and permanent residents															
	Male		Female		U.S. citizen or permanent resident		Temporary visa holder		Hispanic or Latino	Not Hispanic or Latino											Ethnicity not reported			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported		Number	Percent
Cumulative debt																								
All reporting education-related debt (number)	27,392		24,636		33,627		18,122		3,250		94		3,689		2,589		22,225		1,283		330		167	
Median debt (dollars)	35,000		45,000		45,000		15,000		45,000		60,000		25,000		95,000		40,000		40,000		45,000		50,000	
No debt	17,839	65.1	14,382	58.4	17,394	51.7	14,653	80.9	1,387	42.7	37	39.4	2,648	71.8	576	22.2	11,819	53.2	644	50.2	186	56.4	97	58.1
\$10,000 or less	1,987	7.3	1,676	6.8	2,289	6.8	1,354	7.5	271	8.3	5	5.3	243	6.6	133	5.1	1,512	6.8	88	6.9	21	6.4	16	9.6
\$10,001–\$20,000	1,392	5.1	1,334	5.4	2,143	6.4	571	3.2	233	7.2	6	6.4	175	4.7	120	4.6	1,487	6.7	100	7.8	12	3.6	10	6.0
\$20,001–\$30,000	1,223	4.5	1,166	4.7	1,970	5.9	410	2.3	239	7.4	5	5.3	150	4.1	131	5.1	1,344	6.0	75	5.8	20	6.1	6	3.6
\$30,001–\$40,000	868	3.2	821	3.3	1,460	4.3	223	1.2	162	5.0	D	D	D	D	134	5.2	999	4.5	59	4.6	17	5.2	1	0.6
\$40,001–\$50,000	604	2.2	593	2.4	1,014	3.0	179	1.0	102	3.1	5	5.3	56	1.5	97	3.7	706	3.2	37	2.9	8	2.4	3	1.8
\$50,001–\$60,000	471	1.7	486	2.0	804	2.4	147	0.8	83	2.6	D	D	D	D	96	3.7	532	2.4	28	2.2	7	2.1	4	2.4
\$60,001–\$70,000	391	1.4	450	1.8	740	2.2	91	0.5	83	2.6	5	5.3	34	0.9	99	3.8	488	2.2	25	1.9	5	1.5	1	0.6
\$70,001–\$80,000	327	1.2	417	1.7	667	2.0	73	0.4	74	2.3	D	D	D	D	88	3.4	446	2.0	24	1.9	2	0.6	4	2.4
\$80,001–\$90,000	338	1.2	364	1.5	653	1.9	47	0.3	64	2.0	0	0.0	32	0.9	83	3.2	450	2.0	18	1.4	4	1.2	2	1.2
\$90,001–\$100,000	381	1.4	467	1.9	772	2.3	67	0.4	78	2.4	D	D	D	D	111	4.3	493	2.2	35	2.7	10	3.0	1	0.6
\$100,001–\$120,000	351	1.3	542	2.2	796	2.4	93	0.5	94	2.9	D	D	D	D	169	6.5	453	2.0	21	1.6	10	3.0	5	3.0
\$120,001–\$140,000	273	1.0	402	1.6	619	1.8	53	0.3	94	2.9	D	D	D	D	113	4.4	347	1.6	29	2.3	5	1.5	3	1.8
\$140,001–\$160,000	218	0.8	322	1.3	484	1.4	57	0.3	68	2.1	D	D	D	D	118	4.6	257	1.2	18	1.4	3	0.9	3	1.8
\$160,001 or more	729	2.7	1,214	4.9	1,822	5.4	104	0.6	218	6.7	10	10.6	68	1.8	521	20.1	892	4.0	82	6.4	20	6.1	11	6.6
Graduate debt																								
All reporting graduate debt (number)	27,359		24,599		33,593		18,096		3,246		94		3,688		2,580		22,206		1,283		330		166	
Median debt (dollars)	25,000		45,000		45,000		15,000		45,000		45,000		25,000		75,000		45,000		45,000		45,000		55,000	
No debt	20,968	76.6	17,143	69.7	22,713	67.6	15,205	84.0	1,916	59.0	46	48.9	3,021	81.9	894	34.7	15,627	70.4	866	67.5	228	69.1	115	69.3
\$10,000 or less	1,688	6.2	1,440	5.9	1,874	5.6	1,234	6.8	235	7.2	5	5.3	163	4.4	142	5.5	1,222	5.5	81	6.3	18	5.5	8	4.8
\$10,001–\$20,000	902	3.3	917	3.7	1,287	3.8	524	2.9	165	5.1	5	5.3	91	2.5	105	4.1	850	3.8	57	4.4	8	2.4	6	3.6
\$20,001–\$30,000	692	2.5	712	2.9	1,083	3.2	314	1.7	140	4.3	7	7.4	84	2.3	126	4.9	677	3.0	31	2.4	13	3.9	5	3.0
\$30,001–\$40,000	445	1.6	520	2.1	794	2.4	168	0.9	105	3.2	D	D	D	D	105	4.1	489	2.2	24	1.9	9	2.7	3	1.8
\$40,001–\$50,000	379	1.4	458	1.9	714	2.1	118	0.7	69	2.1	6	6.4	36	1.0	102	4.0	463	2.1	29	2.3	7	2.1	2	1.2
\$50,001–\$60,000	338	1.2	429	1.7	647	1.9	117	0.6	64	2.0	D	D	D	D	114	4.4	409	1.8	18	1.4	5	1.5	3	1.8
\$60,001–\$70,000	266	1.0	348	1.4	548	1.6	61	0.3	49	1.5	6	6.4	30	0.8	95	3.7	341	1.5	22	1.7	5	1.5	0	0.0
\$70,001–\$80,000	216	0.8	293	1.2	457	1.4	50	0.3	60	1.8	D	D	D	D	86	3.3	263	1.2	17	1.3	4	1.2	2	1.2
\$80,001–\$90,000	177	0.6	256	1.0	401	1.2	31	0.2	46	1.4	D	D	D	D	67	2.6	257	1.2	12	0.9	2	0.6	1	0.6
\$90,001–\$100,000	208	0.8	264	1.1	422	1.3	46	0.3	49	1.5	D	D	D	D	90	3.5	231	1.0	22	1.7	4	1.2	1	0.6

TABLE 4-5
Education-related debt of research doctorate recipients, by sex, citizenship status, ethnicity, and race: 2023

(Median debt, number, and percent)

Debt level	Sex				Citizenship status				U.S. citizens and permanent residents															
	Male		Female		U.S. citizen or permanent resident		Temporary visa holder		Hispanic or Latino		Not Hispanic or Latino										Ethnicity not reported			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
\$100,001–\$120,000	258	0.9	464	1.9	655	1.9	67	0.4	86	2.6	D	D	D	D	136	5.3	362	1.6	24	1.9	5	1.5	6	3.6
\$120,001–\$140,000	184	0.7	270	1.1	413	1.2	37	0.2	52	1.6	D	D	D	D	95	3.7	229	1.0	12	0.9	3	0.9	3	1.8
\$140,001–\$160,000	223	0.8	360	1.5	530	1.6	50	0.3	71	2.2	D	D	D	D	144	5.6	268	1.2	18	1.4	5	1.5	4	2.4
\$160,001 or more	415	1.5	725	2.9	1,055	3.1	74	0.4	139	4.3	5	5.3	43	1.2	279	10.8	518	2.3	50	3.9	14	4.2	7	4.2
Undergraduate debt																								
All reporting undergraduate debt (number)	27,369		24,618		33,607		18,104		3,250		94		3,687		2,584		22,212		1,283		330		167	
Median debt (dollars)	25,000		25,000		25,000		15,000		25,000		25,000		15,000		35,000		25,000		25,000		25,000		25,000	
No debt	20,643	75.4	17,455	70.9	21,411	63.7	16,477	91.0	1,827	56.2	52	55.3	2,962	80.3	999	38.7	14,445	65.0	785	61.2	225	68.2	116	69.5
\$10,000 or less	1,569	5.7	1,478	6.0	2,302	6.8	734	4.1	308	9.5	8	8.5	210	5.7	212	8.2	1,432	6.4	93	7.2	21	6.4	18	10.8
\$10,001–\$20,000	1,250	4.6	1,372	5.6	2,311	6.9	300	1.7	265	8.2	5	5.3	170	4.6	195	7.5	1,554	7.0	97	7.6	19	5.8	6	3.6
\$20,001–\$30,000	1,169	4.3	1,273	5.2	2,230	6.6	200	1.1	278	8.6	9	9.6	136	3.7	232	9.0	1,457	6.6	86	6.7	23	7.0	9	5.4
\$30,001–\$40,000	875	3.2	881	3.6	1,623	4.8	125	0.7	177	5.4	D	D	D	D	195	7.5	1,076	4.8	70	5.5	13	3.9	8	4.8
\$40,001–\$50,000	490	1.8	536	2.2	934	2.8	92	0.5	100	3.1	D	D	D	D	161	6.2	597	2.7	33	2.6	4	1.2	3	1.8
\$50,001–\$60,000	385	1.4	450	1.8	765	2.3	64	0.4	81	2.5	5	5.3	26	0.7	141	5.5	475	2.1	28	2.2	8	2.4	1	0.6
\$60,001–\$70,000	235	0.9	258	1.0	464	1.4	26	0.1	50	1.5	D	D	D	D	99	3.8	274	1.2	19	1.5	4	1.2	2	1.2
\$70,001–\$80,000	171	0.6	199	0.8	349	1.0	18	0.1	38	1.2	D	D	D	D	70	2.7	215	1.0	12	0.9	2	0.6	1	0.6
\$80,001–\$90,000	205	0.7	203	0.8	372	1.1	33	0.2	29	0.9	D	D	D	D	79	3.1	224	1.0	20	1.6	2	0.6	0	0.0
\$90,001 or more	377	1.4	513	2.1	846	2.5	35	0.2	97	3.0	D	D	D	D	201	7.8	463	2.1	40	3.1	9	2.7	3	1.8

D = suppressed to avoid disclosure of confidential information.

Note(s):
 Median debt is the median debt of doctorate recipients with debt (debt > 0). Due to rounding, percentages may not sum to 100.

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

TABLE 4-6

U.S. citizen and permanent resident research doctorate recipients with graduate education-related debt, by ethnicity, race, and broad field of doctorate: 2023

(Number and percent)

Ethnicity, race, and debt level	All fields	Science and engineering											Non-science and engineering						
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
U.S. citizens and permanent residents reporting graduate debt																			
Total (number) ^a	33,593	25,633	717	6,739	764	4,303	750	1,811	893	769	2,988	2,925	2,974	7,960	608	3,065	2,356	547	1,384
Debt > \$30,000 (%)	19.8	16.1	17.2	10.9	9.3	6.8	7.7	38.7	4.4	14.4	5.3	37.7	24.7	31.6	23.8	37.3	25.0	24.9	35.9
Debt > \$70,000 (%)	11.7	9.3	8.2	5.4	4.8	2.7	3.6	23.5	1.8	7.8	2.3	26.2	14.9	19.5	16.8	23.1	14.5	15.7	22.7
Hispanic or Latino																			
Total (number) ^a	3,246	2,460	61	695	44	389	57	153	61	71	280	327	322	786	36	331	239	47	133
Debt > \$30,000 (%)	24.3	20.8	D	13.7	15.9	9.3	19.3	43.1	D	15.5	10.7	45.3	29.8	35.4	44.4	40.8	27.6	19.1	39.1
Debt > \$70,000 (%)	15.5	13.4	D	7.5	D	4.4	10.5	29.4	D	8.5	5.7	33.9	20.8	22.1	D	26.3	D	D	22.6
Not Hispanic or Latino																			
American Indian or Alaska Native																			
Total (number) ^a	94	58	D	11	D	D	D	9	0	D	D	8	15	36	D	21	8	D	D
Debt > \$30,000 (%)	33.0	31.0	D	D	0.0	0.0	0.0	D	-	0.0	D	D	46.7	36.1	0.0	D	D	0.0	0.0
Debt > \$70,000 (%)	16.0	D	0.0	0.0	0.0	0.0	0.0	D	-	0.0	D	D	D	D	0.0	D	D	0.0	0.0
Asian																			
Total (number) ^a	3,688	3,130	44	885	180	705	56	186	131	106	335	217	285	558	116	174	124	38	106
Debt > \$30,000 (%)	8.9	7.7	15.9	6.3	4.4	3.3	D	D	D	6.6	2.7	D	11.6	15.6	11.2	17.2	12.9	15.8	20.8
Debt > \$70,000 (%)	4.7	4.0	D	3.2	D	1.1	0.0	9.7	0.0	D	D	D	6.7	8.6	5.2	D	5.6	D	13.2
Black or African American																			
Total (number) ^a	2,580	1,570	D	319	D	204	D	230	21	D	92	277	285	1,010	D	561	141	D	D
Debt > \$30,000 (%)	50.9	44.1	43.3	D	D	17.6	D	65.2	28.6	D	14.1	68.2	54.0	61.5	62.3	63.8	D	D	65.8
Debt > \$70,000 (%)	34.8	29.7	26.7	16.6	D	7.4	D	48.3	D	28.6	5.4	52.7	34.7	42.6	47.5	43.9	D	D	47.6
White																			
Total (number) ^a	22,206	16,999	546	4,427	459	2,775	583	1,143	626	496	2,124	1,911	1,909	5,207	367	1,864	1,727	408	841
Debt > \$30,000 (%)	17.2	14.4	16.5	10.3	7.8	6.3	6.9	34.7	4.2	12.5	4.7	33.9	21.6	26.7	19.3	30.1	23.7	25.7	28.8
Debt > \$70,000 (%)	9.6	7.7	7.9	4.9	3.9	2.3	D	18.9	1.1	6.5	2.0	21.9	D	15.7	13.1	17.1	14.1	16.4	16.6
More than one race																			
Total (number) ^a	1,283	1,051	27	324	21	174	29	59	41	24	111	139	102	232	15	76	71	16	54
Debt > \$30,000 (%)	19.3	14.5	D	8.6	D	9.8	D	42.4	D	D	D	32.4	21.6	41.4	40.0	D	31.0	D	53.7
Debt > \$70,000 (%)	12.1	8.8	D	2.8	D	3.4	0.0	28.8	D	D	D	27.3	13.7	26.7	D	35.5	11.3	D	38.9
Other race or race not reported																			
Total (number) ^a	330	244	3	57	10	D	4	16	11	6	D	31	38	86	8	19	33	8	18
Debt > \$30,000 (%)	19.1	17.6	66.7	12.3	0.0	8.6	0.0	56.3	9.1	16.7	3.0	38.7	18.4	23.3	12.5	47.4	15.2	12.5	22.2
Debt > \$70,000 (%)	11.2	D	0.0	7.0	0.0	0.0	0.0	D	9.1	0.0	0.0	29.0	5.3	D	12.5	31.6	D	0.0	11.1
Ethnicity not reported																			

TABLE 4-6

U.S. citizen and permanent resident research doctorate recipients with graduate education-related debt, by ethnicity, race, and broad field of doctorate: 2023

(Number and percent)

Ethnicity, race, and debt level	All fields	Science and engineering										Non-science and engineering							
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Total (number) ^a	166	121	4	21	8	17	2	15	2	8	11	15	18	45	4	19	13	6	3
Debt > \$30,000 (%)	19.3	19.8	0.0	4.8	12.5	23.5	0.0	60.0	0.0	0.0	0.0	40.0	16.7	17.8	0.0	31.6	7.7	16.7	0.0
Debt > \$70,000 (%)	14.5	16.5	0.0	0.0	12.5	23.5	0.0	53.3	0.0	0.0	0.0	26.7	16.7	8.9	0.0	10.5	7.7	16.7	0.0

- = not calculable; D = suppressed to avoid disclosure of confidential information.

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

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

TABLE 5-1
Research doctorate recipients who ever attended community college, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
 (Percent)

Demographic characteristic	All fields	Science and engineering												Non-science and engineering						
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Doctorate recipients reporting community college attendance	21.3	20.0	26.0	23.0	9.4	14.2	21.4	36.1	13.4	17.2	17.3	30.5	19.6	26.7	16.0	35.5	23.6	17.3	26.5	
Sex																				
Male	18.9	17.7	29.2	22.8	9.2	13.5	20.3	30.3	13.4	15.2	16.9	33.5	19.3	25.9	16.9	35.4	24.6	18.7	28.2	
Female	24.0	22.9	23.3	23.2	10.1	16.0	22.8	38.4	13.4	20.4	18.2	29.6	19.8	27.3	14.9	35.5	22.5	16.3	25.5	
Citizenship status																				
U.S. citizen or permanent resident	30.8	30.1	38.6	29.4	20.3	27.6	29.7	44.8	26.1	30.1	26.8	33.2	28.3	33.1	28.7	39.3	28.0	21.2	34.8	
Temporary visa holder	3.8	3.5	4.4	4.0	2.7	3.3	4.2	9.3	1.4	3.9	2.9	5.3	3.3	5.2	4.5	7.5	4.4	4.1	5.5	
Ethnicity and race (U.S. citizens and permanent residents)																				
Hispanic or Latino	35.1	34.7	26.2	32.3	26.7	32.2	31.6	45.1	37.7	33.8	35.0	40.9	34.0	36.5	33.3	42.9	26.6	29.2	41.8	
Not Hispanic or Latino																				
American Indian or Alaska Native	67.4	64.4	D	45.5	D	D	D	88.9	-	D	D	D	73.3	72.2	D	71.4	75.0	D	D	
Asian	20.3	20.5	D	20.9	D	20.0	17.9	30.6	15.2	D	21.0	D	15.8	19.1	D	28.5	12.1	D	D	
Black or African American	37.2	35.6	26.7	30.0	36.6	D	D	49.8	47.6	42.9	D	37.3	31.7	39.6	39.3	41.4	33.8	27.3	40.3	
White	30.8	30.4	41.4	30.2	21.9	27.6	30.5	46.3	26.5	30.3	26.6	31.6	28.2	32.0	29.8	38.5	27.9	18.8	33.7	
More than one race	34.9	32.8	30.8	33.5	28.6	37.4	24.1	30.5	29.3	37.5	27.9	35.3	30.4	44.6	42.9	45.3	45.8	37.5	44.4	
Other race or race not reported	33.1	31.7	33.3	28.3	16.7	31.4	50.0	37.5	27.3	16.7	36.4	35.5	34.2	37.1	37.5	55.0	24.2	37.5	40.0	
Ethnicity not reported	32.4	33.3	80.0	36.0	10.0	40.9	0.0	62.5	0.0	33.3	13.3	36.8	21.1	29.8	40.0	22.7	35.3	37.5	20.0	

- = not calculable; D = suppressed to avoid disclosure of confidential information.

Note(s):

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

Source(s):

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

TABLE 5-2

Research doctorate recipients who earned a bachelor's degree related to doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Percent)

Demographic characteristic	All fields		Science and engineering													Non-science and engineering					
			Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Doctorate recipients reporting bachelor's degree	98.3	98.3	97.1	98.2	98.5	98.7	98.3	96.3	98.8	98.1	98.7	98.2	98.8	98.2	98.3	98.2	98.2	98.2	98.3	98.3	
Bachelor's degree in the same field as doctorate	60.6	64.3	48.4	64.2	38.8	78.4	49.8	46.4	80.6	14.0	77.2	70.9	55.2	46.0	42.3	25.7	71.3	69.7	38.0	38.0	
Sex																					
Male	63.4	66.0	50.8	62.3	39.7	80.1	50.6	37.2	80.5	14.5	77.6	66.0	58.9	49.2	41.7	22.8	71.1	71.6	36.7	36.7	
Female	57.6	62.3	46.4	65.7	35.7	73.5	49.0	50.1	80.7	13.2	76.5	72.4	51.7	43.8	42.9	26.7	71.6	68.2	38.8	38.8	
Citizenship status																					
U.S. citizen or permanent resident	61.3	66.2	46.0	68.7	46.1	80.0	51.1	43.5	84.6	12.9	80.6	73.1	55.3	45.8	40.9	25.0	73.6	73.1	35.8	35.8	
Temporary visa holder	61.5	63.2	53.8	52.6	35.1	78.9	48.9	57.7	78.8	15.3	73.3	62.7	56.6	50.2	44.5	34.7	67.5	64.9	46.1	46.1	
Ethnicity and race (U.S. citizens and permanent residents)																					
Hispanic or Latino	61.7	68.6	39.3	72.6	44.4	83.5	50.9	31.4	86.9	16.9	81.1	78.3	59.0	40.1	52.8	17.4	66.0	70.8	35.3	35.3	
Not Hispanic or Latino																					
American Indian or Alaska Native	49.5	59.3	0.0	81.8	0.0	D	D	D	-	0.0	D	77.8	46.7	33.3	0.0	D	62.5	D	0.0	0.0	
Asian	60.0	64.0	48.9	64.1	40.7	78.6	46.4	D	79.5	15.9	D	70.3	50.5	37.7	35.0	D	D	68.4	27.5	27.5	
Black or African American	48.1	59.1	35.5	D	42.9	D	D	49.8	81.0	D	79.3	66.0	44.6	31.1	27.9	D	D	D	33.0	33.0	
White	63.1	67.0	47.7	68.8	48.1	80.0	51.6	45.1	86.0	13.0	80.7	73.6	57.4	50.4	43.9	27.9	76.3	74.6	37.9	37.9	
More than one race	64.6	68.0	37.0	D	57.1	82.2	41.4	35.6	82.9	D	79.3	75.5	52.9	49.4	46.7	25.0	76.4	81.3	38.9	38.9	
Other race or race not reported	61.2	65.6	66.7	70.5	50.0	80.6	50.0	43.8	72.7	0.0	74.3	74.2	52.6	48.9	33.3	30.0	63.6	87.5	35.0	35.0	
Ethnicity not reported	45.9	51.0	40.0	60.7	50.0	59.1	100.0	37.5	60.0	10.0	68.8	57.1	35.0	33.3	33.3	13.6	55.0	55.6	0.0	0.0	

- = not calculable; D = suppressed to avoid disclosure of confidential information.

Note(s):

Percentages are based on the total number of doctorate recipients. A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 5-3
Research doctorate recipients who earned a master's degree related to doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
 (Percent)

Demographic characteristic	All fields	Science and engineering												Non-science and engineering						
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
Doctorate recipients reporting master's degree	73.2	68.0	77.9	44.6	74.7	74.4	68.9	80.9	68.8	76.4	50.3	89.0	89.0	93.5	87.8	96.6	91.2	93.8	95.3	
Sex																				
Male	71.5	67.6	80.6	45.0	73.4	75.3	72.6	74.5	67.4	74.7	52.2	87.1	87.0	92.5	87.9	96.0	90.9	93.5	95.3	
Female	75.0	68.5	75.6	44.3	78.9	71.7	64.3	83.5	72.3	79.2	46.5	89.6	90.8	94.2	87.7	96.8	91.5	94.1	95.3	
Citizenship status																				
U.S. citizen or permanent resident	70.4	62.9	73.6	37.4	73.9	67.0	63.6	81.2	62.3	74.7	42.7	90.1	88.2	94.6	86.5	97.7	91.8	94.8	95.9	
Temporary visa holder	79.9	77.6	87.1	67.3	76.2	81.4	80.8	83.3	75.4	79.8	62.6	91.7	91.9	94.8	90.4	98.3	94.6	96.6	97.6	
Ethnicity and race (U.S. citizens and permanent residents)																				
Hispanic or Latino	70.4	62.6	75.4	33.1	75.6	71.0	68.4	80.4	68.9	74.6	43.8	87.3	89.2	94.8	D	97.9	92.1	D	93.4	
Not Hispanic or Latino																				
American Indian or Alaska Native	84.2	D	D	D	D	D	D	D	-	D	D	88.9	D	D	D	95.2	100.0	D	D	
Asian	67.6	D	77.8	D	70.9	D	D	D	D	D	D	91.8	D	D	D	96.0	92.7	D	94.5	
Black or African American	85.4	77.5	D	41.9	D	75.5	66.7	90.6	D	89.3	52.2	94.3	93.7	97.7	D	D	91.7	100.0	98.2	
White	69.4	61.7	72.6	36.8	74.1	65.3	62.6	80.0	62.8	72.5	42.1	89.8	87.6	94.3	85.6	97.6	91.8	94.6	95.7	
More than one race	63.8	57.3	63.0	31.5	57.1	61.5	55.2	83.1	68.3	75.0	31.5	93.5	86.3	93.5	D	D	87.5	D	D	
Other race or race not reported	69.6	62.3	100.0	37.7	75.0	63.9	75.0	75.0	63.6	66.7	38.2	80.6	92.1	90.0	66.7	90.0	90.9	87.5	100.0	
Ethnicity not reported	76.4	70.1	100.0	42.9	66.7	72.7	50.0	87.5	20.0	70.0	75.0	85.7	80.0	92.1	83.3	100.0	90.0	88.9	83.3	
Master's degree in the same field as doctorate	55.4	52.2	52.7	30.8	48.2	64.3	49.4	61.0	61.5	25.3	42.7	73.8	66.8	67.9	61.3	62.1	78.7	80.4	62.0	
Sex																				
Male	55.3	52.5	54.5	30.0	47.9	65.9	50.1	49.9	60.3	24.9	44.4	69.4	68.7	70.1	62.3	62.2	80.1	85.2	61.4	
Female	55.5	51.9	51.3	31.4	49.0	59.8	48.6	65.4	64.5	26.0	39.3	75.2	65.0	66.5	60.1	62.1	77.2	76.8	62.5	
Citizenship status																				
U.S. citizen or permanent resident	53.6	48.7	49.4	26.1	48.8	59.4	48.1	62.7	56.8	26.5	38.2	75.5	63.6	69.2	60.1	63.1	80.6	81.9	62.0	
Temporary visa holder	60.6	59.4	59.9	45.9	48.5	69.7	53.3	59.0	66.9	24.8	50.4	71.9	74.8	68.6	63.7	63.4	76.7	82.2	65.8	
Ethnicity and race (U.S. citizens and permanent residents)																				
Hispanic or Latino	53.6	49.0	50.8	24.7	53.3	64.5	47.4	55.6	62.3	23.9	38.4	73.8	65.7	67.8	61.1	61.6	78.4	81.3	61.0	
Not Hispanic or Latino																				
American Indian or Alaska Native	52.6	D	0.0	0.0	D	D	D	D	-	0.0	D	66.7	D	D	D	42.9	75.0	D	D	
Asian	50.0	D	48.9	30.5	45.1	59.5	D	D	D	27.1	D	77.5	D	D	D	54.6	78.2	86.8	64.2	
Black or African American	57.6	53.4	38.7	30.0	D	D	33.3	71.7	D	30.4	46.7	69.5	50.2	64.1	D	D	72.2	90.9	58.6	
White	54.2	48.9	50.3	25.7	51.2	58.9	49.2	63.6	58.7	26.9	37.7	76.5	65.9	71.3	63.7	63.7	82.3	82.2	63.4	
More than one race	48.0	42.9	33.3	20.4	38.1	55.2	34.5	59.3	58.5	25.0	28.8	76.3	57.8	71.1	73.3	D	77.8	D	D	
Other race or race not reported	50.3	44.8	100.0	26.2	41.7	52.8	25.0	43.8	45.5	16.7	32.4	71.0	60.5	65.6	55.6	80.0	69.7	62.5	50.0	
Ethnicity not reported	45.2	43.6	80.0	21.4	16.7	50.0	0.0	68.8	20.0	10.0	60.0	71.4	40.0	49.2	50.0	45.5	60.0	66.7	0.0	

- = not calculable; D = suppressed to avoid disclosure of confidential information.

Note(s):

Percentages are based on the total number of doctorate recipients. A master's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent master's degree is in the same broad field as their doctoral degree. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 5-4

Baccalaureate-origin institution characteristics of research doctorate recipients, by broad field of doctorate: 2023

(Number)

Baccalaureate-origin institution characteristics	All fields	Science and engineering												Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Doctorate recipients reporting bachelor's degree	54,618	43,483	1,209	9,285	2,165	10,115	1,159	2,522	1,973	1,623	5,185	3,483	4,764	11,135	1,410	3,742	3,145	769	2,069
U.S. baccalaureate-origin institutions	34,884	26,699	736	6,982	787	4,404	748	1,860	1,003	799	3,215	3,172	2,993	8,185	664	3,148	2,402	572	1,399
Institution control																			
Public	21,184	16,344	568	4,201	440	3,067	485	1,177	559	469	1,852	1,829	1,697	4,840	415	2,120	1,152	266	887
Private, not-for-profit	13,539	10,247	165	2,774	342	1,331	263	657	443	329	1,361	1,296	1,286	3,292	238	1,010	1,241	305	498
Private, for-profit	125	86	1	3	3	4	0	22	0	1	1	41	10	39	9	10	6	1	13
2021 Carnegie Classification																			
R1: doctoral universities - very high research	18,771	15,190	443	3,975	511	3,170	417	867	587	487	1,671	1,476	1,586	3,581	359	1,323	979	282	638
R2: doctoral universities - high research	4,493	3,227	82	812	95	496	95	293	84	101	373	428	368	1,266	104	568	313	64	217
Doctoral/ professional universities	1,641	1,100	17	276	22	84	25	150	32	31	136	224	103	541	41	231	165	19	85
Master's colleges and universities	4,942	3,468	99	881	76	353	86	321	157	79	491	543	382	1,474	93	625	405	79	272
Baccalaureate colleges	4,550	3,383	85	966	75	244	122	165	138	93	522	456	517	1,167	56	346	492	110	163
Other universities	487	331	10	72	8	57	3	64	5	8	22	45	37	156	11	55	48	18	24
Historically Black college or university																			
Yes	622	387	17	78	15	47	2	46	7	19	25	60	71	235	16	142	23	3	51
No	34,226	26,290	717	6,900	770	4,355	746	1,810	995	780	3,189	3,106	2,922	7,936	646	2,998	2,376	569	1,347
Non-U.S. baccalaureate-origin institutions	19,315	16,459	466	2,252	1,360	5,614	403	643	952	808	1,941	291	1,729	2,856	727	561	726	193	649
Top countries or economies	13,848	12,094	235	1,616	1,128	4,414	290	439	726	614	1,429	213	990	1,754	581	332	329	114	398
China ^a	5,939	5,304	105	756	500	1,749	156	134	455	259	754	78	358	635	251	122	76	39	147
India	2,774	2,590	62	392	275	1,051	33	107	95	140	289	25	121	184	89	17	25	10	43
Iran	1,210	1,113	16	82	122	610	21	15	18	67	102	7	53	97	49	12	D	D	22
South Korea	1,031	708	13	54	31	226	10	31	42	27	51	33	190	323	102	57	59	15	90
Bangladesh	628	596	9	57	70	297	D	22	11	33	58	D	28	32	15	D	D	0	19
Canada	510	381	7	75	19	63	21	20	21	19	41	34	61	129	19	13	58	20	12
Taiwan	503	449	6	81	30	149	13	23	22	21	70	7	27	54	11	12	13	6	12
Saudi Arabia	468	355	D	28	42	106	D	71	23	15	24	5	32	113	13	55	11	5	29
Turkey	408	326	9	34	25	118	7	D	11	22	20	D	65	82	23	D	15	D	10
United Kingdom	377	272	D	57	14	45	16	D	28	11	20	10	55	105	9	8	60	14	14

D = suppressed to avoid disclosure of confidential information.

^a China includes Hong Kong.**Note(s):**Tied countries or economies are listed alphabetically. Carnegie classification is based on the 2021 Carnegie Classifications: Doctoral universities - very high research (R1), Doctoral universities - high research (R2), Doctoral/ professional universities, and other universities, which includes all other Carnegie classifications (e.g., special focus institutions) and institutions without Carnegie classifications. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the [Technical Notes](#).

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

TABLE 5-5

Educational attainment of research doctorate recipients' parents, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Percent)

Demographic characteristic and field	Total (number)	Highest level of parental education (%)						
		All	High school or less	Some college ^a	Bachelor's degree	Master's degree	Professional doctorate ^b	Research doctoral degree
Doctorate recipients reporting parental education (number)	49,708	49,708	8,621	6,553	13,498	11,102	4,298	5,636
Highest level of parental education	49,708	100.0	17.3	13.2	27.2	22.3	8.6	11.3
Sex								
Male	26,048	100.0	18.3	12.3	27.9	21.9	8.3	11.2
Female	23,655	100.0	16.2	14.1	26.3	22.8	9.0	11.5
Citizenship status								
U.S. citizen or permanent resident	32,492	100.0	14.2	14.2	24.4	24.3	10.7	12.1
Temporary visa holder	17,193	100.0	23.3	11.2	32.3	18.6	4.8	9.9
Ethnicity and race (U.S. citizens and permanent residents)								
Hispanic or Latino	3,128	100.0	28.6	16.9	21.7	17.3	7.5	8.0
Not Hispanic or Latino								
American Indian or Alaska Native	91	100.0	23.1	23.1	24.2	23.1	D	D
Asian	3,537	100.0	16.9	10.0	21.5	22.0	8.0	21.6
Black or African American	2,416	100.0	23.6	25.4	18.0	20.8	5.5	6.6
White	21,710	100.0	10.7	13.3	26.0	26.2	12.2	11.6
More than one race	1,243	100.0	11.8	13.1	23.5	23.4	11.7	16.4
Other race or race not reported	272	100.0	13.6	11.0	26.1	25.0	D	D
Ethnicity not reported	95	100.0	14.7	18.9	22.1	24.2	7.4	12.6
Field of doctorate								
Science and engineering	39,753	100.0	16.9	12.5	28.0	22.5	8.7	11.4
Agricultural sciences and natural resources	1,084	100.0	19.2	14.9	24.9	21.2	8.9	10.8
Biological and biomedical sciences	8,689	100.0	15.2	12.7	27.0	23.4	10.4	11.4
Computer and information sciences	1,905	100.0	18.8	11.5	28.6	21.3	6.9	12.9
Engineering	9,180	100.0	17.1	10.7	30.6	22.9	6.7	12.1
Geosciences, atmospheric, and ocean sciences	1,082	100.0	15.8	12.6	28.2	23.2	9.3	10.9
Health sciences	2,294	100.0	20.1	15.9	25.6	22.1	8.0	8.3
Mathematics and statistics	1,766	100.0	17.7	10.4	30.1	22.7	7.5	11.7
Multidisciplinary/interdisciplinary sciences	1,471	100.0	15.6	11.4	28.5	24.0	7.7	12.8
Physical sciences	4,768	100.0	17.8	12.8	29.9	21.7	7.7	10.1
Psychology	3,111	100.0	15.4	15.7	25.2	22.4	12.0	9.3
Social sciences	4,403	100.0	17.1	12.9	25.4	21.3	9.7	13.5
Non-science and engineering	9,955	100.0	19.1	15.8	23.7	21.6	8.6	11.1
Business	1,228	100.0	19.1	13.5	27.0	20.0	6.3	14.1
Education	3,364	100.0	23.4	19.7	20.9	20.7	6.8	8.4
Humanities	2,834	100.0	15.8	12.9	25.1	23.0	11.6	11.5
Visual and performing arts	703	100.0	12.2	11.0	23.0	26.5	12.4	14.9
Other non-science and engineering	1,826	100.0	19.1	16.5	25.0	20.3	7.2	11.9

D = suppressed to avoid disclosure of confidential information.

^a Some college includes those who attended college but did not earn a bachelor's degree.

^b Professional doctorate includes professional doctorates such as MD, DDS, DVM, JD, PsyD, DDiv.

Note(s):

Table excludes doctorate recipients who did not report parental education for either parent or reported "not applicable or unknown" for both parents' education. If data were provided for one parent, that response is used; when data were provided for two parents, the higher attainment is used. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 5-6

Research doctorate recipients reporting one or more functional limitations, by broad field of doctorate, sex, and citizenship status: 2023

(Number and percent)

Field and 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
Doctorate recipients reporting functional limitation status	7,138	14.2	2,293	4.5	946	1.9	353	0.7	534	1.1	4,575	9.1
Field of doctorate												
Science and engineering	5,470	13.6	1,715	4.2	702	1.7	225	0.6	372	0.9	3,559	8.8
Agricultural sciences and natural resources	184	16.7	65	5.9	29	2.6	11	1.0	14	1.3	111	10.0
Biological and biomedical sciences	1,313	14.9	317	3.6	171	1.9	45	0.5	73	0.8	955	10.9
Computer and information sciences	235	12.1	97	5.0	24	1.2	14	0.7	22	1.1	130	6.7
Engineering	953	10.2	418	4.5	116	1.2	36	0.4	68	0.7	497	5.3
Geosciences, atmospheric, and ocean sciences	177	16.1	49	4.5	27	2.5	D	D	6	0.5	129	11.8
Health sciences	296	12.6	111	4.7	42	1.8	18	0.8	32	1.4	166	7.1
Mathematics and statistics	201	11.1	75	4.2	37	2.1	D	D	15	0.8	118	6.5
Multidisciplinary/interdisciplinary sciences	196	13.1	70	4.7	30	2.0	5	0.3	10	0.7	114	7.6
Physical sciences	669	13.9	186	3.9	93	1.9	22	0.5	37	0.8	450	9.3
Psychology	539	17.1	115	3.6	48	1.5	22	0.7	38	1.2	409	13.0
Social sciences	707	15.8	212	4.7	85	1.9	42	0.9	57	1.3	480	10.7
Non-science and engineering	1,668	16.6	578	5.7	244	2.4	128	1.3	162	1.6	1,016	10.1
Business	137	10.9	61	4.8	23	1.8	9	0.7	13	1.0	63	5.0
Education	526	15.5	223	6.6	93	2.7	51	1.5	52	1.5	277	8.2
Humanities	541	19.0	149	5.2	62	2.2	42	1.5	52	1.8	377	13.3
Visual and performing arts	138	19.5	38	5.4	20	2.8	5	0.7	12	1.7	98	13.9
Other non-science and engineering	326	17.5	107	5.7	46	2.5	21	1.1	33	1.8	201	10.8
Sex												
Male	3,269	12.3	1,169	4.4	488	1.8	152	0.6	178	0.7	1,966	7.4
Female	3,867	16.2	1,123	4.7	458	1.9	201	0.8	356	1.5	2,608	10.9
Citizenship status ^a												
U.S. citizen or permanent resident	5,331	16.2	1,229	3.7	752	2.3	280	0.9	354	1.1	3,845	11.7
Temporary visa holder	1,803	10.2	1,063	6.0	193	1.1	70	0.4	178	1.0	728	4.1

D = suppressed to avoid disclosure of confidential information.

^a Citizenship status excludes doctorate recipients who did not report citizenship status.**Note(s):**

Doctorate recipients could report more than one functional limitation; thus, counts and percentages for the specific limitations will not sum to the "One or more limitations" columns. Survey asks degree of difficulty—none, slight, moderate, severe, or unable to do—that 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

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

TABLE 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	All doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
All fields	57,862	38,328	35,280	12,818	7,672	10,495	4,295	3,022	26
Science and engineering	45,973	30,767	28,391	11,811	4,074	9,838	2,668	2,360	16
Agricultural sciences and natural resources	1,278	828	771	341	135	187	108	57	0
Agricultural, animal, plant, and veterinary sciences	856	549	506	227	84	146	49	43	0
Natural resources and conservation	422	279	265	114	51	41	59	14	0
Biological and biomedical sciences	9,724	6,165	5,877	3,428	551	1,506	392	286	2
Biochemistry, biophysics, and molecular biology	1,509	931	897	506	65	293	33	33	1
Bioinformatics, biostatistics, and computational biology	735	498	476	155	51	224	46	22	0
Biological and biomedical sciences, general	907	498	474	290	43	108	33	24	0
Cell/ cellular biology and anatomy	761	440	423	261	46	107	9	17	0
Ecology, evolutionary biology, and epidemiology	1,144	818	758	442	99	90	127	60	0
Genetics and genomics	477	290	273	173	17	68	15	17	0
Microbiology and immunology	1,092	690	663	433	42	160	28	26	1
Neurobiology and neurosciences	1,200	771	742	494	53	164	31	29	0
Pharmacology and toxicology	409	258	251	128	9	100	14	7	0
Physiology, oncology, and cancer biology	821	529	510	294	68	127	21	19	0
Biological and biomedical sciences, other	669	442	410	252	58	65	35	32	0
Computer and information sciences	2,297	1,589	1,449	276	245	832	96	136	4
Computer science	1,605	1,127	1,028	194	156	624	54	98	1
Computer and information sciences, other	692	462	421	82	89	208	42	38	3
Engineering	10,724	7,077	6,569	1,971	459	3,634	505	505	3
Aerospace, aeronautical, astronautical, and space engineering	584	409	391	97	45	172	77	18	0
Biological, biomedical, and biosystems engineering	1,313	795	765	347	40	344	34	30	0
Chemical and petroleum engineering	1,245	829	764	228	19	495	22	65	0

TABLE 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	All doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Civil, environmental, and transportation engineering	1,279	823	747	280	64	328	75	76	0
Electrical and computer engineering	2,119	1,479	1,353	246	79	934	94	125	1
Engineering technologies	402	269	240	71	17	143	9	29	0
Industrial engineering and operations research	627	427	391	71	64	212	44	35	1
Materials and mining engineering	912	617	573	198	18	323	34	44	0
Mechanical engineering	1,552	1,002	939	294	75	501	69	63	0
Engineering, other	691	427	406	139	38	182	47	20	1
Geosciences, atmospheric, and ocean sciences	1,216	872	809	518	78	122	91	61	2
Geological and earth sciences	682	481	442	253	54	87	48	37	2
Ocean, marine, and atmospheric sciences	534	391	367	265	24	35	43	24	0
Health sciences	2,746	1,796	1,661	519	521	351	270	135	0
Nursing and nursing science	638	427	388	66	192	44	86	39	0
Pharmacy and pharmaceutical sciences	442	279	254	109	7	130	8	25	0
Public health	766	530	492	193	118	71	110	38	0
Health sciences, other	900	560	527	151	204	106	66	33	0
Mathematics and statistics	2,056	1,459	1,283	516	214	477	76	175	1
Applied mathematics	490	359	330	155	32	122	21	29	0
Mathematics	890	578	477	254	114	90	19	101	0
Statistics	676	522	476	107	68	265	36	45	1
Multidisciplinary/interdisciplinary sciences	1,704	1,201	1,114	330	198	495	91	86	1
Interdisciplinary computer sciences	583	438	413	91	67	229	26	24	1
Multidisciplinary/interdisciplinary sciences, other	1,121	763	701	239	131	266	65	62	0
Physical sciences	5,443	3,649	3,345	1,529	199	1,449	168	304	0
Astronomy and astrophysics	323	249	212	155	19	27	11	37	0
Chemistry	2,731	1,807	1,709	680	100	842	87	98	0
Materials sciences	389	261	247	83	10	138	16	14	0
Physics	2,000	1,332	1,177	611	70	442	54	155	0
Psychology	3,793	2,625	2,563	1,535	398	308	322	62	0
Clinical psychology	1,203	931	D	793	42	D	66	D	0
Counseling and applied psychology	1,293	918	892	438	165	133	156	26	0

TABLE 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	All doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Research and experimental psychology	803	533	508	208	136	103	61	25	0
Psychology, other	494	243	D	96	55	D	39	D	0
Social sciences	4,992	3,506	2,950	848	1,076	477	549	553	3
Anthropology	379	228	190	85	67	17	21	38	0
Area, ethnic, cultural, gender, and group studies	452	275	246	88	121	7	30	29	0
Economics	1,393	1,087	822	164	241	241	176	263	2
Political science and government	665	467	408	148	157	49	54	59	0
Public policy analysis	407	285	265	56	74	33	102	19	1
Sociology, demography, and population studies	627	470	422	133	190	40	59	48	0
Social sciences, other	1,069	694	597	174	226	90	107	97	0
Non-science and engineering	11,889	7,561	6,889	1,007	3,598	657	1,627	662	10
Business	1,510	1,115	938	86	644	136	72	175	2
Business administration and management	493	298	253	23	153	47	30	44	1
Business, other	1,017	817	685	63	491	89	42	131	1
Education	3,988	2,663	2,547	216	1,191	212	928	114	2
Education leadership and administration	1,179	862	837	44	399	42	352	25	0
Education research	1,253	792	754	65	336	113	240	37	1
Teacher education and teaching fields	1,098	733	688	75	332	41	240	45	0
Education, other	458	276	268	32	124	16	96	7	1
Humanities	3,358	1,967	1,761	417	906	113	325	202	4
English language and literature, letters	1,039	604	566	101	344	50	71	37	1
Foreign languages, literatures, and linguistics	571	318	280	59	165	15	41	37	1
History	733	446	400	129	165	18	88	45	1
Philosophy and religious studies	619	382	324	109	146	15	54	57	1
Humanities, other	396	217	191	19	86	15	71	26	0
Visual and performing arts	824	434	388	62	229	39	58	46	0
Performing arts	487	249	228	19	147	28	34	21	0
Visual arts, media studies, and design	337	185	160	43	82	11	24	25	0
Other non-science and engineering	2,209	1,382	1,255	226	628	157	244	125	2
Communications and journalism	635	401	371	58	239	32	42	30	0

TABLE 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	All doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Multidisciplinary/interdisciplinary studies	380	228	209	31	106	28	44	19	0
Public administration and social services	505	349	320	64	124	42	90	28	1
Non-science and engineering, other	689	404	355	73	159	55	68	48	1

D = suppressed to avoid disclosure of confidential information.

^a Industry employment includes doctorate recipients reporting self-employment.^b Other includes doctorate recipients reporting government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	U.S. citizen and permanent resident doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
U.S. citizens and permanent residents reporting postgraduation plans	35,566	24,352	23,695	8,120	5,992	5,732	3,851	650	7
Science and engineering	27,010	18,532	18,017	7,409	3,121	5,190	2,297	512	3
Agricultural sciences and natural resources	778	529	512	173	109	127	103	17	0
Agricultural, animal, plant, and veterinary sciences	497	323	313	102	67	98	46	10	0
Natural resources and conservation	281	206	199	71	42	29	57	7	0
Biological and biomedical sciences	7,004	4,446	4,334	2,416	495	1,087	336	111	1
Biochemistry, biophysics, and molecular biology	1,031	621	612	318	58	211	25	9	0
Bioinformatics, biostatistics, and computational biology	411	269	264	76	39	123	26	5	0
Biological and biomedical sciences, general	623	365	356	D	D	79	28	9	0
Cell/ cellular biology and anatomy	546	310	303	D	D	73	8	7	0
Ecology, evolutionary biology, and epidemiology	907	665	638	354	92	71	121	27	0
Genetics and genomics	359	212	D	132	D	48	12	D	0
Microbiology and immunology	845	525	513	322	D	D	24	11	1
Neurobiology and neurosciences	947	609	596	388	D	D	27	13	0
Pharmacology and toxicology	295	185	D	88	D	75	12	D	0
Physiology, oncology, and cancer biology	580	380	372	187	62	104	19	8	0
Biological and biomedical sciences, other	460	305	292	162	53	43	34	13	0
Computer and information sciences	820	579	559	93	121	277	68	19	1
Computer science	554	393	D	62	82	197	D	D	0
Computer and information sciences, other	266	186	D	31	39	80	D	D	1
Engineering	4,542	3,076	3,008	775	267	1,563	403	67	1
Aerospace, aeronautical, astronautical, and space engineering	322	241	D	38	D	98	71	D	0

TABLE 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	U.S. citizen and permanent resident doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Biological, biomedical, and biosystems engineering	860	515	503	207	32	239	25	12	0
Chemical and petroleum engineering	600	396	386	98	14	261	13	10	0
Civil, environmental, and transportation engineering	444	301	296	76	33	134	53	5	0
Electrical and computer engineering	586	422	417	65	32	253	67	5	0
Engineering technologies	123	78	D	D	9	43	9	D	0
Industrial engineering and operations research	233	175	D	D	29	81	38	D	0
Materials and mining engineering	417	294	281	D	D	146	32	13	0
Mechanical engineering	634	428	417	104	48	209	56	11	0
Engineering, other	323	226	D	60	D	99	39	D	1
Geosciences, atmospheric, and ocean sciences	773	586	572	343	64	85	80	14	0
Geological and earth sciences	412	311	305	165	D	D	42	6	0
Ocean, marine, and atmospheric sciences	361	275	267	178	D	D	38	8	0
Health sciences	1,953	1,343	1,329	345	480	251	253	14	0
Nursing and nursing science	517	364	D	50	D	D	82	D	0
Pharmacy and pharmaceutical sciences	204	125	125	54	D	D	2	0	0
Public health	578	411	404	136	108	54	106	7	0
Health sciences, other	654	443	D	105	180	D	63	D	0
Mathematics and statistics	929	671	629	254	149	174	52	42	0
Applied mathematics	240	172	165	73	22	53	17	7	0
Mathematics	495	344	314	146	93	58	17	30	0
Statistics	194	155	150	35	34	63	18	5	0
Multidisciplinary/interdisciplinary sciences	826	562	549	158	122	198	71	13	0
Interdisciplinary computer sciences	230	175	D	36	35	86	D	D	0
Multidisciplinary/interdisciplinary sciences, other	596	387	D	122	87	112	D	D	0
Physical sciences	3,142	2,135	2,038	875	163	848	152	97	0
Astronomy and astrophysics	215	172	D	112	D	17	10	D	0

TABLE 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	U.S. citizen and permanent resident doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Chemistry	1,711	1,156	1,132	419	86	549	78	24	0
Materials sciences	192	121	D	33	D	65	13	D	0
Physics	1,024	686	632	311	53	217	51	54	0
Psychology	3,178	2,384	2,363	1,418	348	285	312	21	0
Clinical psychology	1,078	893	D	760	42	D	D	D	0
Counseling and applied psychology	1,099	835	828	409	D	D	152	7	0
Research and experimental psychology	655	447	D	173	117	D	D	D	0
Psychology, other	346	209	D	76	D	41	38	D	0
Social sciences	3,065	2,221	2,124	559	803	295	467	97	0
Anthropology	296	181	165	69	58	17	21	16	0
Area, ethnic, cultural, gender, and group studies	316	212	201	D	102	D	28	11	0
Economics	489	408	390	D	112	D	122	18	0
Political science and government	438	322	310	97	121	40	52	12	0
Public policy analysis	315	232	227	D	63	D	95	5	0
Sociology, demography, and population studies	494	385	369	111	169	34	55	16	0
Social sciences, other	717	481	462	115	178	75	94	19	0
Non-science and engineering	8,556	5,820	5,678	711	2,871	542	1,554	138	4
Business	663	504	486	39	309	79	59	18	0
Business administration and management	223	150	D	D	83	29	27	D	0
Business, other	440	354	D	D	226	50	32	D	0
Education	3,291	2,375	2,360	161	1,095	198	906	14	1
Education leadership and administration	1,051	822	817	D	390	D	352	5	0
Education research	985	673	D	43	D	D	231	D	0
Teacher education and teaching fields	885	627	D	58	295	D	231	D	0
Education, other	370	253	252	D	D	16	92	0	1
Humanities	2,536	1,588	1,521	317	785	104	315	65	2
English language and literature, letters	870	534	521	D	320	D	71	12	1
Foreign languages, literatures, and linguistics	322	196	187	D	109	D	35	8	1
History	578	371	355	D	151	D	87	16	0
Philosophy and religious studies	482	313	289	D	132	D	52	24	0
Humanities, other	284	174	169	D	73	D	70	5	0
Visual and performing arts	575	350	333	52	194	34	53	17	0

TABLE 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	U.S. citizen and permanent resident doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Performing arts	340	207	196	D	124	D	32	11	0
Visual arts, media studies, and design	235	143	137	D	70	D	21	6	0
Other non-science and engineering	1,491	1,003	978	142	488	127	221	24	1
Communications and journalism	440	292	284	D	183	D	37	8	0
Multidisciplinary/interdisciplinary studies	281	188	179	D	88	D	42	9	0
Public administration and social services	383	271	D	42	105	D	85	D	1
Non-science and engineering, other	387	252	D	D	112	37	57	D	0

D = suppressed to avoid disclosure of confidential information.

^a Industry employment includes doctorate recipients reporting self-employment.^b Other includes doctorate recipients reporting government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-3

Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Temporary visa holder doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Temporary visa holder doctorate recipients reporting postgraduation commitments	19,393	13,776	11,409	4,645	1,652	4,708	404	2,353	14
Science and engineering	16,807	12,074	10,234	4,358	936	4,598	342	1,830	10
Agricultural sciences and natural resources	454	293	255	166	25	59	5	38	0
Agricultural, animal, plant, and veterinary sciences	335	222	191	124	17	47	3	31	0
Natural resources and conservation	119	71	64	42	8	12	2	7	0
Biological and biomedical sciences	2,352	1,692	1,521	1,001	54	412	54	170	1
Biochemistry, biophysics, and molecular biology	426	306	281	186	7	81	7	24	1
Bioinformatics, biostatistics, and computational biology	301	225	209	78	11	100	20	16	0
Biological and biomedical sciences, general	216	131	118	D	D	29	5	13	0
Cell/ cellular biology and anatomy	182	128	119	D	D	33	1	9	0
Ecology, evolutionary biology, and epidemiology	214	152	120	88	7	19	6	32	0
Genetics and genomics	100	77	D	40	D	20	3	D	0
Microbiology and immunology	214	159	144	107	D	D	4	15	0
Neurobiology and neurosciences	218	158	142	105	D	D	3	16	0
Pharmacology and toxicology	93	72	D	39	D	25	2	D	0
Physiology, oncology, and cancer biology	198	147	136	106	6	22	2	11	0
Biological and biomedical sciences, other	190	137	118	90	5	22	1	19	0
Computer and information sciences	1,337	999	882	181	124	551	26	115	2
Computer science	962	727	646	130	74	425	17	81	0
Computer and information sciences, other	375	272	236	51	50	126	9	34	2
Engineering	5,646	3,966	3,529	1,190	188	2,055	96	435	2
Aerospace, aeronautical, astronautical, and space engineering	226	165	D	58	D	74	5	D	0
Biological, biomedical, and biosystems engineering	392	276	258	138	8	103	9	18	0

TABLE 6-3

Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Temporary visa holder doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Chemical and petroleum engineering	594	433	378	130	5	234	9	55	0
Civil, environmental, and transportation engineering	769	518	447	204	30	193	20	71	0
Electrical and computer engineering	1,423	1,048	928	181	47	673	27	119	1
Engineering technologies	272	190	D	D	8	99	0	D	0
Industrial engineering and operations research	363	246	D	D	34	128	6	D	1
Materials and mining engineering	447	319	288	D	D	177	1	31	0
Mechanical engineering	840	572	520	190	27	291	12	52	0
Engineering, other	320	199	D	79	D	83	7	D	0
Geosciences, atmospheric, and ocean sciences	389	283	235	174	14	37	10	47	1
Geological and earth sciences	235	168	136	88	D	D	5	31	1
Ocean, marine, and atmospheric sciences	154	115	99	86	D	D	5	16	0
Health sciences	623	446	325	172	39	98	16	121	0
Nursing and nursing science	79	60	D	15	D	D	3	D	0
Pharmacy and pharmaceutical sciences	211	152	127	54	D	D	6	25	0
Public health	165	119	88	57	10	17	4	31	0
Health sciences, other	168	115	D	46	23	D	3	D	0
Mathematics and statistics	1,049	777	645	260	65	301	19	131	1
Applied mathematics	239	184	163	82	10	68	3	21	0
Mathematics	351	230	160	107	21	31	1	70	0
Statistics	459	363	322	71	34	202	15	40	1
Multidisciplinary/interdisciplinary sciences	813	629	557	171	74	294	18	72	0
Interdisciplinary computer sciences	332	258	D	54	32	141	D	D	0
Multidisciplinary/interdisciplinary sciences, other	481	371	D	117	42	153	D	D	0
Physical sciences	2,093	1,495	1,289	648	36	590	15	206	0
Astronomy and astrophysics	98	74	D	40	D	10	1	D	0
Chemistry	928	646	572	260	14	289	9	74	0
Materials sciences	191	138	D	50	D	71	3	D	0
Physics	876	637	537	298	17	220	2	100	0
Psychology	335	227	186	109	47	21	9	41	0
Clinical psychology	41	32	D	28	0	0	D	D	0

TABLE 6-3

Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Temporary visa holder doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Counseling and applied psychology	121	78	59	26	D	D	4	19	0
Research and experimental psychology	126	84	D	35	18	D	D	D	0
Psychology, other	47	33	D	20	D	D	1	D	0
Social sciences	1,716	1,267	810	286	270	180	74	454	3
Anthropology	66	46	24	15	9	0	0	22	0
Area, ethnic, cultural, gender, and group studies	108	61	43	D	18	D	2	18	0
Economics	841	671	426	D	128	D	50	243	2
Political science and government	196	144	97	51	36	8	2	47	0
Public policy analysis	77	51	36	D	11	D	6	14	1
Sociology, demography, and population studies	113	85	53	22	21	6	4	32	0
Social sciences, other	315	209	131	59	47	15	10	78	0
Non-science and engineering	2,586	1,702	1,175	287	716	110	62	523	4
Business	742	604	445	46	333	55	11	157	2
Business administration and management	208	144	D	D	68	17	2	D	1
Business, other	534	460	D	D	265	38	9	D	1
Education	461	272	173	53	91	12	17	99	0
Education leadership and administration	78	39	19	D	8	D	0	20	0
Education research	188	114	D	21	D	D	7	D	0
Teacher education and teaching fields	159	102	D	17	36	D	8	D	0
Education, other	36	17	10	D	D	0	2	7	0
Humanities	621	374	236	99	119	9	9	137	1
English language and literature, letters	124	70	45	D	24	D	0	25	0
Foreign languages, literatures, and linguistics	205	120	91	D	55	D	5	29	0
History	120	74	44	D	14	D	1	29	1
Philosophy and religious studies	107	68	35	D	14	D	2	33	0
Humanities, other	65	42	21	D	12	D	1	21	0
Visual and performing arts	185	84	55	10	35	5	5	29	0
Performing arts	96	42	32	D	23	D	2	10	0
Visual arts, media studies, and design	89	42	23	D	12	D	3	19	0
Other non-science and engineering	577	368	266	79	138	29	20	101	1
Communications and journalism	152	107	85	D	56	D	5	22	0

TABLE 6-3

Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Temporary visa holder doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Multidisciplinary/interdisciplinary studies	72	40	30	D	18	D	2	10	0
Public administration and social services	99	75	D	22	18	D	4	D	0
Non-science and engineering, other	254	146	D	D	46	18	9	D	1

D = suppressed to avoid disclosure of confidential information.

^a Industry employment includes doctorate recipients reporting self-employment.^b Other includes doctorate recipients reporting government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-4

Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Female doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Female doctorate recipients reporting postgraduation commitments	27,499	18,054	16,942	6,254	4,433	3,835	2,420	1,099	13
Science and engineering	20,486	13,573	12,780	5,668	2,251	3,460	1,401	786	7
Agricultural sciences and natural resources	706	446	418	173	75	106	64	28	0
Agricultural, animal, plant, and veterinary sciences	485	301	282	116	48	86	32	19	0
Natural resources and conservation	221	145	136	57	27	20	32	9	0
Biological and biomedical sciences	5,290	3,385	3,228	1,857	335	788	248	155	2
Biochemistry, biophysics, and molecular biology	728	434	416	230	38	128	20	17	1
Bioinformatics, biostatistics, and computational biology	322	219	205	60	26	92	27	14	0
Biological and biomedical sciences, general	537	296	283	167	24	71	21	13	0
Cell/ cellular biology and anatomy	448	275	266	159	28	73	6	9	0
Ecology, evolutionary biology, and epidemiology	697	504	471	269	68	48	86	33	0
Genetics and genomics	252	163	D	97	D	36	7	D	0
Microbiology and immunology	597	377	359	226	26	87	20	17	1
Neurobiology and neurosciences	676	450	434	287	41	88	18	16	0
Pharmacology and toxicology	229	143	D	72	D	58	6	D	0
Physiology, oncology, and cancer biology	408	267	259	145	32	69	13	8	0
Biological and biomedical sciences, other	396	257	243	145	36	38	24	14	0
Computer and information sciences	587	375	340	72	75	166	27	34	1
Computer science	371	242	219	49	42	116	12	23	0
Computer and information sciences, other	216	133	121	23	33	50	15	11	1
Engineering	2,851	1,813	1,719	560	162	866	131	92	2
Aerospace, aeronautical, astronautical, and space engineering	95	63	63	17	11	23	12	0	0
Biological, biomedical, and biosystems engineering	570	358	345	160	13	155	17	13	0

TABLE 6-4

Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Female doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Chemical and petroleum engineering	356	232	221	63	10	140	8	11	0
Civil, environmental, and transportation engineering	416	244	231	95	24	86	26	13	0
Electrical and computer engineering	400	260	243	51	21	158	13	16	1
Engineering technologies	85	57	51	18	8	22	3	6	0
Industrial engineering and operations research	191	128	119	15	29	61	14	8	1
Materials and mining engineering	263	181	171	54	8	96	13	10	0
Mechanical engineering	275	178	169	46	21	88	14	9	0
Engineering, other	200	112	106	41	17	37	11	6	0
Geosciences, atmospheric, and ocean sciences	547	381	364	237	39	43	45	16	1
Geological and earth sciences	298	200	190	114	28	31	17	9	1
Ocean, marine, and atmospheric sciences	249	181	174	123	11	12	28	7	0
Health sciences	1,957	1,267	1,185	331	421	225	208	82	0
Nursing and nursing science	569	380	349	61	D	D	76	31	0
Pharmacy and pharmaceutical sciences	231	134	125	53	D	D	4	9	0
Public health	548	376	353	126	93	51	83	23	0
Health sciences, other	609	377	358	91	153	69	45	19	0
Mathematics and statistics	575	428	393	139	72	159	23	35	0
Applied mathematics	148	110	103	53	14	30	6	7	0
Mathematics	186	131	120	55	35	27	3	11	0
Statistics	241	187	170	31	23	102	14	17	0
Multidisciplinary/interdisciplinary sciences	660	439	413	137	92	143	41	26	0
Interdisciplinary computer sciences	174	131	124	27	25	67	5	7	0
Multidisciplinary/interdisciplinary sciences, other	486	308	289	110	67	76	36	19	0
Physical sciences	1,848	1,238	1,165	477	82	530	76	73	0
Astronomy and astrophysics	104	79	69	D	D	5	3	10	0
Chemistry	1,180	775	744	265	44	383	52	31	0
Materials sciences	141	97	90	D	D	56	8	7	0
Physics	423	287	262	138	25	86	13	25	0
Psychology	2,907	2,043	2,005	1,244	294	221	246	38	0
Clinical psychology	961	748	D	649	28	D	50	D	0

TABLE 6-4

Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Female doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Counseling and applied psychology	1,005	724	708	373	128	94	113	16	0
Research and experimental psychology	558	375	D	145	96	D	48	D	0
Psychology, other	383	196	191	77	42	37	35	5	0
Social sciences	2,558	1,758	1,550	441	604	213	292	207	1
Anthropology	245	146	126	58	43	7	18	20	0
Area, ethnic, cultural, gender, and group studies	296	179	161	50	84	7	20	18	0
Economics	485	374	301	54	96	79	72	72	1
Political science and government	281	195	172	63	65	25	19	23	0
Public policy analysis	246	176	168	38	53	15	62	8	0
Sociology, demography, and population studies	387	290	268	74	124	30	40	22	0
Social sciences, other	618	398	354	104	139	50	61	44	0
Non-science and engineering	7,013	4,481	4,162	586	2,182	375	1,019	313	6
Business	688	507	431	41	307	54	29	76	0
Business administration and management	228	132	116	9	77	16	14	16	0
Business, other	460	375	315	32	230	38	15	60	0
Education	2,899	1,928	1,853	155	867	159	672	73	2
Education leadership and administration	783	566	557	28	277	28	224	9	0
Education research	936	592	564	48	253	82	181	27	1
Teacher education and teaching fields	825	554	D	56	242	D	188	D	0
Education, other	355	216	D	23	95	D	79	D	1
Humanities	1,627	959	876	199	490	57	130	80	3
English language and literature, letters	619	359	341	64	210	29	38	18	0
Foreign languages, literatures, and linguistics	338	193	D	34	99	D	24	D	1
History	329	210	189	60	82	13	34	20	1
Philosophy and religious studies	222	132	116	32	64	0	20	15	1
Humanities, other	119	65	D	9	35	D	14	D	0
Visual and performing arts	468	253	228	42	134	14	38	25	0
Performing arts	230	129	119	12	80	8	19	10	0
Visual arts, media studies, and design	238	124	109	30	54	6	19	15	0
Other non-science and engineering	1,331	834	774	149	384	91	150	59	1
Communications and journalism	388	240	227	35	143	18	31	13	0

TABLE 6-4

Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Female doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Multidisciplinary/interdisciplinary studies	220	134	125	20	63	20	22	9	0
Public administration and social services	362	253	235	50	97	27	61	17	1
Non-science and engineering, other	361	207	187	44	81	26	36	20	0

D = suppressed to avoid disclosure of confidential information.

^a Industry employment includes doctorate recipients reporting self-employment.^b Other includes doctorate recipients reporting government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Male doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Male doctorate recipients reporting postgraduation commitments	30,356	20,270	18,335	6,564	3,238	6,659	1,874	1,922	13
Science and engineering	25,480	17,190	15,608	6,143	1,822	6,377	1,266	1,573	9
Agricultural sciences and natural resources	572	382	353	168	60	81	44	29	0
Agricultural, animal, plant, and veterinary sciences	371	248	224	111	36	60	17	24	0
Natural resources and conservation	201	134	129	57	24	21	27	5	0
Biological and biomedical sciences	4,433	2,780	2,649	1,571	216	718	144	131	0
Biochemistry, biophysics, and molecular biology	780	497	481	276	27	165	13	16	0
Bioinformatics, biostatistics, and computational biology	413	279	271	95	25	132	19	8	0
Biological and biomedical sciences, general	370	202	191	123	19	37	12	11	0
Cell/ cellular biology and anatomy	313	165	157	102	18	34	3	8	0
Ecology, evolutionary biology, and epidemiology	447	314	287	173	31	42	41	27	0
Genetics and genomics	225	127	D	76	D	32	8	D	0
Microbiology and immunology	495	313	304	207	16	73	8	9	0
Neurobiology and neurosciences	524	321	308	207	12	76	13	13	0
Pharmacology and toxicology	180	115	D	56	D	42	8	D	0
Physiology, oncology, and cancer biology	413	262	251	149	36	58	8	11	0
Biological and biomedical sciences, other	273	185	167	107	22	27	11	18	0
Computer and information sciences	1,710	1,214	1,109	204	170	666	69	102	3
Computer science	1,234	885	809	145	114	508	42	75	1
Computer and information sciences, other	476	329	300	59	56	158	27	27	2
Engineering	7,873	5,264	4,850	1,411	297	2,768	374	413	1
Aerospace, aeronautical, astronautical, and space engineering	489	346	328	80	34	149	65	18	0
Biological, biomedical, and biosystems engineering	743	437	420	187	27	189	17	17	0

TABLE 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Male doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Chemical and petroleum engineering	889	597	543	165	9	355	14	54	0
Civil, environmental, and transportation engineering	863	579	516	185	40	242	49	63	0
Electrical and computer engineering	1,719	1,219	1,110	195	58	776	81	109	0
Engineering technologies	317	212	189	53	9	121	6	23	0
Industrial engineering and operations research	436	299	272	56	35	151	30	27	0
Materials and mining engineering	649	436	402	144	10	227	21	34	0
Mechanical engineering	1,277	824	770	248	54	413	55	54	0
Engineering, other	491	315	300	98	21	145	36	14	1
Geosciences, atmospheric, and ocean sciences	668	491	445	281	39	79	46	45	1
Geological and earth sciences	384	281	252	139	26	56	31	28	1
Ocean, marine, and atmospheric sciences	284	210	193	142	13	23	15	17	0
Health sciences	789	529	476	188	100	126	62	53	0
Nursing and nursing science	69	47	39	5	D	D	10	8	0
Pharmacy and pharmaceutical sciences	211	145	129	56	D	D	4	16	0
Public health	218	154	139	67	25	20	27	15	0
Health sciences, other	291	183	169	60	51	37	21	14	0
Mathematics and statistics	1,480	1,030	890	377	142	318	53	139	1
Applied mathematics	342	249	227	102	18	92	15	22	0
Mathematics	703	446	357	199	79	63	16	89	0
Statistics	435	335	306	76	45	163	22	28	1
Multidisciplinary/interdisciplinary sciences	1,044	762	701	193	106	352	50	60	1
Interdisciplinary computer sciences	409	307	289	64	42	162	21	17	1
Multidisciplinary/interdisciplinary sciences, other	635	455	412	129	64	190	29	43	0
Physical sciences	3,594	2,410	2,179	1,052	117	918	92	231	0
Astronomy and astrophysics	219	170	143	D	D	22	8	27	0
Chemistry	1,550	1,031	964	415	56	458	35	67	0
Materials sciences	248	164	157	D	D	82	8	7	0
Physics	1,577	1,045	915	473	45	356	41	130	0
Psychology	885	581	557	291	103	87	76	24	0
Clinical psychology	242	183	D	144	14	D	16	D	0

TABLE 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Male doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Counseling and applied psychology	288	194	184	65	37	39	43	10	0
Research and experimental psychology	245	158	D	63	40	D	13	D	0
Psychology, other	110	46	D	19	12	D	4	D	0
Social sciences	2,432	1,747	1,399	407	472	264	256	346	2
Anthropology	134	82	64	27	24	10	3	18	0
Area, ethnic, cultural, gender, and group studies	155	96	85	38	37	0	10	11	0
Economics	907	712	520	110	145	162	103	191	1
Political science and government	384	272	236	85	92	24	35	36	0
Public policy analysis	161	109	97	18	21	18	40	11	1
Sociology, demography, and population studies	240	180	154	59	66	10	19	26	0
Social sciences, other	451	296	243	70	87	40	46	53	0
Non-science and engineering	4,876	3,080	2,727	421	1,416	282	608	349	4
Business	822	608	507	45	337	82	43	99	2
Business administration and management	265	166	137	14	76	31	16	28	1
Business, other	557	442	370	31	261	51	27	71	1
Education	1,089	735	694	61	324	53	256	41	0
Education leadership and administration	396	296	280	16	122	14	128	16	0
Education research	317	200	190	17	83	31	59	10	0
Teacher education and teaching fields	273	179	D	19	90	D	52	D	0
Education, other	103	60	D	9	29	D	17	D	0
Humanities	1,731	1,008	885	218	416	56	195	122	1
English language and literature, letters	420	245	225	37	134	21	33	19	1
Foreign languages, literatures, and linguistics	233	125	D	25	66	D	17	D	0
History	404	236	211	69	83	5	54	25	0
Philosophy and religious studies	397	250	208	77	82	15	34	42	0
Humanities, other	277	152	D	10	51	D	57	D	0
Visual and performing arts	356	181	160	20	95	25	20	21	0
Performing arts	257	120	109	7	67	20	15	11	0
Visual arts, media studies, and design	99	61	51	13	28	5	5	10	0
Other non-science and engineering	878	548	481	77	244	66	94	66	1
Communications and journalism	247	161	144	23	96	14	11	17	0

TABLE 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023

(Number)

Field of doctorate	Male doctorate recipients	Doctorate recipients with definite commitments	Location of definite commitments						
			United States					Abroad	Unknown
			Total	Postdoctoral study	Academic employment	Industry employment ^a	Other ^b		
Multidisciplinary/interdisciplinary studies	160	94	84	11	43	8	22	10	0
Public administration and social services	143	96	85	14	27	15	29	11	0
Non-science and engineering, other	328	197	168	29	78	29	32	28	1

D = suppressed to avoid disclosure of confidential information.

^a Industry employment includes doctorate recipients reporting self-employment.^b Other includes doctorate recipients reporting government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-6

Median basic annual salary for research doctorate recipients with definite postgraduation plans in the United States, by broad field of doctorate, type of postgraduation plans, and sex: 2023

(Dollars)

Field of doctorate	Total with definite plan ^a			Employment			Postdoctoral study		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Doctorate recipients reporting annual salary	75,000	83,000	70,000	100,000	110,000	87,000	59,155	60,000	57,000
Science and engineering	78,000	85,000	70,000	110,000	120,000	95,000	60,000	60,000	57,000
Agricultural sciences and natural resources	66,000	65,000	69,000	85,000	85,000	83,000	55,000	55,000	55,000
Biological and biomedical sciences	64,000	65,000	64,000	100,000	106,392	95,000	56,400	56,100	56,400
Computer and information sciences	150,000	150,000	120,000	160,000	160,000	140,000	70,000	70,000	70,000
Engineering	100,000	104,000	95,000	120,000	120,000	115,000	60,000	60,000	60,000
Geosciences, atmospheric, and ocean sciences	66,500	67,000	66,250	82,000	85,000	78,000	64,417	63,000	65,000
Health sciences	80,000	80,000	80,000	95,000	100,484	91,650	59,185	58,000	59,556
Mathematics and statistics	82,000	80,000	86,250	120,000	125,000	118,000	65,000	67,000	65,000
Multidisciplinary/ interdisciplinary sciences	105,000	115,000	82,000	129,000	135,000	113,625	62,000	65,000	60,000
Physical sciences	80,000	80,000	82,727	115,000	115,000	110,000	62,000	60,000	65,000
Psychology	58,500	60,000	58,000	80,000	82,500	78,000	54,835	54,840	54,835
Social sciences	75,000	77,250	72,000	85,000	92,000	80,000	60,000	60,000	60,000
Non-science and engineering	70,000	70,000	70,000	75,000	78,000	73,000	56,650	55,957	58,000
Business	135,000	140,000	130,000	140,000	150,000	135,000	68,000	65,000	70,000
Education	75,000	80,000	72,100	76,700	85,000	75,000	60,000	56,000	60,000
Humanities	58,000	57,000	59,754	60,000	60,000	60,000	54,000	53,380	55,000
Visual and performing arts	57,000	55,000	60,000	60,000	55,000	60,000	55,000	54,920	55,000
Other non-science and engineering	70,000	71,000	70,000	74,230	76,000	72,000	57,000	60,000	56,448

^a Total with definite plan includes doctorate recipients who reported having a postgraduation plan and salary but did not report type of postgraduation plan.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Basic annual salary is based on the job or postdoctoral study expected to be held after graduation. Median salaries in this table are the 50th percentile of the exact salary data provided and are rounded to the nearest dollar. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 6-7

Median basic annual salary for research doctorate recipients with definite postgraduation plans for non-postdoc employment in the United States, by broad field of doctorate and employment sector: 2023

(Dollars)

Field of doctorate	Total with definite plan ^a	Academe	Industry or business ^b	Government	Nonprofit organization	Other or unknown ^c
Doctorate recipients reporting annual salary	100,000	72,200	124,000	94,662	90,000	80,000
Science and engineering	110,000	75,000	125,000	95,000	99,000	73,549
Agricultural sciences and natural resources	85,000	70,500	97,000	78,250	78,372	55,500
Biological and biomedical sciences	100,000	67,750	120,000	83,000	84,000	58,500
Computer and information sciences	160,000	100,000	170,000	130,000	126,000	D
Engineering	120,000	90,000	125,000	101,396	110,000	81,000
Geosciences, atmospheric, and ocean sciences	82,000	65,000	110,000	79,000	100,000	D
Health sciences	95,000	82,000	115,000	100,000	101,000	96,000
Mathematics and statistics	120,000	65,800	145,000	110,000	110,000	D
Multidisciplinary/ interdisciplinary sciences	129,000	90,000	150,500	103,000	100,000	75,000
Physical sciences	115,000	65,000	120,000	94,000	107,000	72,198
Psychology	80,000	70,000	100,000	80,000	90,750	72,000
Social sciences	85,000	73,000	125,000	100,000	95,000	75,000
Non-science and engineering	75,000	70,000	92,000	93,000	77,000	82,000
Business	140,000	139,500	160,000	150,000	140,000	157,500
Education	76,700	70,000	85,000	90,000	84,000	88,000
Humanities	60,000	58,500	72,500	79,245	63,427	58,000
Visual and performing arts	60,000	57,000	70,000	D	50,000	57,500
Other non-science and engineering	74,230	69,750	90,000	93,000	92,000	74,000

D = suppressed to avoid disclosure of confidential information.

^a Total with definite plan includes doctorate recipients who did not report employment sector.^b Industry or business includes doctorate recipients reporting self-employment.^c Other is mainly composed of elementary and secondary schools.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment. Basic annual salary is based on the job or postdoctoral study expected to be held after graduation. Median salaries in this table are the 50th percentile of the exact salary data provided and are rounded to the nearest dollar. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 7-1

Doctorate-granting institutions and research doctorate recipients per institution: 1973–2023

(Number, mean, and median)

Year	Doctorate-granting institutions (number)	Doctorate recipients		
		Total (number)	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	54,550	128.4	50.0
2018	428	55,078	128.7	48.5
2019	447	55,599	124.4	40.0
2020	450	55,203	122.7	40.5
2021	447	52,160	116.7	41.0
2022	457	57,448	125.7	42.0

TABLE 7-1

Doctorate-granting institutions and research doctorate recipients per institution: 1973–2023

(Number, mean, and median)

Year	Doctorate-granting institutions (number)	Doctorate recipients		
		Total (number)	Mean per institution	Median per institution
2023	459	57,862	126.1	40.0

Source(s):

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

TABLE 7-2

Top 50 doctorate-granting institutions ranked by total number of research doctorate recipients, by sex: 2023

(Number)

Institution	Rank	Total ^a	Male	Female
U. Michigan, Ann Arbor	1	900	506	394
U. California, Berkeley	2	834	488	346
Purdue U., West Lafayette	3	810	510	300
Texas A&M U., College Station	4	806	506	300
Stanford U.	5	799	474	325
U. Texas, Austin	6	767	429	337
U. Wisconsin-Madison	7	761	412	349
U. California, Los Angeles	8	749	410	339
Ohio State U., Columbus	9	748	403	345
U. Florida	10	745	410	335
U. Illinois, Urbana-Champaign	11	731	418	313
U. Minnesota, Twin Cities	12	726	356	369
Harvard U.	13	725	380	345
U. Washington, Seattle	14	710	356	354
Pennsylvania State U.	15	691	362	328
Massachusetts Institute of Technology	16	684	456	228
Walden U.	17	612	179	433
U. California, Davis	18	609	315	294
Columbia U. in the City of New York	19	606	319	287
U. Maryland, College Park	20	595	328	267
Cornell U.	21	549	318	231
U. California, San Diego	22	537	334	203
North Carolina State U.	23	536	296	240
U. Southern California	24	535	312	223
Georgia Institute of Technology	25	531	367	164
Johns Hopkins U.	25	531	294	237
U. Georgia	27	528	222	306
U. North Carolina, Chapel Hill	28	526	227	299
Michigan State U.	29	515	278	237
Arizona State U., Tempe	30	510	285	225
U. Pennsylvania	31	508	278	230
Virginia Polytechnic Institute and State U.	32	502	288	214
Northwestern U.	33	473	241	232
U. California, Irvine	34	471	264	207
U. Chicago	35	467	278	189
Princeton U.	36	445	265	180
U. Arizona	36	445	231	213
Yale U.	38	442	243	199
Duke U.	39	435	262	173
New York U.	39	435	244	190
U. Pittsburgh, Pittsburgh	41	430	208	222
Texas Tech U.	42	417	203	214
U. Colorado Boulder	43	409	236	173
Iowa State U.	44	401	231	170
Rutgers, State U. New Jersey, New Brunswick	44	401	190	211
Boston U.	46	392	205	187
Florida State U.	47	383	203	180
U. Virginia, Charlottesville	48	380	200	180
U. Tennessee, Knoxville	49	378	214	164
Indiana U., Bloomington	50	376	198	178

^a Total includes doctorate recipients who did not report sex.

Note(s):

Tied institutions are listed alphabetically.

Source(s):

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

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
Science and engineering	-	45,973	25,480	20,486
From top 20 institutions	-	12,641	7,552	5,086
U. Michigan, Ann Arbor	1	764	448	316
Texas A&M U., College Station	2	714	463	251
U. California, Berkeley	3	713	432	281
Purdue U., West Lafayette	4	710	467	243
Stanford U.	5	694	423	271
Massachusetts Institute of Technology	6	645	432	213
U. Florida	7	610	352	258
U. Washington, Seattle	8	608	315	293
U. Illinois, Urbana-Champaign	9	606	375	231
U. Wisconsin-Madison	10	602	354	248
U. California, Los Angeles	11	597	357	240
U. Texas, Austin	12	593	362	230
Harvard U.	13	579	302	277
Ohio State U., Columbus	14	576	340	236
U. Minnesota, Twin Cities	14	576	302	273
U. California, Davis	16	556	290	266
Pennsylvania State U.	17	545	310	234
Georgia Institute of Technology	18	510	357	153
Johns Hopkins U.	19	485	265	220
U. California, San Diego	20	479	320	159
U. Maryland, College Park	20	479	286	193
Agricultural sciences and natural resources	-	1,278	572	706
From top 20 institutions	-	725	331	394
U. Florida	1	65	37	28
U. Georgia	2	54	22	32
Cornell U.	3	52	20	32
Texas A&M U., College Station	3	52	26	26
North Carolina State U.	5	49	23	26
Iowa State U.	6	42	20	22
U. California, Davis	7	39	16	23
Virginia Polytechnic Institute and State U.	8	38	16	22
U. Illinois, Urbana-Champaign	9	34	15	19
Oregon State U.	10	33	13	20
U. Minnesota, Twin Cities	11	31	11	20
Purdue U., West Lafayette	12	29	16	13
Mississippi State U.	13	28	17	11
Ohio State U., Columbus	13	28	9	19
U. Wisconsin-Madison	13	28	13	15
Kansas State U.	16	26	9	17
U. Nebraska, Lincoln	16	26	14	12
Louisiana State U., Baton Rouge	18	24	13	11
Texas Tech U.	18	24	15	9
Michigan State U.	20	23	6	17
Biological and biomedical sciences	-	9,724	4,433	5,290
From top 20 institutions	-	2,818	1,305	1,513
Harvard U.	1	207	103	104
Johns Hopkins U.	2	185	76	109
U. California, Davis	3	174	69	105

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Washington, Seattle	4	163	76	87
U. North Carolina, Chapel Hill	5	162	61	101
U. Pennsylvania	6	156	68	88
U. Michigan, Ann Arbor	7	150	67	83
U. Wisconsin-Madison	8	145	70	75
U. Florida	9	144	77	67
U. California, Berkeley	10	134	72	62
U. California, Los Angeles	10	134	66	68
Stanford U.	12	130	64	66
U. Minnesota, Twin Cities	12	130	53	77
Yale U.	14	121	63	58
Columbia U. in the City of New York	15	119	49	70
Texas A&M U., College Station	16	114	49	65
U. California, San Diego	16	114	74	40
Vanderbilt U.	16	114	54	60
U. Pittsburgh, Pittsburgh	19	113	44	69
U. Georgia	20	109	50	59
Computer and information sciences	-	2,297	1,710	587
From top 20 institutions	-	822	628	194
Massachusetts Institute of Technology	1	64	56	8
Stanford U.	2	53	35	18
U. California, Berkeley	3	50	44	6
Carnegie Mellon U.	4	48	37	11
Purdue U., West Lafayette	5	45	38	7
U. Southern California	6	44	32	12
U. Illinois, Urbana-Champaign	7	41	27	14
U. Maryland, College Park	8	39	26	13
Georgia Institute of Technology	9	35	28	7
Princeton U.	9	35	27	8
Johns Hopkins U.	11	34	31	3
U. Central Florida	12	32	21	11
Cornell U.	13	30	20	10
U. Texas, Austin	13	30	24	6
U. California, San Diego	15	29	24	5
U. Washington, Seattle	15	29	21	8
U. California, Irvine	17	27	21	6
U. Chicago	17	27	19	8
George Mason U.	19	26	20	6
Indiana U., Bloomington	19	26	19	7
Northeastern U.	19	26	21	5
U. California, Los Angeles	19	26	21	5
U. Michigan, Ann Arbor	19	26	16	10
Engineering	-	10,724	7,873	2,851
From top 20 institutions	-	3,919	2,911	1,008
Purdue U., West Lafayette	1	327	244	83
Georgia Institute of Technology	2	305	221	84
Texas A&M U., College Station	3	299	246	53
Massachusetts Institute of Technology	4	252	170	82
U. Michigan, Ann Arbor	5	237	174	63
Stanford U.	6	217	140	77

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Illinois, Urbana-Champaign	7	215	165	50
Virginia Polytechnic Institute and State U.	8	211	151	60
U. Texas, Austin	9	210	168	42
North Carolina State U.	10	173	118	55
U. California, Berkeley	11	162	106	56
Ohio State U., Columbus	12	161	126	35
Pennsylvania State U.	13	158	129	29
Carnegie Mellon U.	14	153	113	40
U. California, Los Angeles	15	145	119	26
U. California, San Diego	15	145	114	31
U. Maryland, College Park	17	144	106	38
Arizona State U., Tempe	18	140	104	36
U. Florida	18	140	100	40
U. Wisconsin-Madison	20	125	97	28
Geosciences, atmospheric, and ocean sciences	-	1,216	668	547
From top 20 institutions	-	466	243	222
Texas A&M U., College Station	1	41	25	16
U. California, San Diego	2	39	16	23
U. Texas, Austin	3	31	14	17
U. Washington, Seattle	4	28	12	16
Massachusetts Institute of Technology	5	27	12	15
U. Colorado Boulder	6	23	11	12
U. Arizona	7	21	9	12
Colorado School of Mines	8	19	13	6
Colorado State U., Fort Collins	8	19	7	12
U. California, Los Angeles	8	19	13	6
U. Michigan, Ann Arbor	8	19	8	11
Columbia U. in the City of New York	12	18	14	4
Stanford U.	12	18	10	8
U. Houston	12	18	12	6
Stony Brook U.	15	17	9	8
U. Utah	15	17	12	4
Pennsylvania State U.	17	16	11	5
U. Southern California	17	16	8	8
U. California, Berkeley	19	15	7	8
U. California, Santa Cruz	19	15	9	6
U. Hawaii, Manoa	19	15	5	10
U. Maryland, College Park	19	15	6	9
Health sciences	-	2,746	789	1,957
From top 20 institutions	-	921	281	640
Walden U.	1	130	26	104
U. Washington, Seattle	2	64	18	46
U. North Carolina, Chapel Hill	3	57	14	43
U. Florida	4	51	14	37
Johns Hopkins U.	5	50	10	40
Texas Woman's U.	6	48	4	44
U. Minnesota, Twin Cities	7	47	20	27
U. Wisconsin-Madison	8	44	23	21
Harvard U.	9	39	10	29
U. Pittsburgh, Pittsburgh	10	38	8	30

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Texas Health Science Center, Houston	11	37	15	22
Ohio State U., Columbus	12	36	11	25
U. Michigan, Ann Arbor	13	35	14	21
U. Mississippi, Oxford	14	34	20	14
U. Texas, Austin	15	32	13	19
U. Illinois, Chicago	16	31	7	24
U. Iowa	17	30	11	19
U. Nebraska, Medical Center	17	30	12	18
U. South Carolina, Columbia	17	30	7	23
U. Alabama, Birmingham	20	29	9	20
U. Cincinnati, Uptown West Campus	20	29	15	14
Mathematics and statistics	-	2,056	1,480	575
From top 20 institutions	-	658	485	173
North Carolina State U.	1	47	27	20
U. Michigan, Ann Arbor	2	45	30	15
Purdue U., West Lafayette	3	40	28	12
Stanford U.	4	37	31	6
U. Illinois, Urbana-Champaign	5	36	23	13
U. California, Berkeley	6	35	31	4
U. California, Los Angeles	7	34	28	6
Ohio State U., Columbus	8	33	28	5
U. Wisconsin-Madison	9	32	22	10
Stony Brook U.	10	31	22	9
Iowa State U.	11	30	19	11
Pennsylvania State U.	11	30	21	9
Princeton U.	11	30	23	7
Florida State U.	14	29	19	10
Texas A&M U., College Station	14	29	20	9
U. California, Davis	14	29	25	4
U. Connecticut, Storrs	17	28	24	4
U. Maryland, College Park	17	28	23	5
U. Washington, Seattle	17	28	17	11
U. Chicago	20	27	24	3
Multidisciplinary/ interdisciplinary sciences	-	1,704	1,044	660
From top 20 institutions	-	601	380	221
Massachusetts Institute of Technology	1	60	39	21
U. California, Berkeley	2	54	33	21
Carnegie Mellon U.	3	49	32	17
U. Michigan, Ann Arbor	4	45	23	22
U. Washington, Seattle	5	40	27	13
Georgia Institute of Technology	6	34	23	11
Stanford U.	6	34	25	9
Pennsylvania State U.	8	26	15	11
SUNY, U. Buffalo	8	26	21	5
U. California, San Diego	8	26	14	12
George Mason U.	11	25	17	8
U. Illinois, Urbana-Champaign	12	24	14	10
Purdue U., West Lafayette	13	22	11	11
Arizona State U., Tempe	14	21	12	9
U. Minnesota, Twin Cities	14	21	12	9

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
New York U.	16	20	17	3
U. Texas, Austin	17	19	13	6
Virginia Polytechnic Institute and State U.	17	19	13	6
U. California, Irvine	19	18	9	9
U. Wisconsin-Madison	19	18	10	8
Physical sciences	-	5,443	3,594	1,848
From top 20 institutions	-	1,633	1,108	525
U. California, Berkeley	1	116	71	45
Massachusetts Institute of Technology	2	107	77	30
Stanford U.	3	106	74	32
U. Michigan, Ann Arbor	4	104	71	33
Harvard U.	5	102	59	43
California Institute of Technology	6	87	54	33
U. Wisconsin-Madison	7	86	57	29
Purdue U., West Lafayette	8	83	56	27
U. Minnesota, Twin Cities	9	81	53	28
Ohio State U., Columbus	10	80	57	23
U. Arizona	11	78	56	22
Princeton U.	12	72	47	25
U. Illinois, Urbana-Champaign	13	69	52	17
U. Colorado Boulder	14	68	50	18
U. Chicago	15	67	47	20
U. Maryland, College Park	16	66	51	15
U. Texas, Austin	16	66	41	25
U. California, Davis	18	65	41	24
U. California, Santa Barbara	18	65	47	18
U. Florida	18	65	47	18
Psychology	-	3,793	885	2,907
From top 20 institutions	-	985	222	762
Walden U.	1	184	38	146
Palo Alto U.	2	70	17	53
Fielding Graduate U.	3	57	14	43
CUNY, Graduate Center	4	55	12	43
Pennsylvania State U.	5	53	8	45
U. Houston	6	45	10	35
U. Minnesota, Twin Cities	6	45	9	35
Alliant International U., San Diego	8	41	10	31
U. Georgia	9	40	11	29
Florida State U.	10	39	10	29
U. Texas, Austin	10	39	12	27
Texas A&M U., College Station	12	38	7	31
Ohio State U., Columbus	13	37	12	25
U. California, Los Angeles	13	37	7	30
Fordham U.	15	36	6	30
Carlos Albizu U., San Juan	16	35	8	27
Texas Tech U.	16	35	9	26
U. Kansas	18	34	8	26
U. Florida	19	33	9	24
U. Missouri, Columbia	20	32	5	27
Social sciences	-	4,992	2,432	2,558

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
From top 20 institutions	-	1,606	820	786
Harvard U.	1	133	69	64
U. California, Los Angeles	2	111	54	57
U. California, Berkeley	3	106	59	47
U. Chicago	4	92	58	34
U. Texas, Austin	5	87	35	52
Columbia U. in the City of New York	6	83	44	39
U. Michigan, Ann Arbor	7	80	38	42
Princeton U.	8	78	44	34
U. California, Davis	8	78	34	44
U. Pennsylvania	8	78	42	36
Stanford U.	11	77	36	41
U. Southern California	11	77	38	39
Cornell U.	13	68	39	29
Ohio State U., Columbus	13	68	32	36
U. Wisconsin-Madison	13	68	31	37
CUNY, Graduate Center	16	65	40	25
U. North Carolina, Chapel Hill	16	65	28	37
Northwestern U.	18	64	28	36
Walden U.	18	64	37	27
Yale U.	18	64	34	30
Non-science and engineering	-	11,889	4,876	7,013
From top 20 institutions	-	2,937	1,180	1,757
Walden U.	1	215	66	149
Texas Tech U.	2	180	67	113
U. Texas, Austin	3	174	67	107
Ohio State U., Columbus	4	172	63	109
U. Wisconsin-Madison	5	159	58	101
U. Georgia	6	155	51	104
U. California, Los Angeles	7	152	53	99
U. Minnesota, Twin Cities	8	150	54	96
Harvard U.	9	146	78	68
Pennsylvania State U.	9	146	52	94
U. Michigan, Ann Arbor	11	136	58	78
Florida State U.	12	135	58	77
U. Florida	12	135	58	77
Indiana U., Bloomington	14	134	62	72
Columbia U. in the City of New York	15	129	51	78
CUNY, Graduate Center	16	127	60	67
U. Illinois, Urbana-Champaign	17	125	43	82
U. Chicago	18	124	69	55
New York U.	19	122	56	66
U. California, Berkeley	20	121	56	65
Business	-	1,510	822	688
From top 20 institutions	-	524	294	230
Walden U.	1	47	29	18
U. Maryland, College Park	2	26	12	14
Oklahoma State U., Stillwater	3	25	15	10
Pennsylvania State U.	3	25	10	15
U. Florida	5	23	16	7

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Texas, Dallas	5	23	16	7
Iowa State U.	7	21	11	10
U. Pennsylvania	7	21	15	6
U. Washington, Seattle	7	21	12	9
New York U.	10	20	15	5
Stanford U.	10	20	12	8
Texas A&M U., College Station	10	20	12	8
U. Texas, Austin	10	20	17	3
Columbia U. in the City of New York	14	19	10	9
U. Minnesota, Twin Cities	14	19	10	9
Purdue U., West Lafayette	16	18	9	9
Rutgers, State U. New Jersey, Newark	16	18	5	13
U. California, Los Angeles	16	18	8	10
U. Georgia	16	18	7	11
Harvard U.	20	17	8	9
Michigan State U.	20	17	9	8
U. California, Berkeley	20	17	9	8
U. Illinois, Urbana-Champaign	20	17	9	8
U. North Texas, Denton	20	17	9	8
U. Texas, Arlington	20	17	9	8
Education	-	3,988	1,089	2,899
From top 20 institutions	-	1,075	294	781
Texas Tech U.	1	104	30	74
Walden U.	2	87	16	71
U. Georgia	3	75	20	55
Ohio State U., Columbus	4	63	16	47
Pennsylvania State U.	5	61	18	43
U. Wisconsin-Madison	6	59	15	44
U. Minnesota, Twin Cities	7	58	15	43
Teachers C., Columbia U.	8	55	20	35
Michigan State U.	9	51	14	37
U. Florida	10	50	16	34
U. California, Los Angeles	11	46	11	35
U. North Texas, Denton	12	45	14	31
Florida State U.	13	43	10	33
North Carolina State U.	13	43	13	30
SUNY, U. Buffalo	13	43	11	32
Old Dominion U.	16	39	9	30
Rutgers, State U. New Jersey, New Brunswick	16	39	6	33
U. Texas, Austin	16	39	15	24
U. South Florida, Tampa	19	38	10	28
U. Kentucky	20	37	15	22
Humanities	-	3,358	1,731	1,627
From top 20 institutions	-	1,016	539	477
U. Chicago	1	80	53	27
Harvard U.	2	70	43	27
Princeton U.	3	60	33	27
U. Michigan, Ann Arbor	4	58	30	28
CUNY, Graduate Center	5	52	27	25
U. Texas, Austin	6	51	16	35

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
Yale U.	6	51	23	28
Midwestern Baptist Theological Seminary	8	50	50	0
Ohio State U., Columbus	9	48	21	27
U. Wisconsin-Madison	9	48	21	27
Columbia U. in the City of New York	11	46	25	21
U. California, Berkeley	11	46	21	25
Emory U., Atlanta	13	45	16	29
New York U.	14	42	19	23
U. California, Los Angeles	14	42	18	24
Indiana U., Bloomington	16	40	19	21
U. Pennsylvania	16	40	19	21
Stanford U.	18	39	19	20
Duke U.	19	36	20	16
Florida State U.	19	36	22	14
U. Notre Dame	19	36	24	12
Visual and performing arts	-	824	356	468
From top 20 institutions	-	471	201	270
Arizona State U., Tempe	1	35	16	19
U. Miami	1	35	16	19
CUNY, Graduate Center	3	30	14	16
Northwestern U.	4	27	13	14
U. Colorado Boulder	5	26	16	10
Harvard U.	6	25	10	15
New York U.	7	23	9	14
U. California, Los Angeles	8	22	9	13
Florida State U.	9	20	7	13
U. California, Berkeley	10	19	6	13
Columbia U. in the City of New York	11	18	5	13
Indiana U., Bloomington	11	18	8	10
U. Chicago	11	18	5	13
U. California, Santa Barbara	14	17	8	9
Yale U.	15	16	6	10
U. Southern California	16	15	6	9
Ohio State U., Columbus	17	14	4	10
Princeton U.	17	14	7	7
U. Pennsylvania	17	14	4	10
Texas Tech U.	20	13	5	8
U. California, Irvine	20	13	7	6
U. California, Santa Cruz	20	13	4	9
U. Pittsburgh, Pittsburgh	20	13	8	5
U. Rochester	20	13	8	5
Other non-science and engineering	-	2,209	878	1,331
From top 20 institutions	-	742	296	446
Walden U.	1	77	19	58
U. Texas, Austin	2	52	17	35
U. Illinois, Urbana-Champaign	3	40	10	30
U. North Carolina, Chapel Hill	4	37	14	23
U. Southern California	5	36	17	19
U. Kansas	6	35	16	19
U. Michigan, Ann Arbor	7	33	12	21

TABLE 7-3

Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023

(Number)

Field and institution	Rank	Total ^a	Male	Female
Ohio State U., Columbus	8	31	11	20
New York U.	9	29	11	18
U. Florida	9	29	12	17
U. Wisconsin-Madison	9	29	13	16
Indiana U., Bloomington	12	28	18	10
U. Minnesota, Twin Cities	12	28	12	16
U. California, Berkeley	14	27	16	11
U. Georgia	14	27	7	20
Arizona State U., Tempe	16	26	7	19
Michigan State U.	16	26	12	14
Pennsylvania State U.	16	26	10	16
U. Pennsylvania	16	26	13	13
Florida State U.	20	25	12	13
Harvard U.	20	25	16	9
U. Missouri, Columbia	20	25	10	15
U. Washington, Seattle	20	25	11	14

- = no value (rank) possible.

^a Total includes doctorate recipients who did not report sex.**Note(s):**

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

Source(s):

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

TABLE 7-4

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident research doctorate recipients, by ethnicity and race: 5-year total, 2019–23

(Number)

Institution	Rank	Doctorate recipients
Hispanic or Latino (409 institutions)	-	15,364
From top 20 institutions	-	4,393
U. California, Berkeley	1	309
U. California, Los Angeles	2	298
U. Michigan, Ann Arbor	3	269
U. Florida	4	266
Texas A&M U., College Station	5	251
Walden U.	6	241
Florida International U.	7	234
U. Texas, Austin	8	225
U. California, Irvine	9	220
U. California, San Diego	10	210
U. Wisconsin-Madison	11	209
U. Arizona	12	202
Harvard U.	13	193
U. California, Davis	14	188
U. Texas, El Paso	15	187
U. Illinois, Urbana-Champaign	16	180
U. Washington, Seattle	16	180
Stanford U.	18	179
Arizona State U., Tempe	19	176
Columbia U. in the City of New York	19	176
Not Hispanic or Latino	-	-
American Indian or Alaska Native (160 institutions)	-	529
From top 20 institutions	-	254
U. Arizona	1	28
U. Minnesota, Twin Cities	2	19
U. New Mexico, Albuquerque	3	18
Oklahoma State U., Stillwater	4	15
Arizona State U., Tempe	5	14
U. Washington, Seattle	5	14
U. Memphis	7	13
Walden U.	7	13
U. Montana, Missoula	9	12
U. Oklahoma, Norman	9	12
Ohio State U., Columbus	11	11
U. Kansas	11	11
U. California, Davis	13	10
Texas A&M U., College Station	14	9
U. Oregon	14	9
U. North Dakota	16	8
U. Alaska, Fairbanks	17	7
U. California, Berkeley	17	7
North Carolina State U.	19	6
Texas Tech U.	19	6
U. California, San Diego	19	6
U. Michigan, Ann Arbor	19	6
Asian (394 institutions)	-	17,067
From top 20 institutions	-	6,211
U. California, Los Angeles	1	514

TABLE 7-4

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident research doctorate recipients, by ethnicity and race: 5-year total, 2019–23

(Number)

Institution	Rank	Doctorate recipients
U. California, Berkeley	2	472
Harvard U.	3	429
Massachusetts Institute of Technology	4	392
Stanford U.	5	382
U. Michigan, Ann Arbor	6	337
Columbia U. in the City of New York	7	326
U. California, Irvine	8	303
U. Washington, Seattle	9	297
U. California, San Diego	10	282
U. Illinois, Urbana-Champaign	11	260
U. Southern California	12	257
U. California, Davis	13	249
U. Pennsylvania	14	247
Georgia Institute of Technology	15	229
Johns Hopkins U.	16	225
U. Minnesota, Twin Cities	17	218
Yale U.	18	206
U. Chicago	19	196
Cornell U.	20	195
Ohio State U., Columbus	20	195
Black or African American (399 institutions)	-	12,784
From top 20 institutions	-	4,083
Walden U.	1	1,536
Howard U.	2	244
Jackson State U.	3	212
U. Georgia	4	168
U. Michigan, Ann Arbor	5	148
Georgia State U.	6	142
Morgan State U.	7	134
U. North Carolina, Chapel Hill	8	133
Louisiana State U., Baton Rouge	9	131
U. Florida	10	127
Ohio State U., Columbus	11	123
North Carolina Agricultural and Technical State U.	12	120
U. Maryland, College Park	13	119
Florida State U.	14	112
Harvard U.	15	111
U. Illinois, Urbana-Champaign	16	108
Michigan State U.	17	107
North Carolina State U.	18	104
U. South Carolina, Columbia	18	104
U. California, Los Angeles	20	100
Other (357 institutions) ^a	-	6,049
From top 20 institutions	-	1,879
U. California, Berkeley	1	167
U. California, Los Angeles	2	136
U. Hawaii, Manoa	3	130
U. Washington, Seattle	4	121
U. Michigan, Ann Arbor	5	118
U. California, Davis	6	117

TABLE 7-4

Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident research doctorate recipients, by ethnicity and race: 5-year total, 2019–23

(Number)

Institution	Rank	Doctorate recipients
Harvard U.	7	107
Walden U.	8	101
Stanford U.	9	98
U. Wisconsin-Madison	10	84
U. California, San Diego	11	81
U. Illinois, Urbana-Champaign	12	80
U. North Carolina, Chapel Hill	13	75
U. California, Irvine	14	73
Massachusetts Institute of Technology	15	68
U. Pennsylvania	16	67
Columbia U. in the City of New York	17	66
Yale U.	17	66
Texas A&M U., College Station	19	62
U. Chicago	19	62

- = no value (rank) possible.

^a Other includes Native Hawaiian or Other Pacific Islander and More than one race.

Note(s):

Tied institutions are listed alphabetically.

Source(s):

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

TABLE 7-5

Top 20 doctorate-granting institutions, ranked by number of research doctorate recipients holding temporary visas: 2023

(Number)

Institution	Rank	Doctorate recipients
All institutions (459 institutions)	-	19,393
From top 20 institutions	-	5,471
Purdue U., West Lafayette	1	448
U. Illinois, Urbana-Champaign	2	390
Texas A&M U., College Station	3	375
U. Florida	4	324
Ohio State U., Columbus	5	316
U. Michigan, Ann Arbor	6	315
Massachusetts Institute of Technology	7	272
Georgia Institute of Technology	8	263
U. Wisconsin-Madison	9	249
U. California, Los Angeles	10	242
U. Southern California	11	241
Columbia U. in the City of New York	12	236
U. Minnesota, Twin Cities	13	233
Arizona State U., Tempe	14	230
Harvard U.	14	230
North Carolina State U.	16	229
U. California, Berkeley	17	228
Cornell U.	18	223
U. Texas, Austin	19	214
U. Maryland, College Park	20	213

- = no value (rank) possible.

Note(s):

Tied institutions are listed alphabetically.

Source(s):

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

TABLE 7-6

State or location of doctorate institution ranked by total number of research doctorate recipients, by field of doctorate and sex: 2023

(Number)

State or location	Rank	Total ^a	Male	Female	Science and engineering			Non-science and engineering		
					Total	Male	Female	Total	Male	Female
California	1	6,775	3,670	3,105	5,703	3,227	2,476	1,072	443	629
Texas	2	4,525	2,462	2,062	3,495	2,028	1,466	1,030	434	596
New York	3	4,336	2,285	2,050	3,401	1,884	1,516	935	401	534
Massachusetts	4	3,113	1,686	1,427	2,609	1,453	1,156	504	233	271
Pennsylvania	5	2,725	1,427	1,297	2,177	1,188	988	548	239	309
Illinois	6	2,478	1,317	1,161	1,908	1,057	851	570	260	310
Florida	7	2,426	1,250	1,176	1,832	1,022	810	594	228	366
Michigan	8	1,980	1,070	910	1,585	920	665	395	150	245
North Carolina	9	1,953	998	955	1,591	845	746	362	153	209
Ohio	10	1,921	991	930	1,468	827	641	453	164	289
Indiana	11	1,656	971	685	1,318	817	501	338	154	184
Virginia	12	1,630	835	795	1,289	734	555	341	101	240
Georgia	13	1,599	809	790	1,273	689	584	326	120	206
Maryland	14	1,463	786	677	1,225	685	540	238	101	137
Minnesota	15	1,369	549	819	1,001	428	572	368	121	247
New Jersey	16	1,189	625	564	923	523	400	266	102	164
Colorado	17	1,149	571	578	938	489	449	211	82	129
Wisconsin	18	1,055	549	506	814	460	354	241	89	152
Arizona	19	1,044	550	493	826	471	354	218	79	139
Tennessee	20	998	514	484	775	432	343	223	82	141
Washington	21	985	501	484	831	438	393	154	63	91
Missouri	22	962	526	436	723	398	325	239	128	111
Connecticut	23	799	438	361	659	377	282	140	61	79
Alabama	24	762	380	382	609	316	293	153	64	89
Iowa	25	741	415	326	609	353	256	132	62	70
Louisiana	26	630	301	329	462	238	224	168	63	105
Utah	27	583	324	258	496	289	206	87	35	52
South Carolina	28	581	314	267	443	261	182	138	53	85
Kansas	29	553	265	288	418	215	203	135	50	85
Oregon	30	542	272	270	443	230	213	99	42	57
District of Columbia	31	521	226	295	374	164	210	147	62	85
Kentucky	32	499	265	234	352	183	169	147	82	65
Oklahoma	32	499	291	208	358	216	142	141	75	66
Mississippi	34	463	215	248	308	149	159	155	66	89
Nebraska	35	373	181	192	298	151	147	75	30	45
Rhode Island	36	337	192	145	292	169	123	45	23	22
Nevada	37	278	138	140	233	129	104	45	9	36
New Mexico	38	262	150	112	197	120	77	65	30	35
Delaware	39	261	143	118	237	135	102	24	8	16
West Virginia	40	245	107	138	180	86	94	65	21	44
Arkansas	41	219	124	95	176	104	72	43	20	23
Puerto Rico	42	205	78	127	146	50	96	59	28	31
New Hampshire	43	187	92	95	171	85	86	16	7	9
North Dakota	44	177	98	79	144	83	61	33	15	18
Hawaii	45	164	69	95	112	56	56	52	13	39
Montana	46	138	68	70	109	60	49	29	8	21
Idaho	47	137	73	64	115	69	46	22	D	D
South Dakota	48	116	66	50	104	58	46	12	D	D
Wyoming	49	93	51	42	79	47	32	14	D	D
Vermont	50	66	28	37	59	27	31	7	D	D

TABLE 7-6

State or location of doctorate institution ranked by total number of research doctorate recipients, by field of doctorate and sex: 2023

(Number)

State or location	Rank	Total ^a	Male	Female	Science and engineering			Non-science and engineering		
					Total	Male	Female	Total	Male	Female
Maine	51	65	32	33	53	28	25	12	D	D
Alaska	52	35	18	17	32	17	15	3	D	D

D = suppressed to avoid disclosure of confidential information.

^a Total includes doctorate recipients who did not report sex.**Note(s):**

Tied states or locations are listed alphabetically.

Source(s):

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

TABLE 7-7

Top 10 countries or economies of origin of temporary visa holders earning U.S. research doctorates, by country or economy of citizenship and field of doctorate: 2013–23

(Number)

Country or economy and field	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
China ^a	4,796	4,982	5,374	5,527	5,552	6,188	6,316	6,335	6,198	6,661	6,652
Science and engineering	4,443	4,653	4,971	5,141	5,147	5,692	5,755	5,730	5,605	6,029	5,981
Non-science and engineering	353	329	403	386	405	496	561	605	593	632	671
India	2,204	2,316	2,229	2,195	1,970	2,045	2,056	2,250	2,300	2,674	2,762
Science and engineering	2,075	2,209	2,119	2,085	1,885	1,922	1,910	2,111	2,138	2,513	2,583
Non-science and engineering	129	107	110	110	85	123	146	139	162	161	179
South Korea	1,383	1,284	1,234	1,229	1,129	1,039	1,168	1,055	1,036	1,075	1,109
Science and engineering	1,012	930	920	892	818	729	824	756	733	761	800
Non-science and engineering	371	354	314	337	311	310	344	299	303	314	309
Iran	409	483	629	695	767	935	964	963	815	859	648
Science and engineering	380	463	608	664	728	869	882	896	741	791	597
Non-science and engineering	29	20	21	31	39	66	82	67	74	68	51
Bangladesh	107	139	154	185	236	280	292	392	397	551	552
Science and engineering	96	127	146	178	225	271	271	369	381	522	528
Non-science and engineering	11	12	8	7	11	9	21	23	16	29	24
Saudi Arabia	73	105	134	238	339	403	554	614	485	492	483
Science and engineering	53	76	98	175	232	294	431	471	368	385	373
Non-science and engineering	20	29	36	63	107	109	123	143	117	107	110
Taiwan	699	668	614	592	520	514	492	468	410	416	462
Science and engineering	571	559	516	500	435	445	426	417	375	374	420
Non-science and engineering	128	109	98	92	85	69	66	51	35	42	42
Canada	485	488	454	408	409	431	427	398	369	474	405
Science and engineering	335	325	325	275	288	307	313	281	267	356	300
Non-science and engineering	150	163	129	133	121	124	114	117	102	118	105
Turkey	478	426	469	472	496	454	406	371	330	354	368
Science and engineering	392	360	386	380	393	364	324	305	272	289	289
Non-science and engineering	86	66	83	92	103	90	82	66	58	65	79
Nepal	150	172	177	222	221	225	241	226	252	313	326
Science and engineering	D	163	162	208	209	219	230	D	242	305	311
Non-science and engineering	D	9	15	14	12	6	11	D	10	8	15

D = suppressed to avoid disclosure of confidential information.

^a China includes Hong Kong.**Note(s):**

Rank is based on the total number of doctorate recipients from 2013 to 2023.

Source(s):

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

TABLE 7-8

Top 40 countries or economies of origin of temporary visa holders earning U.S. research doctorates, by number of doctorate recipients: 2023

(Number)

Country or economy	Rank	Doctorate recipients
All temporary visa holders (154 countries or economies)	-	18,908
Top 40 countries or economies of origin	-	17,656
China ^a	1	6,652
India	2	2,762
South Korea	3	1,109
Iran	4	648
Bangladesh	5	552
Saudi Arabia	6	483
Taiwan	7	462
Canada	8	405
Turkey	9	368
Nepal	10	326
Brazil	11	298
Nigeria	12	265
Mexico	13	235
Sri Lanka	14	229
Colombia	15	227
Vietnam	16	188
Italy	17	185
Pakistan	18	178
Germany	19	162
Egypt	20	145
Spain	21	138
Ghana	22	124
United Kingdom	22	124
Greece	24	122
Japan	25	115
Thailand	26	114
France	27	112
Russia	27	112
Chile	29	111
Jordan	30	75
Indonesia	31	73
Israel	32	71
Lebanon	32	71
Singapore	34	69
Argentina	35	68
Peru	36	66
Malaysia	37	61
Ecuador	38	55
Ethiopia	39	49
Australia	40	47

- = no value (rank) possible.

^a China includes Hong Kong.**Note(s):**

Tied countries or economies are listed alphabetically.

Source(s):

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

TABLE 7-9

Top 20 baccalaureate-origin institutions ranked by 2021 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2023

(Number)

2021 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
U.S. institutions by 2021 Carnegie Classification	-	34,644	26,545	8,099
R1: doctoral universities - very high research	-	18,771	15,190	3,581
U. California, Berkeley	1	535	464	71
U. California, Los Angeles	2	408	341	67
U. Michigan, Ann Arbor	3	374	299	75
U. Florida	4	331	265	66
U. Wisconsin-Madison	5	328	278	50
U. Illinois, Urbana-Champaign	6	315	271	44
Cornell U.	7	300	257	43
U. Texas, Austin	8	298	237	61
U. California, San Diego	9	285	256	29
Ohio State U., Columbus	10	284	236	48
U. Minnesota, Twin Cities	11	261	214	47
U. California, Davis	12	257	221	36
U. North Carolina, Chapel Hill	12	257	200	57
U. Washington, Seattle	12	257	226	31
Purdue U., West Lafayette	15	245	218	27
Texas A&M U., College Station	16	242	190	52
Massachusetts Institute of Technology	17	241	232	9
U. Chicago	18	237	187	50
U. Maryland, College Park	18	237	205	32
Pennsylvania State U.	20	236	202	34
R2: doctoral universities - high research	-	4,493	3,227	1,266
Brigham Young U., Provo	1	259	176	83
William & Mary	2	104	81	23
U. Puerto Rico, Rio Piedras	3	93	70	23
James Madison U.	4	73	56	17
U. Vermont	5	70	61	9
Florida Atlantic U.	6	69	52	17
Miami U., Oxford	6	69	45	24
California State U., Long Beach	8	68	46	22
Northern Arizona U.	8	68	51	17
Rochester Institute of Technology	10	66	62	4
Texas State U.	11	62	39	23
San Diego State U., San Diego	12	61	42	19
Loyola U., Chicago	13	60	45	15
San Francisco State U.	14	57	35	22
Central Michigan U.	15	56	32	24
U. North Carolina, Wilmington	16	54	44	10
Worcester Polytechnic Institute	16	54	52	2
California State U., Fullerton	18	53	43	10
Southern Illinois U., Carbondale	18	53	33	20
U. North Carolina, Charlotte	18	53	38	15
Doctoral/ professional universities	-	1,641	1,100	541
Grand Valley State U.	1	44	33	11
Elon U.	2	30	22	8
Hofstra U.	2	30	23	7
Harding U.	4	29	19	10
Missouri State U., Springfield	4	29	21	8
Santa Clara U.	4	29	23	6

TABLE 7-9

Top 20 baccalaureate-origin institutions ranked by 2021 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2023

(Number)

2021 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
U. St. Thomas	4	29	23	6
U. Tennessee, Chattanooga	4	29	20	9
Drake U.	9	28	22	6
Gonzaga U.	9	28	22	6
Valparaiso U.	11	27	21	6
Lipscomb U.	12	26	15	11
Seattle U.	12	26	18	8
Southern Illinois U., Edwardsville	12	26	18	8
U. San Francisco	12	26	15	11
Hampton U.	16	25	13	12
Samford U.	17	22	6	16
St. John's U., Queens	17	22	18	4
Western Kentucky U.	17	22	15	7
Liberty U.	20	21	9	12
U. Phoenix, Phoenix	20	21	15	6
Xavier U.	20	21	20	1
Master's colleges and universities	-	4,942	3,468	1,474
U. Puerto Rico, Mayaguez	1	94	89	5
California Polytechnic State U., San Luis Obispo	2	73	67	6
Western Washington U.	3	61	56	5
C. New Jersey	4	59	51	8
CUNY, Hunter C.	4	59	40	19
California State U., Northridge	6	56	43	13
SUNY, Geneseo	6	56	48	8
Appalachian State U.	8	54	39	15
California State Polytechnic U., Pomona	9	46	36	10
Truman State U.	10	43	33	10
C. Charleston	11	40	27	13
California State U., Sacramento	12	38	24	14
Calvin U.	13	37	26	11
Humboldt State U.	14	36	27	9
Ithaca C.	14	36	24	12
New Mexico Institute of Mining and Technology	16	32	32	0
San Jose State U.	16	32	22	10
Christopher Newport U.	18	31	17	14
U. Northern Iowa	18	31	16	15
California State U., Los Angeles	20	30	22	8
Baccalaureate colleges	-	4,550	3,383	1,167
Oberlin C.	1	89	61	28
Carleton C.	2	74	64	10
Smith C.	3	70	55	15
Wesleyan U.	4	69	56	13
Swarthmore C.	5	64	48	16
Middlebury C.	6	63	44	19
St. Olaf C.	7	62	50	12
Wellesley C.	8	61	39	22
Vassar C.	9	59	43	16
Williams C.	10	58	42	16
Mount Holyoke C.	11	56	43	13
Macalester C.	12	55	44	11

TABLE 7-9

Top 20 baccalaureate-origin institutions ranked by 2021 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2023

(Number)

2021 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
Pomona C.	12	55	44	11
Barnard C.	14	52	40	12
Amherst C.	15	49	36	13
Kenyon C.	15	49	40	9
Grinnell C.	17	48	36	12
Colgate U.	18	47	40	7
Colorado C.	18	47	38	9
U.S. Air Force Academy	20	45	35	10
Other universities	-	247	177	70
Rose-Hulman Institute of Technology	1	37	37	0
Franklin W. Olin C. Engineering	2	16	16	0
Moody Bible Institute	3	8	1	7
Juilliard School	4	7	2	5
Southern Baptist Theological Seminary	5	5	0	5
U. Maryland, Baltimore	5	5	5	0
U. Nebraska, Medical Center	5	5	4	1
U. Texas Health Science Center, San Antonio	5	5	4	1
U. Texas Southwestern Medical Center	5	5	5	0
Non-U.S. institutions	-	19,315	16,459	2,856
Beijing U.	1	348	306	42
U. of Science and Technology of China (USTC)	2	315	310	5
Tsinghua U.	3	304	287	17
Bangladesh U. of Engineering and Technology	4	239	236	3
Tribhuvan U.	5	234	222	12
National Taiwan U.	6	209	190	19
Sharif U. of Technology	7	192	173	19
Shanghai Jiaotong U.	8	178	173	5
Zhejiang U.	8	178	170	8
Seoul National U.	10	167	127	40
Fudan U.	11	157	141	16
Huazhong U. of Science and Technology	12	156	147	9
U. of Dhaka	13	154	139	15
Nanjing U.	14	147	139	8
Wuhan U.	15	140	122	18
U. of Delhi	16	138	111	27
Islamic Azad U.	17	130	114	16
Yonsei U.	17	130	92	38
Nankai U.	19	126	118	8
King Saud U.	20	117	91	26
U. of Mumbai	20	117	110	7

- = no value (rank) possible.

^a Rank is based on the total number of doctorate recipients among both U.S. and non-U.S. baccalaureate-origin institutions. Only institutions with five or more doctorate recipients are listed.

Note(s):

Carnegie classification is based on the 2021 Carnegie Classifications: Doctoral universities - very high research (R1), Doctoral universities - high research (R2), Doctoral/professional universities, and other universities, which includes all other Carnegie classifications (e.g., special focus institutions) and institutions without Carnegie classifications.

Source(s):

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

TABLE 7-10

Research doctorate recipients, by state or location of doctorate institution and broad field of doctorate: 2023

(Number)

State or location	All fields	Science and engineering													Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering	
United States ^a	57,862	45,973	1,278	9,724	2,297	10,274	1,216	2,746	2,056	1,704	5,443	3,793	4,992	11,889	1,510	3,988	3,358	824	2,209	
Alabama	762	609	16	131	28	169	13	48	21	24	69	68	22	153	33	69	12	2	37	
Alaska	35	32	3	4	0	1	9	0	2	0	4	4	5	3	0	2	1	0	0	
Arizona	1,044	826	21	132	40	203	40	44	33	27	119	49	118	218	29	71	45	38	35	
Arkansas	219	176	19	42	11	34	5	6	7	5	25	10	12	43	13	12	5	0	13	
California	6,775	5,703	92	1,218	309	1,217	188	170	248	249	760	511	741	1,072	110	261	361	134	206	
Colorado	1,149	938	26	194	36	221	61	38	42	28	141	86	65	211	21	92	25	26	47	
Connecticut	799	659	11	193	13	107	12	32	37	17	101	42	94	140	22	15	64	17	22	
Delaware	261	237	8	33	9	97	5	7	12	8	21	9	28	24	1	0	12	4	7	
District of Columbia	521	374	0	90	12	46	0	32	8	8	35	48	95	147	10	33	72	1	31	
Florida	2,426	1,832	78	348	101	430	59	124	74	71	223	161	163	594	81	243	92	65	113	
Georgia	1,599	1,273	54	303	71	334	19	73	46	53	118	83	119	326	62	100	102	10	52	
Hawaii	164	112	4	16	1	9	15	7	7	4	12	11	26	52	5	26	13	4	4	
Idaho	137	115	12	26	12	24	10	8	3	4	6	6	4	22	0	17	2	0	3	
Illinois	2,478	1,908	38	338	121	454	21	90	117	57	233	181	258	570	82	119	224	59	86	
Indiana	1,656	1,318	31	227	82	394	29	34	76	52	187	79	127	338	33	114	111	22	58	
Iowa	741	609	42	141	26	154	7	35	44	15	69	35	41	132	37	58	13	7	17	
Kansas	553	418	27	86	11	89	6	22	26	16	39	46	50	135	13	53	22	4	43	
Kentucky	499	352	7	99	13	58	2	43	15	11	39	26	39	147	12	53	63	3	16	
Louisiana	630	462	30	112	17	98	11	27	18	14	40	24	71	168	20	44	70	12	22	
Maine	65	53	6	8	2	11	7	0	0	0	7	6	6	12	0	8	1	1	2	
Maryland	1,463	1,225	27	308	118	280	26	99	54	42	123	40	108	238	33	68	70	10	57	
Massachusetts	3,113	2,609	14	567	176	591	61	145	80	129	346	124	376	504	74	119	176	46	89	
Michigan	1,980	1,585	30	267	53	465	33	63	93	70	218	124	169	395	35	171	106	9	74	
Minnesota	1,369	1,001	34	162	15	125	10	180	24	21	81	229	120	368	66	145	41	11	105	
Mississippi	463	308	31	39	5	54	10	44	3	20	36	50	16	155	28	74	34	0	19	
Missouri	962	723	18	164	34	147	20	60	29	20	80	73	78	239	20	62	107	8	42	
Montana	138	109	7	31	5	10	6	3	6	1	13	16	11	29	0	21	6	0	2	
Nebraska	373	298	26	81	10	41	3	32	18	8	23	31	25	75	4	33	20	0	18	
Nevada	278	233	7	37	8	45	15	15	10	10	23	38	25	45	8	25	10	0	2	
New Hampshire	187	171	5	49	2	32	6	12	12	3	38	6	6	16	1	6	9	0	0	
New Jersey	1,189	923	27	147	73	229	14	33	55	37	133	36	139	266	36	55	100	21	54	
New Mexico	262	197	10	26	5	65	10	7	8	1	31	18	16	65	3	34	16	1	11	
New York	4,336	3,401	61	828	207	623	74	169	140	130	388	305	476	935	91	231	303	126	184	
North Carolina	1,953	1,591	55	413	70	352	24	116	91	60	169	94	147	362	38	120	101	13	90	

TABLE 7-10

Research doctorate recipients, by state or location of doctorate institution and broad field of doctorate: 2023

(Number)

State or location	All fields	Science and engineering												Non-science and engineering					
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences	Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
North Dakota	177	144	14	21	2	48	2	8	13	2	14	17	3	33	4	18	5	0	6
Ohio	1,921	1,468	31	338	27	361	15	118	70	58	202	122	126	453	37	200	109	28	79
Oklahoma	499	358	16	64	14	88	19	19	17	9	34	43	35	141	32	42	27	11	29
Oregon	542	443	39	73	25	67	14	32	28	7	49	52	57	99	13	33	20	3	30
Pennsylvania	2,725	2,177	19	494	124	569	30	159	106	110	227	123	216	548	98	134	165	41	110
Puerto Rico	205	146	4	28	1	11	7	0	0	1	13	76	5	59	2	1	51	0	5
Rhode Island	337	292	2	63	16	48	18	12	18	6	56	6	47	45	3	8	26	4	4
South Carolina	581	443	18	90	20	142	8	49	20	12	46	15	23	138	8	78	17	0	35
South Dakota	116	104	13	21	6	21	1	12	0	1	11	15	3	12	1	1	4	0	6
Tennessee	998	775	25	200	30	177	16	47	21	31	92	76	60	223	22	95	62	6	38
Texas	4,525	3,495	92	689	156	1,031	146	223	157	103	352	270	276	1,030	169	390	281	43	147
Utah	583	496	9	100	25	120	24	33	23	6	73	58	25	87	10	44	17	0	16
Vermont	66	59	6	26	2	8	0	1	3	2	6	5	0	7	0	4	2	0	1
Virginia	1,630	1,289	45	211	77	413	33	60	36	59	107	119	129	341	35	201	52	6	47
Washington	985	831	27	197	35	177	31	74	36	48	78	48	80	154	29	41	31	8	45
West Virginia	245	180	7	34	8	39	2	12	9	7	27	21	14	65	6	42	4	7	6
Wisconsin	1,055	814	28	203	31	166	12	69	36	25	98	52	94	241	20	89	76	13	43
Wyoming	93	79	6	12	2	29	7	0	4	2	8	6	3	14	0	13	0	0	1

^a United States includes the 50 states, the District of Columbia, and Puerto Rico.

Note(s):

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

Source(s):

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

TABLE 8-1

Science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All fields	Science and engineering											
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences
All doctorate recipients (number) ^a	57,862	45,973	1,278	9,724	2,297	10,724	1,216	2,746	2,056	1,704	5,443	3,793	4,992
Sex (%)													
Male	52.5	55.4	44.8	45.6	74.4	73.4	54.9	28.7	72.0	61.3	66.0	23.3	48.7
Female	47.5	44.6	55.2	54.4	25.6	26.6	45.0	71.3	28.0	38.7	34.0	76.6	51.2
Unknown	*	*	0.0	*	0.0	0.0	0.1	0.0	*	0.0	*	*	*
Citizenship status (%)													
U.S. citizen or permanent resident	61.5	58.8	60.9	72.0	35.7	42.4	63.6	71.1	45.2	48.5	57.7	83.8	61.4
Temporary visa holder	33.5	36.6	35.5	24.2	58.2	52.6	32.0	22.7	51.0	47.7	38.5	8.8	34.4
Unknown	5.0	4.7	3.6	3.8	6.1	5.0	4.4	6.2	3.8	3.8	3.8	7.4	4.2
Marital status (%)													
Never married	38.6	41.8	36.5	42.8	42.0	46.0	41.6	25.9	54.0	42.1	50.8	30.7	34.5
Married	37.2	34.6	39.3	33.9	35.7	33.5	33.1	47.9	24.9	36.2	27.3	35.3	40.9
Marriage-like relationship	9.3	9.8	9.1	12.5	6.1	7.3	13.2	6.6	9.0	8.3	10.3	13.4	10.8
Separated, divorced, widowed	3.0	2.4	2.4	1.9	2.4	1.3	2.7	5.3	1.5	2.7	1.2	4.0	4.2
Unknown	12.0	11.3	12.8	8.9	13.8	12.0	9.3	14.3	10.6	10.7	10.3	16.6	9.7
Has dependent age 18 or younger (%)	19.2	15.9	21.6	13.3	16.3	14.3	14.9	33.6	9.4	15.2	9.5	18.7	21.6
Has one or more functional limitations (%)	14.2	13.6	16.7	14.9	12.1	10.2	16.1	12.6	11.1	13.1	13.9	17.1	15.8
Age at doctorate (median years)	31.4	30.7	31.9	30.4	30.8	30.1	30.8	34.8	29.2	31.1	29.3	31.3	33.1
Bachelor's in same field as doctorate (%) ^b	60.6	64.3	48.4	64.2	38.8	78.4	49.8	46.4	80.6	14.0	77.2	70.9	55.2
Master's earned (%)	73.2	68.0	77.9	44.6	74.7	74.4	68.9	80.9	68.8	76.4	50.3	89.0	89.0
Master's earned at same doctorate institution (%)	44.6	48.6	36.5	38.5	50.1	51.2	45.2	32.1	53.2	48.6	56.8	65.4	46.2
Time to doctorate (median years)													
Years since earning bachelor's degree	8.6	8.0	9.0	7.8	8.2	7.4	8.1	11.4	7.0	8.3	6.7	8.6	10.2
From graduate school start	7.2	6.8	7.3	6.4	7.0	6.6	6.8	9.0	6.0	7.0	6.0	6.9	8.7
From doctoral program start ^c	5.7	5.6	5.0	5.8	5.7	5.3	5.7	5.0	5.3	5.3	5.7	5.9	6.0
Received tuition remission (%)	85.6	87.4	88.0	90.4	86.1	86.5	88.0	72.1	93.8	86.1	91.4	81.5	89.6
Male doctorate recipients (number)	30,356	25,480	572	4,433	1,710	7,873	668	789	1,480	1,044	3,594	885	2,432
Citizenship status (%)													
U.S. citizen or permanent resident	54.9	52.3	56.6	70.2	35.0	40.4	57.0	62.6	46.8	44.1	55.7	82.3	56.2
Temporary visa holder	40.2	43.1	39.9	25.7	59.6	55.0	38.2	31.1	48.9	52.2	40.5	8.9	39.5
Unknown	4.9	4.6	3.5	4.1	5.4	4.6	4.8	6.3	4.4	3.7	3.9	8.8	4.3
Marital status (%)													
Never married	42.1	44.9	36.4	44.1	44.2	46.9	43.1	31.1	56.6	45.7	51.6	31.5	35.4
Married	35.9	33.7	40.9	33.2	34.9	33.7	34.7	44.1	23.0	36.2	27.5	35.5	42.1
Marriage-like relationship	8.4	8.6	8.6	11.8	5.8	6.6	10.9	7.0	8.2	7.6	9.2	12.8	9.3

TABLE 8-1

Science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All fields	Science and engineering											
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences
Separated, divorced, widowed	1.9	1.7	1.2	1.6	2.3	1.1	2.2	2.9	1.1	1.5	1.1	3.1	3.2
Unknown	11.7	11.1	12.9	9.3	12.9	11.6	9.0	15.0	11.1	9.0	10.5	17.2	9.9
Has dependent age 18 or younger (%)	18.4	15.6	24.7	14.2	15.7	15.7	18.5	29.2	7.9	13.6	10.6	20.6	21.7
Has one or more functional limitations (%)	12.3	11.8	15.7	13.3	11.8	9.3	12.2	11.9	10.0	13.1	12.9	15.5	14.0
Age at doctorate (median years)	31.2	30.6	32.3	30.8	30.6	30.3	31.3	32.9	29.2	31.0	29.5	32.3	33.1
Bachelor's in same field as doctorate (%) ^b	63.4	66.0	50.8	62.3	39.7	80.1	50.6	37.2	80.5	14.5	77.6	66.0	58.9
Master's earned (%)	71.5	67.6	80.6	45.0	73.4	75.3	72.6	74.5	67.4	74.7	52.2	87.1	87.0
Master's earned at same doctorate institution (%)	44.8	48.0	36.7	36.5	50.7	50.6	43.9	32.2	51.3	50.1	55.7	62.6	43.6
Time to doctorate (median years)													
Years since earning bachelor's degree	8.3	7.9	9.1	8.0	8.1	7.6	8.3	9.9	6.8	8.1	7.0	8.9	10.0
From graduate school start	7.0	6.8	7.3	6.7	6.9	6.7	6.9	7.8	6.0	6.9	6.0	7.0	8.3
From doctoral program start ^c	5.7	5.6	5.0	5.8	5.7	5.3	5.5	5.0	5.3	5.6	5.8	5.9	5.9
Received tuition remission (%)	86.7	88.0	87.0	90.5	86.9	86.0	87.2	76.0	93.9	84.8	91.7	81.5	89.2
Female doctorate recipients (number)	27,499	20,486	706	5,290	587	2,851	547	1,957	575	660	1,848	2,907	2,558
Citizenship status (%)													
U.S. citizen or permanent resident	68.7	66.7	64.3	73.6	37.6	47.9	71.7	74.6	41.2	55.5	61.7	84.2	66.4
Temporary visa holder	26.2	28.4	32.0	22.9	54.2	46.1	24.5	19.3	56.5	40.6	34.6	8.8	29.5
Unknown	5.1	4.8	3.7	3.5	8.2	6.1	3.8	6.1	2.3	3.9	3.7	6.9	4.1
Marital status (%)													
Never married	34.7	37.9	36.5	41.8	35.8	43.5	39.9	23.9	47.5	36.4	49.3	30.5	33.5
Married	38.6	35.8	38.0	34.5	38.2	33.0	31.3	49.5	29.7	36.2	26.7	35.2	39.7
Marriage-like relationship	10.3	11.4	9.5	13.1	6.8	9.0	16.1	6.4	11.1	9.4	12.6	13.7	12.2
Separated, divorced, widowed	4.2	3.2	3.4	2.1	2.6	1.7	3.3	6.3	2.3	4.5	1.4	4.3	5.2
Unknown	12.2	11.6	12.6	8.5	16.7	12.8	9.5	14.0	9.4	13.5	10.1	16.4	9.4
Has dependent age 18 or younger (%)	20.0	16.3	19.0	12.6	18.1	10.3	10.5	35.3	13.3	17.7	7.4	18.2	21.4
Has one or more functional limitations (%)	16.2	15.7	17.4	16.3	13.0	12.6	20.9	13.0	14.0	13.2	15.7	17.5	17.5
Age at doctorate (median years)	31.7	30.7	31.6	30.1	31.3	29.6	30.4	35.8	29.4	31.2	28.7	31.1	33.0
Bachelor's in same field as doctorate (%) ^b	57.6	62.3	46.4	65.7	35.7	73.5	49.0	50.1	80.7	13.2	76.5	72.4	51.7
Master's earned (%)	75.0	68.5	75.6	44.3	78.9	71.7	64.3	83.5	72.3	79.2	46.5	89.6	90.8
Master's earned at same doctorate institution (%)	44.4	49.4	36.4	40.1	48.5	52.8	47.1	32.1	57.8	46.4	59.2	66.2	48.6
Time to doctorate (median years)													
Years since earning bachelor's degree	9.0	8.2	8.6	7.6	8.9	7.1	8.0	12.2	7.2	8.4	6.3	8.4	10.3
From graduate school start	7.4	6.8	7.3	6.3	7.7	6.3	6.8	9.3	6.1	7.3	5.8	6.8	8.8
From doctoral program start ^c	5.8	5.7	5.0	5.7	5.7	5.3	5.8	5.0	5.3	5.3	5.3	5.9	6.0
Received tuition remission (%)	84.4	86.7	88.8	90.3	83.7	87.9	89.0	70.5	93.5	88.3	91.0	81.5	90.0

* = value between 0.00% and 0.05%.

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 8-2

Non-science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
All doctorate recipients (number) ^a	57,862	11,889	1,510	3,988	3,358	824	2,209
Sex (%)							
Male	52.5	41.0	54.4	27.3	51.5	43.2	39.7
Female	47.5	59.0	45.6	72.7	48.5	56.8	60.3
Unknown	*	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)							
U.S. citizen or permanent resident	61.5	72.0	43.9	82.5	75.5	69.8	67.5
Temporary visa holder	33.5	21.8	49.1	11.6	18.5	22.5	26.1
Unknown	5.0	6.3	7.0	5.9	6.0	7.8	6.4
Marital status (%)							
Never married	38.6	26.0	29.1	19.2	28.6	33.7	29.2
Married	37.2	46.9	46.7	54.3	42.9	37.3	43.3
Marriage-like relationship	9.3	7.4	5.6	5.2	9.6	11.4	7.7
Separated, divorced, widowed	3.0	5.4	3.9	7.1	4.5	4.1	5.2
Unknown	12.0	14.4	14.7	14.2	14.4	13.5	14.6
Has dependent age 18 or younger (%)	19.2	32.2	29.3	43.1	26.5	16.9	29.0
Has one or more functional limitations (%)	14.2	16.6	10.9	15.5	19.0	19.5	17.5
Age at doctorate (median years)	31.4	35.8	33.5	39.2	34.8	34.2	35.0
Bachelor's in same field as doctorate (%) ^b	60.6	46.0	42.3	25.7	71.3	69.7	38.0
Master's earned (%)	73.2	93.5	87.8	96.6	91.2	93.8	95.3
Master's earned at same doctorate institution (%)	44.6	33.1	24.9	31.3	37.1	35.9	34.7
Time to doctorate (median years)							
Years since earning bachelor's degree	8.6	12.3	10.5	15.4	11.4	11.3	11.4
From graduate school start	7.2	10.0	8.8	12.7	9.8	9.3	9.3
From doctoral program start ^c	5.7	5.9	5.0	5.6	6.8	6.7	5.8
Received tuition remission (%)	85.6	78.5	83.8	61.8	89.4	94.7	82.6
Male doctorate recipients (number)	30,356	4,876	822	1,089	1,731	356	878
Citizenship status (%)							
U.S. citizen or permanent resident	54.9	68.4	43.3	81.6	75.0	71.9	61.3
Temporary visa holder	40.2	24.9	49.5	12.9	18.3	19.7	31.5
Unknown	4.9	6.7	7.2	5.4	6.7	8.4	7.2
Marital status (%)							
Never married	42.1	27.1	29.4	20.3	27.6	39.0	27.6
Married	35.9	47.3	48.3	57.2	44.2	32.6	46.0
Marriage-like relationship	8.4	7.6	5.5	4.4	9.5	12.6	7.5
Separated, divorced, widowed	1.9	3.1	2.8	3.8	3.2	2.2	2.7
Unknown	11.7	14.9	14.0	14.3	15.4	13.5	16.2
Has dependent age 18 or younger (%)	18.4	33.5	32.1	46.7	30.3	16.2	31.6
Has one or more functional limitations (%)	12.3	15.1	9.5	14.1	16.3	19.9	17.1
Age at doctorate (median years)	31.2	35.7	33.7	39.4	35.1	33.8	35.5
Bachelor's in same field as doctorate (%) ^b	63.4	49.2	41.7	22.8	71.1	71.6	36.7
Master's earned (%)	71.5	92.5	87.9	96.0	90.9	93.5	95.3

TABLE 8-2

Non-science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Master's earned at same doctorate institution (%)	44.8	32.3	24.5	30.5	36.5	34.1	32.6
Time to doctorate (median years)							
Years since earning bachelor's degree	8.3	12.0	10.3	15.0	11.6	10.3	11.4
From graduate school start	7.0	9.8	8.8	12.8	9.8	8.8	9.3
From doctoral program start ^c	5.7	6.0	5.0	5.6	6.8	6.3	5.8
Received tuition remission (%)	86.7	79.9	83.5	57.8	88.6	94.3	81.3
Female doctorate recipients (number)	27,499	7,013	688	2,899	1,627	468	1,331
Citizenship status (%)							
U.S. citizen or permanent resident	68.7	74.4	44.6	82.9	76.1	68.2	71.6
Temporary visa holder	26.2	19.6	48.7	11.0	18.7	24.6	22.5
Unknown	5.1	6.0	6.7	6.1	5.2	7.3	5.9
Marital status (%)							
Never married	34.7	25.2	28.6	18.8	29.6	29.7	30.4
Married	38.6	46.6	44.8	53.2	41.5	40.8	41.5
Marriage-like relationship	10.3	7.3	5.8	5.5	9.8	10.5	7.7
Separated, divorced, widowed	4.2	7.0	5.2	8.3	5.8	5.6	6.8
Unknown	12.2	14.0	15.6	14.2	13.4	13.5	13.6
Has dependent age 18 or younger (%)	20.0	31.3	25.9	41.8	22.5	17.5	27.3
Has one or more functional limitations (%)	16.2	17.6	12.6	16.0	21.9	19.3	17.7
Age at doctorate (median years)	31.7	35.9	33.3	39.1	34.5	34.4	34.7
Bachelor's in same field as doctorate (%) ^b	57.6	43.8	42.9	26.7	71.6	68.2	38.8
Master's earned (%)	75.0	94.2	87.7	96.8	91.5	94.1	95.3
Master's earned at same doctorate institution (%)	44.4	33.7	25.5	31.6	37.7	37.3	36.0
Time to doctorate (median years)							
Years since earning bachelor's degree	9.0	12.8	10.9	15.6	11.3	12.0	11.3
From graduate school start	7.4	10.3	8.8	12.6	9.3	9.8	9.4
From doctoral program start ^c	5.8	5.9	5.0	5.7	6.8	6.8	5.8
Received tuition remission (%)	84.4	77.6	84.2	63.4	90.2	94.9	83.4

* = value between 0.00% and 0.05%.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-3

Agricultural sciences and natural resources research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All agricultural sciences and natural resources fields	Agricultural, animal, plant, and veterinary sciences	Natural resources and conservation
All doctorate recipients (number) ^a	1,278	856	422
Sex (%)			
Male	44.8	43.3	47.6
Female	55.2	56.7	52.4
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	60.9	58.1	66.6
Temporary visa holder	35.5	39.1	28.2
Unknown	3.6	2.8	5.2
Marital status (%)			
Never married	36.5	38.0	33.4
Married	39.3	38.7	40.5
Marriage-like relationship	9.1	8.4	10.4
Separated, divorced, widowed	2.4	2.2	2.8
Unknown	12.8	12.7	12.8
Has dependent age 18 or younger (%)	21.6	21.6	21.5
Has one or more functional limitations (%)	16.7	15.5	19.1
Age at doctorate (median years)	31.9	31.2	33.0
Bachelor's in same field as doctorate (%) ^b	48.4	58.8	27.4
Master's earned (%)	77.9	75.3	83.0
Master's earned at same doctorate institution (%)	36.5	38.0	33.9
Time to doctorate (median years)			
Years since earning bachelor's degree	9.0	8.1	10.3
From graduate school start	7.3	6.9	8.5
From doctoral program start ^c	5.0	4.8	5.3
Received tuition remission (%)	88.0	87.0	90.1
Male doctorate recipients (number)	572	371	201
Citizenship status (%)			
U.S. citizen or permanent resident	56.6	53.4	62.7
Temporary visa holder	39.9	43.1	33.8
Unknown	3.5	3.5	3.5
Marital status (%)			
Never married	36.4	39.6	30.3
Married	40.9	38.5	45.3
Marriage-like relationship	8.6	D	D
Separated, divorced, widowed	1.2	D	D
Unknown	12.9	12.9	12.9
Has dependent age 18 or younger (%)	24.7	23.6	26.9
Has one or more functional limitations (%)	15.7	13.4	20.0
Age at doctorate (median years)	32.3	31.3	33.8
Bachelor's in same field as doctorate (%) ^b	50.8	61.3	31.1

TABLE 8-3

Agricultural sciences and natural resources research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All agricultural sciences and natural resources fields	Agricultural, animal, plant, and veterinary sciences	Natural resources and conservation
Master's earned (%)	80.6	76.8	87.8
Master's earned at same doctorate institution (%)	36.7	39.1	32.9
Time to doctorate (median years)			
Years since earning bachelor's degree	9.1	8.3	10.5
From graduate school start	7.3	6.8	8.5
From doctoral program start ^c	5.0	4.9	5.0
Received tuition remission (%)	87.0	86.5	88.1
Female doctorate recipients (number)	706	485	221
Citizenship status (%)			
U.S. citizen or permanent resident	64.3	61.6	70.1
Temporary visa holder	32.0	36.1	23.1
Unknown	3.7	2.3	6.8
Marital status (%)			
Never married	36.5	36.7	36.2
Married	38.0	38.8	36.2
Marriage-like relationship	9.5	D	D
Separated, divorced, widowed	3.4	D	D
Unknown	12.6	12.6	12.7
Has dependent age 18 or younger (%)	19.0	20.0	16.7
Has one or more functional limitations (%)	17.4	17.0	18.2
Age at doctorate (median years)	31.6	31.0	32.8
Bachelor's in same field as doctorate (%) ^b	46.4	56.8	24.1
Master's earned (%)	75.6	74.1	78.8
Master's earned at same doctorate institution (%)	36.4	37.2	34.8
Time to doctorate (median years)			
Years since earning bachelor's degree	8.6	8.0	10.0
From graduate school start	7.3	7.0	8.6
From doctoral program start ^c	5.0	4.8	5.3
Received tuition remission (%)	88.8	87.4	92.0

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-4

Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
All doctorate recipients (number) ^a	9,724	1,509	735	907	761	1,144	477	1,092	1,200	409	821	669
Sex (%)												
Male	45.6	51.7	56.2	40.8	41.1	39.1	47.2	45.3	43.7	44.0	50.3	40.8
Female	54.4	48.2	43.8	59.2	58.9	60.9	52.8	54.7	56.3	56.0	49.7	59.2
Unknown	*	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)												
U.S. citizen or permanent resident	72.0	68.3	55.9	68.7	71.7	79.3	75.3	77.4	78.9	72.1	70.6	68.8
Temporary visa holder	24.2	28.2	41.0	23.8	23.9	18.7	21.0	19.6	18.2	22.7	24.1	28.4
Unknown	3.8	3.4	3.1	7.5	4.3	2.0	3.8	3.0	2.9	5.1	5.2	2.8
Marital status (%)												
Never married	42.8	46.1	47.9	39.1	45.2	38.2	43.6	42.0	44.1	45.2	40.9	39.8
Married	33.9	33.1	33.5	30.4	34.0	37.9	34.2	35.7	31.3	30.3	36.1	34.8
Marriage-like relationship	12.5	10.5	9.8	10.8	12.2	15.6	12.2	14.4	14.9	11.0	11.3	12.6
Separated, divorced, widowed	1.9	1.6	1.8	2.0	1.4	2.4	1.9	1.4	2.0	2.0	2.3	1.9
Unknown	8.9	8.7	7.1	17.6	7.1	5.9	8.2	6.5	7.7	11.5	9.4	10.9
Has dependent age 18 or younger (%)	13.3	11.7	14.2	12.6	11.9	16.4	14.8	12.5	10.5	14.2	16.4	14.3
Has one or more functional limitations (%)	14.9	15.7	13.6	14.7	12.6	15.9	15.4	15.8	15.2	12.2	13.3	17.0
Age at doctorate (median years)	30.4	29.8	30.2	30.7	30.3	31.7	30.2	30.2	30.2	30.3	30.5	31.0
Bachelor's in same field as doctorate (%) ^b	64.2	61.6	39.2	71.0	81.4	58.2	75.1	80.2	61.6	60.9	56.4	61.4
Master's earned (%)	44.6	36.1	62.4	42.0	34.7	66.2	34.5	33.7	36.4	46.7	50.4	53.2
Master's earned at same doctorate institution (%)	38.5	41.3	43.3	40.1	34.4	35.6	36.1	34.1	50.4	44.1	33.2	29.6
Time to doctorate (median years)												
Years since earning bachelor's degree	7.8	7.2	7.8	8.0	7.8	9.0	7.6	7.6	7.6	7.6	7.9	8.0
From graduate school start	6.4	6.2	6.7	6.5	6.3	7.3	6.4	6.1	6.3	6.3	6.6	6.8
From doctoral program start ^c	5.8	5.8	5.3	5.8	5.8	5.7	5.8	5.5	5.8	5.3	5.3	5.6
Received tuition remission (%)	90.4	92.2	90.0	91.8	90.4	87.1	87.3	90.8	92.1	91.6	91.5	87.0
Male doctorate recipients (number)	4,433	780	413	370	313	447	225	495	524	180	413	273
Citizenship status (%)												
U.S. citizen or permanent resident	70.2	67.1	56.4	66.8	71.2	77.6	75.6	76.4	75.2	73.9	69.2	64.5
Temporary visa holder	25.7	29.2	40.7	25.7	22.4	20.6	19.6	21.2	21.4	19.4	24.9	32.2
Unknown	4.1	3.7	2.9	7.6	6.4	1.8	4.9	2.4	3.4	6.7	5.8	3.3
Marital status (%)												
Never married	44.1	47.6	49.6	41.1	D	38.0	D	43.8	45.0	43.3	38.7	D
Married	33.2	31.9	31.5	27.8	27.8	39.6	29.3	37.6	30.3	34.4	37.8	34.4
Marriage-like relationship	11.8	10.3	9.9	10.8	13.1	14.3	13.8	12.1	13.7	9.4	11.1	11.4
Separated, divorced, widowed	1.6	1.4	1.7	1.6	D	2.7	D	1.0	1.7	0.0	1.9	D

TABLE 8-4

Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
Unknown	9.3	8.8	7.3	18.1	9.9	5.4	8.9	5.5	9.2	12.8	10.4	11.7
Has dependent age 18 or younger (%)	14.2	12.5	12.5	12.5	12.5	17.1	13.6	12.8	10.9	17.8	20.0	18.8
Has one or more functional limitations (%)	13.3	13.8	12.9	11.9	11.2	13.2	13.9	14.2	13.0	13.5	13.7	14.4
Age at doctorate (median years)	30.8	30.3	30.5	31.0	30.8	32.0	30.6	30.3	30.8	30.3	31.1	31.6
Bachelor's in same field as doctorate (%) ^b	62.3	59.5	41.0	71.7	80.0	62.3	71.4	79.0	56.0	60.2	52.7	60.1
Master's earned (%)	45.0	36.0	60.1	43.6	33.9	64.2	33.8	33.2	38.9	48.8	55.9	53.8
Master's earned at same doctorate institution (%)	36.5	40.1	40.6	35.1	33.7	33.8	35.2	31.9	44.3	42.0	33.3	27.9
Time to doctorate (median years)												
Years since earning bachelor's degree	8.0	7.5	8.0	8.3	8.0	9.0	8.0	7.6	8.0	7.6	8.0	8.4
From graduate school start	6.7	6.3	6.8	6.8	6.8	7.8	6.6	6.1	6.7	6.0	6.7	6.8
From doctoral program start ^c	5.8	5.8	5.3	5.8	5.8	5.8	6.0	5.5	5.8	5.3	5.3	5.6
Received tuition remission (%)	90.5	91.6	88.9	93.1	90.1	88.3	88.9	91.2	93.1	90.1	92.5	83.5
Female doctorate recipients (number)	5,290	728	322	537	448	697	252	597	676	229	408	396
Citizenship status (%)												
U.S. citizen or permanent resident	73.6	69.6	55.3	70.0	72.1	80.3	75.0	78.2	81.8	70.7	72.1	71.7
Temporary visa holder	22.9	27.2	41.3	22.5	25.0	17.5	22.2	18.3	15.7	25.3	23.3	25.8
Unknown	3.5	3.2	3.4	7.4	2.9	2.2	2.8	3.5	2.5	3.9	4.7	2.5
Marital status (%)												
Never married	41.8	44.5	45.7	37.8	D	38.3	D	40.5	43.3	46.7	43.1	D
Married	34.5	31.8	36.0	31.8	38.4	36.9	38.5	34.2	32.1	27.1	34.3	35.1
Marriage-like relationship	13.1	10.9	9.6	10.8	11.6	16.4	10.7	16.2	15.8	12.2	11.5	13.4
Separated, divorced, widowed	2.1	1.8	1.9	2.2	D	2.2	D	1.7	2.2	3.5	2.7	D
Unknown	8.5	8.5	6.8	17.3	5.1	6.3	7.5	7.4	6.5	10.5	8.3	10.4
Has dependent age 18 or younger (%)	12.6	10.6	16.3	12.6	11.5	16.0	15.9	12.2	10.2	11.3	12.8	11.2
Has one or more functional limitations (%)	16.3	17.8	14.6	16.5	13.5	17.7	16.8	17.1	16.9	11.3	12.9	18.8
Age at doctorate (median years)	30.1	29.4	29.6	30.3	30.0	31.4	29.8	30.2	29.8	30.1	30.1	30.4
Bachelor's in same field as doctorate (%) ^b	65.7	63.9	36.9	70.6	82.4	55.6	78.2	81.2	65.8	61.5	60.0	62.4
Master's earned (%)	44.3	36.1	65.4	40.9	35.2	67.6	35.1	34.2	34.5	45.1	44.9	52.7
Master's earned at same doctorate institution (%)	40.1	42.5	46.5	43.8	34.9	36.7	36.9	35.9	55.7	45.8	32.9	30.7
Time to doctorate (median years)												
Years since earning bachelor's degree	7.6	7.0	7.3	7.8	7.5	9.0	7.3	7.7	7.4	7.6	7.6	7.7
From graduate school start	6.3	6.0	6.3	6.3	6.3	7.3	6.3	6.2	6.2	6.3	6.3	6.6
From doctoral program start ^c	5.7	5.8	5.3	5.6	5.8	5.7	5.7	5.5	5.8	5.3	5.3	5.5
Received tuition remission (%)	90.3	92.9	91.4	90.9	90.7	86.3	86.0	90.4	91.4	92.7	90.4	89.4

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

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-5

Computer and information science research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
All doctorate recipients (number) ^a	2,297	1,605	692
Sex (%)			
Male	74.4	76.9	68.8
Female	25.6	23.1	31.2
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	35.7	34.5	38.4
Temporary visa holder	58.2	59.9	54.2
Unknown	6.1	5.5	7.4
Marital status (%)			
Never married	42.0	45.1	34.8
Married	35.7	34.5	38.7
Marriage-like relationship	6.1	5.7	6.8
Separated, divorced, widowed	2.4	1.7	3.8
Unknown	13.8	13.0	15.9
Has dependent age 18 or younger (%)	16.3	14.3	21.1
Has one or more functional limitations (%)	12.1	11.5	13.5
Age at doctorate (median years)	30.8	30.4	31.8
Bachelor's in same field as doctorate (%) ^b	38.8	43.2	28.2
Master's earned (%)	74.7	72.6	79.8
Master's earned at same doctorate institution (%)	50.1	52.5	45.0
Time to doctorate (median years)			
Years since earning bachelor's degree	8.2	8.0	9.3
From graduate school start	7.0	6.8	7.8
From doctoral program start ^c	5.7	5.7	5.6
Received tuition remission (%)	86.1	88.3	80.9
Male doctorate recipients (number)	1,710	1,234	476
Citizenship status (%)			
U.S. citizen or permanent resident	35.0	34.7	35.9
Temporary visa holder	59.6	60.5	57.1
Unknown	5.4	4.8	6.9
Marital status (%)			
Never married	44.2	46.6	37.8
Married	34.9	33.5	38.4
Marriage-like relationship	5.8	5.5	6.5
Separated, divorced, widowed	2.3	1.8	3.6
Unknown	12.9	12.6	13.7
Has dependent age 18 or younger (%)	15.7	13.8	20.8
Has one or more functional limitations (%)	11.8	11.2	13.5
Age at doctorate (median years)	30.6	30.4	31.4
Bachelor's in same field as doctorate (%) ^b	39.7	43.4	30.2
Master's earned (%)	73.4	71.9	77.1
Master's earned at same doctorate institution (%)	50.7	52.3	46.9
Time to doctorate (median years)			
Years since earning bachelor's degree	8.1	7.9	9.0
From graduate school start	6.9	6.8	7.3

TABLE 8-5

Computer and information science research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
From doctoral program start ^c	5.7	5.7	5.5
Received tuition remission (%)	86.9	89.3	80.8
Female doctorate recipients (number)	587	371	216
Citizenship status (%)			
U.S. citizen or permanent resident	37.6	34.0	44.0
Temporary visa holder	54.2	58.0	47.7
Unknown	8.2	8.1	8.3
Marital status (%)			
Never married	35.8	40.2	28.2
Married	38.2	37.5	39.4
Marriage-like relationship	6.8	6.5	7.4
Separated, divorced, widowed	2.6	1.6	4.2
Unknown	16.7	14.3	20.8
Has dependent age 18 or younger (%)	18.1	16.1	21.9
Has one or more functional limitations (%)	13.0	12.7	13.5
Age at doctorate (median years)	31.3	30.7	32.3
Bachelor's in same field as doctorate (%) ^b	35.7	42.6	23.5
Master's earned (%)	78.9	74.8	86.3
Master's earned at same doctorate institution (%)	48.5	53.3	41.0
Time to doctorate (median years)			
Years since earning bachelor's degree	8.9	8.3	10.0
From graduate school start	7.7	6.8	8.3
From doctoral program start ^c	5.7	5.7	5.6
Received tuition remission (%)	83.7	85.0	81.4

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-6

Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
All doctorate recipients (number) ^a	10,724	584	1,313	1,245	1,279	2,119	402	627	912	1,552	691
Sex (%)											
Male	73.4	83.7	56.6	71.4	67.5	81.1	78.9	69.5	71.2	82.3	71.1
Female	26.6	16.3	43.4	28.6	32.5	18.9	21.1	30.5	28.8	17.7	28.9
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)											
U.S. citizen or permanent resident	42.4	55.1	65.5	48.2	34.7	27.7	30.6	37.2	45.7	40.9	46.7
Temporary visa holder	52.6	38.7	29.9	47.7	60.1	67.2	67.7	57.9	49.0	54.1	46.3
Unknown	5.0	6.2	4.6	4.1	5.2	5.2	1.7	4.9	5.3	5.0	6.9
Marital status (%)											
Never married	46.0	47.1	50.4	52.0	39.7	45.4	45.0	39.2	48.2	47.3	39.7
Married	33.5	30.3	27.0	29.7	40.3	36.0	40.0	37.3	29.6	32.9	34.9
Marriage-like relationship	7.3	8.9	12.3	7.1	5.6	5.7	7.2	7.3	8.8	5.7	5.6
Separated, divorced, widowed	1.3	0.9	0.6	1.0	2.6	1.0	2.7	2.7	0.8	0.8	1.7
Unknown	12.0	12.8	9.7	10.2	11.8	11.9	5.0	13.4	12.6	13.3	18.1
Has dependent age 18 or younger (%)	14.3	12.2	8.4	10.7	19.1	16.7	17.4	17.2	11.4	13.9	18.3
Has one or more functional limitations (%)	10.2	7.3	12.5	11.5	10.4	8.8	9.4	10.3	11.0	9.5	10.7
Age at doctorate (median years)	30.1	29.7	29.3	29.1	31.2	30.7	31.0	30.8	29.3	30.0	30.8
Bachelor's in same field as doctorate (%) ^b	78.4	85.0	72.4	84.2	83.7	77.6	70.2	61.9	71.3	88.9	72.3
Master's earned (%)	74.4	83.5	53.7	55.2	90.9	83.0	84.1	83.7	61.4	79.1	76.3
Master's earned at same doctorate institution (%)	51.2	61.2	52.8	52.2	43.2	52.7	42.5	49.9	47.6	55.9	50.9
Time to doctorate (median years)											
Years since earning bachelor's degree	7.4	7.2	7.0	6.6	8.4	8.1	8.2	8.0	6.8	7.3	7.9
From graduate school start	6.6	6.5	6.0	5.8	7.3	7.0	7.3	7.0	6.0	6.4	6.8
From doctoral program start ^c	5.3	5.3	5.3	5.3	5.0	5.4	5.3	5.0	5.0	5.3	5.2
Received tuition remission (%)	86.5	81.1	87.8	88.4	88.7	85.6	82.2	83.7	86.6	88.4	84.0
Male doctorate recipients (number)	7,873	489	743	889	863	1,719	317	436	649	1,277	491
Citizenship status (%)											
U.S. citizen or permanent resident	40.4	55.2	66.4	47.5	30.4	27.3	28.4	35.3	43.9	39.2	46.8
Temporary visa holder	55.0	39.1	29.1	49.0	65.0	68.1	70.0	60.6	50.7	56.0	46.6
Unknown	4.6	5.7	4.6	3.5	4.6	4.6	1.6	4.1	5.4	4.8	6.5
Marital status (%)											
Never married	46.9	48.5	51.7	52.4	41.1	46.2	47.6	41.1	47.3	48.0	41.1
Married	33.7	31.3	26.9	29.7	40.3	35.6	39.4	37.6	30.8	32.5	35.8
Marriage-like relationship	6.6	D	D	D	4.6	5.9	6.3	6.9	D	D	3.9
Separated, divorced, widowed	1.1	D	D	D	2.5	0.9	1.6	2.3	D	D	1.4

TABLE 8-6

Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
Unknown	11.6	12.5	9.4	9.9	11.4	11.4	5.0	12.2	12.6	13.0	17.7
Has dependent age 18 or younger (%)	15.7	13.3	8.9	12.1	22.3	17.4	17.4	18.2	13.3	14.8	20.1
Has one or more functional limitations (%)	9.3	6.6	12.6	11.0	9.3	8.5	8.9	8.4	11.0	8.2	8.8
Age at doctorate (median years)	30.3	29.8	29.6	29.3	31.4	30.8	31.0	30.8	29.4	30.2	30.8
Bachelor's in same field as doctorate (%) ^b	80.1	85.8	72.0	85.3	87.0	78.0	74.5	65.3	72.8	89.8	74.1
Master's earned (%)	75.3	82.7	54.4	55.2	92.2	82.4	85.0	82.8	62.6	78.6	77.0
Master's earned at same doctorate institution (%)	50.6	59.9	53.2	51.8	44.0	52.2	43.4	47.9	46.3	53.3	50.0
Time to doctorate (median years)											
Years since earning bachelor's degree	7.6	7.2	7.0	6.7	8.4	8.2	8.2	8.0	6.9	7.4	8.0
From graduate school start	6.7	6.6	6.1	6.0	7.3	7.0	7.3	6.9	6.0	6.5	6.8
From doctoral program start ^c	5.3	5.3	5.3	5.3	5.0	5.5	5.3	5.0	5.0	5.3	5.3
Received tuition remission (%)	86.0	81.0	88.5	88.0	87.1	84.9	82.6	81.7	86.7	88.4	83.7
Female doctorate recipients (number)	2,851	95	570	356	416	400	85	191	263	275	200
Citizenship status (%)											
U.S. citizen or permanent resident	47.9	54.7	64.4	50.0	43.8	29.0	38.8	41.4	50.2	48.4	46.5
Temporary visa holder	46.1	36.8	30.9	44.4	50.0	63.3	58.8	51.8	44.9	45.5	45.5
Unknown	6.1	8.4	4.7	5.6	6.3	7.8	2.4	6.8	4.9	6.2	8.0
Marital status (%)											
Never married	43.5	40.0	48.8	50.8	36.8	41.8	35.3	35.1	50.6	44.0	36.0
Married	33.0	25.3	27.0	29.8	40.4	37.8	42.4	36.6	26.6	34.9	32.5
Marriage-like relationship	9.0	D	D	D	7.5	5.0	10.6	8.4	D	D	10.0
Separated, divorced, widowed	1.7	D	D	D	2.6	1.5	7.1	3.7	D	D	2.5
Unknown	12.8	14.7	10.0	11.0	12.7	14.0	4.7	16.2	12.5	14.5	19.0
Has dependent age 18 or younger (%)	10.3	6.2	7.8	6.9	12.4	13.4	17.3	14.8	6.9	9.7	13.6
Has one or more functional limitations (%)	12.6	11.3	12.3	12.8	12.7	10.2	11.3	15.0	11.0	15.5	15.7
Age at doctorate (median years)	29.6	29.3	29.1	28.8	30.6	30.1	31.0	30.6	28.9	29.3	30.5
Bachelor's in same field as doctorate (%) ^b	73.5	80.5	72.9	81.2	76.7	75.6	54.2	54.0	67.6	84.7	67.6
Master's earned (%)	71.7	87.8	52.8	55.1	88.4	85.4	80.7	85.6	58.3	81.5	74.6
Master's earned at same doctorate institution (%)	52.8	68.1	52.2	53.4	41.4	54.8	38.8	54.4	51.1	67.5	53.2
Time to doctorate (median years)											
Years since earning bachelor's degree	7.1	7.0	6.8	6.3	8.4	7.5	8.2	8.1	6.5	7.0	7.3
From graduate school start	6.3	6.4	6.0	5.8	7.0	7.0	7.4	7.2	5.8	6.3	6.8
From doctoral program start ^c	5.3	5.6	5.3	5.1	5.0	5.3	5.3	5.1	5.0	5.3	5.0
Received tuition remission (%)	87.9	81.7	86.8	89.6	92.2	88.6	80.5	88.3	86.3	88.4	84.8

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-7

Geosciences, atmospheric, and ocean sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean, marine, and atmospheric sciences
All doctorate recipients (number) ^a	1,216	682	534
Sex (%)			
Male	54.9	56.3	53.2
Female	45.0	43.7	46.6
Unknown	0.1	0.0	0.2
Citizenship status (%)			
U.S. citizen or permanent resident	63.6	60.4	67.6
Temporary visa holder	32.0	34.5	28.8
Unknown	4.4	5.1	3.6
Marital status (%)			
Never married	41.6	38.0	46.3
Married	33.1	37.7	27.3
Marriage-like relationship	13.2	13.5	12.9
Separated, divorced, widowed	2.7	2.1	3.6
Unknown	9.3	8.8	9.9
Has dependent age 18 or younger (%)	14.9	17.1	12.1
Has one or more functional limitations (%)	16.1	14.6	18.1
Age at doctorate (median years)	30.8	31.3	30.4
Bachelor's in same field as doctorate (%) ^b	49.8	58.0	39.4
Master's earned (%)	68.9	71.0	66.3
Master's earned at same doctorate institution (%)	45.2	39.8	52.6
Time to doctorate (median years)			
Years since earning bachelor's degree	8.1	8.4	8.0
From graduate school start	6.8	7.0	6.6
From doctoral program start ^c	5.7	5.4	5.8
Received tuition remission (%)	88.0	88.4	87.6
Male doctorate recipients (number)	668	384	284
Citizenship status (%)			
U.S. citizen or permanent resident	57.0	54.9	59.9
Temporary visa holder	38.2	39.3	36.6
Unknown	4.8	5.7	3.5
Marital status (%)			
Never married	43.1	37.8	50.4
Married	34.7	39.3	28.5
Marriage-like relationship	10.9	12.0	9.5
Separated, divorced, widowed	2.2	1.8	2.8
Unknown	9.0	9.1	8.8
Has dependent age 18 or younger (%)	18.5	21.5	14.3
Has one or more functional limitations (%)	12.2	11.3	13.5
Age at doctorate (median years)	31.3	32.0	30.6
Bachelor's in same field as doctorate (%) ^b	50.6	57.1	41.9
Master's earned (%)	72.6	75.9	68.1

TABLE 8-7

Geosciences, atmospheric, and ocean sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean, marine, and atmospheric sciences
Master's earned at same doctorate institution (%)	43.9	39.4	50.5
Time to doctorate (median years)			
Years since earning bachelor's degree	8.3	8.6	8.0
From graduate school start	6.9	7.0	6.8
From doctoral program start ^c	5.5	5.3	5.6
Received tuition remission (%)	87.2	87.0	87.5
Female doctorate recipients (number)	547	298	249
Citizenship status (%)			
U.S. citizen or permanent resident	71.7	67.4	76.7
Temporary visa holder	24.5	28.2	20.1
Unknown	3.8	4.4	3.2
Marital status (%)			
Never married	39.9	38.3	41.8
Married	31.3	35.6	26.1
Marriage-like relationship	16.1	15.4	16.9
Separated, divorced, widowed	3.3	2.3	4.4
Unknown	9.5	8.4	10.8
Has dependent age 18 or younger (%)	10.5	11.4	9.5
Has one or more functional limitations (%)	20.9	18.8	23.6
Age at doctorate (median years)	30.4	30.7	30.1
Bachelor's in same field as doctorate (%) ^b	49.0	59.2	36.6
Master's earned (%)	64.3	64.6	63.9
Master's earned at same doctorate institution (%)	47.1	40.4	55.2
Time to doctorate (median years)			
Years since earning bachelor's degree	8.0	8.2	7.6
From graduate school start	6.8	7.0	6.3
From doctoral program start ^c	5.8	5.6	5.8
Received tuition remission (%)	89.0	90.2	87.5

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 8-8

Health sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All health sciences fields	Nursing and nursing science	Pharmacy and pharmaceutical sciences	Public health	Health sciences, other
All doctorate recipients (number) ^a	2,746	638	442	766	900
Sex (%)					
Male	28.7	10.8	47.7	28.5	32.3
Female	71.3	89.2	52.3	71.5	67.7
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	71.1	81.0	46.2	75.5	72.7
Temporary visa holder	22.7	12.4	47.7	21.5	18.7
Unknown	6.2	6.6	6.1	3.0	8.7
Marital status (%)					
Never married	25.9	12.5	43.4	30.8	22.7
Married	47.9	60.8	33.7	47.9	45.8
Marriage-like relationship	6.6	3.8	6.3	9.1	6.4
Separated, divorced, widowed	5.3	11.3	1.6	3.7	4.3
Unknown	14.3	11.6	14.9	8.5	20.8
Has dependent age 18 or younger (%)	33.6	46.4	17.0	31.1	34.6
Has one or more functional limitations (%)	12.6	11.3	13.4	12.1	13.8
Age at doctorate (median years)	34.8	44.2	30.4	34.2	34.6
Bachelor's in same field as doctorate (%) ^b	46.4	90.8	40.0	26.0	34.4
Master's earned (%)	80.9	88.8	50.8	90.9	80.9
Master's earned at same doctorate institution (%)	32.1	27.7	34.0	34.7	32.6
Time to doctorate (median years)					
Years since earning bachelor's degree	11.4	18.0	7.7	10.9	11.3
From graduate school start	9.0	11.3	6.3	8.9	9.9
From doctoral program start ^c	5.0	5.0	5.3	5.0	5.0
Received tuition remission (%)	72.1	54.9	89.3	76.7	72.2
Male doctorate recipients (number)	789	69	211	218	291
Citizenship status (%)					
U.S. citizen or permanent resident	62.6	75.4	45.5	67.9	68.0
Temporary visa holder	31.1	18.8	49.3	27.1	23.7
Unknown	6.3	5.8	5.2	5.0	8.2
Marital status (%)					
Never married	31.1	21.7	39.3	35.8	23.7
Married	44.1	59.4	40.3	44.5	43.0
Marriage-like relationship	7.0	D	D	6.4	8.2
Separated, divorced, widowed	2.9	D	D	3.2	3.4
Unknown	15.0	10.1	12.3	10.1	21.6
Has dependent age 18 or younger (%)	29.2	43.5	21.2	27.4	33.3
Has one or more functional limitations (%)	11.9	11.9	11.0	10.7	13.6
Age at doctorate (median years)	32.9	42.3	30.8	33.7	33.7
Bachelor's in same field as doctorate (%) ^b	37.2	84.6	42.2	25.6	30.2
Master's earned (%)	74.5	92.3	53.1	89.2	74.3

TABLE 8-8

Health sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All health sciences fields	Nursing and nursing science	Pharmacy and pharmaceutical sciences	Public health	Health sciences, other
Master's earned at same doctorate institution (%)	32.2	38.3	34.7	37.1	24.2
Time to doctorate (median years)					
Years since earning bachelor's degree	9.9	15.7	8.0	10.2	10.8
From graduate school start	7.8	9.5	6.2	8.3	9.0
From doctoral program start ^c	5.0	5.5	5.3	4.9	5.0
Received tuition remission (%)	76.0	62.5	86.2	73.9	73.3
Female doctorate recipients (number)	1,957	569	231	548	609
Citizenship status (%)					
U.S. citizen or permanent resident	74.6	81.7	46.8	78.5	74.9
Temporary visa holder	19.3	11.6	46.3	19.3	16.3
Unknown	6.1	6.7	6.9	2.2	8.9
Marital status (%)					
Never married	23.9	11.4	47.2	28.8	22.2
Married	49.5	61.0	27.7	49.3	47.1
Marriage-like relationship	6.4	D	D	10.2	5.6
Separated, divorced, widowed	6.3	D	D	3.8	4.8
Unknown	14.0	11.8	17.3	7.8	20.4
Has dependent age 18 or younger (%)	35.3	46.8	13.0	32.5	35.3
Has one or more functional limitations (%)	13.0	11.2	15.7	12.7	13.9
Age at doctorate (median years)	35.8	44.3	30.1	34.3	35.0
Bachelor's in same field as doctorate (%) ^b	50.1	91.6	37.9	26.2	36.4
Master's earned (%)	83.5	88.4	48.5	91.5	84.0
Master's earned at same doctorate institution (%)	32.1	26.3	33.3	33.8	36.2
Time to doctorate (median years)					
Years since earning bachelor's degree	12.2	18.1	7.5	11.0	12.0
From graduate school start	9.3	11.5	6.3	9.0	10.0
From doctoral program start ^c	5.0	5.0	5.0	5.0	5.0
Received tuition remission (%)	70.5	54.0	92.3	77.9	71.7

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-9

Mathematics and statistics research doctorate recipients, statistical profiles by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
All doctorate recipients (number) ^a	2,056	490	890	676
Sex (%)				
Male	72.0	69.8	79.0	64.3
Female	28.0	30.2	20.9	35.7
Unknown	*	0.0	0.1	0.0
Citizenship status (%)				
U.S. citizen or permanent resident	45.2	49.0	55.6	28.7
Temporary visa holder	51.0	48.8	39.4	67.9
Unknown	3.8	2.2	4.9	3.4
Marital status (%)				
Never married	54.0	56.3	53.1	53.6
Married	24.9	26.1	21.3	28.7
Marriage-like relationship	9.0	8.8	9.7	8.3
Separated, divorced, widowed	1.5	1.6	1.5	1.3
Unknown	10.6	7.1	14.4	8.1
Has dependent age 18 or younger (%)	9.4	12.7	5.9	11.3
Has one or more functional limitations (%)	11.1	10.0	12.4	10.5
Age at doctorate (median years)	29.2	29.5	28.8	29.6
Bachelor's in same field as doctorate (%) ^b	80.6	78.9	87.0	73.7
Master's earned (%)	68.8	71.4	63.1	74.0
Master's earned at same doctorate institution (%)	53.2	56.5	54.1	49.8
Time to doctorate (median years)				
Years since earning bachelor's degree	7.0	7.0	6.3	7.3
From graduate school start	6.0	6.3	5.9	6.1
From doctoral program start ^c	5.3	5.3	5.8	5.0
Received tuition remission (%)	93.8	91.6	95.4	93.5
Male doctorate recipients (number)	1,480	342	703	435
Citizenship status (%)				
U.S. citizen or permanent resident	46.8	50.0	54.6	31.5
Temporary visa holder	48.9	47.1	39.8	64.8
Unknown	4.4	2.9	5.5	3.7
Marital status (%)				
Never married	56.6	60.5	56.0	54.5
Married	23.0	22.8	20.5	27.1
Marriage-like relationship	8.2	D	8.0	D
Separated, divorced, widowed	1.1	D	1.0	D
Unknown	11.1	7.9	14.5	8.0
Has dependent age 18 or younger (%)	7.9	9.8	4.8	11.1
Has one or more functional limitations (%)	10.0	9.6	10.9	9.0
Age at doctorate (median years)	29.2	29.4	28.7	29.6
Bachelor's in same field as doctorate (%) ^b	80.5	78.5	86.3	73.2
Master's earned (%)	67.4	69.2	62.5	73.4
Master's earned at same doctorate institution (%)	51.3	51.3	53.1	49.0
Time to doctorate (median years)				
Years since earning bachelor's degree	6.8	6.9	6.3	7.2
From graduate school start	6.0	6.3	5.9	6.1
From doctoral program start ^c	5.3	5.3	5.8	5.0
Received tuition remission (%)	93.9	91.7	94.8	94.4
Female doctorate recipients (number)	575	148	186	241
Citizenship status (%)				

TABLE 8-9

Mathematics and statistics research doctorate recipients, statistical profiles by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
U.S. citizen or permanent resident	41.2	46.6	59.7	23.7
Temporary visa holder	56.5	52.7	37.6	73.4
Unknown	2.3	0.7	2.7	2.9
Marital status (%)				
Never married	47.5	46.6	42.5	51.9
Married	29.7	33.8	24.2	31.5
Marriage-like relationship	11.1	D	16.1	D
Separated, divorced, widowed	2.3	D	3.2	D
Unknown	9.4	5.4	14.0	8.3
Has dependent age 18 or younger (%)	13.3	19.3	10.0	11.8
Has one or more functional limitations (%)	14.0	10.8	17.7	13.4
Age at doctorate (median years)	29.4	29.6	29.0	29.7
Bachelor's in same field as doctorate (%) ^b	80.7	79.9	89.8	74.7
Master's earned (%)	72.3	76.4	65.1	75.1
Master's earned at same doctorate institution (%)	57.8	67.3	58.3	51.2
Time to doctorate (median years)				
Years since earning bachelor's degree	7.2	7.3	7.0	7.4
From graduate school start	6.1	6.3	6.0	6.3
From doctoral program start ^c	5.3	5.3	5.8	5.0
Received tuition remission (%)	93.5	91.5	97.5	92.0

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

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-10

Multidisciplinary/interdisciplinary sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
All doctorate recipients (number) ^a	1,704	583	1,121
Sex (%)			
Male	61.3	70.2	56.6
Female	38.7	29.8	43.4
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	48.5	39.5	53.2
Temporary visa holder	47.7	56.9	42.9
Unknown	3.8	3.6	3.9
Marital status (%)			
Never married	42.1	47.5	39.3
Married	36.2	35.3	36.7
Marriage-like relationship	8.3	6.7	9.1
Separated, divorced, widowed	2.7	1.2	3.5
Unknown	10.7	9.3	11.5
Has dependent age 18 or younger (%)	15.2	12.8	16.4
Has one or more functional limitations (%)	13.1	12.1	13.7
Age at doctorate (median years)	31.1	30.2	31.7
Bachelor's in same field as doctorate (%) ^b	14.0	18.1	11.8
Master's earned (%)	76.4	77.0	76.0
Master's earned at same doctorate institution (%)	48.6	55.0	45.1
Time to doctorate (median years)			
Years since earning bachelor's degree	8.3	7.7	8.6
From graduate school start	7.0	6.8	7.3
From doctoral program start ^c	5.3	5.6	5.3
Received tuition remission (%)	86.1	87.1	85.6
Male doctorate recipients (number)	1,044	409	635
Citizenship status (%)			
U.S. citizen or permanent resident	44.1	37.4	48.3
Temporary visa holder	52.2	59.4	47.6
Unknown	3.7	3.2	4.1
Marital status (%)			
Never married	45.7	47.7	44.4
Married	36.2	35.9	36.4
Marriage-like relationship	7.6	D	D
Separated, divorced, widowed	1.5	D	D
Unknown	9.0	8.1	9.6
Has dependent age 18 or younger (%)	13.6	12.5	14.3
Has one or more functional limitations (%)	13.1	12.2	13.7
Age at doctorate (median years)	31.0	30.5	31.3
Bachelor's in same field as doctorate (%) ^b	14.5	18.6	11.8

TABLE 8-10

Multidisciplinary/interdisciplinary sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Master's earned (%)	74.7	77.0	73.1
Master's earned at same doctorate institution (%)	50.1	54.2	47.2
Time to doctorate (median years)			
Years since earning bachelor's degree	8.1	7.9	8.3
From graduate school start	6.9	6.9	6.9
From doctoral program start ^c	5.6	5.7	5.3
Received tuition remission (%)	84.8	85.7	84.2
Female doctorate recipients (number)	660	174	486
Citizenship status (%)			
U.S. citizen or permanent resident	55.5	44.3	59.5
Temporary visa holder	40.6	51.1	36.8
Unknown	3.9	4.6	3.7
Marital status (%)			
Never married	36.4	47.1	32.5
Married	36.2	33.9	37.0
Marriage-like relationship	9.4	D	D
Separated, divorced, widowed	4.5	D	D
Unknown	13.5	12.1	14.0
Has dependent age 18 or younger (%)	17.7	13.5	19.3
Has one or more functional limitations (%)	13.2	11.9	13.7
Age at doctorate (median years)	31.2	29.9	32.2
Bachelor's in same field as doctorate (%) ^b	13.2	17.0	11.7
Master's earned (%)	79.2	77.0	80.0
Master's earned at same doctorate institution (%)	46.4	57.1	42.5
Time to doctorate (median years)			
Years since earning bachelor's degree	8.4	7.3	9.2
From graduate school start	7.3	6.5	7.8
From doctoral program start ^c	5.3	5.3	5.3
Received tuition remission (%)	88.3	90.6	87.5

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 8-11

Physical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
All doctorate recipients (number) ^a	5,443	323	2,731	389	2,000
Sex (%)					
Male	66.0	67.8	56.8	63.8	78.9
Female	34.0	32.2	43.2	36.2	21.2
Unknown	*	0.0	*	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	57.7	66.6	62.7	49.4	51.2
Temporary visa holder	38.5	30.3	34.0	49.1	43.8
Unknown	3.8	3.1	3.4	1.5	5.0
Marital status (%)					
Never married	50.8	54.2	48.8	55.3	52.2
Married	27.3	25.7	27.1	29.3	27.3
Marriage-like relationship	10.3	D	11.5	D	8.9
Separated, divorced, widowed	1.2	D	1.4	D	1.2
Unknown	10.3	6.8	11.2	6.7	10.4
Has dependent age 18 or younger (%)	9.5	5.7	9.6	9.6	10.0
Has one or more functional limitations (%)	13.9	15.1	14.1	17.9	12.5
Age at doctorate (median years)	29.3	28.9	29.0	28.9	29.7
Bachelor's in same field as doctorate (%) ^b	77.2	90.6	76.3	53.3	81.0
Master's earned (%)	50.3	69.7	38.7	50.9	62.6
Master's earned at same doctorate institution (%)	56.8	80.1	46.5	45.0	63.0
Time to doctorate (median years)					
Years since earning bachelor's degree	6.7	6.6	6.3	6.3	7.2
From graduate school start	6.0	6.0	5.8	5.8	6.5
From doctoral program start ^c	5.7	5.8	5.3	5.2	6.0
Received tuition remission (%)	91.4	89.1	92.5	87.5	91.2
Male doctorate recipients (number)	3,594	219	1,550	248	1,577
Citizenship status (%)					
U.S. citizen or permanent resident	55.7	65.8	61.3	47.6	50.0
Temporary visa holder	40.5	31.5	35.5	51.6	44.8
Unknown	3.9	2.7	3.2	0.8	5.2
Marital status (%)					
Never married	51.6	55.3	48.8	55.6	53.3
Married	27.5	28.8	27.6	32.3	26.6
Marriage-like relationship	9.2	D	10.5	D	D
Separated, divorced, widowed	1.1	D	1.3	D	D
Unknown	10.5	5.9	11.7	5.6	10.7
Has dependent age 18 or younger (%)	10.6	6.8	11.2	12.4	10.3
Has one or more functional limitations (%)	12.9	14.2	13.1	16.1	11.9
Age at doctorate (median years)	29.5	29.0	29.3	29.3	29.8
Bachelor's in same field as doctorate (%) ^b	77.6	90.0	76.9	52.9	80.5
Master's earned (%)	52.2	68.1	40.7	51.3	61.3
Master's earned at same doctorate institution (%)	55.7	81.1	43.6	40.7	61.6
Time to doctorate (median years)					
Years since earning bachelor's degree	7.0	6.5	6.6	6.6	7.2
From graduate school start	6.0	6.0	5.8	5.8	6.5
From doctoral program start ^c	5.8	5.8	5.3	5.3	6.0
Received tuition remission (%)	91.7	88.4	93.1	85.5	91.8

TABLE 8-11

Physical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Female doctorate recipients (number)	1,848	104	1,180	141	423
Citizenship status (%)					
U.S. citizen or permanent resident	61.7	68.3	64.4	52.5	55.6
Temporary visa holder	34.6	27.9	31.9	44.7	40.2
Unknown	3.7	3.8	3.6	2.8	4.3
Marital status (%)					
Never married	49.3	51.9	48.8	54.6	48.2
Married	26.7	19.2	26.4	24.1	30.0
Marriage-like relationship	12.6	D	12.7	D	D
Separated, divorced, widowed	1.4	D	1.4	D	D
Unknown	10.1	8.7	10.6	8.5	9.5
Has dependent age 18 or younger (%)	7.4	3.2	7.6	4.7	8.9
Has one or more functional limitations (%)	15.7	16.8	15.3	21.1	14.9
Age at doctorate (median years)	28.7	28.6	28.6	28.4	29.4
Bachelor's in same field as doctorate (%) ^b	76.5	92.0	75.6	54.0	82.7
Master's earned (%)	46.5	73.0	36.0	50.4	67.4
Master's earned at same doctorate institution (%)	59.2	78.1	50.8	52.9	67.9
Time to doctorate (median years)					
Years since earning bachelor's degree	6.3	6.6	6.2	6.1	7.0
From graduate school start	5.8	6.0	5.5	5.7	6.4
From doctoral program start ^c	5.3	5.8	5.3	5.1	5.9
Received tuition remission (%)	91.0	90.7	91.6	91.0	89.4

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

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-12

Psychology research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
All doctorate recipients (number) ^a	3,793	1,203	1,293	803	494
Sex (%)					
Male	23.3	20.1	22.3	30.5	22.3
Female	76.6	79.9	77.7	69.5	77.5
Unknown	*	0.0	0.0	0.0	0.2
Citizenship status (%)					
U.S. citizen or permanent resident	83.8	89.6	85.0	81.6	70.0
Temporary visa holder	8.8	3.4	9.4	15.7	9.5
Unknown	7.4	7.0	5.6	2.7	20.4
Marital status (%)					
Never married	30.7	28.9	30.3	39.4	22.3
Married	35.3	35.8	38.4	32.6	30.2
Marriage-like relationship	13.4	15.5	11.2	16.7	9.1
Separated, divorced, widowed	4.0	3.1	6.3	1.6	3.8
Unknown	16.6	16.7	13.8	9.7	34.6
Has dependent age 18 or younger (%)	18.7	17.7	21.6	14.2	22.3
Has one or more functional limitations (%)	17.1	16.0	17.4	17.5	18.6
Age at doctorate (median years)	31.3	31.1	32.3	30.4	31.5
Bachelor's in same field as doctorate (%) ^b	70.9	80.8	65.8	68.9	62.3
Master's earned (%)	89.0	90.4	91.2	84.2	88.1
Master's earned at same doctorate institution (%)	65.4	77.3	54.2	69.1	59.5
Time to doctorate (median years)					
Years since earning bachelor's degree	8.6	8.6	9.3	8.0	8.6
From graduate school start	6.9	6.8	7.4	6.2	6.9
From doctoral program start ^c	5.9	6.0	5.8	5.7	5.8
Received tuition remission (%)	81.5	80.0	76.1	93.3	78.4
Male doctorate recipients (number)	885	242	288	245	110
Citizenship status (%)					
U.S. citizen or permanent resident	82.3	90.1	84.0	81.6	61.8
Temporary visa holder	8.9	1.7	8.7	17.1	7.3
Unknown	8.8	8.3	7.3	1.2	30.9
Marital status (%)					
Never married	31.5	29.3	30.9	39.6	20.0
Married	35.5	33.9	42.0	33.1	27.3
Marriage-like relationship	12.8	16.1	6.9	D	D
Separated, divorced, widowed	3.1	3.3	4.2	D	D
Unknown	17.2	17.4	16.0	7.8	40.9
Has dependent age 18 or younger (%)	20.6	20.5	24.8	16.3	20.0
Has one or more functional limitations (%)	15.5	15.0	16.0	16.1	12.5
Age at doctorate (median years)	32.3	31.8	33.4	31.2	33.3

TABLE 8-12

Psychology research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Bachelor's in same field as doctorate (%) ^b	66.0	76.6	61.1	64.7	55.7
Master's earned (%)	87.1	89.9	88.5	84.1	82.9
Master's earned at same doctorate institution (%)	62.6	76.0	49.1	66.0	60.0
Time to doctorate (median years)					
Years since earning bachelor's degree	8.9	9.0	9.7	8.0	9.0
From graduate school start	7.0	7.0	7.8	6.5	7.6
From doctoral program start ^c	5.9	6.0	5.8	5.8	5.8
Received tuition remission (%)	81.5	77.6	74.9	93.4	77.6
Female doctorate recipients (number)	2,907	961	1,005	558	383
Citizenship status (%)					
U.S. citizen or permanent resident	84.2	89.5	85.3	81.5	72.3
Temporary visa holder	8.8	3.9	9.6	15.1	10.2
Unknown	6.9	6.7	5.2	3.4	17.5
Marital status (%)					
Never married	30.5	28.8	30.1	39.2	23.0
Married	35.2	36.3	37.3	32.4	30.8
Marriage-like relationship	13.7	15.3	12.4	D	D
Separated, divorced, widowed	4.3	3.0	7.0	D	D
Unknown	16.4	16.5	13.1	10.6	32.9
Has dependent age 18 or younger (%)	18.2	17.0	20.8	13.2	22.6
Has one or more functional limitations (%)	17.5	16.2	17.7	18.2	19.8
Age at doctorate (median years)	31.1	31.0	32.0	30.0	31.3
Bachelor's in same field as doctorate (%) ^b	72.4	81.9	67.2	70.8	64.2
Master's earned (%)	89.6	90.5	91.9	84.3	89.4
Master's earned at same doctorate institution (%)	66.2	77.6	55.6	70.5	59.6
Time to doctorate (median years)					
Years since earning bachelor's degree	8.4	8.3	9.3	7.7	8.6
From graduate school start	6.8	6.3	7.3	6.0	6.8
From doctoral program start ^c	5.9	6.0	5.7	5.7	5.7
Received tuition remission (%)	81.5	80.6	76.5	93.2	78.6

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

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-13

Social sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All social sciences fields	Anthropology	Area, ethnic, cultural, gender, and group studies	Economics	Political science and government	Public policy analysis	Sociology, demography, and population studies	Social sciences, other
Never married	33.5	35.1	31.4	40.0	34.2	28.9	32.0	31.2
Married	39.7	35.5	36.8	37.3	38.8	46.3	40.3	42.1
Marriage-like relationship	12.2	16.3	13.5	10.7	10.0	8.5	15.5	11.3
Separated, divorced, widowed	5.2	4.5	7.4	1.4	5.7	6.9	4.9	6.6
Unknown	9.4	8.6	10.8	10.5	11.4	9.3	7.2	8.7
Has dependent age 18 or younger (%)	21.4	17.3	22.8	13.8	21.3	34.1	20.6	23.8
Has one or more functional limitations (%)	17.5	21.4	27.0	9.3	17.1	11.1	20.5	18.6
Age at doctorate (median years)	33.0	33.6	34.1	31.7	31.9	36.2	32.8	34.0
Bachelor's in same field as doctorate (%) ^b	51.7	61.3	30.1	61.9	67.7	37.1	68.6	38.6
Master's earned (%)	90.8	90.0	90.3	85.5	89.3	91.6	93.4	94.2
Master's earned at same doctorate institution (%)	48.6	57.3	46.4	43.0	58.0	40.3	65.2	39.1
Time to doctorate (median years)								
Years since earning bachelor's degree	10.3	11.0	11.2	9.2	9.3	13.0	10.2	11.0
From graduate school start	8.8	8.9	9.3	7.9	7.9	10.8	8.1	9.1
From doctoral program start ^c	6.0	7.1	6.8	5.8	6.0	5.8	6.8	6.0
Received tuition remission (%)	90.0	95.2	90.7	92.4	95.7	71.2	93.1	88.7

* = value between 0.00% and 0.05%.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the ["Technical Notes."](#)

Source(s):

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

TABLE 8-14

Education research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education and teaching fields	Education, other
All doctorate recipients (number) ^a	3,988	1,179	1,253	1,098	458
Sex (%)					
Male	27.3	33.6	25.3	24.9	22.5
Female	72.7	66.4	74.7	75.1	77.5
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	82.5	89.1	78.6	80.6	80.8
Temporary visa holder	11.6	6.6	15.0	14.5	7.9
Unknown	5.9	4.2	6.4	4.9	11.4
Marital status (%)					
Never married	19.2	18.5	19.2	20.5	17.9
Married	54.3	56.3	53.6	56.5	45.9
Marriage-like relationship	5.2	4.7	4.5	5.9	6.3
Separated, divorced, widowed	7.1	7.3	7.1	6.6	7.6
Unknown	14.2	13.1	15.6	10.5	22.3
Has dependent age 18 or younger (%)	43.1	46.3	40.4	42.8	43.0
Has one or more functional limitations (%)	15.5	14.9	15.5	15.3	17.9
Age at doctorate (median years)	39.2	41.3	38.4	38.4	39.0
Bachelor's in same field as doctorate (%) ^b	25.7	23.2	20.0	35.8	21.7
Master's earned (%)	96.6	97.4	96.6	96.5	94.2
Master's earned at same doctorate institution (%)	31.3	30.1	33.1	31.1	29.9
Time to doctorate (median years)					
Years since earning bachelor's degree	15.4	17.6	14.4	14.4	15.0
From graduate school start	12.7	14.9	11.7	11.8	12.2
From doctoral program start ^c	5.6	5.8	5.6	5.3	5.7
Received tuition remission (%)	61.8	51.8	64.3	69.2	63.1
Male doctorate recipients (number)	1,089	396	317	273	103
Citizenship status (%)					
U.S. citizen or permanent resident	81.6	87.6	79.2	76.9	78.6
Temporary visa holder	12.9	8.1	15.8	17.6	10.7
Unknown	5.4	4.3	5.0	5.5	10.7
Marital status (%)					
Never married	20.3	16.2	23.0	23.4	19.4
Married	57.2	61.6	57.1	56.0	43.7
Marriage-like relationship	4.4	4.5	2.8	5.9	4.9
Separated, divorced, widowed	3.8	3.5	3.5	4.0	4.9
Unknown	14.3	14.1	13.6	10.6	27.2
Has dependent age 18 or younger (%)	46.7	56.8	41.8	40.2	40.0
Has one or more functional limitations (%)	14.1	12.3	15.7	14.5	16.0
Age at doctorate (median years)	39.4	41.4	38.6	37.8	39.6
Bachelor's in same field as doctorate (%) ^b	22.8	19.3	15.6	37.3	19.0

TABLE 8-14

Education research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education and teaching fields	Education, other
Master's earned (%)	96.0	97.5	94.8	96.0	93.7
Master's earned at same doctorate institution (%)	30.5	29.1	30.0	34.9	24.3
Time to doctorate (median years)					
Years since earning bachelor's degree	15.0	17.7	14.3	13.3	14.9
From graduate school start	12.8	15.4	11.6	11.3	11.6
From doctoral program start ^c	5.6	5.8	5.6	5.2	5.4
Received tuition remission (%)	57.8	44.8	63.1	69.3	59.7
Female doctorate recipients (number)	2,899	783	936	825	355
Citizenship status (%)					
U.S. citizen or permanent resident	82.9	89.9	78.4	81.8	81.4
Temporary visa holder	11.0	5.9	14.7	13.5	7.0
Unknown	6.1	4.2	6.8	4.7	11.5
Marital status (%)					
Never married	18.8	19.7	17.8	19.5	17.5
Married	53.2	53.6	52.5	56.6	46.5
Marriage-like relationship	5.5	4.9	5.0	5.9	6.8
Separated, divorced, widowed	8.3	9.2	8.3	7.5	8.5
Unknown	14.2	12.6	16.3	10.4	20.8
Has dependent age 18 or younger (%)	41.8	41.1	39.9	43.6	43.8
Has one or more functional limitations (%)	16.0	16.2	15.4	15.6	18.4
Age at doctorate (median years)	39.1	41.3	38.3	38.6	38.9
Bachelor's in same field as doctorate (%) ^b	26.7	25.1	21.5	35.3	22.4
Master's earned (%)	96.8	97.4	97.2	96.7	94.4
Master's earned at same doctorate institution (%)	31.6	30.5	34.2	29.9	31.3
Time to doctorate (median years)					
Years since earning bachelor's degree	15.6	17.6	14.5	14.8	15.3
From graduate school start	12.6	14.8	11.7	11.8	12.4
From doctoral program start ^c	5.7	5.8	5.6	5.3	5.8
Received tuition remission (%)	63.4	55.3	64.7	69.1	63.9

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-15

Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
All doctorate recipients (number) ^a	3,358	1,039	571	733	619	396
Sex (%)						
Male	51.5	40.4	40.8	55.1	64.1	69.9
Female	48.5	59.6	59.2	44.9	35.9	30.1
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)						
U.S. citizen or permanent resident	75.5	83.7	56.4	78.9	77.9	71.7
Temporary visa holder	18.5	11.9	35.9	16.4	17.3	16.4
Unknown	6.0	4.3	7.7	4.8	4.8	11.9
Marital status (%)						
Never married	28.6	30.6	34.3	28.2	27.6	16.9
Married	42.9	38.7	38.0	44.3	46.2	53.0
Marriage-like relationship	9.6	12.4	8.2	11.1	9.5	2.0
Separated, divorced, widowed	4.5	4.6	4.6	5.2	4.2	3.0
Unknown	14.4	13.7	14.9	11.2	12.4	25.0
Has dependent age 18 or younger (%)	26.5	21.3	21.5	24.8	28.5	50.3
Has one or more functional limitations (%)	19.0	23.5	18.8	17.8	17.9	10.9
Age at doctorate (median years)	34.8	34.3	34.7	34.5	34.4	38.4
Bachelor's in same field as doctorate (%) ^b	71.3	78.1	67.8	71.8	71.6	55.9
Master's earned (%)	91.2	92.4	93.5	90.1	85.6	96.3
Master's earned at same doctorate institution (%)	37.1	30.2	42.8	42.4	36.8	37.4
Time to doctorate (median years)						
Years since earning bachelor's degree	11.4	11.1	11.3	11.2	11.3	15.0
From graduate school start	9.8	9.0	9.3	9.7	9.8	12.3
From doctoral program start ^c	6.8	6.3	6.9	7.0	6.9	6.8
Received tuition remission (%)	89.4	91.5	93.8	90.5	90.5	71.9
Male doctorate recipients (number)	1,731	420	233	404	397	277
Citizenship status (%)						
U.S. citizen or permanent resident	75.0	82.4	54.5	79.5	78.1	70.0
Temporary visa holder	18.3	12.9	37.3	15.6	17.4	15.9
Unknown	6.7	4.8	8.2	5.0	4.5	14.1
Marital status (%)						
Never married	27.6	31.2	38.2	27.0	29.2	11.9
Married	44.2	36.7	36.1	44.1	46.9	58.8
Marriage-like relationship	9.5	D	8.6	11.1	9.8	D
Separated, divorced, widowed	3.2	D	3.4	5.0	3.5	D
Unknown	15.4	D	13.7	12.9	10.6	D

TABLE 8-15

Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
Has dependent age 18 or younger (%)	30.3	23.1	20.9	26.9	28.9	61.3
Has one or more functional limitations (%)	16.3	19.4	19.5	17.2	14.6	8.7
Age at doctorate (median years)	35.1	34.5	35.0	34.6	34.6	39.1
Bachelor's in same field as doctorate (%) ^b	71.1	79.6	66.5	72.7	72.4	55.8
Master's earned (%)	90.9	92.8	92.5	90.7	85.7	95.3
Master's earned at same doctorate institution (%)	36.5	29.0	40.4	42.0	34.5	39.5
Time to doctorate (median years)						
Years since earning bachelor's degree	11.6	11.1	11.4	11.0	11.3	15.6
From graduate school start	9.8	9.3	9.4	9.3	9.9	12.8
From doctoral program start ^c	6.8	6.3	6.9	7.0	6.9	6.8
Received tuition remission (%)	88.6	93.4	95.6	90.0	90.9	67.0
Female doctorate recipients (number)	1,627	619	338	329	222	119
Citizenship status (%)						
U.S. citizen or permanent resident	76.1	84.7	57.7	78.1	77.5	75.6
Temporary visa holder	18.7	11.3	34.9	17.3	17.1	17.6
Unknown	5.2	4.0	7.4	4.6	5.4	6.7
Marital status (%)						
Never married	29.6	30.2	31.7	29.8	24.8	28.6
Married	41.5	40.1	39.3	44.7	45.0	39.5
Marriage-like relationship	9.8	D	8.0	10.9	9.0	D
Separated, divorced, widowed	5.8	D	5.3	5.5	5.4	D
Unknown	13.4	D	15.7	9.1	15.8	D
Has dependent age 18 or younger (%)	22.5	20.1	22.0	22.3	27.8	28.3
Has one or more functional limitations (%)	21.9	26.2	18.4	18.4	24.1	15.3
Age at doctorate (median years)	34.5	34.3	34.3	34.5	34.3	37.8
Bachelor's in same field as doctorate (%) ^b	71.6	77.1	68.8	70.7	70.0	56.1
Master's earned (%)	91.5	92.1	94.3	89.4	85.5	98.1
Master's earned at same doctorate institution (%)	37.7	31.0	44.5	42.9	41.2	33.3
Time to doctorate (median years)						
Years since earning bachelor's degree	11.3	11.1	11.2	11.3	11.1	14.5
From graduate school start	9.3	9.0	9.3	9.8	9.7	11.8
From doctoral program start ^c	6.8	6.2	7.0	7.1	6.8	6.7

TABLE 8-15

Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
Received tuition remission (%)	90.2	90.3	92.5	91.2	89.7	81.7

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-16

Business research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All business fields	Business administration and management	Business, other
All doctorate recipients (number) ^a	1,510	493	1,017
Sex (%)			
Male	54.4	53.8	54.8
Female	45.6	46.2	45.2
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	43.9	45.2	43.3
Temporary visa holder	49.1	42.2	52.5
Unknown	7.0	12.6	4.2
Marital status (%)			
Never married	29.1	23.3	31.9
Married	46.7	42.0	49.0
Marriage-like relationship	5.6	3.0	6.9
Separated, divorced, widowed	3.9	4.5	3.6
Unknown	14.7	27.2	8.7
Has dependent age 18 or younger (%)	29.3	34.0	27.5
Has one or more functional limitations (%)	10.9	11.0	10.8
Age at doctorate (median years)	33.5	35.4	32.9
Bachelor's in same field as doctorate (%) ^b	42.3	34.1	45.5
Master's earned (%)	87.8	90.3	86.8
Master's earned at same doctorate institution (%)	24.9	27.1	24.0
Time to doctorate (median years)			
Years since earning bachelor's degree	10.5	12.3	10.0
From graduate school start	8.8	9.9	8.3
From doctoral program start ^c	5.0	5.0	5.0
Received tuition remission (%)	83.8	69.7	89.3
Male doctorate recipients (number)	822	265	557
Citizenship status (%)			
U.S. citizen or permanent resident	43.3	41.5	44.2
Temporary visa holder	49.5	45.3	51.5
Unknown	7.2	13.2	4.3
Marital status (%)			
Never married	29.4	22.3	32.9
Married	48.3	46.0	49.4
Marriage-like relationship	5.5	3.4	6.5
Separated, divorced, widowed	2.8	3.0	2.7
Unknown	14.0	25.3	8.6
Has dependent age 18 or younger (%)	32.1	38.4	29.7
Has one or more functional limitations (%)	9.5	10.7	9.0
Age at doctorate (median years)	33.7	35.8	33.1
Bachelor's in same field as doctorate (%) ^b	41.7	36.3	44.0
Master's earned (%)	87.9	91.0	86.6
Master's earned at same doctorate institution (%)	24.5	25.1	24.2
Time to doctorate (median years)			
Years since earning bachelor's degree	10.3	11.8	10.0
From graduate school start	8.8	9.9	8.2
From doctoral program start ^c	5.0	5.0	5.0
Received tuition remission (%)	83.5	70.5	88.6
Female doctorate recipients (number)	688	228	460
Citizenship status (%)			

TABLE 8-16

Business research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All business fields	Business administration and management	Business, other
U.S. citizen or permanent resident	44.6	49.6	42.2
Temporary visa holder	48.7	38.6	53.7
Unknown	6.7	11.8	4.1
Marital status (%)			
Never married	28.6	24.6	30.7
Married	44.8	37.3	48.5
Marriage-like relationship	5.8	2.6	7.4
Separated, divorced, widowed	5.2	6.1	4.8
Unknown	15.6	29.4	8.7
Has dependent age 18 or younger (%)	25.9	28.6	24.8
Has one or more functional limitations (%)	12.6	11.5	13.0
Age at doctorate (median years)	33.3	35.0	32.8
Bachelor's in same field as doctorate (%) ^b	42.9	31.4	47.5
Master's earned (%)	87.7	89.3	87.0
Master's earned at same doctorate institution (%)	25.5	29.7	23.8
Time to doctorate (median years)			
Years since earning bachelor's degree	10.9	12.9	10.1
From graduate school start	8.8	9.9	8.5
From doctoral program start ^c	5.0	5.3	5.0
Received tuition remission (%)	84.2	68.7	90.2

^a All doctorate recipients includes doctorate recipients who did not report sex.

^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-17

Visual and performing arts research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies, and design
All doctorate recipients (number) ^a	824	487	337
Sex (%)			
Male	43.2	52.8	29.4
Female	56.8	47.2	70.6
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	69.8	69.8	69.7
Temporary visa holder	22.5	19.7	26.4
Unknown	7.8	10.5	3.9
Marital status (%)			
Never married	33.7	33.1	34.7
Married	37.3	34.9	40.7
Marriage-like relationship	11.4	12.7	9.5
Separated, divorced, widowed	4.1	3.1	5.6
Unknown	13.5	16.2	9.5
Has dependent age 18 or younger (%)	16.9	15.9	18.3
Has one or more functional limitations (%)	19.5	21.1	17.5
Age at doctorate (median years)	34.2	33.3	35.0
Bachelor's in same field as doctorate (%) ^b	69.7	73.5	64.4
Master's earned (%)	93.8	92.6	95.6
Master's earned at same doctorate institution (%)	35.9	32.2	40.9
Time to doctorate (median years)			
Years since earning bachelor's degree	11.3	10.4	12.3
From graduate school start	9.3	8.8	10.3
From doctoral program start ^c	6.7	5.8	7.3
Received tuition remission (%)	94.7	93.1	96.8
Male doctorate recipients (number)	356	257	99
Citizenship status (%)			
U.S. citizen or permanent resident	71.9	73.2	68.7
Temporary visa holder	19.7	16.3	28.3
Unknown	8.4	10.5	3.0
Marital status (%)			
Never married	39.0	36.2	46.5
Married	32.6	32.3	33.3
Marriage-like relationship	12.6	D	D
Separated, divorced, widowed	2.2	D	D
Unknown	13.5	16.3	6.1
Has dependent age 18 or younger (%)	16.2	16.7	14.9
Has one or more functional limitations (%)	19.9	20.6	18.5
Age at doctorate (median years)	33.8	33.2	35.2
Bachelor's in same field as doctorate (%) ^b	71.6	76.3	60.4
Master's earned (%)	93.5	93.4	93.8
Master's earned at same doctorate institution (%)	34.1	31.9	39.3
Time to doctorate (median years)			
Years since earning bachelor's degree	10.3	10.0	11.8
From graduate school start	8.8	8.6	9.9
From doctoral program start ^c	6.3	5.8	7.3
Received tuition remission (%)	94.3	93.6	95.8
Female doctorate recipients (number)	468	230	238

TABLE 8-17

Visual and performing arts research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies, and design
Citizenship status (%)			
U.S. citizen or permanent resident	68.2	66.1	70.2
Temporary visa holder	24.6	23.5	25.6
Unknown	7.3	10.4	4.2
Marital status (%)			
Never married	29.7	29.6	29.8
Married	40.8	37.8	43.7
Marriage-like relationship	10.5	D	D
Separated, divorced, widowed	5.6	D	D
Unknown	13.5	16.1	10.9
Has dependent age 18 or younger (%)	17.5	15.0	19.8
Has one or more functional limitations (%)	19.3	21.7	17.1
Age at doctorate (median years)	34.4	33.3	34.8
Bachelor's in same field as doctorate (%) ^b	68.2	70.4	66.2
Master's earned (%)	94.1	91.6	96.3
Master's earned at same doctorate institution (%)	37.3	32.4	41.6
Time to doctorate (median years)			
Years since earning bachelor's degree	12.0	11.0	12.6
From graduate school start	9.8	9.3	10.3
From doctoral program start ^c	6.8	6.0	7.3
Received tuition remission (%)	94.9	92.5	97.2

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-18

Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
All doctorate recipients (number) ^a	2,209	635	380	505	689
Sex (%)					
Male	39.7	38.9	42.1	28.3	47.6
Female	60.3	61.1	57.9	71.7	52.4
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	67.5	69.3	73.9	75.8	56.2
Temporary visa holder	26.1	23.9	18.9	19.6	36.9
Unknown	6.4	6.8	7.1	4.6	7.0
Marital status (%)					
Never married	29.2	33.2	29.2	24.0	29.5
Married	43.3	39.2	37.6	51.7	44.1
Marriage-like relationship	7.7	9.9	8.2	5.7	6.7
Separated, divorced, widowed	5.2	3.0	7.6	8.3	3.5
Unknown	14.6	14.6	17.4	10.3	16.3
Has dependent age 18 or younger (%)	29.0	21.6	24.2	38.1	31.3
Has one or more functional limitations (%)	17.5	23.0	15.4	17.3	13.4
Age at doctorate (median years)	35.0	33.3	34.8	36.8	35.1
Bachelor's in same field as doctorate (%) ^b	38.0	55.5	33.2	26.1	33.4
Master's earned (%)	95.3	97.2	89.5	98.7	94.0
Master's earned at same doctorate institution (%)	34.7	29.3	43.6	32.8	36.7
Time to doctorate (median years)					
Years since earning bachelor's degree	11.4	10.0	11.8	13.8	11.3
From graduate school start	9.3	8.0	9.8	10.7	9.7
From doctoral program start ^c	5.8	5.0	6.8	5.8	5.3
Received tuition remission (%)	82.6	93.5	77.3	75.9	80.4
Male doctorate recipients (number)	878	247	160	143	328
Citizenship status (%)					
U.S. citizen or permanent resident	61.3	68.0	72.5	70.6	46.6
Temporary visa holder	31.5	25.9	20.0	25.2	44.2
Unknown	7.2	6.1	7.5	4.2	9.1
Marital status (%)					
Never married	27.6	D	25.0	D	28.4

TABLE 8-18

Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Married	46.0	42.1	41.3	58.7	45.7
Marriage-like relationship	7.5	9.7	10.6	6.3	4.9
Separated, divorced, widowed	2.7	D	5.0	D	2.1
Unknown	16.2	14.6	18.1	10.5	18.9
Has dependent age 18 or younger (%)	31.6	24.0	29.0	41.9	33.8
Has one or more functional limitations (%)	17.1	25.4	20.0	14.8	10.0
Age at doctorate (median years)	35.5	34.5	34.9	37.1	35.3
Bachelor's in same field as doctorate (%) ^b	36.7	52.3	33.8	24.1	31.9
Master's earned (%)	95.3	96.4	90.8	97.7	95.4
Master's earned at same doctorate institution (%)	32.6	28.6	35.4	33.8	33.7
Time to doctorate (median years)					
Years since earning bachelor's degree	11.4	10.3	11.8	13.6	11.3
From graduate school start	9.3	8.3	9.8	10.6	9.3
From doctoral program start ^c	5.8	5.0	6.8	6.0	5.1
Received tuition remission (%)	81.3	89.9	79.6	73.1	79.3
Female doctorate recipients (number)	1,331	388	220	362	361
Citizenship status (%)					
U.S. citizen or permanent resident	71.6	70.1	75.0	77.9	64.8
Temporary visa holder	22.5	22.7	18.2	17.4	30.2
Unknown	5.9	7.2	6.8	4.7	5.0
Marital status (%)					
Never married	30.4	D	32.3	D	30.5
Married	41.5	37.4	35.0	48.9	42.7
Marriage-like relationship	7.7	10.1	6.4	5.5	8.3
Separated, divorced, widowed	6.8	D	9.5	D	4.7
Unknown	13.6	14.7	16.8	10.2	13.9
Has dependent age 18 or younger (%)	27.3	20.1	20.8	36.6	29.0
Has one or more functional limitations (%)	17.7	21.6	12.2	18.3	16.2
Age at doctorate (median years)	34.7	32.6	34.8	36.7	34.8

TABLE 8-18

Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Bachelor's in same field as doctorate (%) ^b	38.8	57.6	32.8	26.8	34.7
Master's earned (%)	95.3	97.7	88.5	99.1	92.8
Master's earned at same doctorate institution (%)	36.0	29.7	49.7	32.4	39.5
Time to doctorate (median years)					
Years since earning bachelor's degree	11.3	9.7	11.9	13.8	11.3
From graduate school start	9.4	7.9	9.7	10.7	9.8
From doctoral program start ^c	5.8	5.0	6.8	5.8	5.8
Received tuition remission (%)	83.4	95.9	75.7	77.0	81.3

D = suppressed to avoid disclosure of confidential information.

^a All doctorate recipients includes doctorate recipients who did not report sex.^b A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the same doctoral institution in the same 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. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 8-19

Statistical profile of research doctorate recipients, by ethnicity, race, and citizenship status: 2023

(Number, percent, and median years)

Characteristic	Total ^a	U.S. citizen	Temp. visa holder	Not Hispanic or Latino														Ethnicity not reported	
				Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported			
				U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder
All doctorate recipients (number)	57,862	35,566	19,393	3,449	1,346	115	6	3,828	12,821	2,725	721	23,057	3,148	1,296	124	459	631	637	596
Primary source of support (%) ^b																			
Teaching assistantships	21.2	19.7	23.8	18.3	24.0	10.9	0.0	18.1	23.6	11.4	29.1	21.2	23.6	18.1	23.5	19.7	24.1	20.0	23.1
Research or other assistantships or traineeships ^c	35.6	28.8	48.1	22.7	36.4	6.5	D	35.9	52.7	16.1	41.8	30.1	37.1	29.9	34.5	28.0	D	15.3	42.0
Fellowships, scholarships, or dissertation grants	24.6	26.7	20.7	35.3	28.9	42.4	0.0	30.2	17.9	26.7	19.8	24.6	27.8	30.6	28.6	27.7	26.6	29.4	23.1
Own resources	14.7	20.4	4.1	20.5	3.1	32.6	D	12.5	4.0	40.8	7.1	19.4	4.1	17.5	D	21.7	D	29.4	7.7
Employer or other sources	4.0	4.4	3.3	3.2	7.6	7.6	0.0	3.4	1.7	4.9	2.2	4.7	7.4	3.9	10.1	2.9	9.4	5.9	4.2
Bachelor's in same field as doctorate (%) ^d	60.6	61.3	61.5	61.7	65.6	49.5	D	60.0	60.7	48.1	57.0	63.1	64.2	64.6	D	61.2	60.0	45.9	51.9
Master's earned (%)	73.2	70.4	79.9	70.4	82.7	84.2	100.0	67.6	77.0	85.4	87.7	69.4	88.2	63.8	82.5	69.6	82.5	76.4	81.5
Master's earned at same doctorate institution (%)	44.6	50.0	35.9	51.6	36.2	43.0	D	48.9	37.3	39.8	36.2	51.2	29.9	58.0	49.0	44.8	D	41.2	35.3
Marital status (%)																			
Not married ^e	41.5	39.4	51.4	41.5	47.1	24.3	D	42.7	56.5	49.4	44.9	38.2	49.8	46.3	40.3	28.5	D	8.6	9.1
Married or in marriage-like relationship	46.5	53.4	40.7	50.8	49.1	54.8	D	51.9	40.3	42.9	50.8	56.8	46.9	51.0	55.6	39.2	D	12.4	9.7
Unknown	12.0	7.2	7.9	7.7	3.8	20.9	D	5.4	3.2	7.7	4.3	5.0	3.4	2.7	4.0	32.2	D	79.0	81.2
Has dependent age 18 or younger (%)	19.2	21.0	15.7	19.7	16.7	35.2	0.0	19.3	12.9	30.9	41.7	20.6	19.6	16.0	25.8	19.9	20.7	24.0	20.0
Has one or more functional limitations (%)	14.2	16.2	10.2	20.9	13.8	24.2	0.0	12.2	9.6	14.8	10.0	16.2	10.8	18.8	17.2	19.1	17.5	18.5	13.6
Age at doctorate (median years)	31.4	31.6	31.2	31.9	33.3	36.2	D	31.0	30.6	35.4	34.3	31.4	32.3	30.7	31.3	32.5	D	32.3	32.1
Time to doctorate (median years)																			
Years since earning bachelor's degree	8.6	8.8	8.3	8.6	9.5	11.4	D	8.3	8.0	11.4	10.5	8.6	9.4	8.0	8.6	9.2	8.8	9.6	9.0
From graduate school start	7.2	7.1	7.3	7.3	7.9	8.8	D	7.0	7.0	9.7	7.9	7.0	8.0	6.8	7.0	7.6	7.3	8.1	7.7
From doctoral program start ^f	5.7	5.8	5.3	5.8	5.4	5.8	D	5.8	5.3	5.8	4.9	5.8	5.6	5.8	5.8	5.8	5.6	5.8	5.7
Received tuition remission (%)	85.6	84.1	88.8	81.1	84.7	73.1	D	86.1	91.6	67.5	85.2	86.1	81.3	86.0	78.8	83.4	D	75.3	82.7

D = suppressed to avoid disclosure of confidential information.

^a Total includes doctorate recipients who did not report citizenship status.

^b Percentages are based on the number of doctorate recipients reporting a primary source of financial support during graduate school.

^c Research or other assistantships or traineeships includes research assistantships, other assistantships, traineeships, internships, or clinical residencies.

^d A bachelor's and doctoral degree are considered to be in the same field if doctorate recipient's first or most recent bachelor's degree is in the same broad field as their doctoral degree.

^e Not married includes never married, separated, divorced, or widowed.

^f 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 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.

TABLE 9-1

Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Science and engineering											
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences
Doctorate recipients reporting postgraduation status (number)	52,109	41,671	1,135	9,035	2,037	9,654	1,119	2,413	1,881	1,555	4,983	3,254	4,605
Definite postdoctoral training plans	26.9	30.9	31.5	40.0	16.0	22.2	50.4	22.6	33.4	23.2	34.8	48.1	22.4
Definite employment plans	46.6	43.0	41.5	28.2	62.0	51.1	27.5	51.8	44.1	54.1	38.4	32.6	53.8
Seeking employment or study	23.5	23.3	24.8	26.1	20.2	24.6	20.9	22.6	20.4	21.0	25.2	16.8	21.2
Other status ^a	2.8	2.8	1.9	5.5	1.8	2.0	1.2	2.9	1.9	1.8	1.6	2.3	2.6
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	94.5	94.6	95.8	94.6	95.4	95.9	98.0	89.0	97.0	95.8	98.3	86.1	96.6
Other training or unknown ^c	5.5	5.4	4.2	5.4	4.6	4.1	2.0	11.0	3.0	4.2	1.7	13.9	3.4
Definite employment plans (%) ^d													
Academe	35.8	26.4	33.3	23.1	22.3	11.8	27.3	47.6	29.4	27.3	11.9	39.1	53.2
In tenure track faculty position (%)	44.5	44.0	41.4	23.3	62.1	43.9	21.4	42.0	43.4	51.3	19.7	42.5	55.5
Not in tenure track position (%)	53.0	53.0	55.4	74.9	35.1	52.8	78.6	52.6	53.7	45.7	75.0	54.6	42.2
Government	7.0	7.8	14.4	7.2	2.9	6.5	22.1	8.7	5.2	3.8	5.1	13.4	12.4
Industry or business ^e	45.1	57.3	41.6	60.6	69.5	76.9	41.6	28.6	60.8	61.2	78.8	30.0	20.7
Nonprofit organization	6.4	5.8	6.6	7.2	3.3	3.3	5.8	11.9	2.4	5.0	2.7	9.2	10.0
Other or unknown ^f	5.6	2.6	4.0	1.9	2.0	1.5	3.2	3.1	2.2	2.6	1.5	8.4	3.8
Primary activity ^g													
Research and development	47.5	57.6	53.2	59.0	73.3	67.2	53.0	32.7	51.4	65.6	72.6	30.0	42.1
Teaching	24.9	16.5	D	11.9	12.4	6.7	15.8	33.9	D	16.6	8.5	22.2	34.7
Management or administration	5.3	2.7	D	3.7	1.1	1.6	3.7	7.0	D	1.7	0.7	4.1	3.9
Professional services and other	22.3	23.2	20.8	25.4	13.2	24.5	27.5	26.4	23.4	16.1	18.2	43.7	19.3
Secondary activity ^g													
Research and development	23.4	19.9	25.3	14.4	16.4	16.0	25.2	31.7	24.8	19.7	9.1	23.4	33.1
Teaching	8.8	6.2	5.5	3.1	6.8	3.4	4.0	11.8	3.6	7.7	1.2	11.7	14.5
Management or administration	13.7	14.3	25.1	18.4	7.5	13.9	16.1	16.6	5.0	11.0	16.5	13.8	13.8
Professional services and other	9.6	10.5	11.1	8.6	12.1	12.5	10.1	9.9	11.1	13.1	8.8	9.3	8.8
No secondary activity	44.5	49.0	33.0	55.5	57.3	54.3	44.6	29.9	55.5	48.6	64.4	41.8	29.8
Activity unknown	3.7	3.5	4.2	3.3	3.6	3.4	3.2	4.2	3.4	3.8	3.4	4.8	3.1
Postgraduation location (%) ^h													
United States ⁱ	92.0	92.3	93.1	95.3	91.2	92.8	92.8	92.5	87.9	92.8	91.7	97.6	84.1
Midwest	16.1	15.1	27.1	15.6	9.0	14.3	8.4	17.7	14.7	11.5	14.3	20.0	15.0
Northeast	22.0	22.9	13.4	28.5	20.9	19.5	16.1	23.1	23.3	21.6	24.1	24.5	22.2
South	27.3	25.5	31.0	25.6	20.4	24.8	29.6	33.0	23.7	22.8	20.4	28.5	27.9
West	26.1	28.3	21.3	25.1	40.3	34.0	38.5	18.2	25.7	36.1	32.4	24.0	18.4

TABLE 9-1

Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Science and engineering											
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences
Outside the United States	7.9	7.7	6.9	4.6	8.6	7.1	7.0	7.5	12.0	7.2	8.3	2.4	15.8
Location unknown	0.1	0.1	0.0	*	0.3	*	0.2	0.0	0.1	0.1	0.0	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	38.7	37.5	45.9	46.9	32.2	37.0	39.4	46.4	26.1	36.4	30.7	37.0	30.2
Male doctorate recipients reporting postgraduation status (number)	27,420	23,175	511	4,110	1,537	7,113	618	693	1,351	968	3,285	757	2,232
Definite postdoctoral training plans	26.8	29.5	34.1	40.2	15.6	21.7	50.8	28.7	35.4	22.0	36.8	40.0	23.1
Definite employment plans	47.1	44.7	40.7	27.4	63.4	52.3	28.6	47.6	40.9	56.7	36.6	36.7	55.2
Seeking employment or study	23.3	23.1	23.9	25.6	19.3	24.0	19.3	20.2	22.0	19.2	25.4	20.6	19.7
Other status ^a	2.7	2.7	1.2	6.7	1.8	2.0	1.3	3.5	1.6	2.1	1.2	2.4	2.1
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	95.3	95.3	94.8	94.0	94.6	96.1	98.4	85.4	96.4	95.8	98.6	84.5	96.7
Other training or unknown ^c	4.7	4.7	5.2	6.0	5.4	3.9	1.6	14.6	3.6	4.2	1.4	15.5	3.3
Definite employment plans (%) ^d													
Academe	29.7	21.5	35.1	20.4	20.2	10.8	24.3	38.8	28.3	23.1	11.1	39.2	50.6
In tenure track faculty position (%)	46.4	45.6	38.4	27.4	61.9	42.9	23.3	45.3	39.7	53.5	16.5	42.2	57.9
Not in tenure track position (%)	50.8	51.0	56.2	69.6	35.5	53.3	76.7	46.1	58.3	42.5	76.7	54.1	40.0
Government	7.0	7.4	11.5	6.7	2.7	6.6	19.8	10.0	5.8	3.1	4.7	14.0	15.0
Industry or business ^e	54.2	64.8	41.8	65.5	72.3	78.0	47.5	39.7	61.4	67.4	80.7	32.7	23.2
Nonprofit organization	4.9	4.1	6.3	5.3	3.0	3.1	5.6	7.6	2.0	3.8	1.7	7.2	8.0
Other or unknown ^f	4.2	2.3	5.3	2.0	1.8	1.5	2.8	3.9	2.5	2.6	1.7	6.8	3.2
Primary activity ^g													
Research and development	55.2	63.8	58.2	63.6	74.7	69.5	57.9	43.8	55.0	69.6	75.2	28.5	43.4
Teaching	20.0	13.0	D	9.9	10.9	6.1	D	22.5	D	D	7.8	23.2	33.1
Management or administration	3.7	1.9	D	2.3	1.4	1.4	D	6.0	D	D	0.6	5.7	2.8
Professional services and other	21.0	21.4	19.4	24.2	13.1	23.0	26.9	27.6	21.2	15.8	16.5	42.6	20.7
Secondary activity ^g													
Research and development	21.5	18.5	25.5	14.4	15.3	15.5	23.4	29.8	22.7	20.4	9.7	27.8	32.9
Teaching	7.8	5.4	D	2.7	6.3	3.2	D	11.1	3.9	6.4	1.0	12.5	15.3
Management or administration	13.6	14.4	27.6	19.7	7.8	14.3	17.0	18.7	5.6	11.3	16.2	15.2	14.6
Professional services and other	10.4	11.2	8.7	9.3	12.2	12.8	11.1	9.2	12.0	13.2	10.3	9.5	8.4
No secondary activity	46.7	50.5	33.2	53.9	58.4	54.2	43.9	31.1	55.7	48.7	62.8	35.0	28.9
Activity unknown	3.7	3.6	5.8	3.6	3.6	3.4	3.4	4.5	3.4	3.5	3.8	5.4	3.1
Postgraduation location (%) ^h													
United States ⁱ	90.5	90.8	92.4	95.3	91.4	92.1	90.6	90.0	86.4	92.0	90.4	95.9	80.1
Midwest	15.3	14.4	26.4	15.1	8.8	14.5	9.2	17.0	14.4	11.5	14.1	21.0	14.7

TABLE 9-1

Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Science and engineering											
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences
Northeast	21.4	21.9	12.3	29.9	20.4	18.4	15.5	23.8	22.6	21.0	23.8	23.8	21.1
South	25.4	24.0	35.9	23.9	20.3	24.6	28.1	29.1	22.6	21.9	19.0	27.9	26.4
West	27.9	30.0	17.5	25.7	41.4	34.3	37.5	19.5	26.1	36.9	33.2	22.7	17.2
Outside the United States	9.5	9.2	7.6	4.7	8.4	7.8	9.2	10.0	13.5	7.9	9.6	4.1	19.8
Location unknown	0.1	0.1	0.0	0.0	0.2	*	0.2	0.0	0.1	0.1	0.0	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	36.0	35.5	48.4	45.2	32.4	36.9	39.9	40.6	25.8	34.5	29.1	34.4	27.7
Female doctorate recipients reporting postgraduation status (number)	24,683	18,490	624	4,924	500	2,541	501	1,720	529	587	1,697	2,496	2,371
Definite postdoctoral training plans	27.1	32.6	29.3	39.8	17.2	23.5	49.9	20.2	28.4	25.0	31.0	50.6	21.7
Definite employment plans	46.1	40.8	42.1	28.9	57.8	47.8	26.1	53.5	52.6	49.7	42.0	31.3	52.5
Seeking employment or study	23.8	23.5	25.6	26.6	23.2	26.3	23.0	23.5	16.4	23.9	24.8	15.7	22.7
Other status ^a	2.9	2.9	2.4	4.5	1.8	2.3	1.0	2.6	2.5	1.4	2.2	2.3	3.0
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	93.7	93.7	96.7	95.0	97.7	95.5	97.6	91.1	98.7	95.9	97.7	86.5	96.5
Other training or unknown ^c	6.3	6.3	3.3	5.0	2.3	4.5	2.4	8.9	1.3	4.1	2.3	13.5	3.5
Definite employment plans (%) ^d													
Academe	42.7	33.1	31.9	25.2	29.4	14.7	31.3	50.8	31.7	35.3	13.3	38.9	55.7
In tenure track faculty position (%)	43.0	42.5	44.0	20.6	62.4	46.1	19.5	41.1	50.0	48.5	24.2	42.4	53.2
Not in tenure track position (%)	54.8	54.8	54.8	78.3	34.1	51.7	80.5	54.4	45.5	49.5	72.6	54.9	44.3
Government	7.0	8.4	16.7	7.6	3.5	6.2	25.2	8.3	4.0	5.1	5.6	13.2	9.7
Industry or business ^e	34.8	47.2	41.4	56.7	60.2	73.6	33.6	24.7	59.7	49.7	75.7	29.1	18.3
Nonprofit organization	8.2	8.2	6.8	8.7	4.5	4.1	6.1	13.5	3.2	7.2	4.2	9.9	11.9
Other or unknown ^f	7.3	3.1	3.0	1.8	2.4	1.5	3.8	2.8	1.4	2.7	1.1	9.0	4.3
Primary activity ^g													
Research and development	38.6	49.0	49.4	55.3	68.7	60.3	46.5	28.7	44.2	58.1	68.3	30.5	40.8
Teaching	30.4	21.4	22.4	13.5	17.6	8.7	D	38.0	D	D	9.8	21.9	36.2
Management or administration	7.2	3.9	6.3	4.9	0.0	1.9	D	7.4	D	D	0.9	3.5	5.1
Professional services and other	23.9	25.7	22.0	26.3	13.7	29.2	28.3	26.0	27.9	16.5	21.1	44.2	17.9
Secondary activity ^g													
Research and development	25.6	21.9	25.1	14.5	19.8	17.7	27.6	32.4	29.0	18.3	8.1	21.9	33.3
Teaching	10.0	7.4	D	3.4	8.6	3.8	D	12.0	3.0	10.0	1.4	11.3	13.8
Management or administration	13.8	14.2	23.1	17.3	6.5	12.5	15.0	15.9	3.7	10.4	17.2	13.3	13.0
Professional services and other	8.7	9.6	12.9	8.1	11.5	11.7	8.7	10.2	9.3	12.9	6.3	9.3	9.2
No secondary activity	42.0	46.9	32.9	56.7	53.6	54.3	45.7	29.5	55.0	48.4	67.0	44.3	30.7
Activity unknown	3.8	3.4	3.0	3.0	3.8	3.3	3.1	4.1	3.2	4.5	2.7	4.6	3.1

TABLE 9-1

Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Science and engineering															
		Total	Agricultural sciences and natural resources	Biological and biomedical sciences	Computer and information sciences	Engineering	Geosciences, atmospheric, and ocean sciences	Health sciences	Mathematics and statistics	Multidisciplinary/ interdisciplinary sciences	Physical sciences	Psychology	Social sciences				
Postgraduation location (%) ^h																	
United States ⁱ	93.8	94.2	93.7	95.4	90.7	94.8	95.5	93.5	91.8	94.1	94.1	98.1	88.2				
Midwest	16.9	16.0	27.6	16.0	9.6	13.7	7.3	18.0	15.4	11.4	14.8	19.7	15.3				
Northeast	22.8	24.0	14.3	27.3	22.4	22.7	16.8	22.7	25.0	22.8	24.6	24.6	23.4				
South	29.4	27.5	26.9	26.9	20.5	25.2	31.5	34.6	26.4	24.4	23.3	28.7	29.4				
West	24.1	26.0	24.4	24.6	36.8	32.9	39.9	17.7	24.8	34.9	30.9	24.3	19.5				
Outside the United States	6.1	5.8	6.3	4.6	9.1	5.1	4.2	6.5	8.2	5.9	5.9	1.9	11.8				
Location unknown	0.1	0.1	0.0	0.1	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1				
Postgraduation location in same state as doctorate institution (%)	41.8	40.1	43.7	48.3	31.7	37.2	38.8	48.8	26.9	39.6	33.8	37.7	32.6				

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

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."**Source(s):**

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

TABLE 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Doctorate recipients reporting postgraduation status (number)	52,109	10,438	1,303	3,515	2,950	726	1,944
Definite postdoctoral training plans	26.9	11.1	8.0	6.5	16.7	10.2	13.3
Definite employment plans	46.6	61.3	77.6	69.3	49.9	49.6	57.8
Seeking employment or study	23.5	24.6	11.8	21.6	29.9	36.4	26.2
Other status ^a	2.8	2.8	2.5	2.6	3.2	3.4	2.7
Definite postdoctoral training plans (%) ^b							
Postdoc fellowship or research associateship	94.5	94.1	91.3	93.0	95.5	95.9	93.1
Other training or unknown ^c	5.5	5.9	8.7	7.0	4.5	4.1	6.9
Definite employment plans (%) ^d							
Academe	35.8	62.1	77.6	51.8	67.2	70.0	61.0
In tenure track faculty position (%)	44.5	45.1	84.2	27.8	33.3	30.2	54.7
Not in tenure track position (%)	53.0	53.1	14.9	69.6	64.5	68.3	44.1
Government	7.0	4.8	D	4.4	3.9	D	9.2
Industry or business ^e	45.1	11.0	14.2	9.0	8.7	12.5	15.1
Nonprofit organization	6.4	8.0	D	7.6	11.5	D	8.8
Other or unknown ^f	5.6	14.1	2.4	27.3	8.6	6.7	5.9
Primary activity ^g							
Research and development	47.5	19.0	43.8	11.7	10.4	10.2	26.1
Teaching	24.9	48.4	39.6	42.5	63.9	62.9	44.2
Management or administration	5.3	12.7	4.3	23.3	5.8	8.8	7.8
Professional services and other	22.3	19.9	12.3	22.5	19.9	18.1	21.9
Secondary activity ^g							
Research and development	23.4	33.2	40.4	24.4	37.8	38.6	37.9
Teaching	8.8	16.1	31.6	13.9	10.4	9.1	16.1
Management or administration	13.7	12.0	6.1	15.5	9.8	9.4	13.2
Professional services and other	9.6	7.0	3.0	9.1	6.4	7.6	6.8
No secondary activity	44.5	31.8	18.9	37.0	35.6	35.4	26.0
Activity unknown	3.7	4.2	2.8	4.5	4.0	5.0	5.0
Postgraduation location (%) ^h							
United States ⁱ	92.0	91.1	84.1	95.6	89.5	89.4	90.8
Midwest	16.1	19.8	17.3	22.6	18.9	19.1	17.7
Northeast	22.0	18.8	16.3	15.0	22.8	27.9	19.3
South	27.3	34.6	33.5	39.6	30.8	23.0	34.7
West	26.1	17.3	16.6	17.8	16.2	18.9	17.8
Outside the United States	7.9	8.8	15.7	4.3	10.3	10.6	9.0
Location unknown	0.1	0.1	0.2	0.1	0.2	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	38.7	43.8	18.2	61.8	39.3	40.6	36.8
Male doctorate recipients reporting postgraduation status (number)	27,420	4,245	715	955	1,501	313	761
Definite postdoctoral training plans	26.8	11.8	7.6	6.6	17.7	8.6	12.2
Definite employment plans	47.1	60.7	77.5	70.4	49.4	49.2	59.8
Seeking employment or study	23.3	24.6	12.0	20.2	30.6	37.1	25.1
Other status ^a	2.7	2.7	2.8	2.8	2.2	4.5	2.9
Definite postdoctoral training plans (%) ^b							

TABLE 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Postdoc fellowship or research associateship	95.3	95.2	90.7	96.8	97.0	96.3	91.4
Other training or unknown ^c	4.7	4.8	9.3	3.2	3.0	3.7	8.6
Definite employment plans (%) ^d							
Academe	29.7	62.5	75.3	51.8	62.5	68.2	60.9
In tenure track faculty position (%)	46.4	47.6	85.6	24.1	31.0	24.8	56.3
Not in tenure track position (%)	50.8	50.6	13.7	72.7	67.0	74.3	41.9
Government	7.0	5.5	D	5.2	5.0	D	9.5
Industry or business ^e	54.2	11.8	15.5	8.0	8.8	16.2	16.5
Nonprofit organization	4.9	8.0	D	7.3	13.3	D	7.3
Other or unknown ^f	4.2	12.1	2.0	27.7	10.4	7.1	5.9
Primary activity ^g							
Research and development	55.2	20.8	45.6	12.0	9.6	10.2	24.6
Teaching	20.0	48.5	36.8	37.9	64.6	67.3	46.2
Management or administration	3.7	11.1	3.7	27.1	4.5	7.5	8.6
Professional services and other	21.0	19.7	14.0	23.1	21.4	15.0	20.6
Secondary activity ^g							
Research and development	21.5	33.5	37.9	22.4	35.7	38.1	39.2
Teaching	7.8	17.5	32.5	16.5	10.4	7.5	14.8
Management or administration	13.6	10.6	5.5	16.5	9.0	6.8	12.3
Professional services and other	10.4	7.3	3.1	8.6	7.7	10.9	8.8
No secondary activity	46.7	31.1	21.0	36.0	37.1	36.7	24.8
Activity unknown	3.7	4.0	1.8	4.5	4.2	4.5	5.3
Postgraduation location (%) ^h							
United States ⁱ	90.5	88.5	83.4	94.4	87.8	88.4	87.8
Midwest	15.3	20.0	17.3	23.3	19.2	23.8	18.6
Northeast	21.4	18.2	16.1	15.9	19.6	25.4	18.6
South	25.4	33.6	34.4	39.3	31.9	19.9	32.7
West	27.9	16.1	15.3	15.6	16.0	19.3	16.8
Outside the United States	9.5	11.3	16.3	5.6	12.1	11.6	12.0
Location unknown	0.1	0.1	0.3	0.0	0.1	0.0	0.2
Postgraduation location in same state as doctorate institution (%)	36.0	38.8	18.1	58.0	37.9	44.8	35.8
Female doctorate recipients reporting postgraduation status (number)	24,683	6,193	588	2,560	1,449	413	1,183
Definite postdoctoral training plans	27.1	10.6	8.5	6.4	15.7	11.4	14.0
Definite employment plans	46.1	61.8	77.7	68.9	50.4	49.9	56.5
Seeking employment or study	23.8	24.6	11.6	22.1	29.3	35.8	27.0
Other status ^a	2.9	2.9	2.2	2.5	4.3	2.7	2.5
Definite postdoctoral training plans (%) ^b							
Postdoc fellowship or research associateship	93.7	93.3	92.0	91.5	93.9	95.7	94.0
Other training or unknown ^c	6.3	6.7	8.0	8.5	6.1	4.3	6.0
Definite employment plans (%) ^d							
Academe	42.7	61.8	80.5	51.8	72.0	71.4	61.1
In tenure track faculty position (%)	43.0	43.4	82.6	29.2	35.4	34.0	53.7
Not in tenure track position (%)	54.8	54.7	16.3	68.5	62.4	63.9	45.6
Government	7.0	4.3	D	4.1	2.9	D	9.0

TABLE 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other non-science and engineering
Industry or business ^e	34.8	10.5	12.7	9.3	8.6	9.7	14.2
Nonprofit organization	8.2	8.0	D	7.7	9.7	D	9.9
Other or unknown ^f	7.3	15.5	2.8	27.1	6.8	6.3	5.8
Primary activity ^g							
Research and development	38.6	17.8	41.7	11.6	11.2	10.3	27.0
Teaching	30.4	48.4	43.1	44.3	63.2	59.5	42.9
Management or administration	7.2	13.8	5.0	21.8	7.1	9.7	7.2
Professional services and other	23.9	20.1	10.3	22.2	18.5	20.5	22.8
Secondary activity ^g							
Research and development	25.6	33.0	43.5	25.1	39.8	39.0	36.9
Teaching	10.0	15.1	30.5	13.0	10.4	10.3	17.0
Management or administration	13.8	12.9	6.8	15.2	10.7	11.3	13.8
Professional services and other	8.7	6.8	2.7	9.3	5.1	5.1	5.5
No secondary activity	42.0	32.2	16.4	37.4	34.0	34.4	26.7
Activity unknown	3.8	4.4	3.9	4.5	3.8	5.3	4.8
Postgraduation location (%) ^h							
United States ⁱ	93.8	92.9	85.0	96.1	91.3	90.1	92.8
Midwest	16.9	19.7	17.4	22.4	18.6	15.8	17.1
Northeast	22.8	19.1	16.6	14.7	26.2	29.6	19.8
South	29.4	35.2	32.3	39.7	29.6	25.3	36.1
West	24.1	18.1	18.1	18.7	16.4	18.6	18.5
Outside the United States	6.1	7.0	15.0	3.8	8.3	9.9	7.1
Location unknown	0.1	0.1	0.0	0.1	0.3	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	41.8	47.2	18.3	63.3	40.9	37.5	37.5

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-3

Agricultural sciences and natural resources research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All agricultural sciences and natural resources fields	Agricultural, animal, plant, and veterinary sciences	Natural resources and conservation
Doctorate recipients reporting postgraduation status (number)	1,135	759	376
Definite postdoctoral training plans	31.5	31.2	31.9
Definite employment plans	41.5	41.1	42.3
Seeking employment or study	24.8	25.8	22.9
Other status ^a	1.9	1.8	1.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.8	94.5	98.3
Other training or unknown ^c	4.2	5.5	1.7
Definite employment plans (%) ^d			
Academe	33.3	33.3	33.3
In tenure track faculty position (%)	41.4	49.0	26.4
Not in tenure track position (%)	55.4	47.1	71.7
Government	14.4	9.0	25.2
Industry or business ^e	41.6	49.0	27.0
Nonprofit organization	6.6	5.4	8.8
Other or unknown ^f	4.0	3.2	5.7
Primary activity ^g			
Research and development	53.2	55.8	48.0
Teaching	D	20.3	D
Management or administration	D	3.7	D
Professional services and other	20.8	20.3	22.0
Secondary activity ^g			
Research and development	25.3	24.9	26.0
Teaching	5.5	6.3	4.0
Management or administration	25.1	23.3	28.7
Professional services and other	11.1	10.6	12.0
No secondary activity	33.0	34.9	29.3
Activity unknown	4.2	3.5	5.7
Postgraduation location (%) ^h			
United States ⁱ	93.1	92.2	95.0
Midwest	27.1	33.2	15.1
Northeast	13.4	11.3	17.6
South	31.0	30.8	31.5
West	21.3	16.4	30.8
Outside the United States	6.9	7.8	5.0
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	45.9	45.0	47.7
Male doctorate recipients reporting postgraduation status (number)	511	332	179
Definite postdoctoral training plans	34.1	34.9	32.4
Definite employment plans	40.7	39.8	42.5
Seeking employment or study	23.9	24.4	22.9
Other status ^a	1.2	0.9	1.7
Definite postdoctoral training plans (%) ^b			

TABLE 9-3

Agricultural sciences and natural resources research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All agricultural sciences and natural resources fields	Agricultural, animal, plant, and veterinary sciences	Natural resources and conservation
Postdoc fellowship or research associateship	94.8	92.2	100.0
Other training or unknown ^c	5.2	7.8	0.0
Definite employment plans (%) ^d			
Academe	35.1	37.1	31.6
In tenure track faculty position (%)	38.4	46.9	20.8
Not in tenure track position (%)	56.2	46.9	75.0
Government	11.5	5.3	22.4
Industry or business ^e	41.8	48.5	30.3
Nonprofit organization	6.3	5.3	7.9
Other or unknown ^f	5.3	3.8	7.9
Primary activity ^g			
Research and development	58.2	59.2	56.3
Teaching	D	D	12.7
Management or administration	D	D	11.3
Professional services and other	19.4	19.2	19.7
Secondary activity ^g			
Research and development	25.5	26.4	23.9
Teaching	D	4.8	D
Management or administration	27.6	23.2	35.2
Professional services and other	8.7	8.8	8.5
No secondary activity	33.2	36.8	26.8
Activity unknown	5.8	5.3	6.6
Postgraduation location (%) ^h			
United States ⁱ	92.4	90.3	96.3
Midwest	26.4	34.3	11.9
Northeast	12.3	12.5	11.9
South	35.9	31.5	44.0
West	17.5	11.7	28.4
Outside the United States	7.6	9.7	3.7
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	48.4	44.8	55.2
Female doctorate recipients reporting postgraduation status (number)	624	427	197
Definite postdoctoral training plans	29.3	28.3	31.5
Definite employment plans	42.1	42.2	42.1
Seeking employment or study	25.6	26.9	22.8
Other status ^a	2.4	2.6	2.0
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	96.7	96.7	96.8
Other training or unknown ^c	3.3	3.3	3.2
Definite employment plans (%) ^d			
Academe	31.9	30.6	34.9
In tenure track faculty position (%)	44.0	50.9	31.0
Not in tenure track position (%)	54.8	47.3	69.0
Government	16.7	11.7	27.7

TABLE 9-3

Agricultural sciences and natural resources research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All agricultural sciences and natural resources fields	Agricultural, animal, plant, and veterinary sciences	Natural resources and conservation
Industry or business ^e	41.4	49.4	24.1
Nonprofit organization	6.8	5.6	9.6
Other or unknown ^f	3.0	2.8	3.6
Primary activity ^g			
Research and development	49.4	53.4	40.5
Teaching	22.4	D	D
Management or administration	6.3	D	D
Professional services and other	22.0	21.0	24.1
Secondary activity ^g			
Research and development	25.1	23.9	27.8
Teaching	D	7.4	D
Management or administration	23.1	23.3	22.8
Professional services and other	12.9	11.9	15.2
No secondary activity	32.9	33.5	31.6
Activity unknown	3.0	2.2	4.8
Postgraduation location (%) ^h			
United States ⁱ	93.7	93.7	93.8
Midwest	27.6	32.2	17.9
Northeast	14.3	10.3	22.8
South	26.9	30.2	20.0
West	24.4	20.3	33.1
Outside the United States	6.3	6.3	6.2
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	43.7	45.2	40.7

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
Doctorate recipients reporting postgraduation status (number)	9,035	1,414	693	764	715	1,089	446	1,040	1,132	371	760	611
Definite postdoctoral training plans	40.0	37.3	22.9	40.2	38.5	41.7	44.6	43.3	45.6	35.8	40.1	44.5
Definite employment plans	28.2	28.6	48.9	25.0	23.1	30.5	23.3	23.1	22.5	33.7	29.5	27.8
Seeking employment or study	26.1	30.1	24.4	30.0	30.6	22.5	27.6	25.9	22.7	24.8	23.9	24.7
Other status ^a	5.5	4.1	3.6	4.6	7.6	2.4	7.0	7.5	9.2	5.7	6.4	2.6
Definite postdoctoral training plans (%) ^b												
Postdoc fellowship or research associateship	94.6	95.6	95.0	93.8	94.2	97.1	96.2	91.1	94.6	94.0	92.8	95.6
Other training or unknown ^c	5.4	4.4	5.0	6.2	5.8	2.9	3.8	8.9	5.4	6.0	7.2	4.4
Definite employment plans (%) ^d												
Academe	23.1	16.8	16.5	24.6	29.1	31.6	D	20.0	D	8.0	31.3	37.1
In tenure track faculty position (%)	23.3	17.6	28.6	23.4	22.9	23.8	D	18.8	D	D	35.7	27.0
Not in tenure track position (%)	74.9	79.4	69.6	76.6	77.1	75.2	D	72.9	90.9	D	61.4	71.4
Government	7.2	D	5.0	5.8	3.0	25.3	5.8	4.6	D	4.8	3.1	12.9
Industry or business ^e	60.6	74.8	69.3	57.6	64.8	27.4	67.3	67.5	65.5	80.0	58.5	41.2
Nonprofit organization	7.2	D	8.6	10.5	3.0	12.7	D	6.3	8.2	5.6	5.8	7.1
Other or unknown ^f	1.9	2.2	0.6	1.6	0.0	3.0	3.8	1.7	3.1	1.6	1.3	1.8
Primary activity ^g												
Research and development	59.0	65.8	74.5	53.5	59.3	53.6	D	61.4	46.2	53.8	D	54.2
Teaching	11.9	10.0	5.1	15.7	14.2	16.9	5.0	10.7	10.5	4.2	17.4	20.5
Management or administration	3.7	3.3	0.0	5.9	3.1	6.3	D	2.6	5.7	5.9	D	4.8
Professional services and other	25.4	20.8	20.4	24.9	23.5	23.2	23.0	25.3	37.7	36.1	31.5	20.5
Secondary activity ^g												
Research and development	14.4	10.0	16.8	D	11.7	20.4	5.0	9.9	12.1	D	17.8	17.5
Teaching	3.1	1.8	4.8	D	4.3	3.8	D	D	2.0	D	4.2	6.0
Management or administration	18.4	18.0	7.8	21.1	21.6	22.9	13.0	18.9	21.1	20.2	19.7	21.1
Professional services and other	8.6	6.2	12.9	5.9	4.3	13.2	D	D	9.7	D	8.5	9.0
No secondary activity	55.5	64.0	57.7	54.6	58.0	39.8	70.0	62.7	55.1	58.8	49.8	46.4
Activity unknown	3.3	3.7	1.8	3.1	1.8	3.9	3.8	2.9	3.1	4.8	4.9	2.4
Postgraduation location (%) ^h												
United States ⁱ	95.3	96.3	95.6	95.2	96.1	92.7	94.1	96.1	96.2	97.3	96.4	92.8
Midwest	15.6	16.0	12.7	14.1	14.8	14.2	22.4	15.7	12.8	19.0	19.1	17.9
Northeast	28.5	28.9	34.7	27.9	34.5	18.7	26.6	30.4	34.4	31.4	26.5	21.5
South	25.6	19.5	22.3	30.9	22.3	28.1	21.4	29.9	24.5	27.1	27.4	29.4
West	25.1	31.3	25.3	21.9	24.3	31.1	23.1	19.9	23.7	19.4	22.7	23.5
Outside the United States	4.6	3.5	4.4	4.8	3.9	7.3	5.9	3.8	3.8	2.7	3.6	7.2

TABLE 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
Location unknown	*	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	46.9	47.8	39.2	53.0	49.1	44.9	49.0	46.8	43.0	43.0	45.9	47.5
Male doctorate recipients reporting postgraduation status (number)	4,110	728	390	312	287	427	209	476	491	162	379	249
Definite postdoctoral training plans	40.2	39.1	24.9	42.3	37.6	44.7	37.8	44.7	44.4	37.0	40.6	47.0
Definite employment plans	27.4	27.4	19.9	22.4	19.9	28.8	23.0	21.0	21.0	37.0	28.5	27.3
Seeking employment or study	25.6	27.2	24.4	29.2	31.7	24.6	30.1	24.2	22.6	21.6	23.7	22.9
Other status ^a	6.7	4.5	3.8	5.4	10.8	1.9	9.1	10.1	12.0	7.4	7.1	2.8
Definite postdoctoral training plans (%) ^b												
Postdoc fellowship or research associateship	94.0	94.4	93.8	93.2	94.4	96.9	93.7	90.6	94.5	95.0	92.2	96.6
Other training or unknown ^c	6.0	5.6	6.2	6.8	5.6	3.1	6.3	9.4	5.5	5.0	7.8	3.4
Definite employment plans (%) ^d												
Academe	20.4	13.2	14.3	D	33.3	27.6	14.6	18.0	D	D	D	D
In tenure track faculty position (%)	27.4	21.4	30.8	D	D	32.4	D	D	D	D	D	D
Not in tenure track position (%)	69.6	71.4	65.4	80.0	D	64.7	D	D	91.7	D	56.8	66.7
Government	6.7	D	3.3	D	D	26.8	D	D	D	D	D	13.2
Industry or business ^e	65.5	80.2	75.3	54.3	59.6	34.1	68.8	73.0	73.8	76.4	57.4	45.6
Nonprofit organization	5.3	D	7.1	10.0	D	7.3	D	D	8.7	D	4.6	D
Other or unknown ^f	2.0	2.8	0.0	1.4	0.0	4.1	4.2	1.0	3.9	1.8	1.9	1.5
Primary activity ^g												
Research and development	63.6	71.7	D	55.2	53.6	56.8	D	64.9	D	51.0	D	D
Teaching	9.9	4.9	D	D	D	D	D	D	8.2	D	18.3	19.7
Management or administration	2.3	3.9	0.0	D	D	D	0.0	D	D	D	D	D
Professional services and other	24.2	19.5	20.1	23.9	26.8	23.7	13.3	26.8	35.1	37.3	28.8	19.7
Secondary activity ^g												
Research and development	14.4	11.2	11.7	25.4	D	22.0	D	8.2	D	D	D	16.7
Teaching	2.7	D	4.5	0.0	D	D	D	D	D	D	D	D
Management or administration	19.7	20.5	10.6	20.9	23.2	23.7	15.6	19.6	23.7	19.6	20.2	27.3
Professional services and other	9.3	D	12.3	9.0	D	D	D	D	8.2	D	5.8	D
No secondary activity	53.9	58.0	60.9	44.8	53.6	39.0	68.9	60.8	55.7	56.9	50.0	39.4
Activity unknown	3.6	3.3	1.6	4.3	1.8	4.1	6.3	3.0	5.8	7.3	3.7	2.9
Postgraduation location (%) ^h												
United States ⁱ	95.3	96.8	97.1	94.6	95.2	91.4	D	97.1	96.0	D	95.8	90.3
Midwest	15.1	15.5	11.8	14.4	11.5	15.9	18.9	15.7	14.0	14.8	17.6	17.3
Northeast	29.9	32.0	35.5	28.7	38.2	17.2	25.2	33.9	35.8	39.1	24.0	19.5
South	23.9	17.9	22.6	25.7	20.6	25.5	24.4	30.0	18.7	24.3	29.4	30.8

TABLE 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
West	25.7	31.2	26.2	25.7	24.8	31.5	D	17.3	26.5	D	23.3	22.2
Outside the United States	4.7	3.2	2.9	5.4	4.8	8.6	D	2.9	4.0	D	4.2	9.7
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	45.2	47.7	40.5	48.0	47.3	41.4	53.5	44.4	45.8	42.6	44.3	44.3
Female doctorate recipients reporting postgraduation status (number)	4,924	685	303	452	428	662	237	564	641	209	381	362
Definite postdoctoral training plans	39.8	35.3	20.5	38.7	39.0	44.6	45.1	42.0	46.5	34.9	39.6	42.8
Definite employment plans	28.9	28.0	51.8	26.8	25.2	31.6	23.6	24.8	23.7	33.5	30.4	28.2
Seeking employment or study	26.6	33.0	24.4	30.5	29.9	21.1	25.3	27.3	22.8	27.3	24.1	26.0
Other status ^a	4.5	3.6	3.3	4.0	5.4	2.7	5.1	5.3	7.0	4.3	5.8	2.5
Definite postdoctoral training plans (%) ^b												
Postdoc fellowship or research associateship	95.0	97.1	96.8	94.3	94.0	97.3	98.1	91.6	94.6	93.2	93.4	94.8
Other training or unknown ^c	5.0	2.9	3.2	5.7	6.0	2.7	1.9	8.4	5.4	6.8	6.6	5.2
Definite employment plans (%) ^d												
Academe	25.2	20.8	19.1	D	26.9	34.0	D	21.4	D	D	D	D
In tenure track faculty position (%)	20.6	15.0	26.7	D	D	19.7	D	D	D	D	D	D
Not in tenure track position (%)	78.3	85.0	73.3	74.1	D	80.3	75.0	D	90.7	D	66.7	74.4
Government	7.6	3.1	7.0	D	D	24.4	D	D	D	D	D	12.7
Industry or business ^e	56.7	68.8	62.4	59.5	67.6	23.4	66.1	63.6	59.9	82.9	59.5	38.2
Nonprofit organization	8.7	5.7	10.2	10.7	D	15.8	D	D	7.9	D	6.9	D
Other or unknown ^f	1.8	1.6	1.3	1.7	0.0	2.4	3.6	2.1	2.6	1.4	0.9	2.0
Primary activity ^g												
Research and development	55.3	59.2	D	52.5	62.3	51.7	58.2	58.8	D	55.9	D	D
Teaching	13.5	15.8	D	D	D	D	D	D	12.0	D	16.5	21.0
Management or administration	4.9	2.7	0.0	D	D	D	D	D	D	D	D	D
Professional services and other	26.3	22.3	20.8	25.4	21.7	22.9	30.9	24.3	39.3	35.3	33.9	21.0
Secondary activity ^g												
Research and development	14.5	8.7	22.7	D	D	19.4	D	11.0	D	D	D	18.0
Teaching	3.4	D	5.2	D	D	D	D	D	D	D	D	D
Management or administration	17.3	15.2	4.5	21.2	20.8	22.4	10.9	18.4	19.3	20.6	19.3	17.0
Professional services and other	8.1	D	13.6	4.2	D	D	D	D	10.7	D	11.0	D
No secondary activity	56.7	70.7	53.9	60.2	60.4	40.3	70.9	64.0	54.7	60.3	49.5	51.0
Activity unknown	3.0	4.2	1.9	2.5	1.9	3.8	1.8	2.9	1.3	2.9	6.0	2.0
Postgraduation location (%) ^h												
United States ⁱ	95.4	95.9	93.6	95.6	96.7	93.5	D	95.2	96.4	D	97.0	94.6
Midwest	16.0	16.6	13.7	13.9	16.7	13.1	25.2	15.6	12.0	22.4	20.6	18.3

TABLE 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	Biological and biomedical sciences, general	Cell/ cellular biology and anatomy	Ecology, evolutionary biology, and epidemiology	Genetics and genomics	Microbiology and immunology	Neurobiology and neurosciences	Pharmacology and toxicology	Physiology, oncology, and cancer biology	Biological and biomedical sciences, other
Northeast	27.3	25.3	33.8	27.4	32.4	19.6	27.6	27.6	33.3	25.2	28.8	23.0
South	26.9	21.4	21.9	34.5	23.3	29.8	19.0	29.7	28.7	29.4	25.5	28.4
West	24.6	31.3	24.2	19.3	24.0	30.8	D	22.0	21.8	D	22.1	24.5
Outside the United States	4.6	3.9	6.4	4.4	3.3	6.5	D	4.5	3.6	D	3.0	5.4
Location unknown	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	48.3	47.9	37.4	56.4	50.2	47.0	45.4	48.8	50.9	43.4	47.6	49.8

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

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."**Source(s):**

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

TABLE 9-5

Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Doctorate recipients reporting postgraduation status (number)	2,037	1,436	601
Definite postdoctoral training plans	16.0	16.2	15.6
Definite employment plans	62.0	62.3	61.2
Seeking employment or study	20.2	19.9	21.0
Other status ^a	1.8	1.6	2.2
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.4	95.7	94.7
Other training or unknown ^c	4.6	4.3	5.3
Definite employment plans (%) ^d			
Academe	22.3	19.8	28.5
In tenure track faculty position (%)	62.1	58.2	68.6
Not in tenure track position (%)	35.1	39.0	28.6
Government	2.9	1.8	5.4
Industry or business ^e	69.5	74.1	58.4
Nonprofit organization	3.3	3.0	4.1
Other or unknown ^f	2.0	1.3	3.5
Primary activity ^g			
Research and development	73.3	74.7	69.7
Teaching	12.4	12.0	13.5
Management or administration	1.1	0.6	2.3
Professional services and other	13.2	12.8	14.4
Secondary activity ^g			
Research and development	16.4	15.7	17.9
Teaching	6.8	5.2	11.0
Management or administration	7.5	7.0	8.6
Professional services and other	12.1	12.6	10.7
No secondary activity	57.3	59.4	51.9
Activity unknown	3.6	2.8	5.7
Postgraduation location (%) ^h			
United States ⁱ	91.2	91.2	91.1
Midwest	9.0	8.3	10.8
Northeast	20.9	21.9	18.4
South	20.4	18.5	25.1
West	40.3	42.3	35.3
Outside the United States	8.6	8.7	8.2
Location unknown	0.3	0.1	0.6
Postgraduation location in same state as doctorate institution (%)	32.2	32.2	32.3
Male doctorate recipients reporting postgraduation status (number)	1,537	1,113	424
Definite postdoctoral training plans	15.6	15.5	15.8
Definite employment plans	63.4	64.0	61.8
Seeking employment or study	19.3	19.0	20.0
Other status ^a	1.8	1.5	2.4
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	94.6	94.8	94.0
Other training or unknown ^c	5.4	5.2	6.0
Definite employment plans (%) ^d			

TABLE 9-5

Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Academe	20.2	18.3	25.6
In tenure track faculty position (%)	61.9	57.7	70.1
Not in tenure track position (%)	35.5	39.2	28.4
Government	2.7	D	D
Industry or business ^e	72.3	75.8	62.6
Nonprofit organization	3.0	D	D
Other or unknown ^f	1.8	1.4	3.1
Primary activity ^g			
Research and development	74.7	76.0	70.9
Teaching	10.9	10.9	10.8
Management or administration	1.4	0.7	3.2
Professional services and other	13.1	12.4	15.1
Secondary activity ^g			
Research and development	15.3	15.1	15.9
Teaching	6.3	4.9	10.0
Management or administration	7.8	7.0	10.0
Professional services and other	12.2	13.1	10.0
No secondary activity	58.4	59.9	54.2
Activity unknown	3.6	3.4	4.2
Postgraduation location (%) ^h			
United States ⁱ	91.4	91.4	91.2
Midwest	8.8	8.5	9.7
Northeast	20.4	21.7	17.0
South	20.3	18.4	25.5
West	41.4	42.6	38.0
Outside the United States	8.4	8.5	8.2
Location unknown	0.2	0.1	0.6
Postgraduation location in same state as doctorate institution (%)	32.4	32.4	32.2
Female doctorate recipients reporting postgraduation status (number)	500	323	177
Definite postdoctoral training plans	17.2	18.3	15.3
Definite employment plans	57.8	56.7	59.9
Seeking employment or study	23.2	23.2	23.2
Other status ^a	1.8	1.9	1.7
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	97.7	98.3	96.3
Other training or unknown ^c	2.3	1.7	3.7
Definite employment plans (%) ^d			
Academe	29.4	25.7	35.8
In tenure track faculty position (%)	62.4	59.6	65.8
Not in tenure track position (%)	34.1	38.3	28.9
Government	3.5	D	D
Industry or business ^e	60.2	67.2	48.1
Nonprofit organization	4.5	D	D
Other or unknown ^f	2.4	1.1	4.7
Primary activity ^g			
Research and development	68.7	69.8	66.7
Teaching	17.6	15.9	20.8

TABLE 9-5

Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Management or administration	0.0	0.0	0.0
Professional services and other	13.7	14.3	12.5
Secondary activity ^g			
Research and development	19.8	18.1	22.9
Teaching	8.6	6.0	13.5
Management or administration	6.5	7.1	5.2
Professional services and other	11.5	11.0	12.5
No secondary activity	53.6	57.7	45.8
Activity unknown	3.8	0.5	9.4
Postgraduation location (%) ^h			
United States ⁱ	90.7	90.5	91.0
Midwest	9.6	7.4	13.5
Northeast	22.4	22.7	21.8
South	20.5	18.6	24.1
West	36.8	41.3	28.6
Outside the United States	9.1	9.5	8.3
Location unknown	0.3	0.0	0.8
Postgraduation location in same state as doctorate institution (%)	31.7	31.4	32.3

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-6

Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
Doctorate recipients reporting postgraduation status (number)	9,654	522	1,207	1,136	1,151	1,910	381	563	821	1,385	578
Definite postdoctoral training plans	22.2	20.3	30.3	21.6	26.4	14.2	21.0	14.2	27.0	23.0	25.1
Definite employment plans	51.1	58.0	35.5	51.4	45.1	63.2	49.6	61.6	48.1	49.3	48.8
Seeking employment or study	24.6	20.3	30.0	25.4	25.8	21.2	26.8	22.6	23.3	25.9	24.4
Other status ^a	2.0	1.3	4.1	1.7	2.6	1.4	2.6	1.6	1.6	1.7	1.7
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	95.9	100.0	92.3	98.8	97.7	93.0	97.5	90.0	98.2	96.9	95.9
Other training or unknown ^c	4.1	0.0	7.7	1.2	2.3	7.0	2.5	10.0	1.8	3.1	4.1
Definite employment plans (%) ^d											
Academe	11.8	D	10.3	5.3	17.7	9.4	D	22.5	4.8	12.7	16.0
In tenure track faculty position (%)	43.9	36.2	11.4	45.2	43.5	65.8	D	51.3	D	37.9	35.6
Not in tenure track position (%)	52.8	D	88.6	51.6	51.1	32.5	54.2	43.6	D	59.8	57.8
Government	6.5	17.8	3.0	2.7	10.4	4.4	4.2	8.1	6.6	5.0	12.1
Industry or business ^e	76.9	57.8	81.6	89.6	66.5	81.7	80.4	64.3	85.3	76.3	65.6
Nonprofit organization	3.3	D	3.7	1.4	3.3	3.0	D	4.3	1.8	4.1	5.0
Other or unknown ^f	1.5	2.3	1.4	1.0	2.1	1.5	0.5	0.9	1.5	1.9	1.4
Primary activity ^g											
Research and development	67.2	74.7	68.1	75.3	32.3	76.1	63.4	54.3	75.7	71.5	63.8
Teaching	6.7	D	3.1	3.2	12.5	5.8	6.5	14.5	D	D	8.1
Management or administration	1.6	D	1.9	1.6	2.0	0.6	4.3	3.0	D	D	3.0
Professional services and other	24.5	17.5	26.9	20.0	53.2	17.4	25.8	28.2	20.8	20.4	25.1
Secondary activity ^g											
Research and development	16.0	14.0	10.0	D	31.7	14.0	19.4	22.8	D	14.2	17.3
Teaching	3.4	5.5	3.1	D	3.6	2.6	6.5	7.4	D	3.7	5.2
Management or administration	13.9	9.6	18.6	20.0	12.9	9.6	8.6	13.9	17.9	13.6	17.0
Professional services and other	12.5	15.4	12.4	12.6	11.4	11.5	12.4	13.4	12.9	12.7	13.7
No secondary activity	54.3	55.5	56.0	54.9	40.4	62.3	53.2	42.4	57.5	55.9	46.9
Activity unknown	3.4	3.6	2.1	2.4	3.3	3.5	1.6	2.9	4.1	5.1	3.9
Postgraduation location (%) ^h											
United States ⁱ	92.8	95.6	96.2	92.2	90.8	91.5	89.2	91.6	92.9	93.7	95.1
Midwest	14.3	14.9	14.0	15.3	15.3	9.8	14.1	14.3	12.3	19.8	16.2
Northeast	19.5	15.9	32.1	23.9	15.4	14.2	13.4	23.2	19.6	18.9	18.7
South	24.8	30.1	22.5	22.0	33.0	23.6	25.7	30.4	20.1	21.5	25.5
West	34.0	33.7	27.4	31.0	26.5	43.6	35.7	23.0	40.5	33.5	34.7
Outside the United States	7.1	4.4	3.8	7.8	9.2	8.5	10.8	8.2	7.1	6.3	4.7

TABLE 9-6

Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
Location unknown	*	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.2
Postgraduation location in same state as doctorate institution (%)	37.0	34.0	43.9	32.4	42.6	34.9	32.7	38.4	35.0	37.2	35.6
Male doctorate recipients reporting postgraduation status (number)	7,113	440	686	813	780	1,562	300	393	583	1,141	415
Definite postdoctoral training plans	21.7	20.2	28.6	21.9	26.0	13.8	20.7	16.0	27.6	23.8	24.6
Definite employment plans	52.3	58.4	35.1	51.5	48.2	64.2	50.0	60.1	47.2	48.5	51.3
Seeking employment or study	24.0	19.8	31.9	24.7	23.1	20.6	26.7	22.4	23.7	26.2	22.9
Other status ^a	2.0	1.6	4.2	1.8	2.6	1.4	2.7	1.5	1.5	1.6	1.2
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	96.1	D	91.3	100.0	97.5	93.1	96.8	93.7	98.1	96.3	96.1
Other training or unknown ^c	3.9	D	8.7	0.0	2.5	6.9	3.2	6.3	1.9	3.7	3.9
Definite employment plans (%) ^d											
Academe	10.8	14.0	12.0	D	17.8	9.1	8.7	19.9	D	11.8	D
In tenure track faculty position (%)	42.9	30.6	D	D	44.8	64.8	38.5	51.1	D	32.3	D
Not in tenure track position (%)	53.3	66.7	D	40.0	49.3	34.1	53.8	42.6	D	64.6	56.0
Government	6.6	18.7	2.5	2.6	9.3	4.6	D	8.1	6.5	4.9	D
Industry or business ^e	78.0	59.1	80.5	90.7	68.1	81.8	85.3	66.9	87.3	77.4	69.0
Nonprofit organization	3.1	5.8	3.7	D	2.4	3.1	D	4.2	D	4.2	4.2
Other or unknown ^f	1.5	2.3	1.2	1.2	2.4	1.5	0.7	0.8	1.5	1.8	0.9
Primary activity ^g											
Research and development	69.5	76.9	75.1	76.1	30.9	76.4	68.7	55.4	77.1	74.9	69.1
Teaching	6.1	D	D	D	D	D	D	D	D	D	D
Management or administration	1.4	D	D	D	D	D	D	D	D	D	D
Professional services and other	23.0	15.8	19.8	19.0	54.1	17.4	24.5	29.0	20.7	17.9	23.0
Secondary activity ^g											
Research and development	15.5	13.4	6.8	D	32.3	14.2	17.0	23.4	D	12.6	D
Teaching	3.2	D	D	D	D	2.4	D	6.9	D	3.4	D
Management or administration	14.3	D	D	21.2	12.4	10.0	D	16.9	D	14.1	16.2
Professional services and other	12.8	15.4	15.2	12.7	10.8	10.9	12.2	13.4	15.0	13.0	15.7
No secondary activity	54.2	56.3	53.6	52.9	40.6	62.5	55.1	39.4	55.6	57.0	47.5
Activity unknown	3.4	3.9	1.7	2.1	3.7	3.7	2.0	2.1	3.3	5.1	4.2
Postgraduation location (%) ^h											
United States ⁱ	92.1	94.8	96.1	91.0	89.1	91.1	89.2	91.0	92.2	93.4	95.2
Midwest	14.5	15.0	13.3	14.6	16.6	10.6	13.7	15.1	11.2	20.0	17.1
Northeast	18.4	15.9	31.1	23.3	13.8	13.2	14.2	22.1	20.4	18.8	18.1
South	24.6	30.3	23.6	20.8	32.1	23.9	24.5	31.1	19.0	22.1	24.4

TABLE 9-6

Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
West	34.3	32.9	28.1	32.3	25.9	43.2	36.8	21.7	41.1	32.4	35.6
Outside the United States	7.8	5.2	3.9	9.0	10.9	8.9	10.8	9.0	7.8	6.6	4.4
Location unknown	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Postgraduation location in same state as doctorate institution (%)	36.9	34.1	44.4	33.2	42.1	35.6	33.0	36.5	33.7	37.9	36.8
Female doctorate recipients reporting postgraduation status (number)	2,541	82	521	323	371	348	81	170	238	244	163
Definite postdoctoral training plans	23.5	20.7	32.6	20.7	27.2	16.1	22.2	10.0	25.6	19.7	26.4
Definite employment plans	47.8	56.1	36.1	51.1	38.5	58.6	48.1	65.3	50.4	53.3	42.3
Seeking employment or study	26.3	23.2	27.4	26.9	31.5	23.9	27.2	22.9	22.3	24.6	28.2
Other status ^a	2.3	0.0	3.8	1.2	2.7	1.4	2.5	1.8	1.7	2.0	3.1
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	95.5	D	93.5	95.5	98.0	92.9	100.0	76.5	98.4	100.0	95.3
Other training or unknown ^c	4.5	D	6.5	4.5	2.0	7.1	0.0	23.5	1.6	0.0	4.7
Definite employment plans (%) ^d											
Academe	14.7	D	8.0	D	17.5	11.3	D	27.9	D	16.9	D
In tenure track faculty position (%)	46.1	54.5	D	D	40.0	69.6	D	51.6	D	54.5	D
Not in tenure track position (%)	51.7	D	D	72.7	56.0	26.1	54.5	45.2	55.6	45.5	60.0
Government	6.2	13.0	3.7	3.0	13.3	3.4	D	8.1	6.7	5.4	D
Industry or business ^e	73.6	50.0	83.0	86.7	62.2	81.4	61.5	58.6	80.8	71.5	55.1
Nonprofit organization	4.1	D	3.7	D	5.6	2.5	D	4.5	D	3.8	7.2
Other or unknown ^f	1.5	2.2	1.6	0.6	1.4	1.5	0.0	0.9	1.7	2.3	2.9
Primary activity ^g											
Research and development	60.3	62.2	59.0	73.1	35.7	74.9	43.6	51.9	72.6	56.9	47.8
Teaching	8.7	11.1	D	D	D	D	D	D	D	12.2	D
Management or administration	1.9	0.0	D	D	D	D	D	D	D	0.0	D
Professional services and other	29.2	26.7	36.1	22.5	50.7	17.6	30.8	26.4	21.2	30.9	31.3
Secondary activity ^g											
Research and development	17.7	17.8	14.2	10.6	30.0	13.1	28.2	21.7	D	21.1	D
Teaching	3.8	D	D	0.0	D	3.5	D	8.5	D	4.9	D
Management or administration	12.5	D	D	16.9	14.3	7.5	D	7.5	14.2	11.4	19.4
Professional services and other	11.7	15.6	8.7	12.5	12.9	14.6	12.8	13.2	8.0	11.4	7.5
No secondary activity	54.3	51.1	59.0	60.0	40.0	61.3	46.2	49.1	61.9	51.2	44.8
Activity unknown	3.3	2.2	2.7	3.0	2.1	2.5	0.0	4.5	5.8	5.4	2.9
Postgraduation location (%) ^h											
United States ⁱ	94.8	D	96.4	95.3	94.7	93.5	89.5	93.0	94.5	94.9	94.6
Midwest	13.7	14.3	14.8	17.2	12.3	6.2	15.8	12.5	14.9	18.5	13.4

TABLE 9-6
Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
 (Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
Northeast	22.7	15.9	33.2	25.4	19.3	18.8	10.5	25.8	17.7	19.1	20.5
South	25.2	28.6	21.2	25.0	35.2	22.3	29.8	28.9	22.7	18.5	28.6
West	32.9	38.1	26.5	27.6	27.9	45.4	31.6	25.8	39.2	38.8	32.1
Outside the United States	5.1	0.0	3.6	4.7	5.3	6.2	10.5	6.3	5.5	5.1	5.4
Location unknown	0.1	D	0.0	0.0	0.0	0.4	0.0	0.8	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.2	33.3	43.3	30.6	43.9	31.5	31.6	43.0	38.1	34.3	32.1

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

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):
 A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

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

TABLE 9-7

Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean, marine, and atmospheric sciences
Doctorate recipients reporting postgraduation status (number)	1,119	628	491
Definite postdoctoral training plans	50.4	44.6	57.8
Definite employment plans	27.5	32.0	21.8
Seeking employment or study	20.9	22.1	19.3
Other status ^a	1.2	1.3	1.0
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	98.0	98.2	97.9
Other training or unknown ^c	2.0	1.8	2.1
Definite employment plans (%) ^d			
Academe	27.3	28.9	24.3
In tenure track faculty position (%)	21.4	D	D
Not in tenure track position (%)	78.6	D	D
Government	22.1	16.9	31.8
Industry or business ^e	41.6	45.8	33.6
Nonprofit organization	5.8	6.0	5.6
Other or unknown ^f	3.2	2.5	4.7
Primary activity ^g			
Research and development	53.0	50.5	57.7
Teaching	15.8	19.1	9.6
Management or administration	3.7	D	D
Professional services and other	27.5	D	D
Secondary activity ^g			
Research and development	25.2	25.3	25.0
Teaching	4.0	D	D
Management or administration	16.1	D	D
Professional services and other	10.1	9.3	11.5
No secondary activity	44.6	46.4	41.3
Activity unknown	3.2	3.5	2.8
Postgraduation location (%) ^h			
United States ⁱ	92.8	91.9	93.9
Midwest	8.4	11.0	5.1
Northeast	16.1	14.3	18.2
South	29.6	28.7	30.7
West	38.5	37.6	39.6
Outside the United States	7.0	7.7	6.1
Location unknown	0.2	0.4	0.0
Postgraduation location in same state as doctorate institution (%)	39.4	38.9	40.2
Male doctorate recipients reporting postgraduation status (number)	618	353	265
Definite postdoctoral training plans	50.8	44.8	58.9
Definite employment plans	28.6	34.8	20.4
Seeking employment or study	19.3	19.3	19.2
Other status ^a	1.3	1.1	1.5
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	98.4	98.1	98.7

TABLE 9-7

Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean, marine, and atmospheric sciences
Other training or unknown ^c	1.6	1.9	1.3
Definite employment plans (%) ^d			
Academe	24.3	23.6	25.9
In tenure track faculty position (%)	23.3	D	D
Not in tenure track position (%)	76.7	D	D
Government	19.8	17.9	24.1
Industry or business ^e	47.5	48.8	44.4
Nonprofit organization	5.6	D	D
Other or unknown ^f	2.8	D	D
Primary activity ^g			
Research and development	57.9	55.9	62.3
Teaching	D	16.1	D
Management or administration	D	D	D
Professional services and other	26.9	D	D
Secondary activity ^g			
Research and development	23.4	22.9	24.5
Teaching	D	5.9	D
Management or administration	17.0	16.1	18.9
Professional services and other	11.1	11.0	11.3
No secondary activity	43.9	44.1	43.4
Activity unknown	3.4	4.1	1.9
Postgraduation location (%) ^h			
United States ⁱ	90.6	89.7	91.9
Midwest	9.2	10.7	7.1
Northeast	15.5	13.5	18.1
South	28.1	28.8	27.1
West	37.5	36.3	39.0
Outside the United States	9.2	10.0	8.1
Location unknown	0.2	0.4	0.0
Postgraduation location in same state as doctorate institution (%)	39.9	39.9	40.0
Female doctorate recipients reporting postgraduation status (number)	501	275	226
Definite postdoctoral training plans	49.9	44.4	56.6
Definite employment plans	26.1	28.4	23.5
Seeking employment or study	23.0	25.8	19.5
Other status ^a	1.0	1.5	0.4
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	97.6	98.4	96.9
Other training or unknown ^c	2.4	1.6	3.1
Definite employment plans (%) ^d			
Academe	31.3	37.2	22.6
In tenure track faculty position (%)	19.5	D	D
Not in tenure track position (%)	80.5	D	D
Government	25.2	15.4	39.6
Industry or business ^e	33.6	41.0	22.6
Nonprofit organization	6.1	D	D

TABLE 9-7

Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean, marine, and atmospheric sciences
Other or unknown ^f	3.8	D	D
Primary activity ^g			
Research and development	46.5	42.1	52.9
Teaching	D	23.7	D
Management or administration	D	D	D
Professional services and other	28.3	D	D
Secondary activity ^g			
Research and development	27.6	28.9	25.5
Teaching	D	D	D
Management or administration	15.0	D	D
Professional services and other	8.7	6.6	11.8
No secondary activity	45.7	50.0	39.2
Activity unknown	3.1	2.6	3.8
Postgraduation location (%) ^h			
United States ⁱ	95.5	95.0	96.1
Midwest	7.3	11.5	2.8
Northeast	16.8	15.5	18.2
South	31.5	28.5	34.8
West	39.9	39.5	40.3
Outside the United States	4.2	4.5	3.9
Location unknown	0.3	0.5	0.0
Postgraduation location in same state as doctorate institution (%)	38.8	37.5	40.3

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-8

Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All health sciences fields	Nursing and nursing science	Pharmacy and pharmaceutical sciences	Public health	Health sciences, other
Doctorate recipients reporting postgraduation status (number)	2,413	576	384	716	737
Definite postdoctoral training plans	22.6	12.0	29.7	28.9	21.2
Definite employment plans	51.8	62.2	43.0	45.1	54.8
Seeking employment or study	22.6	23.1	24.7	23.5	20.2
Other status ^a	2.9	2.8	2.3	2.5	3.5
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	89.0	95.7	93.9	79.2	95.5
Other training or unknown ^c	11.0	4.3	6.1	20.8	4.5
Definite employment plans (%) ^d					
Academe	47.6	62.3	10.3	40.2	55.7
In tenure track faculty position (%)	42.0	40.4	70.6	33.8	46.2
Not in tenure track position (%)	52.6	52.5	D	D	51.6
Government	8.7	8.4	4.8	16.7	4.2
Industry or business ^e	28.6	12.3	81.2	22.6	26.5
Nonprofit organization	11.9	13.7	D	17.6	D
Other or unknown ^f	3.1	3.4	D	2.8	D
Primary activity ^g					
Research and development	32.7	8.1	80.0	45.2	24.5
Teaching	33.9	56.1	6.3	17.5	39.1
Management or administration	7.0	9.6	0.0	8.6	6.3
Professional services and other	26.4	26.2	13.8	28.7	30.1
Secondary activity ^g					
Research and development	31.7	37.8	10.0	29.3	37.5
Teaching	11.8	13.7	4.4	11.5	13.5
Management or administration	16.6	12.8	21.3	20.7	14.8
Professional services and other	9.9	11.0	6.3	9.2	11.1
No secondary activity	29.9	24.7	58.1	29.3	23.2
Activity unknown	4.2	3.9	3.0	2.8	6.2
Postgraduation location (%) ^h					
United States ⁱ	92.5	90.9	91.0	92.8	94.1
Midwest	17.7	15.2	19.4	13.8	22.5
Northeast	23.1	28.6	32.6	18.1	18.8
South	33.0	31.6	21.1	40.2	33.2
West	18.2	15.0	17.2	20.0	19.5
Outside the United States	7.5	9.1	9.0	7.2	5.9
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	46.4	53.2	32.6	46.8	47.7
Male doctorate recipients reporting postgraduation status (number)	693	64	189	201	239
Definite postdoctoral training plans	28.7	7.8	31.2	35.8	26.4
Definite employment plans	47.6	65.6	45.5	40.8	50.2
Seeking employment or study	20.2	23.4	20.1	19.9	19.7
Other status ^a	3.5	3.1	3.2	3.5	3.8
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	85.4	D	94.9	69.4	93.7

TABLE 9-8

Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All health sciences fields	Nursing and nursing science	Pharmacy and pharmaceutical sciences	Public health	Health sciences, other
Other training or unknown ^c	14.6	D	5.1	30.6	6.3
Definite employment plans (%) ^d					
Academe	38.8	64.3	14.0	34.1	50.8
In tenure track faculty position (%)	45.3	37.0	D	D	44.3
Not in tenure track position (%)	46.1	40.7	D	D	54.1
Government	10.0	D	D	25.6	4.2
Industry or business ^e	39.7	D	D	26.8	30.8
Nonprofit organization	7.6	D	D	9.8	9.2
Other or unknown ^f	3.9	7.1	1.2	3.7	5.0
Primary activity ^g					
Research and development	43.8	14.6	D	D	30.0
Teaching	22.5	41.5	D	D	31.8
Management or administration	6.0	12.2	0.0	8.8	6.4
Professional services and other	27.6	31.7	10.7	37.5	31.8
Secondary activity ^g					
Research and development	29.8	41.5	10.7	32.5	38.2
Teaching	11.1	D	D	8.8	10.9
Management or administration	18.7	17.1	21.4	18.8	17.3
Professional services and other	9.2	D	D	12.5	11.8
No secondary activity	31.1	7.3	58.3	27.5	21.8
Activity unknown	4.5	2.4	2.3	2.4	8.3
Postgraduation location (%) ^h					
United States ⁱ	90.0	83.0	89.0	90.3	92.3
Midwest	17.0	12.8	19.3	10.4	21.9
Northeast	23.8	27.7	35.2	18.8	18.0
South	29.1	27.7	17.2	40.9	29.0
West	19.5	14.9	17.2	18.2	23.5
Outside the United States	10.0	17.0	11.0	9.7	7.7
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	40.6	55.3	33.1	42.9	41.0
Female doctorate recipients reporting postgraduation status (number)	1,720	512	195	515	498
Definite postdoctoral training plans	20.2	12.5	28.2	26.2	18.7
Definite employment plans	53.5	61.7	40.5	46.8	57.0
Seeking employment or study	23.5	23.0	29.2	24.9	20.5
Other status ^a	2.6	2.7	1.5	2.1	3.4
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	91.1	95.3	92.7	84.4	96.8
Other training or unknown ^c	8.9	4.7	7.3	15.6	3.2
Definite employment plans (%) ^d					
Academe	50.8	62.0	6.3	42.3	57.7
In tenure track faculty position (%)	41.1	40.8	D	D	47.0
Not in tenure track position (%)	54.4	54.1	D	D	50.6
Government	8.3	D	D	13.7	4.2
Industry or business ^e	24.7	D	D	21.2	24.6
Nonprofit organization	13.5	D	D	20.3	D
Other or unknown ^f	2.8	2.8	D	2.5	D

TABLE 9-8

Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All health sciences fields	Nursing and nursing science	Pharmacy and pharmaceutical sciences	Public health	Health sciences, other
Primary activity ^g					
Research and development	28.7	7.3	D	D	22.3
Teaching	38.0	58.1	D	D	42.0
Management or administration	7.4	9.2	0.0	8.5	6.3
Professional services and other	26.0	25.4	17.1	25.6	29.4
Secondary activity ^g					
Research and development	32.4	37.3	9.2	28.2	37.2
Teaching	12.0	D	D	12.4	14.5
Management or administration	15.9	12.2	21.1	21.4	13.8
Professional services and other	10.2	D	D	8.1	10.8
No secondary activity	29.5	27.1	57.9	29.9	23.8
Activity unknown	4.1	4.1	3.8	2.9	5.3
Postgraduation location (%) ^h					
United States ⁱ	93.5	91.8	93.3	93.9	95.0
Midwest	18.0	15.5	19.4	15.2	22.8
Northeast	22.7	28.7	29.9	17.8	19.1
South	34.6	32.1	25.4	39.9	35.3
West	17.7	15.0	17.2	20.7	17.5
Outside the United States	6.5	8.2	6.7	6.1	5.0
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	48.8	52.9	32.1	48.4	50.9

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Doctorate recipients reporting postgraduation status (number)	1,881	469	782	630
Definite postdoctoral training plans	33.4	35.4	43.7	19.2
Definite employment plans	44.1	41.2	30.2	63.7
Seeking employment or study	20.4	20.5	23.9	16.0
Other status ^a	1.9	2.8	2.0	1.0
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	97.0	96.4	97.4	96.7
Other training or unknown ^c	3.0	3.6	2.6	3.3
Definite employment plans (%) ^d				
Academe	29.4	22.3	51.3	20.0
In tenure track faculty position (%)	43.4	41.9	35.5	56.3
Not in tenure track position (%)	53.7	51.2	63.6	40.0
Government	5.2	D	D	4.2
Industry or business ^e	60.8	66.3	40.3	70.3
Nonprofit organization	2.4	D	D	3.2
Other or unknown ^f	2.2	2.6	1.7	2.2
Primary activity ^g				
Research and development	51.4	51.6	35.4	60.5
Teaching	D	19.4	D	D
Management or administration	D	0.0	D	D
Professional services and other	23.4	29.0	14.6	25.9
Secondary activity ^g				
Research and development	24.8	23.7	31.9	21.3
Teaching	3.6	D	D	4.4
Management or administration	5.0	D	D	5.4
Professional services and other	11.1	10.2	8.8	12.8
No secondary activity	55.5	59.1	51.3	56.2
Activity unknown	3.4	3.6	4.2	2.7
Postgraduation location (%) ^h				
United States ⁱ	87.9	91.9	82.5	91.2
Midwest	14.7	12.3	17.8	12.8
Northeast	23.3	22.8	21.3	25.9
South	23.7	25.9	21.6	24.5
West	25.7	30.1	21.5	27.4
Outside the United States	12.0	8.1	17.5	8.6
Location unknown	0.1	0.0	0.0	0.2
Postgraduation location in same state as doctorate institution (%)	26.1	31.2	21.8	27.4
Male doctorate recipients reporting postgraduation status (number)	1,351	326	618	407
Definite postdoctoral training plans	35.4	34.4	45.0	21.6
Definite employment plans	40.9	42.0	27.2	60.7
Seeking employment or study	22.0	21.5	25.4	17.2
Other status ^a	1.6	1.8	2.3	0.5
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	96.4	94.6	97.1	96.6
Other training or unknown ^c	3.6	5.4	2.9	3.4
Definite employment plans (%) ^d				

TABLE 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Academe	28.3	16.8	D	D
In tenure track faculty position (%)	39.7	30.4	D	D
Not in tenure track position (%)	58.3	69.6	63.9	44.0
Government	5.8	D	D	4.0
Industry or business ^e	61.4	71.5	40.5	70.0
Nonprofit organization	2.0	D	D	D
Other or unknown ^f	2.5	2.9	1.8	2.8
Primary activity ^g				
Research and development	55.0	57.9	38.5	64.4
Teaching	D	14.3	47.8	D
Management or administration	D	0.0	0.0	D
Professional services and other	21.2	27.8	13.7	22.6
Secondary activity ^g				
Research and development	22.7	D	D	18.4
Teaching	3.9	D	3.7	D
Management or administration	5.6	5.3	D	D
Professional services and other	12.0	10.5	9.3	14.6
No secondary activity	55.7	60.9	50.9	56.1
Activity unknown	3.4	2.9	4.2	3.2
Postgraduation location (%) ^h				
United States ⁱ	86.4	91.2	80.0	91.3
Midwest	14.4	13.3	16.1	12.8
Northeast	22.6	20.5	22.9	23.9
South	22.6	24.9	19.5	25.1
West	26.1	31.7	21.1	28.7
Outside the United States	13.5	8.8	20.0	8.4
Location unknown	0.1	0.0	0.0	0.3
Postgraduation location in same state as doctorate institution (%)	25.8	32.5	20.2	28.4
Female doctorate recipients reporting postgraduation status (number)	529	143	163	223
Definite postdoctoral training plans	28.4	37.8	38.7	14.8
Definite employment plans	52.6	39.2	41.7	69.1
Seeking employment or study	16.4	18.2	18.4	13.9
Other status ^a	2.5	4.9	1.2	1.8
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	98.7	D	98.4	97.0
Other training or unknown ^c	1.3	D	1.6	3.0
Definite employment plans (%) ^d				
Academe	31.7	35.7	D	D
In tenure track faculty position (%)	50.0	55.0	D	D
Not in tenure track position (%)	45.5	30.0	63.2	33.3
Government	4.0	D	D	4.5
Industry or business ^e	59.7	53.6	39.7	70.8
Nonprofit organization	3.2	D	0.0	D
Other or unknown ^f	1.4	1.8	1.5	1.3
Primary activity ^g				
Research and development	44.2	35.8	27.7	54.3
Teaching	D	32.1	D	14.6

TABLE 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Management or administration	D	0.0	D	0.0
Professional services and other	27.9	32.1	16.9	31.1
Secondary activity ^g				
Research and development	29.0	D	D	25.8
Teaching	3.0	D	D	D
Management or administration	3.7	D	D	D
Professional services and other	9.3	9.4	7.7	9.9
No secondary activity	55.0	54.7	52.3	56.3
Activity unknown	3.2	5.4	4.4	1.9
Postgraduation location (%) ^h				
United States ⁱ	91.8	93.6	91.6	90.9
Midwest	15.4	10.0	23.7	12.8
Northeast	25.0	28.2	16.0	29.4
South	26.4	28.2	29.0	23.5
West	24.8	26.4	22.9	25.1
Outside the United States	8.2	6.4	8.4	9.1
Location unknown	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	26.9	28.2	27.5	25.7

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-10

Multidisciplinary/interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Doctorate recipients reporting postgraduation status (number)	1,555	547	1,008
Definite postdoctoral training plans	23.2	18.1	25.9
Definite employment plans	54.1	62.0	49.8
Seeking employment or study	21.0	18.3	22.4
Other status ^a	1.8	1.6	1.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.8	92.9	96.9
Other training or unknown ^c	4.2	7.1	3.1
Definite employment plans (%) ^d			
Academe	27.3	23.0	30.3
In tenure track faculty position (%)	51.3	59.0	47.4
Not in tenure track position (%)	45.7	35.9	50.7
Government	3.8	2.4	4.8
Industry or business ^e	61.2	69.3	55.8
Nonprofit organization	5.0	3.2	6.2
Other or unknown ^f	2.6	2.1	3.0
Primary activity ^g			
Research and development	65.6	74.5	59.7
Teaching	16.6	11.4	20.0
Management or administration	1.7	0.0	2.9
Professional services and other	16.1	14.2	17.4
Secondary activity ^g			
Research and development	19.7	17.2	21.3
Teaching	7.7	6.8	8.3
Management or administration	11.0	10.8	11.2
Professional services and other	13.1	12.3	13.6
No secondary activity	48.6	52.9	45.7
Activity unknown	3.8	4.1	3.6
Postgraduation location (%) ^h			
United States ⁱ	92.8	94.3	91.9
Midwest	11.5	11.9	11.3
Northeast	21.6	20.5	22.3
South	22.8	16.2	26.6
West	36.1	44.7	31.2
Outside the United States	7.2	5.5	8.1
Location unknown	0.1	0.2	0.0
Postgraduation location in same state as doctorate institution (%)	36.4	34.2	37.6
Male doctorate recipients reporting postgraduation status (number)	968	389	579
Definite postdoctoral training plans	22.0	17.2	25.2
Definite employment plans	56.7	61.7	53.4
Seeking employment or study	19.2	19.0	19.3
Other status ^a	2.1	2.1	2.1
Definite postdoctoral training plans (%) ^b			

TABLE 9-10

Multidisciplinary/interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Postdoc fellowship or research associateship	95.8	92.5	97.3
Other training or unknown ^c	4.2	7.5	2.7
Definite employment plans (%) ^d			
Academe	23.1	21.7	24.3
In tenure track faculty position (%)	53.5	53.8	53.3
Not in tenure track position (%)	42.5	38.5	45.3
Government	3.1	D	D
Industry or business ^e	67.4	69.6	65.7
Nonprofit organization	3.8	4.6	3.2
Other or unknown ^f	2.6	D	D
Primary activity ^g			
Research and development	69.6	72.5	67.4
Teaching	D	10.9	D
Management or administration	D	0.0	D
Professional services and other	15.8	16.6	15.3
Secondary activity ^g			
Research and development	20.4	19.7	20.9
Teaching	6.4	5.7	7.0
Management or administration	11.3	11.8	11.0
Professional services and other	13.2	11.8	14.3
No secondary activity	48.7	51.1	46.8
Activity unknown	3.5	4.6	2.6
Postgraduation location (%) ^h			
United States ⁱ	92.0	94.1	90.5
Midwest	11.5	11.7	11.4
Northeast	21.0	19.2	22.2
South	21.9	16.6	25.5
West	36.9	45.9	30.8
Outside the United States	7.9	5.5	9.5
Location unknown	0.1	0.3	0.0
Postgraduation location in same state as doctorate institution (%)	34.5	35.2	34.1
Female doctorate recipients reporting postgraduation status (number)	587	158	429
Definite postdoctoral training plans	25.0	20.3	26.8
Definite employment plans	49.7	62.7	45.0
Seeking employment or study	23.9	16.5	26.6
Other status ^a	1.4	0.6	1.6
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.9	93.8	96.5
Other training or unknown ^c	4.1	6.3	3.5
Definite employment plans (%) ^d			
Academe	35.3	26.3	39.9
In tenure track faculty position (%)	48.5	69.2	41.6
Not in tenure track position (%)	49.5	30.8	55.8
Government	5.1	D	D

TABLE 9-10

Multidisciplinary/interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Industry or business ^e	49.7	68.7	39.9
Nonprofit organization	7.2	0.0	10.9
Other or unknown ^f	2.7	D	D
Primary activity ^g			
Research and development	58.1	79.2	47.0
Teaching	D	12.5	D
Management or administration	D	0.0	D
Professional services and other	16.5	8.3	20.8
Secondary activity ^g			
Research and development	18.3	11.5	21.9
Teaching	10.0	9.4	10.4
Management or administration	10.4	8.3	11.5
Professional services and other	12.9	13.5	12.6
No secondary activity	48.4	57.3	43.7
Activity unknown	4.5	3.0	5.2
Postgraduation location (%) ^h			
United States ⁱ	94.1	94.7	93.8
Midwest	11.4	12.2	11.0
Northeast	22.8	23.7	22.4
South	24.4	15.3	28.2
West	34.9	42.0	31.8
Outside the United States	5.9	5.3	6.2
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	39.6	32.1	42.9

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-11

Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Doctorate recipients reporting postgraduation status (number)	4,983	308	2,472	374	1,829
Definite postdoctoral training plans	34.8	62.0	29.5	23.5	39.7
Definite employment plans	38.4	18.8	43.6	46.3	33.1
Seeking employment or study	25.2	17.2	25.4	29.1	25.4
Other status ^a	1.6	1.9	1.5	1.1	1.7
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	98.3	99.5	97.3	D	98.9
Other training or unknown ^c	1.7	0.5	2.7	D	1.1
Definite employment plans (%) ^d					
Academe	11.9	34.5	10.5	7.5	13.5
In tenure track faculty position (%)	19.7	D	22.1	D	18.3
Not in tenure track position (%)	75.0	D	74.3	D	75.6
Government	5.1	D	4.6	D	5.4
Industry or business ^e	78.8	46.6	81.1	83.2	76.7
Nonprofit organization	2.7	D	2.3	D	3.0
Other or unknown ^f	1.5	3.4	1.5	1.7	1.3
Primary activity ^g					
Research and development	72.6	61.4	73.4	76.5	71.2
Teaching	8.5	D	8.4	D	D
Management or administration	0.7	D	0.9	D	D
Professional services and other	18.2	21.1	17.3	17.3	19.6
Secondary activity ^g					
Research and development	9.1	D	D	9.3	13.5
Teaching	1.2	0.0	D	D	1.0
Management or administration	16.5	D	20.3	D	9.7
Professional services and other	8.8	15.8	6.5	9.9	11.9
No secondary activity	64.4	57.9	65.9	58.6	63.8
Activity unknown	3.4	1.7	3.1	6.4	3.3
Postgraduation location (%) ^h					
United States ⁱ	91.7	85.1	94.6	94.6	88.4
Midwest	14.3	10.4	16.5	14.6	12.0
Northeast	24.1	18.9	26.0	19.5	23.3
South	20.4	21.7	21.6	15.7	19.6
West	32.4	33.7	30.3	42.9	33.0
Outside the United States	8.3	14.9	5.4	5.4	11.6
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	30.7	22.5	33.9	33.7	27.3
Male doctorate recipients reporting postgraduation status (number)	3,285	209	1,398	238	1,440
Definite postdoctoral training plans	36.8	61.7	32.0	26.9	39.5
Definite employment plans	36.6	19.6	41.8	42.0	33.1
Seeking employment or study	25.4	16.7	25.0	30.3	26.2
Other status ^a	1.2	1.9	1.2	0.8	1.3
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	98.6	99.2	97.5	D	99.1
Other training or unknown ^c	1.4	0.8	2.5	D	0.9
Definite employment plans (%) ^d					

TABLE 9-11

Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Academe	11.1	D	D	7.0	11.3
In tenure track faculty position (%)	16.5	D	D	0.0	18.5
Not in tenure track position (%)	76.7	81.8	75.4	85.7	75.9
Government	4.7	D	D	6.0	5.7
Industry or business ^e	80.7	53.7	83.2	85.0	79.0
Nonprofit organization	1.7	D	D	0.0	2.7
Other or unknown ^f	1.7	4.9	1.9	2.0	1.3
Primary activity ^g					
Research and development	75.2	D	76.0	D	73.5
Teaching	7.8	D	D	D	D
Management or administration	0.6	0.0	D	0.0	D
Professional services and other	16.5	17.5	14.6	15.1	18.9
Secondary activity ^g					
Research and development	9.7	20.0	6.0	9.7	13.3
Teaching	1.0	0.0	D	D	D
Management or administration	16.2	D	D	19.4	10.0
Professional services and other	10.3	22.5	7.3	D	D
No secondary activity	62.8	52.5	63.9	57.0	63.5
Activity unknown	3.8	2.4	3.8	7.0	3.4
Postgraduation location (%) ^h					
United States ⁱ	90.4	84.1	93.5	95.7	87.6
Midwest	14.1	10.6	16.3	15.9	12.2
Northeast	23.8	20.6	26.3	20.1	22.5
South	19.0	18.8	20.3	14.6	18.5
West	33.2	33.5	30.6	43.3	34.2
Outside the United States	9.6	15.9	6.5	4.3	12.4
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	29.1	22.4	32.0	32.9	26.7
Female doctorate recipients reporting postgraduation status (number)	1,697	99	1,073	136	389
Definite postdoctoral training plans	31.0	62.6	26.4	17.6	40.4
Definite employment plans	42.0	17.2	45.9	53.7	33.4
Seeking employment or study	24.8	18.2	25.9	27.2	22.6
Other status ^a	2.2	2.0	1.9	1.5	3.6
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	97.7	D	96.8	D	98.1
Other training or unknown ^c	2.3	D	3.2	D	1.9
Definite employment plans (%) ^d					
Academe	13.3	D	D	8.2	21.5
In tenure track faculty position (%)	24.2	D	D	D	17.9
Not in tenure track position (%)	72.6	D	73.1	D	75.0
Government	5.6	D	D	D	4.6
Industry or business ^e	75.7	29.4	78.5	80.8	68.5
Nonprofit organization	4.2	D	D	D	3.8
Other or unknown ^f	1.1	0.0	1.0	1.4	1.5
Primary activity ^g					
Research and development	68.3	D	70.3	D	62.7
Teaching	9.8	D	D	7.2	15.1

TABLE 9-11

Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Management or administration	0.9	D	D	D	0.0
Professional services and other	21.1	29.4	20.6	20.3	22.2
Secondary activity ^g					
Research and development	8.1	D	D	8.7	14.3
Teaching	1.4	0.0	D	D	D
Management or administration	17.2	D	D	D	8.7
Professional services and other	6.3	0.0	5.6	D	D
No secondary activity	67.0	70.6	68.2	60.9	65.1
Activity unknown	2.7	0.0	2.2	5.5	3.1
Postgraduation location (%) ^h					
United States ⁱ	94.1	87.3	96.0	92.8	91.3
Midwest	14.8	10.1	16.8	12.4	11.5
Northeast	24.6	15.2	25.7	18.6	26.5
South	23.3	27.8	23.4	17.5	23.7
West	30.9	34.2	29.9	42.3	28.9
Outside the United States	5.9	12.7	4.0	7.2	8.7
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	33.8	22.8	36.4	35.1	29.3

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-12

Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Doctorate recipients reporting postgraduation status (number)	3,254	1,034	1,139	741	340
Definite postdoctoral training plans	48.1	76.9	39.0	30.5	29.4
Definite employment plans	32.6	13.2	41.6	41.4	42.1
Seeking employment or study	16.8	8.6	16.7	25.6	22.9
Other status ^a	2.3	1.0	2.5	2.4	5.6
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	86.1	84.7	80.6	96.5	98.0
Other training or unknown ^c	13.9	15.3	19.4	3.5	2.0
Definite employment plans (%) ^d					
Academe	39.1	30.9	37.1	45.3	39.9
In tenure track faculty position (%)	42.5	26.2	44.3	46.8	38.6
Not in tenure track position (%)	54.6	64.3	52.3	52.5	59.6
Government	13.4	36.0	10.8	7.8	12.6
Industry or business ^e	30.0	19.1	29.1	34.9	32.9
Nonprofit organization	9.2	9.6	7.8	9.4	12.6
Other or unknown ^f	8.4	4.4	15.2	2.6	2.1
Primary activity ^g					
Research and development	30.0	D	18.6	53.4	D
Teaching	22.2	8.7	21.0	28.0	25.9
Management or administration	4.1	D	6.0	2.0	D
Professional services and other	43.7	80.2	54.4	16.6	33.3
Secondary activity ^g					
Research and development	23.4	22.2	22.6	25.7	22.2
Teaching	11.7	15.1	12.8	9.8	8.9
Management or administration	13.8	13.5	15.5	12.5	11.1
Professional services and other	9.3	5.6	7.7	11.1	14.1
No secondary activity	41.8	43.7	41.4	40.9	43.7
Activity unknown	4.8	7.4	4.6	3.6	5.6
Postgraduation location (%) ^h					
United States ⁱ	97.6	D	97.2	95.3	D
Midwest	20.0	17.6	21.7	21.4	19.8
Northeast	24.5	30.1	18.1	24.2	27.6
South	28.5	23.3	35.9	27.4	23.0
West	24.0	27.9	21.0	21.2	25.9
Outside the United States	2.4	D	2.8	4.7	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.0	31.6	40.2	40.5	37.9
Male doctorate recipients reporting postgraduation status (number)	757	209	251	231	66
Definite postdoctoral training plans	40.0	68.9	27.1	30.3	31.8
Definite employment plans	36.7	18.7	50.2	38.1	37.9
Seeking employment or study	20.6	10.0	21.1	28.1	25.8
Other status ^a	2.4	1.4	1.6	3.5	4.5
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	84.5	79.9	76.5	97.1	100.0

TABLE 9-12

Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Other training or unknown ^c	15.5	20.1	23.5	2.9	0.0
Definite employment plans (%) ^d					
Academe	39.2	D	33.3	46.6	D
In tenure track faculty position (%)	42.2	D	40.5	48.8	D
Not in tenure track position (%)	54.1	35.7	57.1	51.2	75.0
Government	14.0	33.3	14.3	D	D
Industry or business ^e	32.7	20.5	31.7	38.6	36.0
Nonprofit organization	7.2	D	7.9	D	D
Other or unknown ^f	6.8	2.6	12.7	2.3	0.0
Primary activity ^g					
Research and development	28.5	D	19.8	51.2	D
Teaching	23.2	D	18.2	D	25.0
Management or administration	5.7	D	7.4	D	D
Professional services and other	42.6	73.5	54.5	13.1	41.7
Secondary activity ^g					
Research and development	27.8	32.4	26.4	28.6	25.0
Teaching	12.5	D	D	11.9	D
Management or administration	15.2	D	16.5	15.5	D
Professional services and other	9.5	D	D	13.1	D
No secondary activity	35.0	35.3	38.0	31.0	33.3
Activity unknown	5.4	12.8	4.0	4.5	4.0
Postgraduation location (%) ^h					
United States ⁱ	95.9	D	94.8	D	D
Midwest	21.0	D	20.6	D	D
Northeast	23.8	29.0	12.9	24.7	45.7
South	27.9	17.5	40.7	26.6	19.6
West	22.7	30.6	20.6	19.0	13.0
Outside the United States	4.1	D	5.2	D	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	34.4	34.4	31.4	37.3	37.0
Female doctorate recipients reporting postgraduation status (number)	2,496	825	888	510	273
Definite postdoctoral training plans	50.6	78.9	42.3	30.6	28.9
Definite employment plans	31.3	11.8	39.2	42.9	42.9
Seeking employment or study	15.7	8.2	15.4	24.5	22.3
Other status ^a	2.3	0.8	2.7	2.0	5.9
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	86.5	85.7	81.4	96.2	97.5
Other training or unknown ^c	13.5	14.3	18.6	3.8	2.5
Definite employment plans (%) ^d					
Academe	38.9	D	38.5	44.7	D
In tenure track faculty position (%)	42.4	D	45.5	45.9	D
Not in tenure track position (%)	54.9	78.6	50.7	53.1	56.8
Government	13.2	37.1	9.5	D	D
Industry or business ^e	29.1	18.6	28.2	33.3	32.5
Nonprofit organization	9.9	D	7.8	D	D

TABLE 9-12

Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Other or unknown ^f	9.0	5.2	16.1	2.7	2.6
Primary activity ^g					
Research and development	30.5	D	18.1	54.2	D
Teaching	21.9	D	22.1	D	26.4
Management or administration	3.5	D	5.4	D	D
Professional services and other	44.2	82.6	54.4	17.9	31.8
Secondary activity ^g					
Research and development	21.9	18.5	21.1	24.5	21.8
Teaching	11.3	D	D	9.0	D
Management or administration	13.3	D	15.1	11.3	D
Professional services and other	9.3	D	D	10.4	D
No secondary activity	44.3	46.7	42.6	44.8	46.4
Activity unknown	4.6	5.2	4.9	3.2	6.0
Postgraduation location (%) ^h					
United States ⁱ	98.1	D	97.8	D	97.4
Midwest	19.7	D	22.0	D	D
Northeast	24.6	30.3	19.5	24.0	23.0
South	28.7	24.7	34.7	27.7	24.0
West	24.3	27.3	21.1	22.1	29.1
Outside the United States	1.9	D	2.2	D	2.6
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.7	30.9	42.5	41.9	38.3

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-13

Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All social sciences fields	Anthropology	Area, ethnic, cultural, gender, and group studies	Economics	Political science and government	Public policy analysis	Sociology, demography, and population studies	Social sciences, other
Doctorate recipients reporting postgraduation status (number)	4,605	349	420	1,265	603	388	583	997
Definite postdoctoral training plans	22.4	29.5	23.3	17.6	28.9	16.0	27.4	21.1
Definite employment plans	53.8	35.8	42.1	68.3	48.6	57.5	53.2	48.5
Seeking employment or study	21.2	31.8	31.2	12.5	20.4	22.9	16.3	27.2
Other status ^a	2.6	2.9	3.3	1.6	2.2	3.6	2.9	3.0
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	96.6	97.1	93.9	96.9	96.6	93.5	98.8	96.7
Other training or unknown ^c	3.4	2.9	6.1	3.1	3.4	6.5	1.3	3.3
Definite employment plans (%) ^d								
Academe	53.2	60.8	76.3	43.6	61.4	36.3	65.8	54.3
In tenure track faculty position (%)	55.5	38.2	35.6	74.8	56.1	33.3	56.4	48.7
Not in tenure track position (%)	42.2	61.8	60.7	23.3	41.7	61.7	42.6	48.3
Government	12.4	7.2	4.5	16.2	9.6	17.5	7.1	12.6
Industry or business ^e	20.7	16.0	5.1	29.9	17.7	15.7	13.5	20.0
Nonprofit organization	10.0	11.2	6.8	8.1	8.2	22.0	11.3	8.9
Other or unknown ^f	3.8	4.8	7.3	2.2	3.1	8.5	2.3	4.1
Primary activity ^g								
Research and development	42.1	D	D	58.0	35.3	40.6	40.0	32.3
Teaching	34.7	46.2	61.7	19.6	47.9	15.1	44.3	43.3
Management or administration	3.9	D	D	0.8	2.4	13.7	4.7	4.9
Professional services and other	19.3	21.0	15.4	21.5	14.3	30.7	11.0	19.5
Secondary activity ^g								
Research and development	33.1	42.0	45.1	25.9	42.0	19.8	36.7	37.5
Teaching	14.5	10.1	12.6	19.4	14.0	11.8	14.7	9.0
Management or administration	13.8	16.8	9.7	11.8	8.0	27.4	13.3	15.8
Professional services and other	8.8	5.9	6.3	11.4	7.3	9.9	6.0	7.9
No secondary activity	29.8	25.2	26.3	31.5	28.7	31.1	29.3	29.8
Activity unknown	3.1	4.8	1.1	2.7	2.4	4.9	3.2	3.5
Postgraduation location (%) ^h								
United States ⁱ	84.1	83.3	89.5	75.6	87.4	93.0	89.8	86.0
Midwest	15.0	12.7	18.5	12.8	13.7	15.8	20.6	14.6
Northeast	22.2	26.8	25.8	19.7	28.1	19.3	25.3	18.6

TABLE 9-13

Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All social sciences fields	Anthropology	Area, ethnic, cultural, gender, and group studies	Economics	Political science and government	Public policy analysis	Sociology, demography, and population studies	Social sciences, other
South	27.9	24.1	18.9	27.1	29.1	38.9	25.1	30.5
West	18.4	18.4	26.2	15.3	15.8	18.9	18.5	21.6
Outside the United States	15.8	16.7	10.5	24.2	12.6	6.7	10.2	14.0
Location unknown	0.1	0.0	0.0	0.2	0.0	0.4	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	30.2	36.0	40.0	18.7	28.1	46.0	35.7	33.6
Male doctorate recipients reporting postgraduation status (number)	2,232	121	147	820	347	154	220	423
Definite postdoctoral training plans	23.1	30.6	29.3	18.0	30.3	13.6	33.2	21.0
Definite employment plans	55.2	37.2	36.1	68.8	48.1	57.1	48.6	48.9
Seeking employment or study	19.7	28.9	32.0	11.6	19.9	27.3	15.9	27.4
Other status ^a	2.1	3.3	2.7	1.6	1.7	1.9	2.3	2.6
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	96.7	94.6	95.3	97.3	97.1	90.5	100.0	95.5
Other training or unknown ^c	3.3	5.4	4.7	2.7	2.9	9.5	0.0	4.5
Definite employment plans (%) ^d								
Academe	50.6	55.6	77.4	43.3	61.7	29.5	71.0	52.2
In tenure track faculty position (%)	57.9	56.0	34.1	73.8	48.5	26.9	47.4	55.6
Not in tenure track position (%)	40.0	44.0	65.9	23.8	49.5	65.4	52.6	41.7
Government	15.0	D	D	18.3	9.6	17.0	7.5	17.4
Industry or business ^e	23.2	D	D	30.5	15.6	21.6	10.3	21.3
Nonprofit organization	8.0	D	D	6.0	9.6	25.0	7.5	5.8
Other or unknown ^f	3.2	0.0	9.4	2.0	3.6	6.8	3.7	3.4
Primary activity ^g								
Research and development	43.4	D	D	59.6	34.1	37.2	D	25.3
Teaching	33.1	40.9	67.9	18.8	50.6	14.0	49.0	47.0
Management or administration	2.8	D	D	D	D	8.1	D	5.1
Professional services and other	20.7	20.5	17.0	D	D	40.7	12.5	22.7
Secondary activity ^g								
Research and development	32.9	36.4	50.9	25.0	41.5	23.3	41.3	41.4
Teaching	15.3	11.4	13.2	19.9	12.8	11.6	12.5	9.1
Management or administration	14.6	D	D	14.5	9.8	30.2	D	14.6
Professional services and other	8.4	D	D	10.7	7.9	5.8	D	7.6

TABLE 9-13

Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All social sciences fields	Anthropology	Area, ethnic, cultural, gender, and group studies	Economics	Political science and government	Public policy analysis	Sociology, demography, and population studies	Social sciences, other
No secondary activity	28.9	31.8	24.5	30.0	28.0	29.1	28.8	27.3
Activity unknown	3.1	2.2	0.0	3.5	1.8	2.3	2.8	4.3
Postgraduation location (%) ^h								
United States ⁱ	80.1	78.0	88.5	73.0	86.8	89.0	85.6	82.1
Midwest	14.7	9.8	18.8	12.9	14.7	14.7	22.8	14.2
Northeast	21.1	22.0	22.9	20.4	26.1	22.0	22.8	16.2
South	26.4	19.5	26.0	24.9	26.8	33.9	23.9	30.7
West	17.2	24.4	20.8	14.2	18.8	18.3	16.1	20.3
Outside the United States	19.8	22.0	11.5	26.8	13.2	10.1	14.4	17.9
Location unknown	0.1	0.0	0.0	0.1	0.0	0.9	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	27.7	28.0	38.5	18.3	30.1	45.9	35.6	33.1
Female doctorate recipients reporting postgraduation status (number)	2,371	228	272	444	256	234	363	574
Definite postdoctoral training plans	21.7	28.9	20.2	16.9	27.0	17.5	24.0	21.1
Definite employment plans	52.5	35.1	45.6	67.3	49.2	57.7	55.9	48.3
Seeking employment or study	22.7	33.3	30.9	14.2	21.1	20.1	16.5	27.0
Other status ^a	3.0	2.6	3.3	1.6	2.7	4.7	3.3	3.3
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	96.5	98.5	92.7	96.0	95.7	95.1	97.7	97.5
Other training or unknown ^c	3.5	1.5	7.3	4.0	4.3	4.9	2.3	2.5
Definite employment plans (%) ^d								
Academe	55.7	63.8	75.8	44.5	61.1	40.7	63.1	56.0
In tenure track faculty position (%)	53.2	29.4	36.2	76.7	66.2	36.4	61.7	43.9
Not in tenure track position (%)	44.3	70.6	58.5	22.6	31.2	60.0	36.7	52.9
Government	9.7	D	D	12.0	9.5	17.8	6.9	9.0
Industry or business ^e	18.3	D	D	28.8	20.6	11.9	15.3	19.1
Nonprofit organization	11.9	D	D	12.0	6.3	20.0	13.3	11.2
Other or unknown ^f	4.3	7.5	6.5	2.7	2.4	9.6	1.5	4.7
Primary activity ^g								
Research and development	40.8	D	20.5	55.1	36.9	42.9	D	37.5
Teaching	36.2	49.3	59.0	21.3	44.3	15.9	41.8	40.5
Management or administration	5.1	D	5.7	D	D	17.5	D	4.8
Professional services and other	17.9	21.3	14.8	D	D	23.8	10.2	17.1

TABLE 9-13

Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All social sciences fields	Anthropology	Area, ethnic, cultural, gender, and group studies	Economics	Political science and government	Public policy analysis	Sociology, demography, and population studies	Social sciences, other
Secondary activity ^g								
Research and development	33.3	45.3	42.6	27.7	42.6	17.5	34.2	34.6
Teaching	13.8	9.3	12.3	18.6	15.6	11.9	15.8	8.9
Management or administration	13.0	D	D	6.8	5.7	25.4	D	16.7
Professional services and other	9.2	D	D	12.8	6.6	12.7	D	8.2
No secondary activity	30.7	21.3	27.0	34.1	29.5	32.5	29.6	31.6
Activity unknown	3.1	6.3	1.6	1.0	3.2	6.7	3.4	2.9
Postgraduation location (%) ^h								
United States ⁱ	88.2	86.3	89.9	80.5	88.2	95.5	92.4	88.9
Midwest	15.3	14.4	18.4	12.6	12.3	16.5	19.3	14.8
Northeast	23.4	29.5	27.4	18.4	30.8	17.6	26.9	20.4
South	29.4	26.7	15.1	31.6	32.3	42.0	25.9	30.4
West	19.5	15.1	29.1	17.1	11.8	19.3	20.0	22.6
Outside the United States	11.8	13.7	10.1	19.3	11.8	4.5	7.6	11.1
Location unknown	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	32.6	40.4	40.8	19.3	25.1	46.0	35.9	33.9

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.**Note(s):**

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-14

Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education and teaching fields	Education, other
Doctorate recipients reporting postgraduation status (number)	3,515	1,055	1,086	1,002	372
Definite postdoctoral training plans	6.5	4.3	6.6	7.9	8.6
Definite employment plans	69.3	77.4	66.3	65.3	65.6
Seeking employment or study	21.6	15.9	24.8	24.0	22.0
Other status ^a	2.6	2.4	2.2	2.9	3.5
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	93.0	93.3	91.7	93.7	93.8
Other training or unknown ^c	7.0	6.7	8.3	6.3	6.3
Definite employment plans (%) ^d					
Academe	51.8	50.7	49.2	56.0	52.0
In tenure track faculty position (%)	27.8	11.4	29.7	44.0	29.9
Not in tenure track position (%)	69.6	87.2	66.7	53.6	66.9
Government	4.4	5.3	4.0	4.3	3.3
Industry or business ^e	9.0	5.1	16.3	6.3	7.4
Nonprofit organization	7.6	6.6	8.9	6.0	11.1
Other or unknown ^f	27.3	32.3	21.7	27.5	26.2
Primary activity ^g					
Research and development	11.7	8.8	15.8	9.9	14.8
Teaching	42.5	24.0	42.0	65.6	44.3
Management or administration	23.3	42.4	15.2	10.4	17.4
Professional services and other	22.5	24.8	27.0	14.2	23.5
Secondary activity ^g					
Research and development	24.4	11.5	25.5	39.1	24.8
Teaching	13.9	15.2	15.6	10.7	13.5
Management or administration	15.5	21.1	13.9	10.0	16.5
Professional services and other	9.1	8.7	11.1	8.5	6.5
No secondary activity	37.0	43.6	33.9	31.7	38.7
Activity unknown	4.5	4.2	4.9	4.1	5.7
Postgraduation location (%) ^h					
United States ⁱ	95.6	97.1	95.2	93.9	97.1
Midwest	22.6	26.0	22.6	19.2	21.4
Northeast	15.0	15.9	12.0	16.4	17.4
South	39.6	40.0	42.4	42.4	22.8
West	17.8	14.8	18.1	15.0	34.1
Outside the United States	4.3	2.9	4.7	6.1	2.5
Location unknown	0.1	0.0	0.1	0.0	0.4
Postgraduation location in same state as doctorate institution (%)	61.8	70.3	57.8	55.3	64.1
Male doctorate recipients reporting postgraduation status (number)	955	353	279	246	77
Definite postdoctoral training plans	6.6	4.5	6.5	8.1	11.7
Definite employment plans	70.4	79.3	65.2	64.6	66.2
Seeking employment or study	20.2	14.2	25.1	24.0	18.2
Other status ^a	2.8	2.0	3.2	3.3	3.9
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	96.8	D	94.4	95.0	D

TABLE 9-14

Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education and teaching fields	Education, other
Other training or unknown ^c	3.2	D	5.6	5.0	D
Definite employment plans (%) ^d					
Academe	51.8	47.1	48.4	61.6	58.8
In tenure track faculty position (%)	24.1	12.1	27.3	38.8	20.0
Not in tenure track position (%)	72.7	84.1	70.5	59.2	73.3
Government	5.2	D	5.5	4.4	D
Industry or business ^e	8.0	D	17.0	3.8	D
Nonprofit organization	7.3	D	10.4	3.8	D
Other or unknown ^f	27.7	35.4	18.7	26.4	21.6
Primary activity ^g					
Research and development	12.0	10.2	16.7	7.7	18.8
Teaching	37.9	21.5	32.2	71.6	39.6
Management or administration	27.1	42.6	21.8	9.7	16.7
Professional services and other	23.1	25.7	29.3	11.0	25.0
Secondary activity ^g					
Research and development	22.4	D	21.8	43.2	D
Teaching	16.5	17.0	20.7	10.3	18.8
Management or administration	16.5	21.9	11.5	10.3	25.0
Professional services and other	8.6	D	13.2	8.4	D
No secondary activity	36.0	43.0	32.8	27.7	35.4
Activity unknown	4.5	5.4	4.4	2.5	5.9
Postgraduation location (%) ^h					
United States ⁱ	94.4	94.6	95.0	D	D
Midwest	23.3	25.3	23.0	22.3	16.7
Northeast	15.9	16.2	9.5	D	D
South	39.3	38.5	44.5	41.3	20.0
West	15.6	14.2	17.5	8.9	36.7
Outside the United States	5.6	5.4	5.0	D	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	58.0	66.2	54.5	47.5	60.0
Female doctorate recipients reporting postgraduation status (number)	2,560	702	807	756	295
Definite postdoctoral training plans	6.4	4.1	6.7	7.8	7.8
Definite employment plans	68.9	76.5	66.7	65.5	65.4
Seeking employment or study	22.1	16.8	24.7	23.9	23.1
Other status ^a	2.5	2.6	1.9	2.8	3.4
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	91.5	89.7	90.7	93.2	91.3
Other training or unknown ^c	8.5	10.3	9.3	6.8	8.7
Definite employment plans (%) ^d					
Academe	51.8	52.5	49.4	54.1	50.3
In tenure track faculty position (%)	29.2	11.0	30.5	45.9	33.0
Not in tenure track position (%)	68.5	88.7	65.4	51.5	64.9
Government	4.1	D	3.5	4.2	D
Industry or business ^e	9.3	D	16.0	7.1	D
Nonprofit organization	7.7	D	8.4	6.7	D
Other or unknown ^f	27.1	30.7	22.7	27.9	27.5

TABLE 9-14

Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education and teaching fields	Education, other
Primary activity ^g					
Research and development	11.6	8.1	15.5	10.6	13.7
Teaching	44.3	25.3	45.4	63.6	45.6
Management or administration	21.8	42.3	12.9	10.6	17.6
Professional services and other	22.2	24.3	26.2	15.3	23.1
Secondary activity ^g					
Research and development	25.1	D	26.8	37.7	D
Teaching	13.0	14.3	13.9	10.8	12.1
Management or administration	15.2	20.7	14.7	10.0	14.3
Professional services and other	9.3	D	10.4	8.5	D
No secondary activity	37.4	43.8	34.2	33.1	39.6
Activity unknown	4.5	3.5	5.0	4.6	5.7
Postgraduation location (%) ^h					
United States ⁱ	96.1	98.4	95.3	D	D
Midwest	22.4	26.3	22.5	18.2	22.7
Northeast	14.7	15.7	12.8	D	D
South	39.7	40.8	41.7	42.8	23.6
West	18.7	15.2	18.2	17.0	33.3
Outside the United States	3.8	1.6	4.6	D	D
Location unknown	0.1	0.0	0.2	0.0	0.5
Postgraduation location in same state as doctorate institution (%)	63.3	72.4	59.0	57.8	65.3

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-15

Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
Doctorate recipients reporting postgraduation status (number)	2,950	916	501	665	555	313
Definite postdoctoral training plans	16.7	12.1	13.8	23.2	24.7	7.3
Definite employment plans	49.9	53.8	49.7	43.9	44.1	62.0
Seeking employment or study	29.9	31.6	32.1	28.6	28.6	26.8
Other status ^a	3.2	2.4	4.4	4.1	2.3	3.5
Definite postdoctoral training plans (%) ^b						
Postdoc fellowship or research associateship	95.5	90.1	95.7	96.1	99.3	95.7
Other training or unknown ^c	4.5	9.9	4.3	3.9	0.7	4.3
Definite employment plans (%) ^d						
Academe	67.2	73.8	75.1	61.3	66.9	49.5
In tenure track faculty position (%)	33.3	34.1	29.4	34.6	36.0	31.3
Not in tenure track position (%)	64.5	64.8	67.9	62.0	62.8	64.6
Government	3.9	D	D	9.2	4.1	3.1
Industry or business ^e	8.7	D	D	7.9	6.9	8.2
Nonprofit organization	11.5	5.1	3.2	12.0	14.3	34.5
Other or unknown ^f	8.6	7.9	12.9	9.6	7.8	4.6
Primary activity ^g						
Research and development	10.4	7.3	6.8	18.4	12.9	7.6
Teaching	63.9	65.3	79.7	56.4	61.8	53.8
Management or administration	5.8	6.1	2.5	5.3	7.7	7.6
Professional services and other	19.9	21.3	11.0	19.9	17.6	31.0
Secondary activity ^g						
Research and development	37.8	33.7	50.6	35.8	42.1	29.3
Teaching	10.4	9.0	3.8	8.5	14.2	20.7
Management or administration	9.8	11.3	8.9	11.0	8.2	7.6
Professional services and other	6.4	6.3	4.6	5.7	5.6	11.4
No secondary activity	35.6	39.7	32.1	39.0	30.0	31.0
Activity unknown	4.0	3.0	4.8	3.4	4.9	5.2
Postgraduation location (%) ^h						
United States ⁱ	89.5	93.7	88.1	89.7	84.8	88.0
Midwest	18.9	19.0	19.2	20.6	16.2	19.4
Northeast	22.8	21.9	28.3	22.6	24.9	14.3
South	30.8	35.9	22.0	30.5	24.9	40.6
West	16.2	16.1	16.7	15.7	17.8	13.8
Outside the United States	10.3	6.1	11.6	10.1	14.9	12.0
Location unknown	0.2	0.2	0.3	0.2	0.3	0.0
Postgraduation location in same state as doctorate institution (%)	39.3	43.2	38.1	42.8	31.2	37.8
Male doctorate recipients reporting postgraduation status (number)	1,501	366	206	358	362	209
Definite postdoctoral training plans	17.7	12.0	14.1	23.5	26.5	6.2
Definite employment plans	49.4	54.9	46.6	42.5	42.5	66.5
Seeking employment or study	30.6	32.0	35.4	31.3	29.0	24.9
Other status ^a	2.2	1.1	3.9	2.5	1.9	2.4

TABLE 9-15

Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
Definite postdoctoral training plans (%) ^b						
Postdoc fellowship or research associateship	97.0	95.5	93.1	97.6	99.0	92.3
Other training or unknown ^c	3.0	4.5	6.9	2.4	1.0	7.7
Definite employment plans (%) ^d						
Academe	62.5	71.1	77.1	58.6	63.0	43.9
In tenure track faculty position (%)	31.0	32.2	28.4	29.2	30.9	34.4
Not in tenure track position (%)	67.0	67.8	68.9	67.4	67.0	62.3
Government	5.0	2.5	0.0	13.8	D	D
Industry or business ^e	8.8	11.4	D	5.9	D	D
Nonprofit organization	13.3	5.0	D	8.6	D	39.6
Other or unknown ^f	10.4	10.0	15.6	13.2	8.4	6.5
Primary activity ^g						
Research and development	9.6	4.1	6.5	19.2	11.6	6.8
Teaching	64.6	67.7	82.6	61.6	61.0	54.5
Management or administration	4.5	4.6	0.0	3.4	6.8	6.1
Professional services and other	21.4	23.6	10.9	15.8	20.5	32.6
Secondary activity ^g						
Research and development	35.7	33.8	56.5	29.5	39.7	26.5
Teaching	10.4	6.2	D	8.2	D	19.7
Management or administration	9.0	9.7	D	10.3	8.2	D
Professional services and other	7.7	7.7	D	6.2	D	D
No secondary activity	37.1	42.6	28.3	45.9	31.5	31.8
Activity unknown	4.2	3.0	4.2	3.9	5.2	5.0
Postgraduation location (%) ^h						
United States ⁱ	87.8	91.8	D	89.4	83.2	D
Midwest	19.2	18.4	24.0	21.6	16.4	17.8
Northeast	19.6	21.6	22.4	19.5	22.4	9.9
South	31.9	34.3	23.2	32.6	24.0	47.4
West	16.0	16.3	D	15.3	19.6	D
Outside the United States	12.1	7.8	D	10.6	16.8	D
Location unknown	0.1	0.4	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.9	41.2	39.2	44.1	30.4	34.2
Female doctorate recipients reporting postgraduation status (number)	1,449	550	295	307	193	104
Definite postdoctoral training plans	15.7	12.2	13.6	22.8	21.2	9.6
Definite employment plans	50.4	53.1	51.9	45.6	47.2	52.9
Seeking employment or study	29.3	31.3	29.8	25.4	28.0	30.8
Other status ^a	4.3	3.3	4.7	5.9	3.1	5.8
Definite postdoctoral training plans (%) ^b						
Postdoc fellowship or research associateship	93.9	86.6	97.5	94.3	D	D

TABLE 9-15

Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All humanities fields	English language and literature, letters	Foreign languages, literatures, and linguistics	History	Philosophy and religious studies	Humanities, other
Other training or unknown ^c	6.1	13.4	2.5	5.7	D	D
Definite employment plans (%) ^d						
Academe	72.0	75.7	73.9	64.3	73.6	63.6
In tenure track faculty position (%)	35.4	35.3	30.1	40.0	43.3	25.7
Not in tenure track position (%)	62.4	62.9	67.3	56.7	56.7	68.6
Government	2.9	D	D	4.3	D	D
Industry or business ^e	8.6	D	8.5	10.0	D	D
Nonprofit organization	9.7	5.1	D	15.7	D	21.8
Other or unknown ^f	6.8	6.5	11.1	5.7	6.6	0.0
Primary activity ^g						
Research and development	11.2	9.5	6.9	17.6	14.9	9.6
Teaching	63.2	63.6	77.9	50.7	63.2	51.9
Management or administration	7.1	7.1	4.1	7.4	9.2	11.5
Professional services and other	18.5	19.8	11.0	24.3	12.6	26.9
Secondary activity ^g						
Research and development	39.8	33.6	46.9	42.6	46.0	36.5
Teaching	10.4	11.0	D	8.8	D	23.1
Management or administration	10.7	12.4	D	11.8	8.0	D
Professional services and other	5.1	5.3	D	5.1	D	D
No secondary activity	34.0	37.8	34.5	31.6	27.6	28.8
Activity unknown	3.8	3.1	5.2	2.9	4.4	5.5
Postgraduation location (%) ^h						
United States ⁱ	91.3	95.0	D	90.0	87.9	D
Midwest	18.6	19.5	16.1	19.5	15.9	23.1
Northeast	26.2	22.0	32.1	26.2	29.5	24.6
South	29.6	37.0	21.2	28.1	26.5	24.6
West	16.4	15.9	D	16.2	14.4	D
Outside the United States	8.3	5.0	D	9.5	11.4	D
Location unknown	0.3	0.0	0.5	0.5	0.8	0.0
Postgraduation location in same state as doctorate institution (%)	40.9	44.6	37.3	41.4	32.6	46.2

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^e Industry or business includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "[Technical Notes](#)."

Source(s):

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

TABLE 9-16

Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
Doctorate recipients reporting postgraduation status (number)	1,303	367	936
Definite postdoctoral training plans	8.0	7.6	8.1
Definite employment plans	77.6	73.6	79.2
Seeking employment or study	11.8	15.3	10.5
Other status ^a	2.5	3.5	2.1
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	91.3	89.3	92.1
Other training or unknown ^c	8.7	10.7	7.9
Definite employment plans (%) ^d			
Academe	77.6	70.0	80.4
In tenure track faculty position (%)	84.2	82.0	84.9
Not in tenure track position (%)	14.9	18.0	13.9
Government	D	D	2.3
Industry or business ^e	14.2	17.8	13.0
Nonprofit organization	D	D	2.2
Other or unknown ^f	2.4	3.0	2.2
Primary activity ^g			
Research and development	43.8	42.1	44.5
Teaching	39.6	31.4	42.5
Management or administration	4.3	10.0	2.2
Professional services and other	12.3	16.5	10.8
Secondary activity ^g			
Research and development	40.4	32.6	43.2
Teaching	31.6	29.5	32.4
Management or administration	6.1	8.4	5.3
Professional services and other	3.0	3.4	2.8
No secondary activity	18.9	26.1	16.3
Activity unknown	2.8	3.3	2.6
Postgraduation location (%) ^h			
United States ⁱ	84.1	84.9	83.8
Midwest	17.3	15.4	18.0
Northeast	16.3	16.4	16.3
South	33.5	32.6	33.8
West	16.6	19.8	15.4
Outside the United States	15.7	14.8	16.0
Location unknown	0.2	0.3	0.1
Postgraduation location in same state as doctorate institution (%)	18.2	22.8	16.5
Male doctorate recipients reporting postgraduation status (number)	715	203	512
Definite postdoctoral training plans	7.6	8.9	7.0
Definite employment plans	77.5	72.9	79.3
Seeking employment or study	12.0	14.8	10.9
Other status ^a	2.8	3.4	2.5
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	90.7	83.3	94.4
Other training or unknown ^c	9.3	16.7	5.6
Definite employment plans (%) ^d			
Academe	75.3	65.5	78.8

TABLE 9-16

Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
In tenure track faculty position (%)	85.6	84.5	85.9
Not in tenure track position (%)	13.7	15.5	13.1
Government	D	D	D
Industry or business ^e	15.5	21.6	13.3
Nonprofit organization	D	D	D
Other or unknown ^f	2.0	2.7	1.7
Primary activity ^g			
Research and development	45.6	42.1	46.9
Teaching	36.8	29.7	39.3
Management or administration	3.7	9.7	1.5
Professional services and other	14.0	18.6	12.3
Secondary activity ^g			
Research and development	37.9	31.7	40.1
Teaching	32.5	25.5	35.1
Management or administration	5.5	D	D
Professional services and other	3.1	D	D
No secondary activity	21.0	31.0	17.3
Activity unknown	1.8	2.0	1.7
Postgraduation location (%) ^h			
United States ⁱ	83.4	82.5	83.7
Midwest	17.3	15.7	17.9
Northeast	16.1	17.5	15.6
South	34.4	31.3	35.5
West	15.3	17.5	14.5
Outside the United States	16.3	16.9	16.1
Location unknown	0.3	0.6	0.2
Postgraduation location in same state as doctorate institution (%)	18.1	22.9	16.3
Female doctorate recipients reporting postgraduation status (number)	588	164	424
Definite postdoctoral training plans	8.5	6.1	9.4
Definite employment plans	77.7	74.4	79.0
Seeking employment or study	11.6	15.9	9.9
Other status ^a	2.2	3.7	1.7
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	92.0	D	90.0
Other training or unknown ^c	8.0	D	10.0
Definite employment plans (%) ^d			
Academe	80.5	75.4	82.4
In tenure track faculty position (%)	82.6	79.3	83.7
Not in tenure track position (%)	16.3	20.7	14.9
Government	D	4.1	D
Industry or business ^e	12.7	13.1	12.5
Nonprofit organization	D	4.1	D
Other or unknown ^f	2.8	3.3	2.7
Primary activity ^g			
Research and development	41.7	42.2	41.5
Teaching	43.1	33.6	46.4
Management or administration	5.0	10.3	3.1

TABLE 9-16

Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
Professional services and other	10.3	13.8	9.0
Secondary activity ^g			
Research and development	43.5	33.6	47.1
Teaching	30.5	34.5	29.1
Management or administration	6.8	D	D
Professional services and other	2.7	D	D
No secondary activity	16.4	19.8	15.2
Activity unknown	3.9	4.9	3.6
Postgraduation location (%) ^h			
United States ⁱ	85.0	87.9	84.0
Midwest	17.4	15.2	18.1
Northeast	16.6	15.2	17.1
South	32.3	34.1	31.7
West	18.1	22.7	16.5
Outside the United States	15.0	12.1	16.0
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	18.3	22.7	16.8

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-17

Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies, and design
Doctorate recipients reporting postgraduation status (number)	726	416	310
Definite postdoctoral training plans	10.2	6.0	15.8
Definite employment plans	49.6	53.8	43.9
Seeking employment or study	36.4	35.6	37.4
Other status ^a	3.4	4.3	2.3
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.9	96.0	95.9
Other training or unknown ^c	4.1	4.0	4.1
Definite employment plans (%) ^d			
Academe	70.0	69.2	71.3
In tenure track faculty position (%)	30.2	24.5	39.2
Not in tenure track position (%)	68.3	74.8	57.7
Government	D	D	D
Industry or business ^e	12.5	14.3	9.6
Nonprofit organization	D	D	D
Other or unknown ^f	6.7	7.1	5.9
Primary activity ^g			
Research and development	10.2	8.0	14.0
Teaching	62.9	63.8	61.2
Management or administration	8.8	9.9	7.0
Professional services and other	18.1	18.3	17.8
Secondary activity ^g			
Research and development	38.6	34.3	45.7
Teaching	9.1	D	D
Management or administration	9.4	8.0	11.6
Professional services and other	7.6	D	D
No secondary activity	35.4	36.6	33.3
Activity unknown	5.0	4.9	5.1
Postgraduation location (%) ^h			
United States ⁱ	89.4	91.6	86.5
Midwest	19.1	18.5	20.0
Northeast	27.9	27.7	28.1
South	23.0	26.1	18.9
West	18.9	18.9	18.9
Outside the United States	10.6	8.4	13.5
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	40.6	45.4	34.1
Male doctorate recipients reporting postgraduation status (number)	313	219	94
Definite postdoctoral training plans	8.6	5.0	17.0
Definite employment plans	49.2	49.8	47.9
Seeking employment or study	37.1	38.4	34.0
Other status ^a	4.5	6.4	0.0
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	96.3	D	93.8
Other training or unknown ^c	3.7	D	6.3
Definite employment plans (%) ^d			

TABLE 9-17

Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies, and design
Academe	68.2	66.1	73.3
In tenure track faculty position (%)	24.8	23.6	27.3
Not in tenure track position (%)	74.3	76.4	69.7
Government	D	0.0	D
Industry or business ^e	16.2	D	D
Nonprofit organization	D	D	D
Other or unknown ^f	7.1	8.3	4.4
Primary activity ^g			
Research and development	10.2	D	D
Teaching	67.3	69.2	62.8
Management or administration	7.5	D	D
Professional services and other	15.0	15.4	14.0
Secondary activity ^g			
Research and development	38.1	38.5	37.2
Teaching	7.5	D	D
Management or administration	6.8	4.8	11.6
Professional services and other	10.9	D	D
No secondary activity	36.7	36.5	37.2
Activity unknown	4.5	4.6	4.4
Postgraduation location (%) ^h			
United States ⁱ	88.4	90.8	83.6
Midwest	23.8	21.7	27.9
Northeast	25.4	26.7	23.0
South	19.9	24.2	11.5
West	19.3	18.3	21.3
Outside the United States	11.6	9.2	16.4
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	44.8	47.5	39.3
Female doctorate recipients reporting postgraduation status (number)	413	197	216
Definite postdoctoral training plans	11.4	7.1	15.3
Definite employment plans	49.9	58.4	42.1
Seeking employment or study	35.8	32.5	38.9
Other status ^a	2.7	2.0	3.2
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.7	92.9	97.0
Other training or unknown ^c	4.3	7.1	3.0
Definite employment plans (%) ^d			
Academe	71.4	72.2	70.3
In tenure track faculty position (%)	34.0	25.3	45.3
Not in tenure track position (%)	63.9	73.5	51.6
Government	D	D	D
Industry or business ^e	9.7	D	D
Nonprofit organization	D	10.4	D
Other or unknown ^f	6.3	6.1	6.6
Primary activity ^g			
Research and development	10.3	D	D
Teaching	59.5	58.7	60.5

TABLE 9-17

Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies, and design
Management or administration	9.7	D	D
Professional services and other	20.5	21.1	19.8
Secondary activity ^g			
Research and development	39.0	30.3	50.0
Teaching	10.3	D	D
Management or administration	11.3	11.0	11.6
Professional services and other	5.1	D	D
No secondary activity	34.4	36.7	31.4
Activity unknown	5.3	5.2	5.5
Postgraduation location (%) ^h			
United States ⁱ	90.1	92.2	87.9
Midwest	15.8	15.5	16.1
Northeast	29.6	28.7	30.6
South	25.3	27.9	22.6
West	18.6	19.4	17.7
Outside the United States	9.9	7.8	12.1
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.5	43.4	31.5

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-18

Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Doctorate recipients reporting postgraduation status (number)	1,944	557	324	468	595
Definite postdoctoral training plans	13.3	11.7	11.7	15.2	14.3
Definite employment plans	57.8	60.3	58.6	59.4	53.6
Seeking employment or study	26.2	25.9	26.5	23.9	28.2
Other status ^a	2.7	2.2	3.1	1.5	3.9
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	93.1	93.8	86.8	97.2	91.8
Other training or unknown ^c	6.9	6.2	13.2	2.8	8.2
Definite employment plans (%) ^d					
Academe	61.0	76.8	58.9	48.6	56.4
In tenure track faculty position (%)	54.7	58.9	23.2	65.9	60.0
Not in tenure track position (%)	44.1	39.5	75.0	34.1	38.9
Government	9.2	4.2	6.3	14.4	11.6
Industry or business ^e	15.1	9.8	16.8	16.2	18.8
Nonprofit organization	8.8	6.3	7.9	13.3	8.2
Other or unknown ^f	5.9	3.0	10.0	7.6	5.0
Primary activity ^g					
Research and development	26.1	22.9	9.9	36.2	30.5
Teaching	44.2	61.9	46.7	26.1	39.3
Management or administration	7.8	3.1	18.1	7.8	6.6
Professional services and other	21.9	12.1	25.3	30.0	23.6
Secondary activity ^g					
Research and development	37.9	50.2	28.6	28.0	38.7
Teaching	16.1	13.3	12.6	24.1	14.4
Management or administration	13.2	7.7	11.0	21.8	13.1
Professional services and other	6.8	7.1	8.2	3.9	8.2
No secondary activity	26.0	21.7	39.6	22.2	25.6
Activity unknown	5.0	3.9	4.2	7.6	4.4
Postgraduation location (%) ^h					
United States ⁱ	90.8	92.5	91.7	91.7	87.9
Midwest	17.7	18.5	17.5	19.2	15.8
Northeast	19.3	15.7	22.8	22.1	18.6
South	34.7	37.4	30.3	33.2	35.9
West	17.8	19.0	20.6	16.0	16.6
Outside the United States	9.0	7.5	8.3	8.0	11.9
Location unknown	0.1	0.0	0.0	0.3	0.2
Postgraduation location in same state as doctorate institution (%)	36.8	29.4	52.2	39.3	33.4

TABLE 9-18

Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Male doctorate recipients reporting postgraduation status (number)	761	216	136	131	278
Definite postdoctoral training plans	12.2	12.0	11.0	13.0	12.6
Definite employment plans	59.8	62.5	58.1	60.3	58.3
Seeking employment or study	25.1	23.1	28.7	24.4	25.2
Other status ^a	2.9	2.3	2.2	2.3	4.0
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	91.4	96.2	80.0	100.0	88.6
Other training or unknown ^c	8.6	3.8	20.0	0.0	11.4
Definite employment plans (%) ^d					
Academe	60.9	79.3	58.2	41.8	56.2
In tenure track faculty position (%)	56.3	62.6	19.6	78.8	59.3
Not in tenure track position (%)	41.9	35.5	78.3	21.2	38.5
Government	9.5	D	D	13.9	12.3
Industry or business ^e	16.5	11.1	12.7	20.3	21.0
Nonprofit organization	7.3	D	D	15.2	4.9
Other or unknown ^f	5.9	1.5	11.4	8.9	5.6
Primary activity ^g					
Research and development	24.6	D	D	32.9	32.7
Teaching	46.2	64.4	48.7	27.4	38.0
Management or administration	8.6	D	D	12.3	6.0
Professional services and other	20.6	12.9	22.4	27.4	23.3
Secondary activity ^g					
Research and development	39.2	53.8	23.7	30.1	38.7
Teaching	14.8	11.4	10.5	21.9	16.7
Management or administration	12.3	6.8	10.5	19.2	14.7
Professional services and other	8.8	D	13.2	D	10.0
No secondary activity	24.8	21.2	42.1	23.3	20.0
Activity unknown	5.3	2.2	3.8	7.6	7.4
Postgraduation location (%) ^h					
United States ⁱ	87.8	89.4	89.4	88.5	85.3
Midwest	18.6	21.7	20.2	17.7	15.7
Northeast	18.6	11.8	26.6	24.0	17.8
South	32.7	38.5	22.3	26.0	36.0
West	16.8	15.5	20.2	19.8	14.7
Outside the United States	12.0	10.6	10.6	11.5	14.2
Location unknown	0.2	0.0	0.0	0.0	0.5

TABLE 9-18

Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Postgraduation location in same state as doctorate institution (%)	35.8	31.1	52.1	40.6	29.4
Female doctorate recipients reporting postgraduation status (number)	1,183	341	188	337	317
Definite postdoctoral training plans	14.0	11.4	12.2	16.0	15.8
Definite employment plans	56.5	58.9	59.0	59.1	49.5
Seeking employment or study	27.0	27.6	25.0	23.7	30.9
Other status ^a	2.5	2.1	3.7	1.2	3.8
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	94.0	92.3	91.3	96.3	94.0
Other training or unknown ^c	6.0	7.7	8.7	3.7	6.0
Definite employment plans (%) ^d					
Academe	61.1	75.1	59.5	51.3	56.7
In tenure track faculty position (%)	53.7	56.3	25.8	61.8	60.7
Not in tenure track position (%)	45.6	42.4	72.7	38.2	39.3
Government	9.0	D	D	14.6	10.8
Industry or business ^e	14.2	9.0	19.8	14.6	16.6
Nonprofit organization	9.9	D	D	12.6	11.5
Other or unknown ^f	5.8	4.0	9.0	7.0	4.5
Primary activity ^g					
Research and development	27.0	D	D	37.5	28.4
Teaching	42.9	60.2	45.3	25.5	40.6
Management or administration	7.2	D	D	6.0	7.1
Professional services and other	22.8	11.5	27.4	31.0	23.9
Secondary activity ^g					
Research and development	36.9	47.6	32.1	27.2	38.7
Teaching	17.0	14.7	14.2	25.0	12.3
Management or administration	13.8	8.4	11.3	22.8	11.6
Professional services and other	5.5	D	4.7	D	6.5
No secondary activity	26.7	22.0	37.7	21.7	31.0
Activity unknown	4.8	5.0	4.5	7.5	1.3
Postgraduation location (%) ^h					
United States ⁱ	92.8	94.6	93.3	92.9	90.3
Midwest	17.1	16.3	15.7	19.8	15.9
Northeast	19.8	18.3	20.1	21.3	19.3
South	36.1	36.7	35.8	36.0	35.7
West	18.5	21.3	20.9	14.6	18.4

TABLE 9-18

Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023

(Number and percent)

Characteristic	All other non-science and engineering fields	Communications and journalism	Multidisciplinary/interdisciplinary studies	Public administration and social services	Non-science and engineering, other
Outside the United States	7.1	5.4	6.7	6.7	9.7
Location unknown	0.1	0.0	0.0	0.4	0.0
Postgraduation location in same state as doctorate institution (%)	37.5	28.3	52.2	38.7	37.2

D = suppressed to avoid disclosure of confidential information.

^a Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other training includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.

^e Industry or business includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

^g Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

^h Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ United States includes doctorate recipients with an unknown U.S. region of employment after doctorate; thus, the percentages by regions will not sum to the value for United States. See the "Technical Notes" for states or territories included in regions.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in [table A-4](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

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

TABLE 9-19

Postgraduation plans of research doctorate recipients, by ethnicity, race, and citizenship status: 2023

(Number and percent)

Characteristic	Total ^a	U.S. citizen	Temp. visa holder	Not Hispanic or Latino														Ethnicity not reported	
				Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported			
				U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder	U.S. citizen	Temp. visa holder
All doctorate recipients (number)	52,109	33,702	18,143	3,255	1,314	94	D	3,697	12,570	2,597	709	22,255	3,079	1,283	120	335	D	186	143
Definite postdoctoral training plans	26.9	25.4	29.8	27.3	31.1	21.3	D	24.8	30.2	17.5	22.4	25.9	30.0	32.0	D	20.3	24.0	17.2	25.9
Definite employment plans	46.6	46.9	46.1	43.9	42.5	59.6	D	44.8	46.7	53.4	46.4	47.1	44.7	41.9	D	44.2	48.5	52.7	56.6
Seeking employment or study	23.5	24.3	22.3	24.9	24.3	17.0	D	25.2	21.7	25.1	28.8	24.0	22.7	21.9	25.8	28.7	D	22.0	14.0
Other status ^b	2.8	3.4	1.7	3.9	1.8	2.1	D	5.1	1.4	3.9	1.8	2.8	2.4	4.1	1.7	6.9	D	8.1	3.5
Definite employment plans (%) ^c																			
Academe	35.8	38.6	30.5	39.7	45.0	51.8	D	28.7	26.6	38.9	37.7	39.9	38.1	39.8	55.3	38.5	D	35.7	30.9
In tenure track faculty position (%)	44.5	35.7	65.7	40.4	62.5	37.9	D	47.9	67.8	39.0	66.1	33.1	61.0	37.4	73.1	38.6	D	25.7	52.0
Not in tenure track position (%)	53.0	62.6	30.2	57.8	34.3	58.6	D	50.4	28.7	58.4	32.3	65.3	33.3	60.3	23.1	56.1	D	74.3	32.0
Government	7.0	9.2	3.0	9.4	5.9	8.9	D	7.5	2.2	11.9	4.3	9.1	4.5	8.0	D	6.8	D	12.2	3.7
Industry or business ^d	45.1	36.6	61.2	33.9	41.0	21.4	D	52.8	66.8	25.1	49.2	35.9	50.2	39.6	40.4	39.9	D	30.6	51.9
Nonprofit organization	6.4	8.0	3.5	7.8	5.9	8.9	D	7.3	3.0	11.4	6.1	7.6	4.6	8.9	0.0	4.7	D	6.1	2.5
Other or unknown ^e	5.6	7.6	1.8	9.2	2.2	8.9	D	3.6	1.4	12.7	2.7	7.4	2.5	3.7	0.0	10.1	D	15.3	11.1
Postgraduation location (%) ^f																			
United States	92.4	98.6	80.9	99.0	74.6	100.0	D	97.9	84.6	99.3	84.8	98.6	69.0	98.0	53.2	97.3	D	96.9	79.0
Outside the United States	7.5	1.4	19.1	1.0	25.3	0.0	D	2.1	15.3	0.6	15.2	1.4	30.9	2.0	D	2.7	37.4	3.1	21.0
Location unknown	0.1	*	0.1	0.0	0.2	0.0	D	0.0	0.1	0.1	0.0	*	0.1	0.0	0.0	0.0	D	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	24.9	31.4	13.6	32.0	15.8	43.4	D	28.9	12.8	36.9	15.8	31.3	15.6	25.9	14.9	30.1	D	33.8	11.9

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

^a Total includes doctorate recipients who did not report citizenship status.^b Other status includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.^c Percentages are based on the number of doctorate recipients reporting definite postgraduation plans for employment.^d Industry or business includes doctorate recipients reporting self-employment.^e Other is mainly composed of elementary and secondary schools.^f Percentages are based on the number of doctorate recipients reporting definite postgraduation plans and type of plans.**Note(s):**

U.S. citizen refers to U.S. citizens and permanent residents. Non-U.S. citizen refers to temporary visa holders. A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100.

Source(s):

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

Technical Notes

Survey Overview (2023 Survey Cycle)

Purpose. The Survey of Earned Doctorates (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 20 April 2024. The disclosure review number is NCSES-DRN24-046.

Survey contractor. RTI International.

Survey sponsors. The SED is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the U.S. 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).

Key Survey Information

Frequency. Annual.

Initial survey year. Academic year 1958.

Reference period. Academic year 2023 (1 July 2022 to 30 June 2023).

Response unit. Individuals.

Sample or census. Census.

Population size. 57,862.

Sample size. Not applicable.

Survey Design

Target population. The population for the 2023 SED consists of all individuals receiving a research doctorate from a U.S. academic institution in the 12-month period beginning 1 July 2022 and ending 30 June 2023. 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 2023 ([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 57,862 new research doctorates granted in 2023, 98.6% were PhDs ([table A-1](#)). The next most frequently occurring type of research doctorate was the doctor of education (EdD), which accounted for 0.9% of the total in 2023. No other type of doctoral degree accounted for more than 0.3% of the new research doctorates in 2023.

Sampling frame. The sampling frame of doctorate recipients is created by first identifying all institutions that confer research doctorates and then identifying all individuals receiving a research doctorate from those institutions in the 12-month period ending 30 June 2023. The list of institutions is based principally on the institutions in the prior survey cycle augmented by any new institutions on the Integrated Postsecondary Education Data System (IPEDS) and other higher education resource databases. The list of doctorate recipients is created from administrative sources such as commencement lists from the institutions and commercial databases of doctorate dissertations. For 2023, 469 research doctorate-granting institutions were identified; however, 10 of these institutions reported 0 graduates, and 11 institutions refused to provide lists of graduates. For all 11 refusing institutions, the survey contractor was able to construct graduate lists using secondary data sources. Thus, the sampling frame consisted of 57,862 persons in 459 institutions that conferred research doctorates in 2023.

Sample design. The SED is a census survey of all recipients of U.S. research doctoral degrees in the sampling frame.

Data Collection and Processing Methods

Data collection. SED collects data using two modes: self-administered Web survey and computer-assisted telephone interview (CATI).

The self-administered Web survey is the primary mode of SED completion. When students apply for graduation, institutional coordinators at the universities give students the link to the 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 has increased steadily since it was introduced in 2001, and it reached 98.7% in 2023.

Nonrespondents are contacted by e-mail, mail, and text messages to complete the Web survey. If the series of follow-up e-mails, mailings, and text messages is unsuccessful, the survey contractor attempts to reach nonrespondents to complete an abbreviated survey by CATI. Approximately 1.3% of SED completions were from CATI in 2023. At the end of the data collection phase, institutional coordinators were 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 awarded were 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 complete college education history data. To code U.S. postsecondary degree-granting institutions, the IPEDS institution codes are used. 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 2023 U.S. research doctorate recipients received undergraduate degrees from foreign institutions.

Mode. In 2023, 98.7% of survey responses were obtained via the Web survey and 1.3% via CATI.

Response rate. Of the 57,862 individuals who received a research doctorate in 2023, 91.2% completed the survey ([table A-2](#)). Additional information on response rate is 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. Imputation was performed to support derivation of the following variables in producing the 2023 SED Doctorate Records File (DRF):

- *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 month of bachelor's completion was missing, the month value was logically imputed to the modal value for doctorate recipients who provided month of bachelor's completion.
- *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 month of graduate school entry was missing, the month value was 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 were 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 sampling, so survey totals have no sampling variability.

Disclosure protection. To protect against the disclosure of confidential information provided by SED respondents, data values based on counts of respondents that fall below a predetermined threshold are suppressed in the data tables. Secondary or complementary suppressions are applied as needed to prevent reconstruction of the data values from primary suppressions. Beginning in 2021, the detailed fields in the data tables are based on the aggregation of SED Classified Instructional Program (CIP) fields. All suppressed values in the data tables are replaced with "D."

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, coverage error of institutions is minimal. Because the graduate schools identify degree recipients at the time of doctorate completion, coverage error for individual doctorate recipients is also minimal. Comparisons of the institutions with research doctorate recipients covered by the SED that also report to the [Integrated Postsecondary Education Data System \(IPEDS\) Completions Survey](#), collected by the [National Center for Education Statistics](#), confirm that there is minimal coverage error.

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. Graduation lists provided by institutions serve as the primary frame to determine eligible doctorate recipients. In 2023, 11 doctorate-granting universities declined to fully enumerate their doctorate recipients for academic year 2023. Information on the graduates for all of these institutions was found from other sources, such as ProQuest. Differences in counts of research doctorate recipients between SED and IPEDS are minimal.

Nonresponse error.

- *Unit nonresponse.* Of the 57,862 individuals who received a research doctorate in 2023, 91.2% completed the survey ([table A-2](#)). 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.

Unit nonresponse was concentrated in a small number of institutions: 6 of the 459 doctorate-granting institutions accounted for 25% of the total nonrespondents; an additional 11 institutions accounted for an additional 25% of the total nonrespondents.

- *Item nonresponse.* Due to data collected as part of nonrespondent skeletal records, item missing rates for the five key SED variables—sex, citizenship, country of citizenship, race and ethnicity, and location after graduation—were lower than the unit nonresponse rate and ranged from 0.0% for sex to 8.4% for location after graduation in 2023. [Table A-3](#) shows item response rates for all research doctorate recipients from 2017–23 for all variables used in the data tables (see clarifying notes in the table).¹

Measurement error. The primary source of measurement error in the SED is attributable to incomplete or updated information provided by respondents or degree-granting institutions and for educational history provided by respondents. Another source is errors in the programming of the web instrument, described further below.

Counts of doctorate recipients for previous years are corrected by the addition of data from surveys received after the close of data collection for a given year. Updates and corrections to graduation dates can also change the overall counts for prior years. The published tables reflect these changes.

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 or institution 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 data requiring manual coding is low. In 2023, 0.4% of doctorate fields of study reported by respondents were manually coded, as well as 0.6% of associate’s degree fields, 0.3% of bachelor’s degree fields, and 0.4% of master’s degree fields.

Errors in the 2023 web instrument related to testing of minor wording modification in question response options (described in the “Changes in questionnaire” section below) led to increases in missing responses for a few variables.

- For the parent’s education question, responses to the first parent’s education level were not captured by the web instrument for the first 5 months of the 2023 data collection. To remediate this error, a follow-up email was sent to the 17,408 doctorate recipients affected by this error with a link to the SED web survey that contained just the parental education items. Across non-missing responses, the distributions of parent’s education level in 2023 were similar to prior year distributions and within 1.0 percentage points of the 2022 distribution for all response categories. This variation is typical of the year-to-year distributional changes.
- For the primary work activity question, the response option “management or administration” was inadvertently not shown, and the response options displayed for the secondary work activity, which were dependent on the primary work activity response, were not properly presented. Data were remediated in data processing by back-coding responses in the “other” response option that said “management” or “administration” to the “management or administration” response option. After remediation, the distributions of both primary and secondary work responses were similar to those in 2022 (within 1.6 percentage points for all primary work activities and within 3.3% percentage points for all secondary activities). The proportion of missing data increased nominally for the primary work activity item but more significantly for the secondary work activity item, as shown in [table A-3](#).

Data Comparability

Changes in survey coverage and population. For the 2023 cycle, seven institutions were added to the SED universe.

Changes in questionnaire. The following changes were made to the questionnaire in 2023:

New questions.

None.

Changed question response options.

Several question response options were modified to evaluate minor wording changes in the response options intended to improve question clarity. The table below lists the items in two versions, with the existing response items in version A.

Web variables and forms	Version A wording	Version B wording
Location (A38, B1, B4, B5, B5c, B7, B11, B12, B12c, C5, C7, C9)	Foreign	Foreign (<i>non-U.S.</i>)
Postgraduation plan (B2; response option 3)	I accepted or am employed in a position other than a postdoc or training position	I accepted or am employed in a position other than a postdoc or training position (<i>including self-employment</i>)
Employer type (B4, B11; response option K)	Industry (<i>for profit</i>)	For-profit company or organization
Employer type (B4, B11; response option L)	Nonprofit organization (<i>including private foundation</i>)	Nonprofit organization (<i>including tax-exempt, charitable organization and private foundation</i>)
Primary and secondary work activities (B6, B14; response option 3)	Professional services to individuals (<i>such as healthcare, counseling, financial services, legal services, consulting</i>)	Professional services (<i>such as health care, engineering, consulting, counseling, financial, or legal services</i>)
Salary monthly coverage (B9, B16)	How many months does this salary cover? Number of Months:____	Is this salary based on a 12-month year or fewer than 12 months? <input type="radio"/> 12-month year <input type="radio"/> Less than 12 months <i>If less than 12 months, Number of Months:____</i>
Marital status (C2; response option 1)	“Never married” option listed first	“Never married” option listed last
Parental education (C4, response options 1–8)	<ol style="list-style-type: none"> 1. Less than high school/ secondary school graduate 2. High school/ secondary school graduate 3. Some college 4. Associate’s degree 5. Bachelor’s degree 	<ol style="list-style-type: none"> 1. Less than high school completed 2. High school diploma or equivalent 3. Some college, vocational, or trade school 4. Associate’s degree (e.g., AS, AA) 5. Bachelor’s degree (e.g., BS, BA, AB)

	6. Master's degree (e.g., MA, MS, MBA, MSW, etc.) 7. Professional degree (e.g., MD, DDS, DVM, JD, PsyD, DDiv, etc.) 8. Research doctoral degree (e.g., PhD)	6. Master's degree (e.g., MS, MA, MBA, MSW) 7. Professional doctoral degree (e.g., MD, DDS, DVM, JD, PsyD) 8. Research doctoral degree (e.g., PhD, DSc)
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In the 2023 web instrument, half of the respondents received the wording that had been used in previous years (version A) and half received the version with modified wording (version B). Based on the results of the collected data, the version B wording was recommended for future data cycles as it produced lower item nonresponse rates, and improved clarity.

Due to these changes, trend data in these variables should be used with caution. Additionally, due to the web instrument errors described in the "Measurement error" section above, the primary and secondary work activity and parental education data may not be comparable with prior years' data.

Changes in reporting procedures or classification.

- *Carnegie Classification.* Starting in 2023, the 2021 Carnegie classifications of the doctoral institutions are used in the data tables.
- *Field of study.* Beginning in 2021, field of study and doctorate dissertation field data were collected using a modified version of the [2020 Classification of Instructional Programs \(CIP\)](#) codes maintained by the National Center of Education Statistics (NCES). All data are now reported using the new SED-CIP taxonomy ([table A-4](#)). The SED-CIP modifications are as follows:
 - Over 50 degree fields collected in SED prior to 2021 but not in the 2020 CIP were added. These SED-CIP codes are noted in [table A-5](#) and [table A-6](#) with a letter suffix other than "a."
 - An additional 37 SED-CIP codes were added in 2022 from the emerging doctorate field review based on doctorate field data collected in prior years. These 37 codes had not been incorporated in 2021 due to timing.
 - The exclusion of CIP fields that are not eligible for the SED, which are CIP 28 (Military science, leadership, and operational art), 32 (Basic skills and development/remedial education), 33 (Citizenship activities), 34 (Health-related knowledge and skills), 35 (Interpersonal and social skills), 36 (Leisure and recreational activities), 37 (Personal awareness and self-improvements), and 53 (High school/secondary diplomas and certificates) series codes.
 - The limitation of the CIP 12 (Culinary, entertainment, and personal services), 46 (Construction trade), 47 (Mechanic and repair technology/ technicians), and 48 (Precision production) series codes to associate's degree fields only.
 - The conversion of the CIP 60 (Health professions residency/fellowship) and 61 (Medical residency/fellowship) series codes to SED-CIP 70 and 71 series codes, respectively, to capture the research fields for doctorate dissertation fields only.

The SED-CIP code list includes over 1,650 fields for the field of study reporting, compared to the 334 field codes collected prior to 2021. The SED-CIP codes are aggregated into 306 detailed fields, 68 major fields, and 16 broad fields, which are used for reporting in the data tables ([table A-4](#)). In 2023, minor revisions were made to the major and detailed field taxonomy to improve data utility and alignment with the new trend taxonomy. Specifically, 2 new major fields ("biological and biomedical sciences, general" and "aerospace, aeronautical, astronautical, and space engineering") were added by moving 4 detailed fields and 1 new detailed field was added ([table A-5](#)).

This SED-CIP taxonomy includes multidisciplinary/interdisciplinary sciences and multidisciplinary/interdisciplinary studies to capture and track emerging fields and is aligned to the NCSES Taxonomy of Disciplines for comparison with other NCSES surveys. The complete SED-CIP list with corresponding detailed, major, and broad fields is in [table A-5](#). All single-year data tables ([table 3-1](#) through [table 9-18](#)) use the new SED-CIP taxonomy.

To facilitate the trend data comparison with prior years, a crosswalk was created of the SED-CIP codes to the historical SED field of study (SED-FOS) codes, which were aggregated into the new trend broad and major fields (see [table A-6](#)). The new trend field taxonomy used in the 2023 data tables replaced the historical field taxonomy introduced in the 2021 data tables to align more closely with the new SED-CIP based broad and major fields. In total, the new trend taxonomy aggregates fields into 14 trend broad fields and 62 trend major fields as compared with 8 broad and 35 major fields in the historical field taxonomy.

As an example, the historical field taxonomy previously reported “mathematics and computer sciences” as a single broad field. In the new trend field taxonomy, “computer and information sciences” and “mathematics and statistics” are separately reported as two broad fields, with 2 major fields delineated under computer and information sciences and 4 major fields under mathematics and statistics. In the trend field taxonomy, detailed field “veterinary sciences,” previously reported under major field “health sciences,” is reported under major field “agricultural sciences” to better align with the new field taxonomy.

This results in generally comparable historical broad and major fields with some limitations. Specifically, each SED-CIP code mapped to a historical SED-FOS code might not be the code the respondent would have chosen from the previously used historical SED-FOS list. For example, it is not known how respondents who reported the new SED-CIP field of “electrical engineering and computer science” in 2022 would have chosen their field under the historical SED-FOS list that includes two separate fields “electrical engineering” and “computer science.” For more information, see the working paper [Survey of Earned Doctorates Field of Study Taxonomy Changes in 2021 and Impact on Trend Data](#).

The trend broad and major fields are available from 1958 to the present. The alignment of the historical fine field codes to the new trend broad and major fields is shown in [table A-6](#). A comparison of the historical, trend, and new field taxonomies is shown in [table B-2](#).

- **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 to 2014, 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.
- **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.
- **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 median debt levels are presented in this report (i.e., [table 4-4](#) and [table 4-5](#)), 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 median 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 median 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 median debt levels. All valid responses, including “no debt,” are included in the computation of all median debt data in the data tables.

- *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. 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.

- *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 of 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 U.S. Universities* 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).

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 2021: 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 collects data on over 1,600 fields of study which are grouped into 306 detailed fields, 68 major fields, and 16 broad fields. See [table A-5](#) for a full listing of the SED-CIP codes and their alignment to the detailed, major, and broad fields of study in 2023. See [table A-6](#) for the SED-CIP to new trend field crosswalk.

Doctorate recipients report their fields of study and doctorate dissertation. 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 "nec" or not elsewhere classified field categories (e.g., "chemistry nec") include individuals whose specified doctoral discipline either did not fit into aggregation within major fields or who reported the "other" CIP code (i.e., "chemistry, other") ([Table A-4](#)).

- *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 of 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.

Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
South	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
West	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, American Samoa, Guam, Puerto Rico, Trust Territories, Virgin Islands

Technical Tables

Table	Title
A-1	Research doctoral degrees included in the Survey of Earned Doctorates: 2019–23
A-2	Survey response rates: 1970–2023
A-3	Survey item response rates: 2017–23
A-4	SED field of doctorate taxonomy, by SED-CIP series/codes: 2023
A-5	Doctoral SED-CIP codes in broad, major, and detailed fields: 2023
A-6	Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023
B-1	SED data table crosswalk: 2020 vs. 2021–23
B-2	Comparison of the broad and major fields, trend broad and major fields, and historical broad and major fields

TABLE A-1

Research doctoral degrees included in the Survey of Earned Doctorates: 2019–23

(Number and percent)

Doctoral degree type	Degree title	2019		2020		2021		2022		2023	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All research doctorates	-	55,599	100.0	55,203	100.0	52,160	100.0	57,448	100.0	57,862	100.0
PhD	Doctor of Philosophy	54,701	98.4	54,249	98.3	51,360	98.5	56,671	98.6	57,048	98.6
EdD	Doctor of Education	469	0.8	486	0.9	463	0.9	471	0.8	502	0.9
DSc, ScD	Doctor of Science	92	0.2	68	0.1	28	0.1	36	0.1	21	*
DEng, DESc, DES	Doctor of Engineering or Engineering Science	43	0.1	54	0.1	21	*	19	*	22	*
DA	Doctor of Arts	1	*	1	*	0	0.0	1	*	0	0.0
DBA	Doctor of Business Administration	17	*	22	*	13	*	15	*	14	*
DMA	Doctor of Musical Arts	115	0.2	170	0.3	155	0.3	130	0.2	148	0.3
DDes	Doctor of Design	8	*	8	*	13	*	4	*	9	*
DPH	Doctor of Public Health	37	0.1	38	0.1	34	0.1	24	*	26	*
DHL	Doctor of Hebrew Letters	1	*	1	*	0	0.0	1	*	0	0.0
DME	Doctor of Music Education	1	*	2	*	2	*	0	0.0	2	*
DML	Doctor of Modern Languages	6	*	5	*	1	*	4	*	4	*
DNSc	Doctor of Nursing Science	2	*	5	*	0	0.0	0	0.0	3	*
ThD	Doctor of Theology	11	*	3	*	7	*	8	*	9	*
DFA	Doctor of Fine Arts	2	*	1	*	5	*	4	*	2	*
JSD, SJD	Doctor of Juridical Science	91	0.2	84	0.2	54	0.1	57	0.1	48	0.1
STD	Doctor of Sacred Theology	1	*	2	*	2	*	2	*	3	*
JCD	Doctor of Canon Law	1	*	4	*	2	*	1	*	1	*

* = value between 0.00% and 0.05%.

Note(s):

Due to rounding, percentages may not sum to 100. All PhDs are considered research doctorates; other doctoral degrees included in the SED are from a small number of doctorate programs that had historical designations as research doctorates.

Source(s):

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

TABLE A-2

Survey response rates: 1970–2023

(Percent)

Year	Response 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
2020	92.2

TABLE A-2

Survey response rates: 1970–2023

(Percent)

Year	Response rate
2021	91.6
2022	91.7
2023	91.2

Note(s):

Rates for 1970–2022 include late responses. Rate for 2023 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-3

Survey item response rates: 2017–23

(Percent)

Survey item	Item description	Item source	2017	2018	2019	2020	2021	2022	2023
Demographics									
Age									
AGEDOC	Age at doctorate	A1, C6	94.6	95.1	94.8	94.4	93.4	93.3	93.5
BIRTHMO	Month of birth	C6 or Institution	93.9	94.6	94.4	93.9	92.8	92.7	93.0
BIRTHYR	Year of birth	C6 or Institution	94.5	95.1	94.8	94.4	93.4	93.3	93.5
Citizenship									
BIRTHPLCD	Place of birth	C5	94.4	95.2	95.3	95.1	94.1	94.2	93.7
CITIZ	Type of citizenship	C7 or Institution	95.4	96.1	96.3	95.9	95.1	95.4	95.0
CITIZPLCD	Country of citizenship	C8 or Institution; BIRTHPLCD or HSPLCD	96.4	96.9	97.0	96.7	95.9	96.4	95.8
Degree of difficulty									
DIFCOGN	Degree of difficulty concentrating, remembering, or making decisions	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
DIFHEAR	Degree of difficulty hearing	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
DIFLIFT	Degree of difficulty lifting	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
DIFSEE	Degree of difficulty seeing	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
DIFWALK	Degree of difficulty walking	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
DISABILITY2	Moderate or greater degree of difficulty in any domain	C12	88.1	88.8	88.6	88.2	87.1	87.6	87.2
Dependents and marital status									
MARITAL	Marital status	C2	88.3	89.1	88.7	88.5	87.9	88.4	88.0
DEPEND5	Number of dependents - ages 5 and younger	C3	88.2	89.0	88.6	88.5	87.8	88.4	87.9
DEPEND18	Number of dependents - ages 6-18	C3	88.1	89.0	88.6	88.5	87.8	88.4	87.9
DEPEND19	Number of dependents - ages 19 and older	C3	88.1	89.0	88.6	88.5	87.8	88.4	87.9
Parental education									
EDFATHER	Father/ male guardian's education	C4	87.9	87.6	86.6	86.3	85.2	85.9	82.6
EDMOTHER	Mother/ female guardian's education	C4	88.0	88.0	87.3	86.9	85.8	86.5	77.3
Race and ethnicity									
AMERIND	American Indian/ Alaska Native race indicator	C11	92.8	93.2	93.3	93.2	92.2	92.3	91.5
ASIAN	Asian race indicator	C11	92.8	93.2	93.3	93.2	92.2	92.3	91.5
BLACK	Black/ African American race indicator	C11	92.8	93.2	93.3	93.2	92.2	92.3	91.5
HAWAIIAN	Native Hawaiian/ Pacific Islander race indicator	C11	92.8	93.2	93.3	93.2	92.2	92.3	91.5
HISPANIC	Hispanic origin indicator	C10	93.7	94.7	94.7	94.6	93.6	93.4	93.0
WHITE	White race indicator	C11	92.8	93.2	93.3	93.2	92.2	92.3	91.5
RACE	Edited race/ ethnic code	C10, C11 or Institution	94.6	95.5	95.7	95.5	95.1	95.0	94.4
SEX	Sex of doctorate recipient	C1 or Institution	100.0	99.9	100.0	100.0	100.0	100.0	100.0
Doctoral field and institution									
DOCCODE	Type of doctorate	A1 or Institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDFIELD	Doctoral field – SED historical FOS code	PHDFIELDCIP	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDFIELDCIP	Doctorate field – SED-CIP code	A3 or Institution	na	na	na	na	100.0	100.0	100.0
PHDMONTH	Month of doctorate granted	A1 or Institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDFY	Fiscal (academic) year of doctorate	A1 or Institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDCY	Calendar year of doctorate	A1 or Institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDINST	Doctoral institution (IPEDS code)	Institution	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Educational background									
Bachelor's degrees									
BADEGRN	Number of bachelor's degrees received	A8	95.9	96.3	96.7	96.1	97.0	96.5	96.0
BASAME	Baccalaureate field same as doctorate	BAFIELDCIP, PHDFIELDCIP	na	na	na	na	91.9	91.6	91.1

TABLE A-3

Survey item response rates: 2017–23

(Percent)

Survey item	Item description	Item source	2017	2018	2019	2020	2021	2022	2023
BAFIELD	First baccalaureate field – SED historical FOS code	BAFIELD CIP	91.3	91.3	91.4	91.5	92.0	91.8	91.1
BAFIELD CIP	First baccalaureate field – SED-CIP code	A17 or Institution	na	na	na	na	92.0	91.8	91.1
BA2FIELD	Most recent baccalaureate degree field – SED historical FOS code	BA2FIELD CIP	88.6	89.7	89.5	89.3	89.8	90.6	90.3
BA2FIELD CIP	Most recent baccalaureate field – SED-CIP code	A17	na	na	na	na	89.8	90.6	90.3
BAINST	First baccalaureate institution (IPEDS code)	A16	94.5	95.0	96.0	95.2	95.5	95.6	95.3
BAPLCD	First baccalaureate institution location	A16, BAINST	94.5	95.0	96.0	95.2	95.4	95.5	95.3
BAHBCU	First baccalaureate institution HBCU indicator	A16, BAINST	94.5	95.0	96.0	95.2	95.4	95.5	95.2
BAPUBPRV	First baccalaureate institution public/private indicator	A16, BAINST	94.5	95.0	96.0	95.2	95.4	95.5	95.2
High school and community college									
JRCOLL	Community college attendance indicator	A10	91.2	91.9	91.9	92.0	91.0	90.9	90.3
HSPLCD	Place of high school	C9	88.2	88.7	88.6	94.9	93.9	94.0	93.6
Master's and professional degrees									
MADEGRN	Number of master's degrees received	A8	91.6	91.7	91.8	91.8	92.3	92.1	91.6
MASAME	Master's degree field same as doctorate	MAFIELD CIP, PHDFIELD CIP	na	na	na	na	91.3	91.1	90.6
MAFIELD	Most recent master's degree field – SED historical FOS code	MAFIELD CIP	90.5	91.2	91.3	91.3	91.9	91.8	91.1
MAFIELD CIP	Most recent master's degree field – SED-CIP code	A22	na	na	na	na	91.9	91.8	91.1
PROFEARN	Earned or earning a professional doctoral degree	A8, A9	83.7	89.5	89.4	89.2	88.8	89.5	89.3
Educational debt									
GDEBTLVL	Graduate debt level	A40	90.2	90.9	91.2	91.2	90.6	90.4	89.8
UDEBTLVL	Undergraduate debt level	A40	90.6	91.2	91.3	91.2	90.6	90.5	89.9
Postgraduation plans									
PDOCPLAN	Postgraduation plans	B2, B3, B10	85.3	88.0	88.3	88.4	87.6	87.8	88.7
PDOCSTAT	Postgraduation status	B2	90.8	91.4	91.5	91.4	90.9	90.7	90.1
PDPLCD	Postgraduation location	B1, B5, B12	92.4	93.1	93.2	92.8	92.5	91.9	91.6
PDUSFOR	Postgraduation location: U.S. or foreign	B1, B5, B12	92.4	93.1	93.2	92.8	92.5	91.9	91.6
PDREGION	Postgraduation U.S. region	B1, B5, B12	89.0	89.6	90.1	90.2	89.8	89.7	89.1
PDSAMEST	Postgraduation location in the same state as doctoral institution	B1, PHDINST	92.4	93.1	93.2	92.8	92.5	91.9	91.6
PDEMPLOY	Postgraduation employer type	B4, B11	85.3	87.0	87.3	87.3	86.8	86.8	87.7
PDEMPSECTOR	Postgraduation employment sector	PDEMPLOY	85.3	87.0	87.3	87.3	86.8	86.8	87.7
PDFACULTY	Employment in faculty position	B12, B13	na	73.8	85.8	86.3	86.8	85.4	83.2
PDSTDSUP	Postdoctoral study support	B7	84.3	87.4	86.4	84.9	85.1	86.4	88.2
PDWKPRIM	Edited primary work activity	B6, B14	87.5	88.9	88.8	88.5	88.2	88.5	88.0
PDWKSEC	Edited secondary work activity	B6, B14	84.8	88.3	88.1	88.0	87.8	88.2	82.6
SALARYV	Expected basic annual salary	B8, B15	82.3	82.1	82.4	82.7	81.4	81.8	82.7
Sources of financial support									
SRCEA	Source of financial support: Fellowship, scholarship	A38	88.5	89.3	89.0	88.8	88.4	89.0	88.5
SRCEB	Source of financial support: Dissertation/research grant	A38	88.6	89.3	89.1	88.9	88.5	89.1	88.5
SRCEC	Source of financial support: Teaching assistantship	A38	88.5	89.3	88.9	88.8	88.4	89.0	88.5
SRCED	Source of financial support: Research assistantship	A38	88.5	89.2	88.9	88.8	88.4	89.0	88.5

TABLE A-3

Survey item response rates: 2017–23

(Percent)

Survey item	Item description	Item source	2017	2018	2019	2020	2021	2022	2023
SRCEE	Source of financial support: Other assistantship	A38	88.6	89.3	89.1	88.9	88.5	89.1	88.5
SRCEF	Source of financial support: Traineeship	A38	88.6	89.4	89.1	88.9	88.5	89.1	88.5
SRCEG	Source of financial support: Internship, clinical residency	A38	88.6	89.3	89.1	88.9	88.5	89.1	88.5
SRCEH	Source of financial support: Loans (from any source)	A38	88.6	89.3	89.0	88.9	88.5	89.1	88.5
SRCEI	Source of financial support: Personal savings	A38	88.5	89.3	89.0	88.8	88.4	89.0	88.5
SRCEJ	Source of financial support: Personal earnings during graduate school	A38	88.5	89.3	89.0	88.8	88.5	89.0	88.5
SRCEK	Source of financial support: Spouse's, partner's, or family's earnings or savings	A38	88.5	89.3	89.0	88.8	88.4	89.1	88.5
SRCEL	Source of financial support: Employer reimbursement/ assistance	A38	88.6	89.3	89.1	88.9	88.5	89.1	88.5
SRCEM	Source of financial support: Foreign (non-U.S.) support	A38	88.6	89.4	89.1	88.9	88.5	89.1	88.5
SRCEN	Source of financial support: Other source of support	A38	88.6	89.4	89.1	88.9	88.5	89.1	88.5
SRCEPRIM	Primary source of financial support	A39	88.0	88.9	88.6	88.5	88.2	88.9	88.4
SRCESEC	Secondary source of financial support	A39	82.8	84.1	84.0	84.0	86.6	87.1	86.8
TUITREMS	Tuition remission - full or partial	A7	89.0	89.9	89.5	89.4	89.3	89.9	89.6
Time to degree									
BAYEAR	First baccalaureate year	A8	95.3	95.6	95.9	95.4	96.6	96.2	95.7
GEMONTH	Month of graduate program entry	A11	90.3	92.0	92.0	92.0	91.8	91.9	91.3
GEYEAR	Year of graduate program entry	A11	90.4	92.0	92.1	92.1	91.9	91.9	91.3
MAEYEAR	Entered most recent master's degree year	A8	88.9	89.8	89.6	89.5	90.1	90.7	90.3
TTDBAPHD	Total elapsed time from baccalaureate to doctorate	PHDMONTH, PHDCY, BAMONTH, BAYEAR	95.3	95.5	95.9	95.4	96.6	96.2	95.7
TTDDOC	Total elapsed time in doctorate	PHDMONTH, PHDCY, PHDEMONTH, PHDEYEAR	89.3	89.8	89.6	89.5	89.5	90.3	90.0
TTDGEPHD	Total elapsed time from graduate school entry to doctorate	PHDMONTH, PHDCY, GEMONTH, GEYEAR	90.3	92.0	92.1	92.1	91.9	91.9	91.3

na = not applicable; data either were not collected or derived in that year.

CIP = Classification of Instructional Program; FOS = field of study; HBCU = historically Black college and university; IPEDS = Integrated Postsecondary Education Data System.

Note(s):

Survey items listed above are those utilized in the data tables. Survey 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, consistent with American Association of Public Opinion Research (AAPOR) response rate calculation 3. For most data items, all doctorate recipient respondents are in the universe of eligible respondents. Institution-provided data may be used for some items when respondents do not provide the data; thus response rates for those items are higher than the survey response rate. The item source refers to the question numbers in the SED questionnaire for the most recent survey year in this table: <https://nces.nsf.gov/surveys/earned-doctorates-2023.pdf>

Source(s):

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

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Science and engineering	Area	see below
Agricultural sciences and natural resources	Broad	Most of 01, 03 (see below)
Agricultural, animal, plant, and veterinary sciences	Major	01
Agronomy and crop science	Detailed	01.1102
Animal sciences	Detailed	01.09
Food science and technology	Detailed	01.10
Plant sciences	Detailed	01.11 except 01.1102
Soil sciences	Detailed	01.12
Veterinary biomedical and clinical sciences	Detailed	01.80, 01.81, 01.83, 01.1302, 01.1399
Agricultural, animal, plant, and veterinary sciences nec	Detailed	all other 01 except 01.0103, 01.05, 01.82
Natural resources and conservation	Major	all 03 except 03.0204
Environmental science	Detailed	03.0104
Environmental/ natural resources management and policy	Detailed	all 03.02 except 03.0204
Forestry	Detailed	03.05
Natural resources conservation and research	Detailed	all 03.01 except 03.0104
Natural resources and conservation nec	Detailed	03.03, 03.06, 03.99
Biological and biomedical sciences	Broad	26
Biochemistry, biophysics, and molecular biology	Major	26.02
Biochemistry	Detailed	26.0202
Biochemistry and molecular biology	Detailed	26.0210
Biophysics	Detailed	26.0203, 26.0203b, 26.0206
Molecular biology	Detailed	26.0204
Biochemistry, biophysics, and molecular biology nec	Detailed	all other 26.02
Bioinformatics, biostatistics, and computational biology	Major	26.11
Bioinformatics	Detailed	26.1103
Biostatistics	Detailed	26.1102
Computational biology	Detailed	26.1104
Bioinformatics, biostatistics, and computational biology nec	Detailed	all other 26.11
Biological and biomedical sciences, general	Major	26.01
Biology/ biological sciences, general	Detailed	26.0101, 26.0101b
Biomedical sciences, general	Detailed	26.0102
Cell/ cellular biology and anatomy	Major	26.04
Cell/ cellular and molecular biology	Detailed	26.0406
Developmental biology and embryology	Detailed	26.0404
Cell/ cellular biology and anatomy nec	Detailed	all other 26.04
Ecology, evolutionary biology, and epidemiology	Major	26.13 except 26.1302
Ecology	Detailed	26.1301
Ecology and evolutionary biology	Detailed	26.1310, 26.1399b
Epidemiology	Detailed	26.1309
Epidemiology and biostatistics	Detailed	26.1311
Evolutionary biology	Detailed	26.1303
Ecology, evolutionary biology, and epidemiology nec	Detailed	all other 26.13 except 26.1302
Genetics and genomics	Major	26.08
Genetics, general	Detailed	26.0801
Genome sciences and genomics	Detailed	26.0807

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Human/ medical genetics	Detailed	26.0806
Molecular genetics	Detailed	26.0802
Genetics and genomics nec	Detailed	all other 26.08
Microbiology and immunology	Major	26.05
Immunology	Detailed	26.0507
Microbiology and immunology	Detailed	26.0508
Microbiology, general	Detailed	26.0502
Virology	Detailed	26.0504
Microbiology and immunology nec	Detailed	all other 26.05
Neurobiology and neurosciences	Major	26.15
Cognitive neuroscience	Detailed	26.1599b
Neurobiology	Detailed	26.1503, 26.1504
Neuroscience	Detailed	26.1501
Neurobiology and neurosciences nec	Detailed	all other 26.15
Pharmacology and toxicology	Major	26.10
Pharmacology	Detailed	26.1001
Toxicology	Detailed	26.1004, 26.1005, 26.1006
Pharmacology and toxicology nec	Detailed	all other 26.10
Physiology, oncology, and cancer biology	Major	26.09
Biomechanics	Detailed	26.0913
Exercise physiology and kinesiology	Detailed	26.0908
Oncology and cancer biology	Detailed	26.0911
Physiology, general	Detailed	26.0901
Physiology, oncology, and cancer biology nec	Detailed	all other 26.09
Biological and biomedical sciences, other	Major	all other 26
Botany and plant biology	Detailed	26.0301
Entomology	Detailed	26.0702, 26.0702b, 26.0702c
Plant pathology and phytopathology	Detailed	26.0305, 26.0305b
Plant physiology and biology nec	Detailed	all 26.03 except 26.0301, 26.0305
Zoology and animal biology	Detailed	all 26.07 except 26.0702
Biological and biomedical sciences nec	Detailed	26.1201, 26.1401, 26.9999
Computer and information sciences	Broad	11
Computer science	Major	11.07
Computer science	Detailed	11.07
Computer and information sciences, other	Major	all 11 except 11.07
Artificial intelligence	Detailed	11.0102
Computer and information sciences, general	Detailed	11.0101
Computer systems networking and telecommunications	Detailed	11.09, 11.10
Informatics and information technology	Detailed	11.0103, 11.0104, 11.0105
Information sciences/ studies	Detailed	11.04
Computer and information sciences nec	Detailed	11.0199, 11.02, 11.03, 11.05, 11.06, 11.08, 11.99
Engineering	Broad	14, most 15 (see below)
Aerospace, aeronautical, astronautical, and space engineering	Major	14.02, 15.0801, 49.0101, 14.1901b
Aerospace, aeronautical, astronautical, and space engineering, general	Detailed	14.0201
Mechanical and aerospace engineering	Detailed	14.1901b
Aerospace, aeronautical, astronautical, and space engineering, other	Detailed	14.02 except 14.0201, 15.0801, 49.0101
Biological, biomedical, and biosystems engineering	Major	14.05, 14.45, 15.0401

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Bioengineering and biomedical engineering	Detailed	14.0501
Biological and biosystems engineering and biomedical technology	Detailed	14.4501, 15.0401
Chemical and petroleum engineering	Major	14.07, 14.25, 14.32, 14.40–14.44
Chemical and biomolecular engineering	Detailed	14.0702
Chemical engineering	Detailed	14.0701
Petroleum engineering	Detailed	14.2501
Chemical and petroleum engineering nec	Detailed	14.0799, 14.3201, 14.40, 14.4314.44
Civil, environmental, and transportation engineering	Major	14.08, 14.1401, 14.3301, 14.3801, 14.3901
Civil engineering	Detailed	14.0801, 14.0899
Civil and environmental engineering	Detailed	14.0899b
Environmental/ environmental health engineering	Detailed	14.1401
Geotechnical and geoenvironmental engineering	Detailed	14.0802, 14.3901
Structural engineering	Detailed	14.0803
Transportation and highway engineering	Detailed	14.0804
Civil, environmental, and transportation engineering nec	Detailed	14.0401, 14.0805, 14.3301, 14.3801
Electrical and computer engineering	Major	14.09, 14.10, 14.47
Computer engineering	Detailed	14.09
Electrical and computer engineering	Detailed	14.4701
Electrical and electronics engineering	Detailed	14.1001
Electrical and computer engineering nec	Detailed	14.1003, 14.1004, 14.1099, 14.1099b
Engineering technologies	Major	all 15 except 15.0401, 15.0801, 15.1102, 15.15, 15.16
Electrical and electronic engineering technologies	Detailed	15.03
Electromechanical technologies	Detailed	15.04 except 15.0401
Environmental control technologies	Detailed	15.05
Engineering technologies nec	Detailed	all other 15 except 15.0801, 15.1102, 15.15, 15.16
Industrial engineering and operations research	Major	14.27, 14.35, 14.36, 14.37
Industrial engineering	Detailed	14.3501
Industrial and systems engineering	Detailed	14.3501b
Operations research	Detailed	14.37
Systems and manufacturing engineering	Detailed	14.2701, 14.3601
Materials and mining engineering	Major	14.0601, 14.18, 14.2001, 14.2101, 14.2801
Materials engineering	Detailed	14.1801
Materials science and engineering	Detailed	14.1801b
Materials and mining engineering nec	Detailed	14.0601, 14.2001, 14.2101, 14.2801
Mechanical engineering	Major	14.19, 14.41, 14.42
Mechanical engineering, general	Detailed	14.1901
Mechanical engineering nec	Detailed	14.4101, 14.4201
Engineering, other	Major	all other 14, 15.0801, 15.15, 15.16
Engineering mechanics, physics, and science	Detailed	14.11, 14.1201, 14.1301
Nanotechnology	Detailed	15.1601
Nuclear engineering	Detailed	14.2301
Engineering nec	Detailed	14.01, 14.0301, 14.2201, 14.2401, 14.3401, 14.48, 14.99, 15.15, 49.0101
Geosciences, atmospheric, and ocean sciences	Broad	40.04, 40.06, 15.1102, 26.1302, 30.32, 30.35, 30.38, 30.41
Geological and earth sciences	Major	40.06, 15.1102, 30.38, 30.4101
Geochemistry	Detailed	40.0602, 40.0606
Geology	Detailed	40.0601c
Geology/ earth science, general	Detailed	40.0601, 40.0601b
Geophysics and seismology	Detailed	40.0603
Hydrology and water resources science	Detailed	40.0605

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Geological and earth sciences nec	Detailed	40.0604, 40.0699, 15.1102, 30.38, 30.4101
Ocean, marine, and atmospheric science	Major	40.04, 40.0607, 26.1302, 30.32, 30.35
Atmospheric sciences and meteorology, general	Detailed	40.0401
Climatology, atmospheric chemistry/ physics	Detailed	40.0402, 40.0403
Marine biology and biological oceanography	Detailed	26.1302
Marine sciences	Detailed	30.32
Oceanography, chemical/ physical	Detailed	40.0607
Atmospheric sciences and meteorology nec	Detailed	40.0404, 40.0499, 40.0499b, 30.3501
Health sciences	Broad	51, 31.0505
Nursing and nursing science	Major	51.3203, 51.38, 51.39
Nursing education	Detailed	51.3203
Nursing science	Detailed	51.3808
Nursing specialties and practice	Detailed	51.38, 51.39
Pharmacy and pharmaceutical sciences	Major	51.20
Medicinal and pharmaceutical chemistry	Detailed	51.2004
Pharmaceutical sciences	Detailed	51.2010
Pharmacy, pharmaceutical sciences, and administration nec	Detailed	all other 51.20
Public health	Major	51.22
Environmental health	Detailed	51.2202
Health services research	Detailed	51.2211b
Health/ medical physics	Detailed	51.2205
Public health education and promotion	Detailed	51.2207
Public health, general	Detailed	51.2201
Public health nec	Detailed	all other 51.22
Health sciences, other	Major	all other 51, 31.0505
Communication disorders sciences	Detailed	51.02
Exercise science and kinesiology	Detailed	31.0505
Health sciences, general	Detailed	51.00
Marriage and family therapy/ counseling	Detailed	51.1505
Medical clinical sciences	Detailed	51.14
Medical, biomedical, and health informatics	Detailed	51.27
Mental health, counseling, and therapy services and sciences	Detailed	51.15
Rehabilitation and therapeutic sciences	Detailed	51.23
Health sciences nec	Detailed	all other 51
Mathematics and statistics	Broad	27, 52.1304
Applied mathematics	Major	27.03, 52.1304
Applied mathematics, general	Detailed	27.0301
Computational and applied mathematics	Detailed	27.0303, 27.0304
Applied mathematics nec	Detailed	all other 27.03, 52.1304
Mathematics	Major	27.01
Algebra and number theory	Detailed	27.0102
Mathematics, general	Detailed	27.0101, 27.0101b
Mathematics nec	Detailed	all other 27.01
Statistics	Major	27.05, 27.06, 27.9999
Applied statistics, general	Detailed	27.0601
Mathematics and statistics	Detailed	27.0502, 27.0503, 27.9999
Statistics	Detailed	27.0501
Statistics nec	Detailed	27.0599, 27.0599b
Multidisciplinary/ interdisciplinary sciences	Broad	see below

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Interdisciplinary computer sciences	Major	30.08, 30.16, 30.31, 30.39, 30.48, 30.9999b/d
Computer science and engineering	Detailed	30.9999d
Electrical engineering and computer science	Detailed	30.9999b
Interdisciplinary computer sciences nec	Detailed	30.0801, 30.1601, 30.3101, 30.3901, 30.4801
Multidisciplinary/ interdisciplinary sciences, other	Major	see below
Behavioral and cognitive sciences	Detailed	30.1701, 30.25
Computational science and engineering	Detailed	30.30
Data science and data analytics	Detailed	30.70 except 30.7099b, 30.71
Data mining and machine learning	Detailed	30.7099b
History/ philosophy of science, technology, and society	Detailed	30.1501, 54.0104
Nanoscience/ nanoscale science	Detailed	30.9999c
Nutrition sciences	Detailed	30.1901
Multidisciplinary/ interdisciplinary sciences nec	Detailed	30.01, 30.05, 30.06, 30.10, 30.18, 30.20, 30.21, 30.23, 30.26, 30.27, 30.33, 30.34, 30.37, 30.40, 30.42, 30.43, 30.44, 30.46, 30.49, 30.50, 30.51, 30.53, 30.9999e, 30.9999z
Physical sciences	Broad	all 40 except 40.04, 40.06
Astronomy and astrophysics	Major	40.02
Astronomy	Detailed	40.0201
Astrophysics	Detailed	40.0202
Astronomy and astrophysics nec	Detailed	40.0203, 40.0299, 40.0299b
Chemistry	Major	40.05
Analytical chemistry	Detailed	40.0502
Chemical biology	Detailed	40.0599b
Chemistry, general	Detailed	40.0501
Inorganic chemistry	Detailed	40.0503
Organic chemistry	Detailed	40.0504
Physical chemistry	Detailed	40.0506
Polymer chemistry	Detailed	40.0507
Theoretical and computational chemistry	Detailed	40.0511, 40.0511b
Chemistry nec	Detailed	all other 40.05
Materials sciences	Major	40.10
Materials sciences	Detailed	40.1001
Materials chemistry and materials sciences nec	Detailed	40.1002, 40.1099, 40.1099b
Physics	Major	40.01, 40.08, 40.11, 40.99
Applied physics	Detailed	40.0899b
Atomic/ molecular physics	Detailed	40.0802
Condensed matter and materials physics	Detailed	40.0808
Elementary particle physics	Detailed	40.0804
Nuclear physics	Detailed	40.0806
Optics/ optical sciences	Detailed	40.0807
Physics and astronomy	Detailed	40.1101
Physics, general	Detailed	40.0801
Plasma and high-temperature physics	Detailed	40.0805
Theoretical and mathematical physics	Detailed	40.0810
Physics and physical sciences nec	Detailed	all other 40.08, 40.0101, 40.99
Psychology	Broad	42, 19.0701, 19.0702, 19.0706
Clinical psychology	Major	42.2801, 42.2807
Clinical child psychology	Detailed	42.2807
Clinical psychology	Detailed	42.2801
Counseling and applied psychology	Major	all 42.28 except 42.2801, 42.2807

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Applied behavior analysis	Detailed	42.2814
Counseling psychology	Detailed	42.2803
Educational psychology	Detailed	42.2806, 42.2806b
Industrial and organizational psychology	Detailed	42.2804
School psychology	Detailed	42.2805, 42.2805b
Counseling and applied psychology nec	Detailed	all other 42.28
Research and experimental psychology	Major	42.27
Behavioral neuroscience	Detailed	42.2706
Cognitive psychology and psycholinguistics	Detailed	42.2701
Developmental and child psychology	Detailed	42.2703
Experimental psychology	Detailed	42.2704
Social psychology	Detailed	42.2707
Research and experimental psychology nec	Detailed	all other 42.27
Psychology, other	Major	42.01, 42.99, 19.0701, 19.0702, 19.0706
Human development	Detailed	19.0701, 19.0702, 19.0706
Psychology, general	Detailed	42.0101
Psychology nec	Detailed	42.9999
Social sciences	Broad	45, 01.0103, 03.0204, 05, 16.0102, 16.0105, 16.0199, 30.47, 43.0104, 44.05
Anthropology	Major	45.02
Anthropology, general	Detailed	45.0201
Cultural anthropology	Detailed	45.0204
Physical and biological anthropology	Detailed	45.0202
Anthropology nec	Detailed	all other 45.02
Area, ethnic, cultural, gender, and group studies	Major	05
Area studies	Detailed	05.01
Ethnic studies	Detailed	05.0200–05.0206
Area, ethnic, cultural, gender, and group studies nec	Detailed	05.0207–05.0212, 05.0299, 05.9999
Economics	Major	45.06, 01.0103, 03.0204
Agricultural economics	Detailed	01.0103
Applied economics	Detailed	45.0602
Development economics and international development	Detailed	45.0604
Econometrics and quantitative economics	Detailed	45.0603
Economics, general	Detailed	45.0601
Environmental/ natural resource economics	Detailed	45.0602b, 03.0204
Economics nec	Detailed	all other 45.06
Political science and government	Major	45.10
Political science and government, general	Detailed	45.1001
Political science and government nec	Detailed	all other 45.10
Public policy analysis	Major	44.05
Education policy analysis	Detailed	44.0502
Health policy analysis	Detailed	44.0503
Public policy analysis, general	Detailed	44.0501
Public policy nec	Detailed	all other 44.05
Sociology, demography, and population studies	Major	45.05, 45.11
Sociology, general	Detailed	45.1101
Sociology, demography, and population studies nec	Detailed	all other 45.11, 45.05
Social sciences, other	Major	all other 45, 16.0102, 16.0105, 16.0199, 30.11, 30.4701, 43.0104
Applied linguistics	Detailed	16.0105, 16.0199

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Archeology	Detailed	45.0301, 45.0301b
Criminology	Detailed	45.0401
Geography and cartography	Detailed	45.07
International relations and national security studies	Detailed	45.09
Linguistics	Detailed	16.0102
Social sciences nec	Detailed	45.01, 45.1201, 45.1301, 45.1501, 45.9999, 43.0104, 30.11, 30.4701
Non-science and engineering	Area	see below
Business	Broad	52, 49.0104
Business administration and management	Major	52.02, 49.0104
Business management and administration	Detailed	52.0201
Organizational leadership	Detailed	52.0213
Business administration and management nec	Detailed	all other 52.02, 49.0104
Business, other	Major	all other 52
Accounting and accounting-related	Detailed	52.03
Finance and financial management	Detailed	52.08
Management information systems	Detailed	52.12
Management sciences	Detailed	52.0601, 52.13
Marketing	Detailed	52.14
Organizational behavior studies	Detailed	52.1003
Business nec	Detailed	all other 52
Education	Broad	13
Education leadership and administration	Major	13.04
Educational leadership and administration, general	Detailed	13.0401
Higher education and community college administration	Detailed	13.0406, 13.0407
Education leadership and administration nec	Detailed	all other 13.04
Education research	Major	13.03, 13.05–13.07, 13.09, 13.11
Curriculum and instruction	Detailed	13.0301
Educational assessment, evaluation, and research methods	Detailed	13.0601, 13.0603, 13.0604, 13.0607, 13.0699
Educational/ instructional technology and media design	Detailed	13.05
Higher education evaluation and research	Detailed	13.0608, 13.0699b
Student counseling and personnel services	Detailed	13.11
Education research nec	Detailed	13.07, 13.09
Teacher education and teaching fields	Major	13.02, 13.12, 13.10, 13.13, 13.14
Adult, continuing, and workforce education and development	Detailed	13.1201, 13.1201b
Bilingual, multilingual, and multicultural education	Detailed	13.02
Mathematics teacher education	Detailed	13.1311
Music teacher education	Detailed	13.1312
Special education and teaching	Detailed	13.10
STEM educational methods	Detailed	13.1213
Teacher education, science and engineering	Detailed	13.1301, 13.1316, 13.1317, 13.1321–13.1323, 13.1329, 13.1332, 13.1335, 13.1337, 13.1338
Teacher education, specific levels and methods	Detailed	all 13.12 except 13.1201, 13.1201b, 13.1213
Teacher education, specific subject areas	Detailed	all other 13.13, 13.14
Education, other	Major	13.01, 13.15, 13.99
Education, general	Detailed	13.0101
Education nec	Detailed	13.15, 13.9999

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Humanities	Broad	23, 24.0103, 24.0199, 38, 39, 54, all 16 except 16.0102, 16.0105, 16.0199, 16.12
English language and literature, letters	Major	23
American literature (United States)	Detailed	23.1402, 23.1402b
Creative writing	Detailed	23.1302
English language and literature, general	Detailed	23.0101
English literature (British and Commonwealth)	Detailed	23.1404
Rhetoric and composition, and writing studies	Detailed	all other 23.13
English language and literature nec	Detailed	all other 23.14, 23.99
Foreign languages, literatures, and linguistics	Major	all 16 except 16.0102, 16.0105, 16.0199, 16.12
Comparative literature	Detailed	16.0104
Hispanic/ Latin American languages, literatures, and linguistics	Detailed	16.0908
Romance languages, literatures, and linguistics	Detailed	all other 16.09
Spanish language and literature	Detailed	16.0905, 16.0907
Foreign languages, literatures, and linguistics nec	Detailed	all other 16 except 16.0102, 16.0105, 16.0199, 16.12
History	Major	all 54 except 54.0104
American history (United States)	Detailed	54.0102, 54.0102b
European history	Detailed	54.0103
History, general	Detailed	54.0101
History, regional focus	Detailed	51.0106, 54.0107, 54.0199c/d/e
History nec	Detailed	54.0105, 54.0108, 54.0199
Philosophy and religious studies	Major	38
Philosophy	Detailed	38.01, 38.99
Religion/ religious studies	Detailed	38.0201
Philosophy and religious studies nec	Detailed	all other 38.02
Humanities, other	Major	24.0103, 24.0199, 39
Bible/ biblical studies	Detailed	39.0201
Humanities and humanistic studies	Detailed	24.0103, 24.0199
Theological and ministerial studies	Detailed	all other 39
Visual and performing arts	Broad	50
Music and performing arts	Major	50.03, 50.05, 50.09
Dance, drama, theatre arts and stagecraft	Detailed	50.03, 50.05
Music performance	Detailed	50.0903, 50.0906–50.0908, 50.0910, 50.0911, 50.0914–50.0916
Music theory and composition	Detailed	50.0904
Musicology and ethnomusicology	Detailed	50.0905
Music nec	Detailed	50.0901, 50.0902, 50.0912, 50.0913, 50.0917, 50.0999
Visual arts, media studies, and design	Major	50.01, 50.04, 50.06, 50.07, 50.10, 50.1101, 50.9999
Art history, criticism and conservation	Detailed	50.0703
Film, cinema, and media studies	Detailed	50.06
Visual arts, media studies, and design nec	Detailed	all other 50
Other non-science and engineering	Broad	see below
Communications and journalism	Major	09, 10
Applied communication, advertising, and public relations	Detailed	09.09
Communication and media studies	Detailed	09.0101, 09.0199
Communication, general	Detailed	09.0100, 09.0100d
Mass communication/ media studies	Detailed	09.0102
Communications and journalism nec	Detailed	09.0100b/c, 09.04, 09.07, 09.10, 09.99, 10
Multidisciplinary/ interdisciplinary studies	Major	see below
Classical and ancient studies	Detailed	30.22, 16.12

TABLE A-4

SED field of doctorate taxonomy, by SED-CIP series/codes: 2023

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Interdisciplinary leadership/leadership Studies	Detailed	30.9999f
Multidisciplinary/ interdisciplinary studies nec	Detailed	16.0199b, 24.01, 30.00, 30.12–30.14, 30.28, 30.29, 30.36, 30.45, 30.52, 30.9999, 30.9999g
Public administration and social services	Major	all 44 except 44.05
Public administration	Detailed	44.0201, 44.04, 44.9999b
Social work and human services	Detailed	44.00, 44.07, 44.9999
Non-science and engineering, other	Major	see below
Architecture and architectural studies	Detailed	all 04 except 04.0301
City/ urban, community, and regional planning	Detailed	04.0301
Family, consumer sciences and human sciences	Detailed	all 19 except 19.0701, 19.0702, 19.0706
Homeland security and protective services	Detailed	all 43 except 43.0104
Law, legal studies and research	Detailed	22
Parks, recreation, leisure, fitness, and sport studies and management	Detailed	all 31 except 31.0505
Other non-science and engineering nec	Detailed	01.05, 01.82, 25, 29

CIP = Classification of Instructional Programs; nec = not elsewhere classified; SED = Survey of Earned Doctorates; STEM = science, technology, engineering, and mathematics.

^a The field level provides information about how fields are nested together. There are 4 levels of field aggregation: area, broad field, major field, and detailed field.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. See the SED-CIP level crosswalk to the new broad, major and detailed fields in [table A-5](#); see the crosswalk to the trend taxonomy in [table A-6](#). For more information about the field taxonomy changes, see the "[Technical Notes](#)."

Source(s):

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

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
01.1102	Agronomy and Crop Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agronomy and crop science
01.0901	Animal Sciences, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0902	Agricultural Animal Breeding	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0903	Animal Health	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0904	Animal Nutrition	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0905	Dairy Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0906	Livestock Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0907	Poultry Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.0999	Animal Sciences, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Animal sciences
01.1001	Food Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1002	Food Technology and Processing	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1003	Brewing Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1004	Viticulture and Enology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1005	Zymology/ Fermentation Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1099	Food Science and Technology, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Food science and technology
01.1101	Plant Sciences, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1103	Horticultural Science	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1104	Agricultural and Horticultural Plant Breeding	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1105	Plant Protection and Integrated Pest Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1106	Range Science and Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1199	Plant Sciences, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Plant sciences
01.1201	Soil Science and Agronomy, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Soil sciences
01.1202	Soil Chemistry and Physics	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Soil sciences
01.1203	Soil Microbiology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Soil sciences
01.1203b	Soil Chemistry and Microbiology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Soil sciences
01.1299	Soil Sciences, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Soil sciences
01.1302	Pre-Veterinary Studies	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
01.1399	Agriculture/ Veterinary Preparatory Programs, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8001	Veterinary Medicine	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8101	Veterinary Sciences/ Veterinary Clinical Sciences, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8102	Comparative and Laboratory Animal Medicine	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8103	Large Animal/ Food Animal and Equine Surgery and Medicine	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8104	Small/ Companion Animal Surgery and Medicine	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8105	Veterinary Anatomy	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8106	Veterinary Infectious Diseases	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8107	Veterinary Microbiology and Immunobiology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8108	Veterinary Pathology and Pathobiology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8109	Veterinary Physiology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8110	Veterinary Preventive Medicine, Epidemiology, and Public Health	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8111	Veterinary Toxicology and Pharmacology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8199	Veterinary Biomedical and Clinical Sciences, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8301	Veterinary/ Animal Health Technology and Veterinary Assistant	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.8399	Veterinary/ Animal Health Technologies, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Veterinary biomedical and clinical sciences
01.0000	Agriculture, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0101	Agricultural Business and Management, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0102	Agribusiness/ Agricultural Business Operations	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0104	Farm/ Farm and Ranch Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0105	Agricultural/ Farm Supplies Retailing and Wholesaling	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0106	Agricultural Business Technology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0199	Agricultural Business and Management, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0201	Agricultural Mechanization, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0204	Agricultural Power Machinery Operation	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0205	Agricultural Mechanics and Equipment/ Machine Technology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0207	Irrigation Management Technology	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
01.0299	Agricultural Mechanization, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0301	Agricultural Production Operations, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0302	Animal/ Livestock Husbandry and Production	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0303	Aquaculture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0304	Crop Production	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0306	Dairy Husbandry and Production	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0307	Horse Husbandry/ Equine Science and Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0308	Agroecology and Sustainable Agriculture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0310	Apiculture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0399	Agricultural Production Operations, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0401	Agricultural and Food Products Processing	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0601	Applied Horticulture/ Horticulture Operations, General	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0603	Ornamental Horticulture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0604	Greenhouse Operations and Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0605	Landscaping and Groundskeeping	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0606	Plant Nursery Operations and Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0607	Turf and Turfgrass Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0608	Floriculture/ Floristry Operations and Management	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0609	Public Horticulture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0610	Urban and Community Horticulture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0699	Applied Horticulture/ Horticultural Business Services, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0701	International Agriculture	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0801	Agricultural and Extension Education Services	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0802	Agricultural Communication/ Journalism	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.0899	Agricultural Public Services, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
01.9999	Agricultural/ Animal/ Plant/ Veterinary Science and Related Fields, Other	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences nec
03.0104	Environmental Science	Agricultural sciences and natural resources	Natural resources and conservation	Environmental science

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
03.0201	Environmental/ Natural Resources Management and Policy, General	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0205	Water, Wetlands, and Marine Resources Management	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0206	Land Use Planning and Management/ Development	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0207	Environmental/ Natural Resource Recreation and Tourism	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0208	Environmental/ Natural Resources Law Enforcement and Protective Services	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0209	Energy and Environmental Policy	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0210	Bioenergy	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0299	Environmental/ Natural Resources Management and Policy, Other	Agricultural sciences and natural resources	Natural resources and conservation	Environmental/ natural resources management and policy
03.0501	Forestry, General	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0502	Forest Sciences and Biology	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0506	Forest Management/ Forest Resources Management	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0508	Urban Forestry	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0509	Wood Science and Wood Products/ Pulp and Paper Technology	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0510	Forest Resources Production and Management	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0511	Forest Technology	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0599	Forestry, Other	Agricultural sciences and natural resources	Natural resources and conservation	Forestry
03.0101	Natural Resources/ Conservation, General	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources conservation and research
03.0103	Environmental Studies	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources conservation and research
03.0199	Natural Resources Conservation and Research, Other	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources conservation and research
03.0301	Fishing and Fisheries Sciences and Management	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation nec
03.0601	Wildlife, Fish and Wildlands Science and Management	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation nec
03.9999	Natural Resources and Conservation, Other	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation nec
26.0202	Biochemistry	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry
26.0210	Biochemistry and Molecular Biology	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry and molecular biology

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
26.0203	Biophysics (BIOLOGY)	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biophysics
26.0203b	Biophysics (PHYSICS)	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biophysics
26.0206	Molecular Biophysics	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biophysics
26.0204	Molecular Biology	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Molecular biology
26.0205	Molecular Biochemistry	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry, biophysics, and molecular biology nec
26.0207	Structural Biology	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry, biophysics, and molecular biology nec
26.0208	Photobiology	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry, biophysics, and molecular biology nec
26.0209	Radiation Biology/ Radiobiology	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry, biophysics, and molecular biology nec
26.0299	Biochemistry, Biophysics and Molecular Biology, Other	Biological and biomedical sciences	Biochemistry, biophysics, and molecular biology	Biochemistry, biophysics, and molecular biology nec
26.1103	Bioinformatics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics
26.1102	Biostatistics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Biostatistics
26.1104	Computational Biology	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Computational biology
26.1101	Biometry/ Biometrics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics, biostatistics, and computational biology nec
26.1199	Biomathematics, Bioinformatics, and Computational Biology, Other	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics, biostatistics, and computational biology nec
26.0101	Biology/ Biological Sciences, General	Biological and biomedical sciences	Biological and biomedical sciences, general	Biology/ biological sciences, general
26.0101b	Integrative/ Interdisciplinary Biology, Biosciences, and Biomedical Sciences	Biological and biomedical sciences	Biological and biomedical sciences, general	Biology/ biological sciences, general
26.0102	Biomedical Sciences, General	Biological and biomedical sciences	Biological and biomedical sciences, general	Biomedical sciences, general
26.0406	Cell/ Cellular and Molecular Biology	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Cell/ cellular and molecular biology
26.0404	Developmental Biology and Embryology	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Developmental biology and embryology
26.0401	Cell/ Cellular Biology and Histology	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Cell/ cellular biology and anatomy nec
26.0403	Anatomy	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Cell/ cellular biology and anatomy nec
26.0407	Cell Biology and Anatomy	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Cell/ cellular biology and anatomy nec
26.0499	Cell/ Cellular Biology and Anatomical Sciences, Other	Biological and biomedical sciences	Cell/ cellular biology and anatomy	Cell/ cellular biology and anatomy nec
26.1301	Ecology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology
26.1310	Ecology and Evolutionary Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology and evolutionary biology

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
26.1399b	Ecology, Evolution, and Behavior	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology and evolutionary biology
26.1309	Epidemiology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Epidemiology
26.1311	Epidemiology and Biostatistics	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Epidemiology and biostatistics
26.1303	Evolutionary Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1304	Aquatic Biology/ Limnology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.1305	Environmental Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.1306	Population Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.1307	Conservation Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.1308	Systematic Biology/ Biological Systematics	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.1399	Ecology, Evolution, Systematics and Population Biology, Other	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology, evolutionary biology, and epidemiology nec
26.0801	Genetics, General	Biological and biomedical sciences	Genetics and genomics	Genetics, general
26.0807	Genome Sciences/ Genomics	Biological and biomedical sciences	Genetics and genomics	Genome sciences and genomics
26.0806	Human/ Medical Genetics	Biological and biomedical sciences	Genetics and genomics	Human/ medical genetics
26.0802	Molecular Genetics	Biological and biomedical sciences	Genetics and genomics	Molecular genetics
26.0803	Microbial and Eukaryotic Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics and genomics nec
26.0804	Animal Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics and genomics nec
26.0805	Plant Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics and genomics nec
26.0899	Genetics, Other	Biological and biomedical sciences	Genetics and genomics	Genetics and genomics nec
26.0507	Immunology	Biological and biomedical sciences	Microbiology and immunology	Immunology
26.0508	Microbiology and Immunology	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology
26.0502	Microbiology, General	Biological and biomedical sciences	Microbiology and immunology	Microbiology, general
26.0504	Virology	Biological and biomedical sciences	Microbiology and immunology	Virology
26.0503	Medical Microbiology and Bacteriology	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology nec
26.0505	Parasitology	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology nec
26.0506	Mycology	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology nec
26.0509	Infectious Disease and Global Health	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology nec
26.0599	Microbiological Sciences and Immunology, Other	Biological and biomedical sciences	Microbiology and immunology	Microbiology and immunology nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
26.1599b	Cognitive Neuroscience	Biological and biomedical sciences	Neurobiology and neurosciences	Cognitive neuroscience
26.1503	Neurobiology and Anatomy	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology
26.1504	Neurobiology and Behavior	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology
26.1501	Neuroscience	Biological and biomedical sciences	Neurobiology and neurosciences	Neuroscience
26.1502	Neuroanatomy	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology and neurosciences nec
26.1599	Neurobiology and Neurosciences, Other	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology and neurosciences nec
26.1599c	Computational Neuroscience	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology and neurosciences nec
26.1001	Pharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology
26.1004	Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1005	Molecular Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1006	Environmental Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1002	Molecular Pharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology and toxicology nec
26.1003	Neuropharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology and toxicology nec
26.1007	Pharmacology and Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology and toxicology nec
26.1099	Pharmacology and Toxicology, Other	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology and toxicology nec
26.0913	Biomechanics	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Biomechanics
26.0908	Exercise Physiology and Kinesiology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Exercise physiology and kinesiology
26.0911	Oncology and Cancer Biology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Oncology and cancer biology
26.0901	Physiology, General	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, general
26.0902	Molecular Physiology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0903	Cell Physiology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0904	Endocrinology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0905	Reproductive Biology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0907	Cardiovascular Science	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0909	Vision Science/ Physiological Optics	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0910	Pathology/ Experimental Pathology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0912	Aerospace Physiology and Medicine	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
26.0999	Physiology, Pathology, and Related Sciences, Other	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0999b	Pathobiology/ Integrative Pathobiology	Biological and biomedical sciences	Physiology, oncology, and cancer biology	Physiology, oncology, and cancer biology nec
26.0301	Botany/ Plant Biology	Biological and biomedical sciences	Biological and biomedical sciences, other	Botany and plant biology
26.0702	Entomology	Biological and biomedical sciences	Biological and biomedical sciences, other	Entomology
26.0702b	Nematology	Biological and biomedical sciences	Biological and biomedical sciences, other	Entomology
26.0702c	Entomology and Nematology	Biological and biomedical sciences	Biological and biomedical sciences, other	Entomology
26.0305	Plant Pathology/ Phytopathology (BIOLOGY)	Biological and biomedical sciences	Biological and biomedical sciences, other	Plant pathology and phytopathology
26.0305b	Plant Pathology/ Phytopathology (AGRICULTURAL SCIENCES)	Biological and biomedical sciences	Biological and biomedical sciences, other	Plant pathology and phytopathology
26.0307	Plant Physiology	Biological and biomedical sciences	Biological and biomedical sciences, other	Plant physiology and biology nec
26.0308	Plant Molecular Biology	Biological and biomedical sciences	Biological and biomedical sciences, other	Plant physiology and biology nec
26.0399	Botany/ Plant Biology, Other	Biological and biomedical sciences	Biological and biomedical sciences, other	Plant physiology and biology nec
26.0701	Zoology/ Animal Biology	Biological and biomedical sciences	Biological and biomedical sciences, other	Zoology and animal biology
26.0707	Animal Physiology	Biological and biomedical sciences	Biological and biomedical sciences, other	Zoology and animal biology
26.0708	Animal Behavior and Ethology	Biological and biomedical sciences	Biological and biomedical sciences, other	Zoology and animal biology
26.0709	Wildlife Biology	Biological and biomedical sciences	Biological and biomedical sciences, other	Zoology and animal biology
26.0799	Zoology/ Animal Biology, Other	Biological and biomedical sciences	Biological and biomedical sciences, other	Zoology and animal biology
26.1201	Biotechnology	Biological and biomedical sciences	Biological and biomedical sciences, other	Biological and biomedical sciences nec
26.1401	Molecular Medicine	Biological and biomedical sciences	Biological and biomedical sciences, other	Biological and biomedical sciences nec
26.9999	Biological and Biomedical Sciences, Other	Biological and biomedical sciences	Biological and biomedical sciences, other	Biological and biomedical sciences nec
11.0701	Computer Science	Computer and information sciences	Computer science	Computer science
11.0701b	Computing Theory and Practice (COMPUTER SCIENCE)	Computer and information sciences	Computer science	Computer science
11.0701c	Computing Theory and Practice (MATHEMATICS)	Computer and information sciences	Computer science	Computer science
11.0102	Artificial Intelligence	Computer and information sciences	Computer and information sciences, other	Artificial intelligence
11.0101	Computer and Information Sciences, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0901	Computer Systems Networking and Telecommunications	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.0902	Cloud Computing	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.0999	Computer Systems Networking and Telecommunications, Other	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
11.1001	Network and System Administration/ Administrator	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1002	System, Networking, and LAN/ WAN Management/ Manager	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1003	Computer and Information Systems Security/ Auditing/ Information Assurance	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1004	Web/ Multimedia Management and Webmaster	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1005	Information Technology Project Management	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1006	Computer Support Specialist	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.1099	Computer/ Information Technology Services Administration and Management, Other	Computer and information sciences	Computer and information sciences, other	Computer systems networking and telecommunications
11.0103	Information Technology	Computer and information sciences	Computer and information sciences, other	Informatics and information technology
11.0104	Informatics	Computer and information sciences	Computer and information sciences, other	Informatics and information technology
11.0105	Human-Centered Technology Design	Computer and information sciences	Computer and information sciences, other	Informatics and information technology
11.0401	Information Science/ Studies	Computer and information sciences	Computer and information sciences, other	Information sciences/ studies
11.0199	Computer and Information Sciences, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0201	Computer Programming/ Programmer, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0202	Computer Programming, Specific Applications	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0203	Computer Programming, Vendor/ Product Certification	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0204	Computer Game Programming	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0205	Computer Programming, Specific Platforms	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0299	Computer Programming, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0301	Data Processing and Data Processing Technology	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0501	Computer Systems Analysis/ Analyst	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0601	Data Entry/ Microcomputer Applications, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0602	Word Processing	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0699	Data Entry/ Microcomputer Applications, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0801	Web Page, Digital/ Multimedia and Information Resources Design	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0802	Data Modeling/ Warehousing and Database Administration	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0803	Computer Graphics	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.0804	Modeling, Virtual Environments and Simulation	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
11.0899	Computer Software and Media Applications, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
11.9999	Computer and Information Sciences and Support Services, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences nec
14.0201	Aerospace, Aeronautical, and Astronautical/ Space Engineering, General	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering, general
14.1901b	Mechanical and Aerospace Engineering	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Mechanical and aerospace engineering
14.0202	Astronautical Engineering	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering nec
14.0202b	Aeronautics and Astronautics	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering nec
14.0299	Aerospace, Aeronautical, and Astronautical/ Space Engineering, Other	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering nec
15.0801	Aeronautical/ Aerospace Engineering Technology	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering nec
49.0101	Aeronautics/ Aviation/ Aerospace Science and Technology, General	Engineering	Aerospace, aeronautical, astronautical, and space engineering	Aerospace, aeronautical, astronautical, and space engineering nec
14.0501	Bioengineering and Biomedical Engineering	Engineering	Biological, biomedical, and biosystems engineering	Bioengineering and biomedical engineering
14.4501	Biological/ Biosystems Engineering	Engineering	Biological, biomedical, and biosystems engineering	Biological/ biosystems engineering and biomedical technology
15.0401	Biomedical Technology	Engineering	Biological, biomedical, and biosystems engineering	Biological/ biosystems engineering and biomedical technology
14.0702	Chemical and Biomolecular Engineering	Engineering	Chemical and petroleum engineering	Chemical and biomolecular engineering
14.0701	Chemical Engineering	Engineering	Chemical and petroleum engineering	Chemical engineering
14.2501	Petroleum Engineering	Engineering	Chemical and petroleum engineering	Petroleum engineering
14.0799	Chemical Engineering, Other	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.3201	Polymer/ Plastics Engineering	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.4001	Paper Science and Engineering	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.4301	Biochemical Engineering	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.4401	Engineering Chemistry	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.0801	Civil Engineering, General	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0899	Civil Engineering, Other	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0899b	Civil and Environmental Engineering	Engineering	Civil, environmental, and transportation engineering	Civil and environmental engineering

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
14.1401	Environmental/ Environmental Health Engineering	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
14.0802	Geotechnical and Geoenvironmental Engineering	Engineering	Civil, environmental, and transportation engineering	Geotechnical and geoenvironmental engineering
14.3901	Geological/ Geophysical Engineering	Engineering	Civil, environmental, and transportation engineering	Geotechnical and geoenvironmental engineering
14.0803	Structural Engineering	Engineering	Civil, environmental, and transportation engineering	Structural engineering
14.0804	Transportation and Highway Engineering	Engineering	Civil, environmental, and transportation engineering	Transportation and highway engineering
14.0401	Architectural Engineering	Engineering	Civil, environmental, and transportation engineering	Civil, environmental, and transportation engineering nec
14.0805	Water Resources Engineering	Engineering	Civil, environmental, and transportation engineering	Civil, environmental, and transportation engineering nec
14.3301	Construction Engineering	Engineering	Civil, environmental, and transportation engineering	Civil, environmental, and transportation engineering nec
14.3801	Surveying Engineering	Engineering	Civil, environmental, and transportation engineering	Civil, environmental, and transportation engineering nec
14.0901	Computer Engineering, General	Engineering	Electrical and computer engineering	Computer engineering
14.0902	Computer Hardware Engineering	Engineering	Electrical and computer engineering	Computer engineering
14.0903	Computer Software Engineering	Engineering	Electrical and computer engineering	Computer engineering
14.0999	Computer Engineering, Other	Engineering	Electrical and computer engineering	Computer engineering
14.4701	Electrical and Computer Engineering	Engineering	Electrical and computer engineering	Electrical and computer engineering
14.1001	Electrical and Electronics Engineering	Engineering	Electrical and computer engineering	Electrical and electronics engineering
14.1003	Laser and Optical Engineering	Engineering	Electrical and computer engineering	Electrical and computer engineering nec
14.1004	Telecommunications Engineering	Engineering	Electrical and computer engineering	Electrical and computer engineering nec
14.1099	Electrical, Electronics, and Communications Engineering, Other	Engineering	Electrical and computer engineering	Electrical and computer engineering nec
14.1099b	Communications Engineering	Engineering	Electrical and computer engineering	Electrical and computer engineering nec
15.0303	Electrical, Electronic, and Communications Engineering Technology	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0304	Laser and Optical Technology	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0305	Telecommunications Technology	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0306	Integrated Circuit Design Technology	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0307	Audio Engineering Technology	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0399	Electrical/ Electronic Engineering Technologies, Other	Engineering	Engineering technologies	Electrical and electronic engineering technologies
15.0403	Electromechanical/ Electromechanical Engineering Technology	Engineering	Engineering technologies	Electromechanical technologies
15.0404	Instrumentation Technology	Engineering	Engineering technologies	Electromechanical technologies
15.0405	Robotics Technology	Engineering	Engineering technologies	Electromechanical technologies

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
15.0406	Automation Engineer Technology	Engineering	Engineering technologies	Electromechanical technologies
15.0407	Mechatronics, Robotics, and Automation Engineering Technology	Engineering	Engineering technologies	Electromechanical technologies
15.0499	Electromechanical Technologies, Other	Engineering	Engineering technologies	Electromechanical technologies
15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology	Engineering	Engineering technologies	Environmental control technologies
15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology	Engineering	Engineering technologies	Environmental control technologies
15.0507	Environmental/ Environmental Engineering Technology	Engineering	Engineering technologies	Environmental control technologies
15.0508	Hazardous Materials Management and Waste Technology	Engineering	Engineering technologies	Environmental control technologies
15.0599	Environmental Control Technologies, Other	Engineering	Engineering technologies	Environmental control technologies
15.0000	Engineering Technologies, General	Engineering	Engineering technologies	Engineering technologies nec
15.0001	Applied Engineering Technologies	Engineering	Engineering technologies	Engineering technologies nec
15.0101	Architectural Engineering Technologies	Engineering	Engineering technologies	Engineering technologies nec
15.0201	Civil Engineering Technologies	Engineering	Engineering technologies	Engineering technologies nec
15.0607	Plastics and Polymer Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0611	Metallurgical Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0612	Industrial Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0613	Manufacturing Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0614	Welding Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0615	Chemical Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0616	Semiconductor Manufacturing Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0617	Composite Materials Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0699	Industrial Production Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.0701	Occupational Safety and Health Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0702	Quality Control Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0703	Industrial Safety Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0704	Hazardous Materials Information Systems Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0705	Process Safety Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0799	Quality Control and Safety Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.0803	Automotive Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0805	Mechanical/ Mechanical Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0806	Marine Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0807	Motorsports Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0899	Mechanical Engineering Related Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.0901	Mining Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0903	Petroleum Technology	Engineering	Engineering technologies	Engineering technologies nec
15.0999	Mining and Petroleum Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.1001	Construction Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1103	Hydraulics and Fluid Power Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1199	Engineering-Related Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
15.1201	Computer Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1202	Computer/ Computer Systems Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1203	Computer Hardware Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1204	Computer Software Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1299	Computer Engineering Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.1301	Drafting and Design Technology, General	Engineering	Engineering technologies	Engineering technologies nec
15.1302	CAD/ CADD Drafting and/ or Design Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1303	Architectural Drafting and Architectural CAD/ CADD	Engineering	Engineering technologies	Engineering technologies nec
15.1304	Civil Drafting and Civil Engineering CAD/ CADD	Engineering	Engineering technologies	Engineering technologies nec
15.1305	Electrical/ Electronics Drafting and Electrical/ Electronics CAD/ CADD	Engineering	Engineering technologies	Engineering technologies nec
15.1306	Mechanical Drafting and Mechanical Drafting CAD/ CADD	Engineering	Engineering technologies	Engineering technologies nec
15.1307	3-D Modeling and Design Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1399	Drafting/ Design Engineering Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.1401	Nuclear Engineering Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1701	Energy Systems Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1702	Power Plant Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1703	Solar Energy Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1704	Wind Energy Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1705	Hydroelectric Energy Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1706	Geothermal Energy Technology	Engineering	Engineering technologies	Engineering technologies nec
15.1799	Energy Systems Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
15.9999	Engineering/ Engineering-Related Technologies, Other	Engineering	Engineering technologies	Engineering technologies nec
14.3501	Industrial Engineering	Engineering	Industrial engineering and operations research	Industrial engineering
14.3501b	Industrial and Systems Engineering	Engineering	Industrial engineering and operations research	Industrial and systems engineering
14.3701	Operations Research (ENGINEERING)	Engineering	Industrial engineering and operations research	Operations research
14.3701b	Operations Research (MATHEMATICS)	Engineering	Industrial engineering and operations research	Operations research
14.3701c	Operations Research (BUSINESS)	Engineering	Industrial engineering and operations research	Operations research
14.2701	Systems Engineering	Engineering	Industrial engineering and operations research	Systems and manufacturing engineering
14.3601	Manufacturing Engineering	Engineering	Industrial engineering and operations research	Systems and manufacturing engineering
14.1801	Materials Engineering	Engineering	Materials and mining engineering	Materials engineering
14.1801b	Materials Science and Engineering	Engineering	Materials and mining engineering	Materials science and engineering
14.0601	Ceramic Sciences and Engineering	Engineering	Materials and mining engineering	Materials and mining engineering nec
14.2001	Metallurgical Engineering	Engineering	Materials and mining engineering	Materials and mining engineering nec

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
14.2101	Mining and Mineral Engineering	Engineering	Materials and mining engineering	Materials and mining engineering nec
14.2801	Textile Sciences and Engineering	Engineering	Materials and mining engineering	Materials and mining engineering nec
14.1901	Mechanical Engineering	Engineering	Mechanical engineering	Mechanical engineering, general
14.4101	Electromechanical Engineering	Engineering	Mechanical engineering	Mechanical engineering nec
14.4201	Mechatronics, Robotics, and Automation Engineering	Engineering	Mechanical engineering	Mechanical engineering nec
14.1101	Engineering Mechanics	Engineering	Engineering, other	Engineering mechanics, physics, and science
14.1101b	Computational Mechanics	Engineering	Engineering, other	Engineering mechanics, physics, and science
14.1201	Engineering Physics	Engineering	Engineering, other	Engineering mechanics, physics, and science
14.1301	Engineering Science	Engineering	Engineering, other	Engineering mechanics, physics, and science
15.1601	Nanotechnology	Engineering	Engineering, other	Nanotechnology
14.2301	Nuclear Engineering	Engineering	Engineering, other	Nuclear engineering
14.0101	Engineering, General	Engineering	Engineering, other	Engineering nec
14.0102	Pre-Engineering	Engineering	Engineering, other	Engineering nec
14.0103	Applied Engineering	Engineering	Engineering, other	Engineering nec
14.0301	Agricultural Engineering	Engineering	Engineering, other	Engineering nec
14.2201	Naval Architecture and Marine Engineering	Engineering	Engineering, other	Engineering nec
14.2401	Ocean Engineering	Engineering	Engineering, other	Engineering nec
14.3401	Forest Engineering	Engineering	Engineering, other	Engineering nec
14.4801	Energy Systems Engineering, General	Engineering	Engineering, other	Engineering nec
14.4802	Power Plant Engineering	Engineering	Engineering, other	Engineering nec
14.4899	Energy Systems Engineering, Other	Engineering	Engineering, other	Engineering nec
14.9999	Engineering, Other	Engineering	Engineering, other	Engineering nec
14.9999b	Engineering Education	Engineering	Engineering, other	Engineering nec
14.9999c	Engineering Management and Administration	Engineering	Engineering, other	Engineering nec
14.9999d	Computational Engineering	Engineering	Engineering, other	Engineering nec
14.9999e	Nanoengineering/ Nanoscale Engineering	Engineering	Engineering, other	Engineering nec
15.1501	Engineering/ Industrial Management	Engineering	Engineering, other	Engineering nec
15.1502	Engineering Design	Engineering	Engineering, other	Engineering nec
15.1503	Packaging Science	Engineering	Engineering, other	Engineering nec
15.1599	Engineering-Related Fields, Other	Engineering	Engineering, other	Engineering nec
40.0602	Geochemistry	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geochemistry
40.0606	Geochemistry and Petrology	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geochemistry
40.0601c	Geology	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geology
40.0601	Geology/ Earth Science, General	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geology/ earth science, general

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
40.0601b	Earth Science	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geology/ earth science, general
40.0603	Geophysics and Seismology	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geophysics and seismology
40.0605	Hydrology and Water Resources Science	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Hydrology and water resources science
15.1102	Surveying Technology/ Surveying	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
30.3801	Earth Systems Science	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
30.3801b	Earth & Environmental Sciences	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
30.4101	Environmental Geosciences	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
40.0604	Paleontology	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
40.0699	Geological and Earth Sciences/ Geosciences, Other	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
40.0699b	Geomorphology and Glacial Geology	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
40.0699c	Stratigraphy and Sedimentation	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geological and earth sciences nec
40.0401	Atmospheric Sciences and Meteorology, General	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric sciences and meteorology, general
30.3501	Climate Science	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric sciences and meteorology nec
40.0404	Meteorology	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric sciences and meteorology nec
40.0499	Atmospheric Sciences and Meteorology, Other	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric sciences and meteorology nec
40.0499b	Planetary Sciences	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric sciences and meteorology nec
40.0402	Atmospheric Chemistry and Climatology	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Climatology, atmospheric chemistry/ physics
40.0403	Atmospheric Physics and Dynamics	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Climatology, atmospheric chemistry/ physics
26.1302	Marine Biology and Biological Oceanography	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine biology and biological oceanography

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
30.3201	Marine Sciences	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine sciences
30.3201b	Ocean/ Marine Science, Other	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine sciences
40.0607	Oceanography, Chemical and Physical	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Oceanography, chemical/ physical
51.3203	Nursing Education	Health sciences	Nursing and nursing science	Nursing education
51.3808	Nursing Science	Health sciences	Nursing and nursing science	Nursing science
51.3801	Registered Nursing/ Registered Nurse	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3802	Nursing Administration	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3803	Adult Health Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3804	Nurse Anesthetist	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3805	Family Practice Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3806	Maternal/ Child Health and Neonatal Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3807	Nurse Midwife/ Nursing Midwifery	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3809	Pediatric Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3810	Psychiatric/ Mental Health Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3811	Public Health/ Community Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3812	Perioperative/ Operating Room and Surgical Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3813	Clinical Nurse Specialist	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3814	Critical Care Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3815	Occupational and Environmental Health Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3816	Emergency Room/ Trauma Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3818	Nursing Practice	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3819	Palliative Care Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3820	Clinical Nurse Leader	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3821	Geriatric Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3822	Women's Health Nurse/ Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3824	Forensic Nursing	Health sciences	Nursing and nursing science	Nursing specialties and practice

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.3899	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3901	Licensed Practical/ Vocational Nurse Training	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3902	Nursing Assistant/ Aide and Patient Care Assistant/ Aide	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other	Health sciences	Nursing and nursing science	Nursing specialties and practice
51.2004	Medicinal and Pharmaceutical Chemistry	Health sciences	Pharmacy and pharmaceutical sciences	Medicinal and pharmaceutical chemistry
51.2010	Pharmaceutical Sciences	Health sciences	Pharmacy and pharmaceutical sciences	Pharmaceutical sciences
51.2001	Pharmacy	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2002	Pharmacy Administration and Pharmacy Policy and Regulatory Affairs	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2003	Pharmaceutics and Drug Design	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2005	Natural Products Chemistry and Pharmacognosy	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2006	Clinical and Industrial Drug Development	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2007	Pharmacoeconomics/ Pharmaceutical Economics	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2008	Clinical, Hospital, and Managed Care Pharmacy	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2009	Industrial and Physical Pharmacy and Cosmetic Sciences	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2011	Pharmaceutical Marketing and Management	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2099	Pharmacy, Pharmaceutical Sciences, and Administration, Other	Health sciences	Pharmacy and pharmaceutical sciences	Pharmacy, pharmaceutical sciences, and administration nec
51.2202	Environmental Health	Health sciences	Public health	Environmental health
51.2211b	Health Services Research	Health sciences	Public health	Health services research
51.2205	Health/ Medical Physics	Health sciences	Public health	Health/ medical physics
51.2207	Public Health Education and Promotion	Health sciences	Public health	Public health education and promotion
51.2201	Public Health, General	Health sciences	Public health	Public health, general
51.2206	Occupational Health and Industrial Hygiene	Health sciences	Public health	Public health nec
51.2208	Community Health and Preventive Medicine	Health sciences	Public health	Public health nec
51.2209	Maternal and Child Health	Health sciences	Public health	Public health nec
51.2210	International Public Health/ International Health	Health sciences	Public health	Public health nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.2211	Health Services Administration	Health sciences	Public health	Public health nec
51.2212	Behavioral Aspects of Health	Health sciences	Public health	Public health nec
51.2213	Patient Safety and Healthcare Quality	Health sciences	Public health	Public health nec
51.2214	Public Health Genetics	Health sciences	Public health	Public health nec
51.2299	Public Health, Other	Health sciences	Public health	Public health nec
51.0201	Communication Sciences and Disorders, General	Health sciences	Health sciences, other	Communication disorders sciences
51.0202	Audiology/ Audiologist	Health sciences	Health sciences, other	Communication disorders sciences
51.0203	Speech-Language Pathology/ Pathologist	Health sciences	Health sciences, other	Communication disorders sciences
51.0204	Audiology/ Audiologist and Speech-Language Pathology/ Pathologist	Health sciences	Health sciences, other	Communication disorders sciences
51.0299	Communication Disorders Sciences and Services, Other	Health sciences	Health sciences, other	Communication disorders sciences
31.0505	Exercise Science and Kinesiology	Health sciences	Health sciences, other	Exercise science and kinesiology
51.0000	Health Services/ Allied Health/ Health Sciences, General	Health sciences	Health sciences, other	Health sciences, general
51.0000b	Health sciences, general	Health sciences	Health sciences, other	Health sciences, general
51.0001	Health and Wellness, General	Health sciences	Health sciences, other	Health sciences, general
51.1505	Marriage and Family Therapy/ Counseling	Health sciences	Health sciences, other	Marriage and family therapy/ counseling
51.1401	Medical Science/ Scientist	Health sciences	Health sciences, other	Medical clinical sciences
51.1402	Clinical and Translational Science	Health sciences	Health sciences, other	Medical clinical sciences
51.1403	Pain Management	Health sciences	Health sciences, other	Medical clinical sciences
51.1404	Temporomandibular Disorders and Orofacial Pain	Health sciences	Health sciences, other	Medical clinical sciences
51.1405	Tropical Medicine	Health sciences	Health sciences, other	Medical clinical sciences
51.1499	Medical Clinical Sciences/ Graduate Medical Studies, Other	Health sciences	Health sciences, other	Medical clinical sciences
51.1499b	Clinical Investigation and Sciences	Health sciences	Health sciences, other	Medical clinical sciences
51.2703	Medical Illustration/ Medical Illustrator	Health sciences	Health sciences, other	Medical, biomedical, and health informatics
51.2706	Medical Informatics	Health sciences	Health sciences, other	Medical, biomedical, and health informatics
51.2706b	Biomedical and Health Informatics	Health sciences	Health sciences, other	Medical, biomedical, and health informatics
51.2799	Medical Illustration and Informatics, Other	Health sciences	Health sciences, other	Medical, biomedical, and health informatics
51.1501	Substance Abuse/ Addiction Counseling	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1502	Psychiatric/ Mental Health Services Technician	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1503	Clinical/ Medical Social Work	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1504	Community Health Services/ Liaison/ Counseling	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1506	Clinical Pastoral Counseling/ Patient Counseling	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1507	Psychoanalysis and Psychotherapy	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1508	Mental Health Counseling/ Counselor	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.1509	Genetic Counseling/ Counselor	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1510	Infant/ Toddler Mental Health Services	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1511	Medical Family Therapy/ Therapist	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1512	Hospice and Palliative Care	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1513	Trauma Counseling	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.1599	Mental and Social Health Services and Allied Professions, Other	Health sciences	Health sciences, other	Mental health, counseling, and therapy services and sciences
51.2300	Rehabilitation and Therapeutic Professions, General	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2301	Art Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2302	Dance Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2305	Music Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2306	Occupational Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2307	Orthotist/ Prosthetist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2308	Physical Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2309	Therapeutic Recreation/ Recreational Therapy	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2310	Vocational Rehabilitation Counseling/ Counselor	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2311	Kinesiotherapy/ Kinesiotherapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2312	Assistive/ Augmentative Technology and Rehabilitation Engineering	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2313	Animal-Assisted Therapy	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2314	Rehabilitation Science	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2315	Drama Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2316	Horticulture Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2317	Play Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.2399	Rehabilitation and Therapeutic Professions, Other	Health sciences	Health sciences, other	Rehabilitation and therapeutic sciences
51.0101	Chiropractic	Health sciences	Health sciences, other	Health sciences nec
51.0401	Dentistry	Health sciences	Health sciences, other	Health sciences nec
51.0501	Dental Clinical Sciences, General	Health sciences	Health sciences, other	Health sciences nec
51.0502	Advanced General Dentistry	Health sciences	Health sciences, other	Health sciences nec
51.0503	Oral Biology and Oral and Maxillofacial Pathology	Health sciences	Health sciences, other	Health sciences nec
51.0504	Dental Public Health and Education	Health sciences	Health sciences, other	Health sciences nec
51.0505	Dental Materials	Health sciences	Health sciences, other	Health sciences nec
51.0506	Endodontics/ Endodontology	Health sciences	Health sciences, other	Health sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.0507	Oral/ Maxillofacial Surgery	Health sciences	Health sciences, other	Health sciences nec
51.0508	Orthodontics/ Orthodontology	Health sciences	Health sciences, other	Health sciences nec
51.0509	Pediatric Dentistry/ Pedodontics	Health sciences	Health sciences, other	Health sciences nec
51.0510	Periodontics/ Periodontology	Health sciences	Health sciences, other	Health sciences nec
51.0511	Prosthodontics/ Prosthodontology	Health sciences	Health sciences, other	Health sciences nec
51.0512	Digital Dentistry	Health sciences	Health sciences, other	Health sciences nec
51.0513	Geriatric Dentistry	Health sciences	Health sciences, other	Health sciences nec
51.0514	Implantology/ Implant Dentistry	Health sciences	Health sciences, other	Health sciences nec
51.0599	Advanced/ Graduate Dentistry and Oral Sciences, Other	Health sciences	Health sciences, other	Health sciences nec
51.0601	Dental Assisting/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0602	Dental Hygiene/ Hygienist	Health sciences	Health sciences, other	Health sciences nec
51.0603	Dental Laboratory Technology	Health sciences	Health sciences, other	Health sciences nec
51.0699	Dental Services and Allied Professions, Other	Health sciences	Health sciences, other	Health sciences nec
51.0701	Health/ Health Care Administration/ Management	Health sciences	Health sciences, other	Health sciences nec
51.0702	Hospital and Health Care Facilities Administration/ Management	Health sciences	Health sciences, other	Health sciences nec
51.0703	Health Unit Coordinator/ Ward Clerk	Health sciences	Health sciences, other	Health sciences nec
51.0704	Health Unit Manager/ Ward Supervisor	Health sciences	Health sciences, other	Health sciences nec
51.0705	Medical Office Management/ Administration	Health sciences	Health sciences, other	Health sciences nec
51.0706	Health Information/ Medical Records Administration/ Administrator	Health sciences	Health sciences, other	Health sciences nec
51.0707	Health Information/ Medical Records Technology	Health sciences	Health sciences, other	Health sciences nec
51.0708	Medical Transcription/ Transcriptionist	Health sciences	Health sciences, other	Health sciences nec
51.0709	Medical Office Computer Specialist/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0710	Medical Office Assistant/ Specialist	Health sciences	Health sciences, other	Health sciences nec
51.0711	Medical/ Health Management and Clinical Assistant/ Specialist	Health sciences	Health sciences, other	Health sciences nec
51.0712	Medical Reception/ Receptionist	Health sciences	Health sciences, other	Health sciences nec
51.0713	Medical Insurance Coding Specialist/ Coder	Health sciences	Health sciences, other	Health sciences nec
51.0714	Medical Insurance Specialist/ Medical Biller	Health sciences	Health sciences, other	Health sciences nec
51.0715	Health/ Medical Claims Examiner	Health sciences	Health sciences, other	Health sciences nec
51.0716	Medical Administrative/ Executive Assistant and Medical Secretary	Health sciences	Health sciences, other	Health sciences nec
51.0717	Medical Staff Services Technology	Health sciences	Health sciences, other	Health sciences nec
51.0718	Long Term Care Administration/ Management	Health sciences	Health sciences, other	Health sciences nec
51.0719	Clinical Research Coordinator	Health sciences	Health sciences, other	Health sciences nec
51.0720	Regulatory Science/ Affairs	Health sciences	Health sciences, other	Health sciences nec
51.0721	Disease Registry Data Management	Health sciences	Health sciences, other	Health sciences nec
51.0722	Healthcare Innovation	Health sciences	Health sciences, other	Health sciences nec
51.0723	Healthcare Information Privacy Assurance and Security	Health sciences	Health sciences, other	Health sciences nec
51.0799	Health and Medical Administrative Services, Other	Health sciences	Health sciences, other	Health sciences nec
51.0801	Medical/ Clinical Assistant	Health sciences	Health sciences, other	Health sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.0802	Clinical/ Medical Laboratory Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0803	Occupational Therapist Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0805	Pharmacy Technician/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0806	Physical Therapy Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0809	Anesthesiologist Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0810	Emergency Care Attendant (EMT Ambulance)	Health sciences	Health sciences, other	Health sciences nec
51.0811	Pathology/ Pathologist Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0812	Respiratory Therapy Technician/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0813	Chiropractic Technician/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0814	Radiologist Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0815	Lactation Consultant	Health sciences	Health sciences, other	Health sciences nec
51.0816	Speech-Language Pathology Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0899	Allied Health and Medical Assisting Services, Other	Health sciences	Health sciences, other	Health sciences nec
51.0901	Cardiovascular Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.0902	Electrocardiograph Technology	Health sciences	Health sciences, other	Health sciences nec
51.0903	Electroneurodiagnostic/ Electroencephalographic Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.0904	Emergency Medical Technology (EMT Paramedic)	Health sciences	Health sciences, other	Health sciences nec
51.0905	Nuclear Medical Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.0906	Perfusion Technology/ Perfusionist	Health sciences	Health sciences, other	Health sciences nec
51.0907	Medical Radiologic Technology/ Science - Radiation Therapist	Health sciences	Health sciences, other	Health sciences nec
51.0908	Respiratory Care Therapy/ Therapist	Health sciences	Health sciences, other	Health sciences nec
51.0909	Surgical Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.0910	Diagnostic Medical Sonography/ Sonographer and Ultrasound Technician	Health sciences	Health sciences, other	Health sciences nec
51.0911	Radiologic Technology/ Science - Radiographer	Health sciences	Health sciences, other	Health sciences nec
51.0912	Physician Assistant	Health sciences	Health sciences, other	Health sciences nec
51.0913	Athletic Training/ Trainer	Health sciences	Health sciences, other	Health sciences nec
51.0914	Gene/ Genetic Therapy	Health sciences	Health sciences, other	Health sciences nec
51.0915	Cardiopulmonary Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.0916	Radiation Protection/ Health Physics Technician	Health sciences	Health sciences, other	Health sciences nec
51.0917	Polysomnography	Health sciences	Health sciences, other	Health sciences nec
51.0918	Hearing Instrument Specialist	Health sciences	Health sciences, other	Health sciences nec
51.0919	Mammography Technology	Health sciences	Health sciences, other	Health sciences nec
51.0920	Magnetic Resonance Imaging (MRI) Technology	Health sciences	Health sciences, other	Health sciences nec
51.0921	Hyperbaric Medicine Technology	Health sciences	Health sciences, other	Health sciences nec
51.0922	Intraoperative Neuromonitoring Technology	Health sciences	Health sciences, other	Health sciences nec
51.0923	Orthopedic Technology	Health sciences	Health sciences, other	Health sciences nec
51.0999	Allied Health Diagnostic, Intervention, and Treatment Professions, Other	Health sciences	Health sciences, other	Health sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.1001	Blood Bank Technology Specialist	Health sciences	Health sciences, other	Health sciences nec
51.1002	Cytotechnology/ Cytotechnologist	Health sciences	Health sciences, other	Health sciences nec
51.1003	Hematology Technology	Health sciences	Health sciences, other	Health sciences nec
51.1004	Clinical/ Medical Laboratory Technician	Health sciences	Health sciences, other	Health sciences nec
51.1005	Clinical Laboratory Science/ Medical Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.1006	Ophthalmic Laboratory Technology	Health sciences	Health sciences, other	Health sciences nec
51.1007	Histologic Technology/ Histotechnologist	Health sciences	Health sciences, other	Health sciences nec
51.1008	Histologic Technician	Health sciences	Health sciences, other	Health sciences nec
51.1009	Phlebotomy Technician/ Phlebotomist	Health sciences	Health sciences, other	Health sciences nec
51.1010	Cytogenetics/ Genetics/ Clinical Genetics Technology/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.1011	Renal/ Dialysis Technologist/ Technician	Health sciences	Health sciences, other	Health sciences nec
51.1012	Sterile Processing Technology	Health sciences	Health sciences, other	Health sciences nec
51.1099	Clinical/ Medical Laboratory Science and Allied Professions, Other	Health sciences	Health sciences, other	Health sciences nec
51.1101	Pre-Dentistry Studies	Health sciences	Health sciences, other	Health sciences nec
51.1102	Pre-Medicine/ Pre-Medical Studies	Health sciences	Health sciences, other	Health sciences nec
51.1103	Pre-Pharmacy Studies	Health sciences	Health sciences, other	Health sciences nec
51.1105	Pre-Nursing Studies	Health sciences	Health sciences, other	Health sciences nec
51.1106	Pre-Chiropractic Studies	Health sciences	Health sciences, other	Health sciences nec
51.1107	Pre-Occupational Therapy Studies	Health sciences	Health sciences, other	Health sciences nec
51.1108	Pre-Optometry Studies	Health sciences	Health sciences, other	Health sciences nec
51.1109	Pre-Physical Therapy Studies	Health sciences	Health sciences, other	Health sciences nec
51.1110	Pre-Art Therapy	Health sciences	Health sciences, other	Health sciences nec
51.1111	Pre-Physician Assistant	Health sciences	Health sciences, other	Health sciences nec
51.1199	Health/ Medical Preparatory Programs, Other	Health sciences	Health sciences, other	Health sciences nec
51.1201	Medicine	Health sciences	Health sciences, other	Health sciences nec
51.1202	Osteopathic Medicine/ Osteopathy	Health sciences	Health sciences, other	Health sciences nec
51.1203	Podiatric Medicine/ Podiatry	Health sciences	Health sciences, other	Health sciences nec
51.1299	Medicine, Other	Health sciences	Health sciences, other	Health sciences nec
51.1701	Optometry	Health sciences	Health sciences, other	Health sciences nec
51.1801	Opticianry/ Ophthalmic Dispensing Optician	Health sciences	Health sciences, other	Health sciences nec
51.1802	Optometric Technician/ Assistant	Health sciences	Health sciences, other	Health sciences nec
51.1803	Ophthalmic Technician/ Technologist	Health sciences	Health sciences, other	Health sciences nec
51.1804	Orthoptics/ Orthoptist	Health sciences	Health sciences, other	Health sciences nec
51.1899	Ophthalmic and Optometric Support Services and Allied Professions, Other	Health sciences	Health sciences, other	Health sciences nec
51.2601	Health Aide	Health sciences	Health sciences, other	Health sciences nec
51.2602	Home Health Aide/ Home Attendant	Health sciences	Health sciences, other	Health sciences nec
51.2603	Medication Aide	Health sciences	Health sciences, other	Health sciences nec
51.2604	Rehabilitation Aide	Health sciences	Health sciences, other	Health sciences nec
51.2605	Physical Therapy Technician/ Aide	Health sciences	Health sciences, other	Health sciences nec
51.2699	Health Aides/ Attendants/ Orderlies, Other	Health sciences	Health sciences, other	Health sciences nec
51.3101	Dietetics/ Dietitian	Health sciences	Health sciences, other	Health sciences nec
51.3102	Clinical Nutrition/ Nutritionist	Health sciences	Health sciences, other	Health sciences nec
51.3103	Dietetic Technician	Health sciences	Health sciences, other	Health sciences nec
51.3104	Dietitian Assistant	Health sciences	Health sciences, other	Health sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
51.3199	Dietetics and Clinical Nutrition Services, Other	Health sciences	Health sciences, other	Health sciences nec
51.3201	Bioethics/ Medical Ethics	Health sciences	Health sciences, other	Health sciences nec
51.3202	Health Professions Education	Health sciences	Health sciences, other	Health sciences nec
51.3204	Medical/ Health Humanities	Health sciences	Health sciences, other	Health sciences nec
51.3205	History of Medicine	Health sciences	Health sciences, other	Health sciences nec
51.3206	Arts in Medicine/ Health	Health sciences	Health sciences, other	Health sciences nec
51.3299	Health Professions Education, Ethics, and Humanities, Other	Health sciences	Health sciences, other	Health sciences nec
51.3300	Alternative and Complementary Medicine and Medical Systems, General	Health sciences	Health sciences, other	Health sciences nec
51.3301	Acupuncture and Oriental Medicine	Health sciences	Health sciences, other	Health sciences nec
51.3302	Traditional Chinese Medicine and Chinese Herbology	Health sciences	Health sciences, other	Health sciences nec
51.3303	Naturopathic Medicine/ Naturopathy	Health sciences	Health sciences, other	Health sciences nec
51.3304	Homeopathic Medicine/ Homeopathy	Health sciences	Health sciences, other	Health sciences nec
51.3305	Ayurvedic Medicine/ Ayurveda	Health sciences	Health sciences, other	Health sciences nec
51.3306	Holistic/ Integrative Health	Health sciences	Health sciences, other	Health sciences nec
51.3399	Alternative and Complementary Medicine and Medical Systems, Other	Health sciences	Health sciences, other	Health sciences nec
51.3401	Direct Entry Midwifery	Health sciences	Health sciences, other	Health sciences nec
51.3499	Alternative and Complementary Medical Support Services, Other	Health sciences	Health sciences, other	Health sciences nec
51.3501	Massage Therapy/ Therapeutic Massage	Health sciences	Health sciences, other	Health sciences nec
51.3502	Asian Bodywork Therapy	Health sciences	Health sciences, other	Health sciences nec
51.3503	Somatic Bodywork	Health sciences	Health sciences, other	Health sciences nec
51.3599	Somatic Bodywork and Related Therapeutic Services, Other	Health sciences	Health sciences, other	Health sciences nec
51.3601	Movement Therapy and Movement Education	Health sciences	Health sciences, other	Health sciences nec
51.3602	Yoga Teacher Training/ Yoga Therapy	Health sciences	Health sciences, other	Health sciences nec
51.3603	Hypnotherapy/ Hypnotherapist	Health sciences	Health sciences, other	Health sciences nec
51.3699	Movement and Mind-Body Therapies and Education, Other	Health sciences	Health sciences, other	Health sciences nec
51.3701	Aromatherapy	Health sciences	Health sciences, other	Health sciences nec
51.3702	Herbalism/ Herbalist	Health sciences	Health sciences, other	Health sciences nec
51.3703	Polarity Therapy	Health sciences	Health sciences, other	Health sciences nec
51.3704	Reiki	Health sciences	Health sciences, other	Health sciences nec
51.3799	Energy and Biologically Based Therapies, Other	Health sciences	Health sciences, other	Health sciences nec
51.9999	Health Professions and Related Clinical Sciences, Other	Health sciences	Health sciences, other	Health sciences nec
51.9999b	Health Sciences, Other	Health sciences	Health sciences, other	Health sciences nec
27.0301	Applied Mathematics, General	Mathematics and statistics	Applied mathematics	Applied mathematics, general
27.0303	Computational Mathematics	Mathematics and statistics	Applied mathematics	Computational and applied mathematics
27.0304	Computational and Applied Mathematics	Mathematics and statistics	Applied mathematics	Computational and applied mathematics
27.0305	Financial Mathematics	Mathematics and statistics	Applied mathematics	Applied mathematics nec
27.0306	Mathematical Biology	Mathematics and statistics	Applied mathematics	Applied mathematics nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
27.0399	Applied Mathematics, Other	Mathematics and statistics	Applied mathematics	Applied mathematics nec
52.1304	Actuarial Science	Mathematics and statistics	Applied mathematics	Applied mathematics nec
27.0102	Algebra and Number Theory	Mathematics and statistics	Mathematics	Algebra and number theory
27.0102b	Algebra	Mathematics and statistics	Mathematics	Algebra and number theory
27.0102c	Number Theory	Mathematics and statistics	Mathematics	Algebra and number theory
27.0101	Mathematics, General	Mathematics and statistics	Mathematics	Mathematics, general
27.0101b	Mathematical Sciences	Mathematics and statistics	Mathematics	Mathematics, general
27.0103	Analysis and Functional Analysis	Mathematics and statistics	Mathematics	Mathematics nec
27.0104	Geometry/ Geometric Analysis	Mathematics and statistics	Mathematics	Mathematics nec
27.0105	Topology and Foundations	Mathematics and statistics	Mathematics	Mathematics nec
27.0199	Mathematics, Other	Mathematics and statistics	Mathematics	Mathematics nec
27.0199c	Logic (MATHEMATICS)	Mathematics and statistics	Mathematics	Mathematics nec
27.0601	Applied Statistics, General	Mathematics and statistics	Statistics	Applied statistics, general
27.0502	Mathematical Statistics and Probability	Mathematics and statistics	Statistics	Mathematics and statistics
27.0503	Mathematics and Statistics	Mathematics and statistics	Statistics	Mathematics and statistics
27.9999	Mathematics and Statistics, Other	Mathematics and statistics	Statistics	Mathematics and statistics
27.0501	Statistics (MATHEMATICS)	Mathematics and statistics	Statistics	Statistics
27.0599	Statistics, Other	Mathematics and statistics	Statistics	Statistics nec
27.0599b	Statistics (SOCIAL SCIENCES)	Mathematics and statistics	Statistics	Statistics nec
30.9999d	Computer Science and Engineering	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Computer science and engineering
30.9999b	Electrical Engineering and Computer Science	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Electrical engineering and computer science
30.0801	Mathematics and Computer Science	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Interdisciplinary computer sciences nec
30.1601	Accounting and Computer Science	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Interdisciplinary computer sciences nec
30.3101	Human Computer Interaction	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Interdisciplinary computer sciences nec
30.3901	Economics and Computer Science	Multidisciplinary/interdisciplinary sciences	Interdisciplinary computer sciences	Interdisciplinary computer sciences nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
30.4801	Linguistics and Computer Science	Multidisciplinary/ interdisciplinary sciences	Interdisciplinary computer sciences	Interdisciplinary computer sciences nec
30.1701	Behavioral Sciences	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Behavioral and cognitive sciences
30.2501	Cognitive Science, General	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Behavioral and cognitive sciences
30.2502	Contemplative Studies/ Inquiry	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Behavioral and cognitive sciences
30.2599	Cognitive Science, Other	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Behavioral and cognitive sciences
30.3001	Computational Science	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Computational science and engineering
30.3001b	Computational Science and Engineering	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Computational science and engineering
30.3001c	Computational Science, Engineering, and Mathematics	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Computational science and engineering
30.7099b	Data Mining and Machine Learning	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data mining and machine learning
30.7001	Data Science, General	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7099	Data Science, Other	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7101	Data Analytics, General	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7102	Business Analytics	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7103	Data Visualization	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7104	Financial Analytics	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.7199	Data Analytics, Other	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Data science and data analytics
30.1501	Science, Technology and Society	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	History/ philosophy of science, technology, and society
54.0104	History and Philosophy of Science and Technology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	History/ philosophy of science, technology, and society
30.9999c	Nanosciences/ Nanoscale Sciences	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Nanoscience/ nanoscale science

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
30.1901	Nutrition Sciences	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Nutrition sciences
30.0101	Biological and Physical Sciences	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.0501	Peace Studies and Conflict Resolution	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.0501b	Conflict Analysis and Resolution	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.0601	Systems Science and Theory	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.1001	Biopsychology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.1801	Natural Sciences	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.2001	International/ Globalization Studies	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.2101	Holocaust and Related Studies	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.2301	Intercultural/ Multicultural and Diversity Studies	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.2601	Cultural Studies/ Critical Theory and Analysis	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.2701	Human Biology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.3301	Sustainability Studies	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.3401	Anthrozoology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.3701	Design for Human Health	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.4001	Economics and Foreign Language/ Literature	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.4201	Geoarchaeology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.4301	Geobiology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.4401	Geography and Environmental Studies	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
30.4601	History and Political Science	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.4901	Mathematical Economics	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.5001	Mathematics and Atmospheric/ Oceanic Science	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.5101	Philosophy, Politics, and Economics	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.5301	Thanatology	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.9999e	Polymer Science and Engineering	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
30.9999z	Multi-/ Interdisciplinary Sciences, Other	Multidisciplinary/ interdisciplinary sciences	Multidisciplinary/ interdisciplinary sciences, other	Multidisciplinary/ interdisciplinary sciences nec
40.0201	Astronomy	Physical sciences	Astronomy and astrophysics	Astronomy
40.0202	Astrophysics	Physical sciences	Astronomy and astrophysics	Astrophysics
40.0203	Planetary Astronomy and Science	Physical sciences	Astronomy and astrophysics	Astronomy and astrophysics nec
40.0299	Astronomy and Astrophysics, Other	Physical sciences	Astronomy and astrophysics	Astronomy and astrophysics nec
40.0299b	Cosmology	Physical sciences	Astronomy and astrophysics	Astronomy and astrophysics nec
40.0502	Analytical Chemistry	Physical sciences	Chemistry	Analytical chemistry
40.0599b	Chemical Biology	Physical sciences	Chemistry	Chemical biology
40.0501	Chemistry, General	Physical sciences	Chemistry	Chemistry, general
40.0503	Inorganic Chemistry	Physical sciences	Chemistry	Inorganic chemistry
40.0504	Organic Chemistry	Physical sciences	Chemistry	Organic chemistry
40.0506	Physical Chemistry	Physical sciences	Chemistry	Physical chemistry
40.0507	Polymer Chemistry	Physical sciences	Chemistry	Polymer chemistry
40.0511	Theoretical Chemistry	Physical sciences	Chemistry	Theoretical and computational chemistry
40.0511b	Computational Chemistry	Physical sciences	Chemistry	Theoretical and computational chemistry
40.0508	Chemical Physics	Physical sciences	Chemistry	Chemistry nec
40.0509	Environmental Chemistry	Physical sciences	Chemistry	Chemistry nec
40.0510	Forensic Chemistry	Physical sciences	Chemistry	Chemistry nec
40.0512	Cheminformatics/ Chemistry Informatics	Physical sciences	Chemistry	Chemistry nec
40.0599	Chemistry, Other	Physical sciences	Chemistry	Chemistry nec
40.1001	Materials Science	Physical sciences	Materials sciences	Materials science
40.1002	Materials Chemistry	Physical sciences	Materials sciences	Materials chemistry and materials sciences nec
40.1099	Materials Sciences, Other	Physical sciences	Materials sciences	Materials chemistry and materials sciences nec
40.1099b	Fiber and Polymer Sciences	Physical sciences	Materials sciences	Materials chemistry and materials sciences nec
40.0899b	Applied Physics	Physical sciences	Physics	Applied physics

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
40.0802	Atomic/ Molecular Physics	Physical sciences	Physics	Atomic/ molecular physics
40.0808	Condensed Matter and Materials Physics	Physical sciences	Physics	Condensed matter and materials physics
40.0804	Elementary Particle Physics	Physical sciences	Physics	Elementary particle physics
40.0806	Nuclear Physics	Physical sciences	Physics	Nuclear physics
40.0807	Optics/ Optical Sciences	Physical sciences	Physics	Optics/ optical sciences
40.1101	Physics and Astronomy	Physical sciences	Physics	Physics and astronomy
40.0801	Physics, General	Physical sciences	Physics	Physics, general
40.0805	Plasma and High-Temperature Physics	Physical sciences	Physics	Plasma and high-temperature physics
40.0810	Theoretical and Mathematical Physics	Physical sciences	Physics	Theoretical and mathematical physics
40.0101	Physical Sciences, General	Physical sciences	Physics	Physics and physical sciences nec
40.0808b	Polymer Physics	Physical sciences	Physics	Physics and physical sciences nec
40.0809	Acoustics	Physical sciences	Physics	Physics and physical sciences nec
40.0899	Physics, Other	Physical sciences	Physics	Physics and physical sciences nec
40.9999	Physical Sciences, Other	Physical sciences	Physics	Physics and physical sciences nec
40.9999b	Polymer Sciences	Physical sciences	Physics	Physics and physical sciences nec
42.2807	Clinical Child Psychology	Psychology	Clinical psychology	Clinical child psychology
42.2801	Clinical Psychology	Psychology	Clinical psychology	Clinical psychology
42.2814	Applied Behavior Analysis	Psychology	Counseling and applied psychology	Applied behavior analysis
42.2803	Counseling Psychology	Psychology	Counseling and applied psychology	Counseling psychology
42.2806	Educational Psychology (PSYCHOLOGY)	Psychology	Counseling and applied psychology	Educational psychology
42.2806b	Educational Psychology (EDUCATION)	Psychology	Counseling and applied psychology	Educational psychology
42.2804	Industrial and Organizational Psychology	Psychology	Counseling and applied psychology	Industrial and organizational psychology
42.2805	School Psychology (PSYCHOLOGY)	Psychology	Counseling and applied psychology	School psychology
42.2805b	School Psychology (EDUCATION)	Psychology	Counseling and applied psychology	School psychology
42.2802	Community Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2808	Environmental Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2809	Geropsychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2810	Health/ Medical Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2811	Family Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2812	Forensic Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2813	Applied Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
42.2815	Performance and Sport Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2816	Somatic Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2817	Transpersonal/ Spiritual Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2899	Clinical, Counseling and Applied Psychology, Other	Psychology	Counseling and applied psychology	Counseling and applied psychology nec
42.2706	Behavioral Neuroscience	Psychology	Research and experimental psychology	Behavioral neuroscience
42.2701	Cognitive Psychology and Psycholinguistics	Psychology	Research and experimental psychology	Cognitive psychology and psycholinguistics
42.2703	Developmental and Child Psychology	Psychology	Research and experimental psychology	Developmental and child psychology
42.2704	Experimental Psychology	Psychology	Research and experimental psychology	Experimental psychology
42.2707	Social Psychology	Psychology	Research and experimental psychology	Social psychology
42.2702	Comparative Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2705	Personality Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2708	Psychometrics and Quantitative Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2709	Psychopharmacology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2710	Developmental and Adolescent Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2799	Research and Experimental Psychology, Other	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2799b	Physiological/ Psychobiology Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
42.2799c	Human Factors Psychology	Psychology	Research and experimental psychology	Research and experimental psychology nec
19.0701	Human Development and Family Studies, General	Psychology	Psychology, other	Human development
19.0702	Adult Development and Aging	Psychology	Psychology, other	Human development
19.0706	Child Development	Psychology	Psychology, other	Human development
42.0101	Psychology, General	Psychology	Psychology, other	Psychology, general
42.9999	Psychology, Other	Psychology	Psychology, other	Psychology nec
45.0201	Anthropology, General	Social sciences	Anthropology	Anthropology, general
45.0204	Cultural Anthropology	Social sciences	Anthropology	Cultural anthropology
45.0202	Physical and Biological Anthropology	Social sciences	Anthropology	Physical and biological anthropology
45.0203	Medical Anthropology	Social sciences	Anthropology	Anthropology nec
45.0205	Forensic Anthropology	Social sciences	Anthropology	Anthropology nec
45.0299	Anthropology, Other	Social sciences	Anthropology	Anthropology nec
05.0101	African Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0102	American/ United States Studies/ Civilization	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0103	Asian Studies/ Civilization	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
05.0104	East Asian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0105	Russian, Central European, East European and Eurasian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0106	European Studies/ Civilization	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0107	Latin American Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0108	Near and Middle Eastern Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0109	Pacific Area/ Pacific Rim Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0110	Russian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0111	Scandinavian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0112	South Asian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0113	Southeast Asian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0114	Western European Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0115	Canadian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0116	Balkans Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0117	Baltic Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0118	Slavic Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0119	Caribbean Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0120	Ural-Altaic and Central Asian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0121	Commonwealth Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0122	Regional Studies (US, Canadian, Foreign)	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0123	Chinese Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0124	French Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0125	German Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0126	Italian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0127	Japanese Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0128	Korean Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0129	Polish Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0130	Spanish and Iberian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
05.0131	Tibetan Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0132	Ukraine Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0133	Irish Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0134	Latin American and Caribbean Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0135	Appalachian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0136	Arctic Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0199	Area Studies, Other	Social sciences	Area, ethnic, cultural, gender, and group studies	Area studies
05.0200	Ethnic Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Ethnic studies
05.0201	African-American/ Black Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Ethnic studies
05.0202	American Indian/ Native American Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Ethnic studies
05.0203	Hispanic-American, Puerto Rican, Latinx, and Mexican-American/ Chicano Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Ethnic studies
05.0206	Asian-American Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Ethnic studies
05.0207	Women's Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0208	Gay/ Lesbian Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0209	Folklore Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0210	Disability Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0211	Deaf Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0212	Comparative Group Studies	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.0299	Ethnic, Cultural Minority, Gender, and Group Studies, Other	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
05.9999	Area, Ethnic, Cultural, Gender, and Group Studies, Other	Social sciences	Area, ethnic, cultural, gender, and group studies	Area, ethnic, cultural, gender, and group studies nec
01.0103	Agricultural Economics	Social sciences	Economics	Agricultural economics
45.0602	Applied Economics	Social sciences	Economics	Applied economics
45.0604	Development Economics and International Development	Social sciences	Economics	Development economics and international development
45.0603	Econometrics and Quantitative Economics	Social sciences	Economics	Econometrics and quantitative economics
45.0601	Economics, General	Social sciences	Economics	Economics, general
03.0204	Environmental/ Natural Resource Economics (NATURAL RESOURCES/ CONSERVATION SCIENCES)	Social sciences	Economics	Environmental/ natural resource economics
45.0602b	Environmental/ Natural Resource Economics (SOCIAL SCIENCES)	Social sciences	Economics	Environmental/ natural resource economics
45.0605	International Economics	Social sciences	Economics	Economics nec
45.0699	Economics, Other	Social sciences	Economics	Economics nec

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
45.1001	Political Science and Government, General	Social sciences	Political science and government	Political science and government, general
45.1002	American Government and Politics (United States)	Social sciences	Political science and government	Political science and government nec
45.1003	Canadian Government and Politics	Social sciences	Political science and government	Political science and government nec
45.1004	Political Economy	Social sciences	Political science and government	Political science and government nec
45.1099	Political Science and Government, Other	Social sciences	Political science and government	Political science and government nec
44.0502	Education Policy Analysis	Social sciences	Public policy analysis	Education policy analysis
44.0503	Health Policy Analysis	Social sciences	Public policy analysis	Health policy analysis
44.0501	Public Policy Analysis, General	Social sciences	Public policy analysis	Public policy analysis, general
44.0504	International Policy Analysis	Social sciences	Public policy analysis	Public policy nec
44.0599	Public Policy Analysis, Other	Social sciences	Public policy analysis	Public policy nec
44.0599b	Public Policy and Administration	Social sciences	Public policy analysis	Public policy nec
45.1101	Sociology, General	Social sciences	Sociology, demography, and population studies	Sociology, general
45.0501	Demography and Population Studies	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
45.0502	Applied Demography	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
45.0599	Demography, Other	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
45.1102	Applied/ Public Sociology	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
45.1103	Rural Sociology	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
45.1199	Sociology, Other	Social sciences	Sociology, demography, and population studies	Sociology, demography, and population studies nec
16.0105	Applied Linguistics	Social sciences	Social sciences, other	Applied linguistics
16.0199	Linguistic, Comparative, and Related Language Studies and Services, Other	Social sciences	Social sciences, other	Applied linguistics
45.0301	Archaeology/ Archeology (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Archeology
45.0301b	Archaeology/ Archeology (HUMANITIES)	Social sciences	Social sciences, other	Archeology
45.0401	Criminology	Social sciences	Social sciences, other	Criminology
45.0701	Geography	Social sciences	Social sciences, other	Geography and cartography
45.0702	Geographic Information Science and Cartography	Social sciences	Social sciences, other	Geography and cartography
45.0799	Geography, Other	Social sciences	Social sciences, other	Geography and cartography
45.0901	International Relations and Affairs	Social sciences	Social sciences, other	International relations and national security studies
45.0902	National Security Policy Studies	Social sciences	Social sciences, other	International relations and national security studies
45.0999	International Relations and National Security Studies, Other	Social sciences	Social sciences, other	International relations and national security studies
16.0102	Linguistics	Social sciences	Social sciences, other	Linguistics
30.1101	Gerontology (MULTIDISCIPLINARY STUDIES)	Social sciences	Social sciences, other	Social sciences nec
30.1101b	Gerontology (HEALTH SCIENCES)	Social sciences	Social sciences, other	Social sciences nec
30.1101c	Gerontology (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Social sciences nec
30.4701	Linguistics and Anthropology	Social sciences	Social sciences, other	Social sciences nec
43.0104	Criminal Justice/ Safety Studies	Social sciences	Social sciences, other	Social sciences nec

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(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
45.0101	Social Sciences, General	Social sciences	Social sciences, other	Social sciences nec
45.0102	Research Methodology and Quantitative Methods	Social sciences	Social sciences, other	Social sciences nec
45.0103	Survey Research/ Methodology	Social sciences	Social sciences, other	Social sciences nec
45.0199	Social Sciences, Other	Social sciences	Social sciences, other	Social sciences nec
45.1201	Urban Studies/ Affairs	Social sciences	Social sciences, other	Social sciences nec
45.1301	Sociology and Anthropology	Social sciences	Social sciences, other	Social sciences nec
45.1501	Geography and Anthropology	Social sciences	Social sciences, other	Social sciences nec
45.9999	Social Sciences, Other	Social sciences	Social sciences, other	Social sciences nec
52.0201	Business Administration and Management, General	Business	Business administration and management	Business management and administration
52.0201b	Business Management/ Administration	Business	Business administration and management	Business management and administration
52.0213	Organizational Leadership	Business	Business administration and management	Organizational leadership
49.0104	Aviation/ Airway Management and Operations	Business	Business administration and management	Business administration and management nec
52.0202	Purchasing, Procurement/ Acquisitions and Contracts Management	Business	Business administration and management	Business administration and management nec
52.0203	Logistics, Materials, and Supply Chain Management	Business	Business administration and management	Business administration and management nec
52.0204	Office Management and Supervision	Business	Business administration and management	Business administration and management nec
52.0205	Operations Management and Supervision	Business	Business administration and management	Business administration and management nec
52.0206	Non-Profit/ Public/ Organizational Management	Business	Business administration and management	Business administration and management nec
52.0207	Customer Service Management	Business	Business administration and management	Business administration and management nec
52.0208	E-Commerce/ Electronic Commerce	Business	Business administration and management	Business administration and management nec
52.0209	Transportation/ Mobility Management	Business	Business administration and management	Business administration and management nec
52.0210	Research and Development Management	Business	Business administration and management	Business administration and management nec
52.0211	Project Management	Business	Business administration and management	Business administration and management nec
52.0212	Retail Management	Business	Business administration and management	Business administration and management nec
52.0214	Research Administration	Business	Business administration and management	Business administration and management nec
52.0215	Risk Management	Business	Business administration and management	Business administration and management nec
52.0216	Science/ Technology Management	Business	Business administration and management	Business administration and management nec
52.0299	Business Administration, Management and Operations, Other	Business	Business administration and management	Business administration and management nec
52.0301	Accounting	Business	Business, other	Accounting and accounting-related
52.0302	Accounting Technology and Bookkeeping	Business	Business, other	Accounting and accounting-related
52.0303	Auditing	Business	Business, other	Accounting and accounting-related
52.0304	Accounting and Finance	Business	Business, other	Accounting and accounting-related

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
52.0305	Accounting and Business/ Management	Business	Business, other	Accounting and accounting-related
52.0399	Accounting and Related Services, Other	Business	Business, other	Accounting and accounting-related
52.0801	Finance, General	Business	Business, other	Finance and financial management
52.0803	Banking and Financial Support Services	Business	Business, other	Finance and financial management
52.0804	Financial Planning and Services	Business	Business, other	Finance and financial management
52.0806	International Finance	Business	Business, other	Finance and financial management
52.0807	Investments and Securities	Business	Business, other	Finance and financial management
52.0808	Public Finance	Business	Business, other	Finance and financial management
52.0809	Credit Management	Business	Business, other	Finance and financial management
52.0810	Financial Risk Management	Business	Business, other	Finance and financial management
52.0899	Finance and Financial Management Services, Other	Business	Business, other	Finance and financial management
52.1201	Management Information Systems, General	Business	Business, other	Management information systems
52.1206	Information Resources Management	Business	Business, other	Management information systems
52.1207	Knowledge Management	Business	Business, other	Management information systems
52.1299	Management Information Systems and Services, Other	Business	Business, other	Management information systems
52.0601	Business/ Managerial Economics	Business	Business, other	Management sciences
52.1301	Management Science	Business	Business, other	Management sciences
52.1302	Business Statistics	Business	Business, other	Management sciences
52.1399	Management Sciences and Quantitative Methods, Other	Business	Business, other	Management sciences
52.1401	Marketing/ Marketing Management, General	Business	Business, other	Marketing
52.1402	Marketing Research	Business	Business, other	Marketing
52.1403	International Marketing	Business	Business, other	Marketing
52.1404	Digital Marketing	Business	Business, other	Marketing
52.1499	Marketing, Other	Business	Business, other	Marketing
52.1003	Organizational Behavior Studies	Business	Business, other	Organizational behavior studies
52.0101	Business/ Commerce, General	Business	Business, other	Business nec
52.0401	Administrative Assistant and Secretarial Science, General	Business	Business, other	Business nec
52.0402	Executive Assistant/ Executive Secretary	Business	Business, other	Business nec
52.0406	Receptionist	Business	Business, other	Business nec
52.0407	Business/ Office Automation/ Technology/ Data Entry	Business	Business, other	Business nec
52.0408	General Office Occupations and Clerical Services	Business	Business, other	Business nec
52.0409	Parts, Warehousing, and Inventory Management Operations	Business	Business, other	Business nec

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
52.0410	Traffic, Customs, and Transportation Clerk/ Technician	Business	Business, other	Business nec
52.0411	Customer Service Support/ Call Center/ Teleservice Operation	Business	Business, other	Business nec
52.0499	Business Operations Support and Secretarial Services, Other	Business	Business, other	Business nec
52.0501	Business/ Corporate Communications, General	Business	Business, other	Business nec
52.0502	Grantsmanship	Business	Business, other	Business nec
52.0599	Business/ Corporate Communications, Other	Business	Business, other	Business nec
52.0701	Entrepreneurship/ Entrepreneurial Studies	Business	Business, other	Business nec
52.0702	Franchising and Franchise Operations	Business	Business, other	Business nec
52.0703	Small Business Administration/ Management	Business	Business, other	Business nec
52.0704	Social Entrepreneurship	Business	Business, other	Business nec
52.0799	Entrepreneurial and Small Business Operations, Other	Business	Business, other	Business nec
52.0901	Hospitality Administration/ Management, General	Business	Business, other	Business nec
52.0903	Tourism and Travel Services Management	Business	Business, other	Business nec
52.0904	Hotel/ Motel Administration/ Management	Business	Business, other	Business nec
52.0905	Restaurant/ Food Services Management	Business	Business, other	Business nec
52.0906	Resort Management	Business	Business, other	Business nec
52.0907	Meeting and Event Planning	Business	Business, other	Business nec
52.0908	Casino Management	Business	Business, other	Business nec
52.0909	Hotel, Motel, and Restaurant Management	Business	Business, other	Business nec
52.0910	Brewery/ Brewpub Operations/ Management	Business	Business, other	Business nec
52.0999	Hospitality Administration/ Management, Other	Business	Business, other	Business nec
52.1001	Human Resources Management/ Personnel Administration, General	Business	Business, other	Business nec
52.1002	Labor and Industrial Relations	Business	Business, other	Business nec
52.1004	Labor Studies	Business	Business, other	Business nec
52.1005	Human Resources Development	Business	Business, other	Business nec
52.1006	Executive/ Career Coaching	Business	Business, other	Business nec
52.1099	Human Resources Management and Services, Other	Business	Business, other	Business nec
52.1101	International Business/ Trade/ Commerce	Business	Business, other	Business nec
52.1501	Real Estate	Business	Business, other	Business nec
52.1601	Taxation	Business	Business, other	Business nec
52.1701	Insurance	Business	Business, other	Business nec
52.1801	Sales, Distribution, and Marketing Operations, General	Business	Business, other	Business nec
52.1802	Merchandising and Buying Operations	Business	Business, other	Business nec
52.1803	Retailing and Retail Operations	Business	Business, other	Business nec
52.1804	Selling Skills and Sales Operations	Business	Business, other	Business nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
52.1899	General Merchandising, Sales, and Related Marketing Operations, Other	Business	Business, other	Business nec
52.1901	Auctioneering	Business	Business, other	Business nec
52.1902	Fashion Merchandising	Business	Business, other	Business nec
52.1903	Fashion Modeling	Business	Business, other	Business nec
52.1904	Apparel and Accessories Marketing Operations	Business	Business, other	Business nec
52.1905	Tourism and Travel Services Marketing Operations	Business	Business, other	Business nec
52.1906	Tourism Promotion Operations	Business	Business, other	Business nec
52.1907	Vehicle and Vehicle Parts and Accessories Marketing Operations	Business	Business, other	Business nec
52.1908	Business and Personal/ Financial Services Marketing Operations	Business	Business, other	Business nec
52.1909	Special Products Marketing Operations	Business	Business, other	Business nec
52.1910	Hospitality and Recreation Marketing Operations	Business	Business, other	Business nec
52.1999	Specialized Merchandising, Sales, and Marketing Operations, Other	Business	Business, other	Business nec
52.2001	Construction Management, General	Business	Business, other	Business nec
52.2002	Construction Project Management	Business	Business, other	Business nec
52.2099	Construction Management, Other	Business	Business, other	Business nec
52.2101	Telecommunications Management	Business	Business, other	Business nec
52.9999	Business, Management, Marketing, and Related Support Services, Other	Business	Business, other	Business nec
13.0401	Educational Leadership and Administration, General	Education	Education leadership and administration	Educational leadership and administration, general
13.0406	Higher Education/ Higher Education Administration	Education	Education leadership and administration	Higher education and community college administration
13.0407	Community College Administration	Education	Education leadership and administration	Higher education and community college administration
13.0402	Administration of Special Education	Education	Education leadership and administration	Education leadership and administration nec
13.0403	Adult and Continuing Education Administration	Education	Education leadership and administration	Education leadership and administration nec
13.0404	Educational, Instructional, and Curriculum Supervision	Education	Education leadership and administration	Education leadership and administration nec
13.0408	Elementary and Middle School Administration/ Principalship	Education	Education leadership and administration	Education leadership and administration nec
13.0409	Secondary School Administration/ Principalship	Education	Education leadership and administration	Education leadership and administration nec
13.0410	Urban Education and Leadership	Education	Education leadership and administration	Education leadership and administration nec
13.0411	Superintendency and Educational System Administration	Education	Education leadership and administration	Education leadership and administration nec
13.0412	International School Administration/ Leadership	Education	Education leadership and administration	Education leadership and administration nec
13.0413	Education Entrepreneurship	Education	Education leadership and administration	Education leadership and administration nec
13.0414	Early Childhood Program Administration	Education	Education leadership and administration	Education leadership and administration nec
13.0499	Educational Administration and Supervision, Other	Education	Education leadership and administration	Education leadership and administration nec

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
13.0499b	Education and Human Resource Studies/ Development	Education	Education leadership and administration	Education leadership and administration nec
13.0499c	Organizational Leadership and Policy Development (Education)	Education	Education leadership and administration	Education leadership and administration nec
13.0301	Curriculum and Instruction	Education	Education research	Curriculum and instruction
13.0601	Educational Evaluation and Research	Education	Education research	Educational assessment, evaluation, and research methods
13.0603	Educational Statistics and Research Methods	Education	Education research	Educational assessment, evaluation, and research methods
13.0604	Educational Assessment, Testing, and Measurement	Education	Education research	Educational assessment, evaluation, and research methods
13.0607	Learning Sciences	Education	Education research	Educational assessment, evaluation, and research methods
13.0699	Educational Assessment, Evaluation, and Research, Other	Education	Education research	Educational assessment, evaluation, and research methods
13.0501	Educational/ Instructional Technology	Education	Education research	Educational/ instructional technology and media design
13.0501b	Educational/ Instructional Media Design	Education	Education research	Educational/ instructional technology and media design
13.0501c	Learning/ Instructional Design and Technology	Education	Education research	Educational/ instructional technology and media design
13.0608	Institutional Research	Education	Education research	Higher education evaluation and research
13.0699b	Higher Education Evaluation and Research	Education	Education research	Higher education evaluation and research
13.1101	Counselor Education/ School Counseling and Guidance Services	Education	Education research	Student counseling and personnel services
13.1102	College Student Counseling and Personnel Services	Education	Education research	Student counseling and personnel services
13.1199	Student Counseling and Personnel Services, Other	Education	Education research	Student counseling and personnel services
13.0701	International and Comparative Education	Education	Education research	Education research nec
13.0901	Social and Philosophical Foundations of Education	Education	Education research	Education research nec
13.1201	Adult and Continuing Education and Teaching	Education	Teacher education and teaching fields	Adult, continuing, and workforce education and development
13.1201b	Workforce Education and Development	Education	Teacher education and teaching fields	Adult, continuing, and workforce education and development
13.0201	Bilingual and Multilingual Education	Education	Teacher education and teaching fields	Bilingual, multilingual, and multicultural education
13.0202	Multicultural Education	Education	Teacher education and teaching fields	Bilingual, multilingual, and multicultural education
13.0203	Indian/ Native American Education	Education	Teacher education and teaching fields	Bilingual, multilingual, and multicultural education
13.0299	Bilingual, Multilingual, and Multicultural Education, Other	Education	Teacher education and teaching fields	Bilingual, multilingual, and multicultural education
13.1311	Mathematics Teacher Education	Education	Teacher education and teaching fields	Mathematics teacher education
13.1312	Music Teacher Education	Education	Teacher education and teaching fields	Music teacher education

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
13.1001	Special Education and Teaching, General	Education	Teacher education and teaching fields	Special education and teaching
13.1003	Education/ Teaching of Individuals with Hearing Impairments Including Deafness	Education	Teacher education and teaching fields	Special education and teaching
13.1004	Education/ Teaching of the Gifted and Talented	Education	Teacher education and teaching fields	Special education and teaching
13.1005	Education/ Teaching of Individuals with Emotional Disturbances	Education	Teacher education and teaching fields	Special education and teaching
13.1006	Education/ Teaching of Individuals with Intellectual Disabilities	Education	Teacher education and teaching fields	Special education and teaching
13.1007	Education/ Teaching of Individuals with Multiple Disabilities	Education	Teacher education and teaching fields	Special education and teaching
13.1008	Education/ Teaching of Individuals with Orthopedic and Other Physical Health Impairments	Education	Teacher education and teaching fields	Special education and teaching
13.1009	Education/ Teaching of Individuals with Vision Impairments Including Blindness	Education	Teacher education and teaching fields	Special education and teaching
13.1011	Education/ Teaching of Individuals with Specific Learning Disabilities	Education	Teacher education and teaching fields	Special education and teaching
13.1012	Education/ Teaching of Individuals with Speech or Language Impairments	Education	Teacher education and teaching fields	Special education and teaching
13.1013	Education/ Teaching of Individuals with Autism	Education	Teacher education and teaching fields	Special education and teaching
13.1014	Education/ Teaching of Individuals Who are Developmentally Delayed	Education	Teacher education and teaching fields	Special education and teaching
13.1015	Education/ Teaching of Individuals in Early Childhood Special Education Programs	Education	Teacher education and teaching fields	Special education and teaching
13.1016	Education/ Teaching of Individuals with Traumatic Brain Injuries	Education	Teacher education and teaching fields	Special education and teaching
13.1017	Education/ Teaching of Individuals in Elementary Special Education Programs	Education	Teacher education and teaching fields	Special education and teaching
13.1018	Education/ Teaching of Individuals in Junior High/ Middle School Special Education Programs	Education	Teacher education and teaching fields	Special education and teaching
13.1019	Education/ Teaching of Individuals in Secondary Special Education Programs	Education	Teacher education and teaching fields	Special education and teaching
13.1099	Special Education and Teaching, Other	Education	Teacher education and teaching fields	Special education and teaching
13.1213	Science, Technology, Engineering, and Mathematics (STEM) Educational Methods	Education	Teacher education and teaching fields	STEM educational methods
13.1301	Agricultural Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1316	Science Teacher Education/ General Science Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1317	Social Science Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1321	Computer Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1322	Biology Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1323	Chemistry Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1329	Physics Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
13.1332	Geography Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1335	Psychology Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1337	Earth Science Teacher Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1338	Environmental Education	Education	Teacher education and teaching fields	Teacher education, science and engineering
13.1202	Elementary Education and Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1203	Junior High/ Intermediate/ Middle School Education and Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1205	Secondary Education and Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1206	Teacher Education, Multiple Levels	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1207	Montessori Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1208	Waldorf/ Steiner Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1209	Kindergarten/ Preschool Education and Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1210	Early Childhood Education and Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1211	Online Educator/ Online Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1212	International Teaching and Learning	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1214	College/ Postsecondary/ University Teaching	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1214b	Developmental Education	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1299b	Teaching and Learning	Education	Teacher education and teaching fields	Teacher education, specific levels and methods
13.1302	Art Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1303	Business and Innovation/ Entrepreneurship Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1304	Driver and Safety Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1305	English/ Language Arts Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1306	Foreign Language Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1307	Health Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1308	Family and Consumer Sciences/ Home Economics Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1309	Technology Teacher Education/ Industrial Arts Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1310	Sales and Marketing Operations/ Marketing and Distribution Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
13.1314	Physical Education Teaching and Coaching	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1315	Reading Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1315b	Language and Literacy Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1318	Social Studies Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1319	Technical Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1320	Trade and Industrial Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1324	Drama and Dance Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1325	French Language Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1326	German Language Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1327	Health Occupations Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1328	History Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1330	Spanish Language Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1331	Speech Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1333	Latin Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1334	School Librarian/ School Library Media Specialist	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1339	Communication Arts and Literature Teacher Education	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1399	Teacher Education and Professional Development, Specific Subject Areas, Other	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1401	Teaching English as a Second or Foreign Language/ ESL Language Instructor	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1402	Teaching French as a Second or Foreign Language	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.1499	Teaching English or French as a Second or Foreign Language, Other	Education	Teacher education and teaching fields	Teacher education, specific subject areas
13.0101	Education, General	Education	Education, other	Education, general
13.0101b	Educational Studies	Education	Education, other	Education, general
13.1501	Teacher Assistant/ Aide	Education	Education, other	Education nec
13.1502	Adult Literacy Tutor/ Instructor	Education	Education, other	Education nec
13.1599	Teaching Assistants/ Aides, Other	Education	Education, other	Education nec
13.9999	Education, Other	Education	Education, other	Education nec
23.1402	American Literature (United States)	Humanities	English language and literature, letters	American literature (United States)
23.1402b	African-American/ Black Literature	Humanities	English language and literature, letters	American literature (United States)
23.1302	Creative Writing	Humanities	English language and literature, letters	Creative writing
23.0101	English Language and Literature, General	Humanities	English language and literature, letters	English language and literature, general

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
23.1404	English Literature (British and Commonwealth)	Humanities	English language and literature, letters	English literature (British and Commonwealth)
23.1301	Writing, General	Humanities	English language and literature, letters	Rhetoric, composition, and writing studies
23.1303	Professional, Technical, Business, and Scientific Writing	Humanities	English language and literature, letters	Rhetoric, composition, and writing studies
23.1304	Rhetoric and Composition	Humanities	English language and literature, letters	Rhetoric, composition, and writing studies
23.1399	Rhetoric and Composition/ Writing Studies, Other	Humanities	English language and literature, letters	Rhetoric, composition, and writing studies
23.1401	General Literature	Humanities	English language and literature, letters	English language and literature nec
23.1403	American Literature (Canadian)	Humanities	English language and literature, letters	English language and literature nec
23.1405	Children's and Adolescent Literature	Humanities	English language and literature, letters	English language and literature nec
23.1499	Literature, Other	Humanities	English language and literature, letters	English language and literature nec
23.9999	English Language and Literature/ Letters, Other	Humanities	English language and literature, letters	English language and literature nec
16.0104	Comparative Literature	Humanities	Foreign languages, literatures, and linguistics	Comparative literature
16.0908	Hispanic and Latin American Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Hispanic/ Latin American languages, literatures, and linguistics
16.0900	Romance Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0901	French Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0902	Italian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0904	Portuguese Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0906	Romanian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0999	Romance Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Romance languages, literatures, and linguistics
16.0905	Spanish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Spanish language and literature
16.0907	Catalan Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Spanish language and literature
16.0101	Foreign Languages and Literatures, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0103	Language Interpretation and Translation	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0201	African Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0300	East Asian Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0301	Chinese Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0302	Japanese Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0303	Korean Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
16.0304	Tibetan Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0399	East Asian Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0400	Slavic Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0401	Baltic Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0402	Russian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0404	Albanian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0405	Bulgarian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0406	Czech Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0407	Polish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0408	Bosnian, Serbian, and Croatian Languages and Literatures	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0409	Slovak Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0410	Ukrainian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0499	Slavic, Baltic, and Albanian Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0500	Germanic Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0501	German Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0502	Scandinavian Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0503	Danish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0504	Dutch/ Flemish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0505	Norwegian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0506	Swedish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0599	Germanic Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0601	Modern Greek Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0700	South Asian Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0701	Hindi Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0702	Sanskrit and Classical Indian Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0704	Bengali Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0705	Punjabi Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
16.0706	Tamil Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0707	Urdu Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0799	South Asian Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.0801	Iranian Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1001	American Indian/ Native American Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1100	Middle/ Near Eastern and Semitic Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1101	Arabic Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1102	Hebrew Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1103	Ancient Near Eastern and Biblical Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1199	Middle/ Near Eastern and Semitic Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1301	Celtic Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1400	Southeast Asian Languages, Literatures, and Linguistics, General	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1401	Australian/ Oceanic/ Pacific Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1402	Indonesian/ Malay Languages and Literatures	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1403	Burmese Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1404	Filipino/ Tagalog Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1405	Khmer/ Cambodian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1406	Lao Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1407	Thai Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1408	Vietnamese Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1409	Hawaiian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1499	Southeast Asian and Australasian/ Pacific Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1501	Turkish Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1502	Uralic Languages, Literatures, and Linguistics	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1503	Hungarian/ Magyar Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1504	Mongolian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
16.1599	Turkic, Uralic-Altaic, Caucasian, and Central Asian Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1601	American Sign Language (ASL)	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1602	Linguistics of ASL and Other Sign Languages	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1603	Sign Language Interpretation and Translation	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1699	American Sign Language, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1701	English as a Second Language	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.1801	Armenian Language and Literature	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
16.9999	Foreign Languages, Literatures, and Linguistics, Other	Humanities	Foreign languages, literatures, and linguistics	Foreign languages, literatures, and linguistics nec
54.0102	American History (United States)	Humanities	History	American history (United States)
54.0102b	African-American/ Black History	Humanities	History	American history (United States)
54.0103	European History	Humanities	History	European history
54.0101	History, General	Humanities	History	History, general
54.0106	Asian History	Humanities	History	History, regional focus
54.0107	Canadian History	Humanities	History	History, regional focus
54.0199c	African History	Humanities	History	History, regional focus
54.0199d	Latin American History	Humanities	History	History, regional focus
54.0199e	Middle/ Near East History	Humanities	History	History, regional focus
54.0105	Public/ Applied History	Humanities	History	History nec
54.0108	Military History	Humanities	History	History nec
54.0199	History, Other	Humanities	History	History nec
38.0001	Philosophy and Religious Studies, General	Humanities	Philosophy and religious studies	Philosophy
38.0101	Philosophy	Humanities	Philosophy and religious studies	Philosophy
38.0102	Logic (PHILOSOPHY)	Humanities	Philosophy and religious studies	Philosophy
38.0103	Ethics	Humanities	Philosophy and religious studies	Philosophy
38.0104	Applied and Professional Ethics	Humanities	Philosophy and religious studies	Philosophy
38.0199	Philosophy, Other	Humanities	Philosophy and religious studies	Philosophy
38.9999	Philosophy and Religious Studies, Other	Humanities	Philosophy and religious studies	Philosophy
38.0201	Religion/ Religious Studies	Humanities	Philosophy and religious studies	Religion/ religious studies
38.0202	Buddhist Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0203	Christian Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0204	Hindu Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0205	Islamic Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
38.0206	Jewish/ Judaic Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0207	Talmudic Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0208	Catholic Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0209	Mormon Studies	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
38.0299	Religion/ Religious Studies, Other	Humanities	Philosophy and religious studies	Philosophy and religious studies nec
39.0201	Bible/ Biblical Studies	Humanities	Humanities, other	Bible/ biblical studies
24.0103	Humanities/ Humanistic Studies	Humanities	Humanities, other	Humanities and humanistic studies
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	Humanities	Humanities, other	Humanities and humanistic studies
39.0301	Missions/ Missionary Studies	Humanities	Humanities, other	Theological and ministerial studies
39.0302	Church Planting	Humanities	Humanities, other	Theological and ministerial studies
39.0399	Missions/ Missionary Studies and Missiology, Other	Humanities	Humanities, other	Theological and ministerial studies
39.0401	Religious Education	Humanities	Humanities, other	Theological and ministerial studies
39.0501	Religious/ Sacred Music	Humanities	Humanities, other	Theological and ministerial studies
39.0502	Worship Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0599	Religious Music and Worship, Other	Humanities	Humanities, other	Theological and ministerial studies
39.0601	Theology/ Theological Studies	Humanities	Humanities, other	Theological and ministerial studies
39.0602	Divinity/ Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0604	Pre-Theology/ Pre-Ministerial Studies	Humanities	Humanities, other	Theological and ministerial studies
39.0605	Rabbinical Studies	Humanities	Humanities, other	Theological and ministerial studies
39.0699	Theological and Ministerial Studies, Other	Humanities	Humanities, other	Theological and ministerial studies
39.0701	Pastoral Studies/ Counseling	Humanities	Humanities, other	Theological and ministerial studies
39.0702	Youth Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0703	Urban Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0704	Women's Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0705	Lay Ministry	Humanities	Humanities, other	Theological and ministerial studies
39.0706	Chaplain/ Chaplaincy Studies	Humanities	Humanities, other	Theological and ministerial studies
39.0799	Pastoral Counseling and Specialized Ministries, Other	Humanities	Humanities, other	Theological and ministerial studies
39.0801	Religious Institution Administration and Management	Humanities	Humanities, other	Theological and ministerial studies

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
39.0802	Religious/ Canon Law	Humanities	Humanities, other	Theological and ministerial studies
39.0899	Religious Institution Administration and Law, Other	Humanities	Humanities, other	Theological and ministerial studies
39.9999	Theology and Religious Vocations, Other	Humanities	Humanities, other	Theological and ministerial studies
50.0301	Dance, General	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0302	Ballet	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0399	Dance, Other	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0501	Drama and Dramatics/ Theatre Arts, General	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0502	Technical Theatre/ Theatre Design and Technology	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0504	Playwriting and Screenwriting	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0505	Theatre Literature, History and Criticism	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0506	Acting	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0507	Directing and Theatrical Production	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0509	Musical Theatre	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0510	Costume Design	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0511	Comedy Writing and Performance	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0512	Theatre and Dance	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0599	Dramatic/ Theatre Arts and Stagecraft, Other	Visual and performing arts	Performing arts	Dance, drama, theatre arts, and stagecraft
50.0903	Music Performance, General	Visual and performing arts	Performing arts	Music performance
50.0906	Conducting	Visual and performing arts	Performing arts	Music performance
50.0907	Keyboard Instruments	Visual and performing arts	Performing arts	Music performance
50.0908	Voice and Opera	Visual and performing arts	Performing arts	Music performance
50.0910	Jazz/ Jazz Studies	Visual and performing arts	Performing arts	Music performance
50.0911	Stringed Instruments	Visual and performing arts	Performing arts	Music performance
50.0914	Brass Instruments	Visual and performing arts	Performing arts	Music performance
50.0915	Woodwind Instruments	Visual and performing arts	Performing arts	Music performance
50.0916	Percussion Instruments	Visual and performing arts	Performing arts	Music performance
50.0904	Music Theory and Composition	Visual and performing arts	Performing arts	Music theory and composition

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
50.0905	Musicology and Ethnomusicology	Visual and performing arts	Performing arts	Musicology and ethnomusicology
50.0901	Music, General	Visual and performing arts	Performing arts	Music nec
50.0902	Music History, Literature, and Theory	Visual and performing arts	Performing arts	Music nec
50.0912	Music Pedagogy	Visual and performing arts	Performing arts	Music nec
50.0913	Music Technology	Visual and performing arts	Performing arts	Music nec
50.0917	Sound Arts	Visual and performing arts	Performing arts	Music nec
50.0999	Music, Other	Visual and performing arts	Performing arts	Music nec
50.0703	Art History, Criticism and Conservation	Visual and performing arts	Visual arts, media studies, and design	Art history, criticism, and conservation
50.0601	Film/ Cinema/ Media Studies	Visual and performing arts	Visual arts, media studies, and design	Film, cinema, and media studies
50.0602	Cinematography and Film/ Video Production	Visual and performing arts	Visual arts, media studies, and design	Film, cinema, and media studies
50.0605	Photography	Visual and performing arts	Visual arts, media studies, and design	Film, cinema, and media studies
50.0607	Documentary Production	Visual and performing arts	Visual arts, media studies, and design	Film, cinema, and media studies
50.0699	Film/ Video and Photographic Arts, Other	Visual and performing arts	Visual arts, media studies, and design	Film, cinema, and media studies
50.0101	Visual and Performing Arts, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0102	Digital Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0201	Crafts/ Craft Design, Folk Art and Artisanry	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0401	Design and Visual Communications, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0402	Commercial and Advertising Art	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0404	Industrial and Product Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0406	Commercial Photography	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0407	Fashion/ Apparel Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0408	Interior Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0409	Graphic Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0410	Illustration	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0411	Game and Interactive Media Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0499	Design and Applied Arts, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0701	Art/ Art Studies, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
50.0702	Fine/ Studio Arts, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0705	Drawing	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0706	Intermedia/ Multimedia	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0708	Painting	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0709	Sculpture	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0710	Printmaking	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0711	Ceramic Arts and Ceramics	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0712	Fiber, Textile and Weaving Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0713	Jewelry Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0714	Metal Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.0799	Fine Arts and Art Studies, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1001	Arts, Entertainment, and Media Management, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1002	Fine and Studio Arts Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1003	Music Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1004	Theatre/ Theatre Arts Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1099	Arts, Entertainment, and Media Management, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.1101	Community/ Environmental/ Socially-Engaged Art	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
50.9999	Visual and Performing Arts, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies, and design nec
09.0900	Public Relations, Advertising, and Applied Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0901	Organizational Communication, General	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0902	Public Relations/ Image Management	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0903	Advertising	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0904	Political Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0905	Health Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0906	Sports Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0907	International and Intercultural Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0908	Technical and Scientific Communication	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
09.0909	Communication Management and Strategic Communications	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0999	Public Relations, Advertising, and Applied Communication, Other	Other non-science and engineering	Communications and journalism	Applied communication, advertising, and public relations
09.0101	Speech Communication and Rhetoric	Other non-science and engineering	Communications and journalism	Communication and media studies
09.0199	Communication and Media Studies, Other	Other non-science and engineering	Communications and journalism	Communication and media studies
09.0100	Communication, General	Other non-science and engineering	Communications and journalism	Communication, general
09.0100d	Communication Studies	Other non-science and engineering	Communications and journalism	Communication, general
09.0102	Mass Communication/ Media Studies	Other non-science and engineering	Communications and journalism	Mass communication/ media studies
09.0100b	Communication Research	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0100c	Communication Theory	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0401	Journalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0402	Broadcast Journalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0404	Photojournalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0405	Business and Economic Journalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0406	Cultural Journalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0407	Science/ Health/ Environmental Journalism	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0499	Journalism, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0701	Radio and Television	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0702	Digital Communication and Media/ Multimedia	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.0799	Radio, Television, and Digital Communication, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.1001	Publishing	Other non-science and engineering	Communications and journalism	Communications and journalism nec
09.9999	Communication, Journalism, and Related Programs, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0105	Communications Technology	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0201	Photographic and Film/ Video Technology	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0202	Radio and Television Broadcasting Technology	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0203	Recording Arts Technology	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0204	Voice Writing Technology	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0299	Audiovisual Communications Technologies, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
10.0301	Graphic Communications, General	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0302	Printing Management	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0303	Prepress/ Desktop Publishing and Digital Imaging Design	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0304	Animation, Interactive Technology, Video Graphics, and Special Effects	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0305	Graphic and Printing Equipment Operator, General Production	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0306	Platemaker/ Imager	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0307	Printing Press Operator	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0308	Computer Typography and Composition Equipment Operator	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.0399	Graphic Communications, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec
10.9999	Communications Technologies and Support Services, Other	Other non-science and engineering	Communications and journalism	Communications and journalism nec
16.1200	Classics and Classical Languages, Literatures, and Linguistics, General	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
16.1202	Ancient/ Classical Greek Language and Literature	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
16.1203	Latin Language and Literature	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
16.1299	Classics and Classical Languages, Literatures, and Linguistics, Other	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
30.2201	Ancient Studies/ Civilization	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
30.2202	Classical, Ancient Mediterranean, and Near Eastern Studies and Archaeology	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
30.2299	Classical and Ancient Studies, Other	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Classical and ancient studies
30.9999f	Interdisciplinary Leadership/ Leadership Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Interdisciplinary leadership/ leadership studies
16.0199b	Translation Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
24.0101	Liberal Arts and Sciences/ Liberal Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
24.0102	General Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.0000	Multi-/ Interdisciplinary Studies, General	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.0001	Comprehensive Transition and Postsecondary (CTP) Program	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.1201	Historic Preservation and Conservation, General	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.1202	Cultural Resource Management and Policy Analysis	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.1299	Historic Preservation and Conservation, Other	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.1301	Medieval and Renaissance Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec

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Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
30.1401	Museology/ Museum Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.2801	Dispute Resolution	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.2901	Maritime Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.3601	Cultural Studies and Comparative Literature	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.4501	History and Language/ Literature	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.4501b	African-American/ Black History and Literature	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.5201	Digital Humanities and Textual Studies, General	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.5202	Digital Humanities	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.5203	Textual Studies	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.5299	Digital Humanities and Textual Studies, Other	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.9999	Multi-/ Interdisciplinary Studies, Other	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
30.9999g	Second Language Acquisition	Other non-science and engineering	Multidisciplinary/ interdisciplinary studies	Multidisciplinary/ interdisciplinary studies nec
44.0201	Community Organization and Advocacy	Other non-science and engineering	Public administration and social services	Public administration
44.0401	Public Administration	Other non-science and engineering	Public administration and social services	Public administration
44.0402	Public Works Management	Other non-science and engineering	Public administration and social services	Public administration
44.0403	Transportation and Infrastructure Planning/ Studies	Other non-science and engineering	Public administration and social services	Public administration
44.0499	Public Administration, Other	Other non-science and engineering	Public administration and social services	Public administration
44.9999b	Public Administration and Policy	Other non-science and engineering	Public administration and social services	Public administration
44.0000	Human Services, General	Other non-science and engineering	Public administration and social services	Social work and human services
44.0701	Social Work	Other non-science and engineering	Public administration and social services	Social work and human services
44.0702	Youth Services/ Administration	Other non-science and engineering	Public administration and social services	Social work and human services
44.0703	Forensic Social Work	Other non-science and engineering	Public administration and social services	Social work and human services
44.0799	Social Work, Other	Other non-science and engineering	Public administration and social services	Social work and human services
44.9999	Public Administration and Social Service Professions, Other	Other non-science and engineering	Public administration and social services	Social work and human services
04.0200	Pre-Architecture Studies	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0201	Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0202	Architectural Design	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
04.0299	Architecture, Other	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0401	Environmental Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0402	Healthcare Environment Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0403	Sustainable Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0499	Environmental Design, Other	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0501	Interior Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0601	Landscape Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0801	Architectural History and Criticism, General	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0802	Architectural Conservation	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0803	Architectural Studies	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0899	Architectural History, Criticism, and Conservation, Other	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0901	Architectural Technology	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0902	Architectural and Building Sciences/ Technology	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0999	Architectural Sciences and Technology, Other	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.1001	Real Estate Development	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.9999	Architecture and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Architecture and architectural studies
04.0301	City/ Urban, Community, and Regional Planning	Other non-science and engineering	Non-science and engineering, other	City/ urban, community, and regional planning
19.0101	Family and Consumer Sciences/ Human Sciences, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0201	Business Family and Consumer Sciences/ Human Sciences	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0202	Family and Consumer Sciences/ Human Sciences Communication	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0203	Consumer Merchandising/ Retailing Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0299	Family and Consumer Sciences/ Human Sciences Business Services, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0401	Family Resource Management Studies, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0402	Consumer Economics	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0403	Consumer Services and Advocacy	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0499	Family and Consumer Economics and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0501	Foods, Nutrition, and Wellness Studies, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
19.0504	Human Nutrition	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0505	Foodservice Systems Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0599	Foods, Nutrition, and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0601	Housing and Human Environments, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0604	Facilities Planning and Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0605	Home Furnishings and Equipment Installers	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0699	Housing and Human Environments, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0704	Family Systems	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0707	Family and Community Services	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0708	Child Care and Support Services Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0709	Child Care Provider/ Assistant	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0710	Developmental Services Worker	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0711	Early Childhood and Family Studies	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0712	Parent Education Services	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0799	Human Development, Family Studies, and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0901	Apparel and Textiles, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0902	Apparel and Textile Manufacture	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0904	Textile Science	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0905	Apparel and Textile Marketing Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0906	Fashion and Fabric Consultant	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.0999	Apparel and Textiles, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.1001	Work and Family Studies	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
19.9999	Family and Consumer Sciences/ Human Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer, and human sciences
43.0100	Criminal Justice and Corrections, General	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0102	Corrections	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0103	Criminal Justice/ Law Enforcement Administration	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0107	Criminal Justice/ Police Science	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
43.0109	Security and Loss Prevention Services	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0110	Juvenile Corrections	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0112	Securities Services Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0113	Corrections Administration	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0114	Law Enforcement Investigation and Interviewing	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0115	Law Enforcement Record-Keeping and Evidence Management	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0119	Critical Incident Response/ Special Police Operations	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0120	Protective Services Operations	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0121	Suspension and Debarment Investigation	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0122	Maritime Law Enforcement	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0123	Cultural/ Archaeological Resources Protection	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0199	Corrections and Criminal Justice, Other	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0201	Fire Prevention and Safety Technology	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0202	Fire Services Administration	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0203	Fire Science/ Fire-fighting	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0204	Fire Systems Technology	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0205	Fire/ Arson Investigation and Prevention	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0206	Wildland/ Forest Firefighting and Investigation	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0299	Fire Protection, Other	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0301	Homeland Security	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0302	Crisis/ Emergency/ Disaster Management	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0303	Critical Infrastructure Protection	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0304	Terrorism and Counterterrorism Operations	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0399	Homeland Security, Other	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0401	Security Science and Technology, General	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0402	Criminalistics and Criminal Science	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0403	Cyber/ Computer Forensics and Counterterrorism	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
43.0404	Cybersecurity Defense Strategy/ Policy	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0405	Financial Forensics and Fraud Investigation	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0406	Forensic Science and Technology	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0407	Geospatial Intelligence	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0408	Law Enforcement Intelligence Analysis	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.0499	Security Science and Technology, Other	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	Other non-science and engineering	Non-science and engineering, other	Homeland security and protective services
22.0000	Legal Studies	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0001	Pre-Law Studies	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0099	Non-Professional Legal Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0101	Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0201	Advanced Legal Research/ Studies, General	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0202	Programs for Foreign Lawyers	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0203	American/ US Law/ Legal Studies/ Jurisprudence	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0204	Canadian Law/ Legal Studies/ Jurisprudence	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0205	Banking, Corporate, Finance, and Securities Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0206	Comparative Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0207	Energy, Environment, and Natural Resources Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0208	Health Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0209	International Law and Legal Studies	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0210	International Business, Trade, and Tax Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0211	Tax Law/ Taxation	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0212	Intellectual Property Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0213	Patent Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0214	Agriculture Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0215	Arts and Entertainment Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0216	Compliance Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
22.0217	Criminal Law and Procedure	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0218	Entrepreneurship Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0219	Family/ Child/ Elder Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0220	Human Resources Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0221	Insurance Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0222	Real Estate and Land Development Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0223	Transportation Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0224	Tribal/ Indigenous Law	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0299	Legal Research and Advanced Professional Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0301	Legal Administrative Assistant/ Secretary	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0302	Legal Assistant/ Paralegal	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0303	Court Reporting and Captioning/ Court Reporter	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0304	Court Interpreter	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0305	Scopist	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.0399	Legal Support Services, Other	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
22.9999	Legal Professions and Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law/ legal studies and research
31.0101	Parks, Recreation, and Leisure Studies	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0301	Parks, Recreation, and Leisure Facilities Management, General	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0302	Golf Course Operation and Grounds Management	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0399	Parks, Recreation, and Leisure Facilities Management, Other	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0501	Sports, Kinesiology, and Physical Education/ Fitness, General	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0504	Sport and Fitness Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0507	Physical Fitness Technician	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0508	Sports Studies	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
31.0599	Sports, Kinesiology, and Physical Education/ Fitness, Other	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.0601	Outdoor Education	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
31.9999	Parks, Recreation, Leisure, Fitness, and Kinesiology, Other	Other non-science and engineering	Non-science and engineering, other	Parks, recreation, leisure, fitness, and sport studies and management
01.0504	Dog/ Pet/ Animal Grooming	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.0505	Animal Training	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.0507	Equestrian/ Equine Studies	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.0508	Taxidermy/ Taxidermist	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.0509	Farrier Science	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.0599	Agricultural and Domestic Animal Services, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.8201	Veterinary Administrative Services, General	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.8202	Veterinary Office Management/ Administration	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.8203	Veterinary Reception/ Receptionist	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.8204	Veterinary Administrative/ Executive Assistant and Veterinary Secretary	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
01.8299	Veterinary Administrative Services, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.0101	Library and Information Science	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.0102	Children and Youth Library Services	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.0103	Archives/ Archival Administration	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.0199	Library Science and Administration, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.0301	Library and Archives Assisting	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
25.9999	Library Science, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0201	Intelligence, General (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0202	Strategic Intelligence (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0203	Signal/ Geospatial Intelligence (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0204	Command & Control (C3, C4) Systems and Operations (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0205	Information Operations/ Joint Information Operations (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0206	Information/ Psychological Warfare and Military Media Relations	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec

TABLE A-5

Doctoral SED-CIP codes in broad, major, and detailed fields: 2023

(Field)

SED-CIP Code	SED-CIP Title	Broad field	Major field	Detailed field
29.0207	Cyber/ Electronic Operations and Warfare (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0299	Intelligence, Command Control and Information Operations, Other (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0301	Combat Systems Engineering (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0302	Directed Energy Systems (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0303	Engineering Acoustics (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0304	Low-Observables and Stealth Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0305	Space Systems Operations (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0306	Operational Oceanography (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0307	Undersea Warfare (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0399	Military Applied Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0401	Aerospace Ground Equipment Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0402	Air and Space Operations Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0403	Aircraft Armament Systems Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0404	Explosive Ordinance/ Bomb Disposal (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0405	Joint Command/ Task Force (C3, C4) Systems (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0406	Military Information Systems Technology	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0407	Missile and Space Systems Technology	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0408	Munitions Systems/ Ordinance Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0409	Radar Communications and Systems Technology (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0499	Military Systems and Maintenance Technology, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.0601	Military Technology and Applied Sciences Management	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec
29.9999	Military Technologies and Applied Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec

CIP = Classification of Instructional Programs; nec = not elsewhere classified; SED = Survey of Earned Doctorates; STEM = science, technology, engineering, and mathematics.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present. In 2023, two new major fields "Biological and biomedical sciences, general" and "Aerospace, aeronautical, astronautical, and space engineering" were added to improve data utility. See the summary field list in [table A-4](#); see the SED-CIP code crosswalk to the trend field taxonomy in [table A-6](#). For more information about the field taxonomy changes, see the ["Technical Notes."](#)

Source(s):

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

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
01.0103	Agricultural Economics	Agricultural sciences and natural resources	Agricultural sciences	Agricultural economics
01.0904	Animal Nutrition	Agricultural sciences and natural resources	Agricultural sciences	Animal nutrition
01.0907	Poultry Science	Agricultural sciences and natural resources	Agricultural sciences	Animal science, poultry or avian
01.0302	Animal/ Livestock Husbandry and Production	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0306	Dairy Husbandry and Production	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0307	Horse Husbandry/ Equine Science and Management	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0505	Animal Training	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0507	Equestrian/ Equine Studies	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0509	Farrier Science	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0599	Agricultural and Domestic Animal Services, Other	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0901	Animal Sciences, General	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0902	Agricultural Animal Breeding	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0903	Animal Health	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0905	Dairy Science	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0906	Livestock Management	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0999	Animal Sciences, Other	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
26.0708	Animal Behavior and Ethology	Agricultural sciences and natural resources	Agricultural sciences	Animal sciences, other
01.0304	Crop Production	Agricultural sciences and natural resources	Agricultural sciences	Agronomy and crop science
01.1102	Agronomy and Crop Science	Agricultural sciences and natural resources	Agricultural sciences	Agronomy and crop science
01.1104	Agricultural and Horticultural Plant Breeding	Agricultural sciences and natural resources	Agricultural sciences	Agricultural and horticultural plant breeding
26.0305b	Plant Pathology/ Phytopathology (AGRICULTURAL SCIENCES)	Agricultural sciences and natural resources	Agricultural sciences	Plant pathology/ phytopathology (agricultural sciences)
01.1101	Plant Sciences, General	Agricultural sciences and natural resources	Agricultural sciences	Plant sciences, other
01.1105	Plant Protection and Integrated Pest Management	Agricultural sciences and natural resources	Agricultural sciences	Plant sciences, other
01.1199	Plant Sciences, Other	Agricultural sciences and natural resources	Agricultural sciences	Plant sciences, other
01.1001	Food Science	Agricultural sciences and natural resources	Agricultural sciences	Food science
01.0401	Agricultural and Food Products Processing	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other
01.1002	Food Technology and Processing	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
01.1003	Brewing Science	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other
01.1004	Viticulture and Enology	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other
01.1005	Zymology/ Fermentation Science	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other
01.1099	Food Science and Technology, Other	Agricultural sciences and natural resources	Agricultural sciences	Food science and technology, other
01.1202	Soil Chemistry and Physics	Agricultural sciences and natural resources	Agricultural sciences	Soil chemistry/ microbiology
01.1203	Soil Microbiology	Agricultural sciences and natural resources	Agricultural sciences	Soil chemistry/ microbiology
01.1203b	Soil Chemistry and Microbiology	Agricultural sciences and natural resources	Agricultural sciences	Soil chemistry/ microbiology
01.1201	Soil Science and Agronomy, General	Agricultural sciences and natural resources	Agricultural sciences	Soil sciences, other
01.1299	Soil Sciences, Other	Agricultural sciences and natural resources	Agricultural sciences	Soil sciences, other
01.0601	Applied Horticulture/ Horticulture Operations, General	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0603	Ornamental Horticulture	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0604	Greenhouse Operations and Management	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0605	Landscaping and Groundskeeping	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0606	Plant Nursery Operations and Management	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0607	Turf and Turfgrass Management	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0608	Floriculture/ Floristry Operations and Management	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0609	Public Horticulture	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0610	Urban and Community Horticulture	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0699	Applied Horticulture/ Horticultural Business Services, Other	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.1103	Horticultural Science	Agricultural sciences and natural resources	Agricultural sciences	Horticulture science
01.0201	Agricultural Mechanization, General	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0204	Agricultural Power Machinery Operation	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0205	Agricultural Mechanics and Equipment/ Machine Technology	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0207	Irrigation Management Technology	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0299	Agricultural Mechanization, Other	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0308	Agroecology and Sustainable Agriculture	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.0399	Agricultural Production Operations, Other	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
01.1399	Agriculture/ Veterinary Preparatory Programs, Other	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.9999	Agricultural/ Animal/ Plant/ Veterinary Science and Related Fields, Other	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
03.0210	Bioenergy	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
30.1801	Natural Sciences	Agricultural sciences and natural resources	Agricultural sciences	Agricultural sciences/ natural resources, other
01.1302	Pre-Veterinary Studies	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8001	Veterinary Medicine	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8101	Veterinary Sciences/ Veterinary Clinical Sciences, General	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8102	Comparative and Laboratory Animal Medicine	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8103	Large Animal/ Food Animal and Equine Surgery and Medicine	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8104	Small/ Companion Animal Surgery and Medicine	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8105	Veterinary Anatomy	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8106	Veterinary Infectious Diseases	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8107	Veterinary Microbiology and Immunobiology	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8108	Veterinary Pathology and Pathobiology	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8109	Veterinary Physiology	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8110	Veterinary Preventive Medicine, Epidemiology, and Public Health	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8111	Veterinary Toxicology and Pharmacology	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8199	Veterinary Biomedical and Clinical Sciences, Other	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8201	Veterinary Administrative Services, General	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8202	Veterinary Office Management/ Administration	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8203	Veterinary Reception/ Receptionist	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8204	Veterinary Administrative/ Executive Assistant and Veterinary Secretary	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8299	Veterinary Administrative Services, Other	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8301	Veterinary/ Animal Health Technology and Veterinary Assistant	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
01.8399	Veterinary/ Animal Health Technologies, Other	Agricultural sciences and natural resources	Agricultural sciences	Veterinary sciences
03.0204	Environmental/ Natural Resource Economics (NATURAL RESOURCES/ CONSERVATION SCIENCES)	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources/ environmental economics (agricultural sciences)
01.0303	Aquaculture	Agricultural sciences and natural resources	Natural resources and conservation	Fishing and fisheries sciences/ management

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
03.0301	Fishing and Fisheries Sciences and Management	Agricultural sciences and natural resources	Natural resources and conservation	Fishing and fisheries sciences/ management
03.0502	Forest Sciences and Biology	Agricultural sciences and natural resources	Natural resources and conservation	Forest sciences and biology
03.0506	Forest Management/ Forest Resources Management	Agricultural sciences and natural resources	Natural resources and conservation	Forest/ forest resources management
03.0510	Forest Resources Production and Management	Agricultural sciences and natural resources	Natural resources and conservation	Forest/ forest resources management
03.0101	Natural Resources/ Conservation, General	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation
03.0199	Natural Resources Conservation and Research, Other	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation
03.9999	Natural Resources and Conservation, Other	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation
30.3301	Sustainability Studies	Agricultural sciences and natural resources	Natural resources and conservation	Natural resources and conservation
03.0501	Forestry, General	Agricultural sciences and natural resources	Natural resources and conservation	Forestry, other
03.0508	Urban Forestry	Agricultural sciences and natural resources	Natural resources and conservation	Forestry, other
03.0509	Wood Science and Wood Products/ Pulp and Paper Technology	Agricultural sciences and natural resources	Natural resources and conservation	Forestry, other
03.0511	Forest Technology	Agricultural sciences and natural resources	Natural resources and conservation	Forestry, other
03.0599	Forestry, Other	Agricultural sciences and natural resources	Natural resources and conservation	Forestry, other
01.1106	Range Science and Management	Agricultural sciences and natural resources	Natural resources and conservation	Wildlife/ range management
03.0601	Wildlife, Fish and Wildlands Science and Management	Agricultural sciences and natural resources	Natural resources and conservation	Wildlife/ range management
03.0103	Environmental Studies	Agricultural sciences and natural resources	Natural resources and conservation	Environmental science
03.0104	Environmental Science	Agricultural sciences and natural resources	Natural resources and conservation	Environmental science
01.0000	Agriculture, General	Agricultural sciences and natural resources	Natural resources and conservation	Agricultural sciences/ natural resources, general
01.0701	International Agriculture	Agricultural sciences and natural resources	Natural resources and conservation	Agricultural sciences/ natural resources, general
03.0201	Environmental/ Natural Resources Management and Policy, General	Agricultural sciences and natural resources	Natural resources and conservation	Natural resource/ environmental policy
03.0209	Energy and Environmental Policy	Agricultural sciences and natural resources	Natural resources and conservation	Natural resource/ environmental policy
03.0299	Environmental/ Natural Resources Management and Policy, Other	Agricultural sciences and natural resources	Natural resources and conservation	Natural resource/ environmental policy
26.0202	Biochemistry	Biological and biomedical sciences	Biochemistry and biophysics	Biochemistry (biological sciences)
26.0205	Molecular Biochemistry	Biological and biomedical sciences	Biochemistry and biophysics	Biochemistry (biological sciences)
26.0210	Biochemistry and Molecular Biology	Biological and biomedical sciences	Biochemistry and biophysics	Biochemistry (biological sciences)
26.0203	Biophysics (BIOLOGY)	Biological and biomedical sciences	Biochemistry and biophysics	Biophysics (biological sciences)
26.0206	Molecular Biophysics	Biological and biomedical sciences	Biochemistry and biophysics	Biophysics (biological sciences)

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.0102	Biomedical Sciences, General	Biological and biomedical sciences	Biology and biomedical sciences, general	Biomedical sciences
26.0907	Cardiovascular Science	Biological and biomedical sciences	Biology and biomedical sciences, general	Biomedical sciences
26.0101	Biology/ Biological Sciences, General	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.0101b	Integrative/ Interdisciplinary Biology, Biosciences, and Biomedical Sciences	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.0208	Photobiology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.0209	Radiation Biology/ Radiobiology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.0299	Biochemistry, Biophysics and Molecular Biology, Other	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.0905	Reproductive Biology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.1304	Aquatic Biology/ Limnology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.1305	Environmental Biology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.9999	Biological and Biomedical Sciences, Other	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
30.2701	Human Biology	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
51.1405	Tropical Medicine	Biological and biomedical sciences	Biology and biomedical sciences, general	Biological and biomedical sciences, general
26.1103	Bioinformatics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics
26.1199	Biomathematics, Bioinformatics, and Computational Biology, Other	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics
51.2706	Medical Informatics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics
51.2706b	Biomedical and Health Informatics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Bioinformatics
26.1104	Computational Biology	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Computational biology
26.1101	Biometry/ Biometrics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Biometrics and biostatistics
26.1102	Biostatistics	Biological and biomedical sciences	Bioinformatics, biostatistics, and computational biology	Biometrics and biostatistics
26.0403	Anatomy	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Anatomy
26.0401	Cell/ Cellular Biology and Histology	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Cell/ cellular biology and histology
26.0407	Cell Biology and Anatomy	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Cell/ cellular biology and histology

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.0499	Cell/ Cellular Biology and Anatomical Sciences, Other	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Cell/ cellular biology and histology
26.0404	Developmental Biology and Embryology	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Developmental biology and embryology
26.0207	Structural Biology	Biological and biomedical sciences	Cellular and developmental biology, and anatomy	Structural biology
26.1309	Epidemiology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Epidemiology
26.1311	Epidemiology and Biostatistics	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Epidemiology
26.1303	Evolutionary Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1306	Population Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1307	Conservation Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1308	Systematic Biology/ Biological Systematics	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1399	Ecology, Evolution, Systematics and Population Biology, Other	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Evolutionary biology
26.1301	Ecology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology
26.1310	Ecology and Evolutionary Biology	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology
26.1399b	Ecology, Evolution, and Behavior	Biological and biomedical sciences	Ecology, evolutionary biology, and epidemiology	Ecology
26.0801	Genetics, General	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0802	Molecular Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0803	Microbial and Eukaryotic Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0804	Animal Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0806	Human/ Medical Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0807	Genome Sciences/ Genomics	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0899	Genetics, Other	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
51.0914	Gene/ Genetic Therapy	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
51.1010	Cytogenetics/ Genetics/ Clinical Genetics Technology/ Technologist	Biological and biomedical sciences	Genetics and genomics	Genetics/ genomics, human and animal
26.0503	Medical Microbiology and Bacteriology	Biological and biomedical sciences	Microbiology and immunology	Bacteriology
26.0506	Mycology	Biological and biomedical sciences	Microbiology and immunology	Immunology
26.0507	Immunology	Biological and biomedical sciences	Microbiology and immunology	Immunology
26.0509	Infectious Disease and Global Health	Biological and biomedical sciences	Microbiology and immunology	Immunology

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.0599	Microbiological Sciences and Immunology, Other	Biological and biomedical sciences	Microbiology and immunology	Immunology
26.0502	Microbiology, General	Biological and biomedical sciences	Microbiology and immunology	Microbiology
26.0508	Microbiology and Immunology	Biological and biomedical sciences	Microbiology and immunology	Microbiology
26.0505	Parasitology	Biological and biomedical sciences	Microbiology and immunology	Parasitology
26.0504	Virology	Biological and biomedical sciences	Microbiology and immunology	Virology
26.0204	Molecular Biology	Biological and biomedical sciences	Molecular biology	Molecular biology
26.0406	Cell/ Cellular and Molecular Biology	Biological and biomedical sciences	Molecular biology	Molecular biology
26.1501	Neuroscience	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1502	Neuroanatomy	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1503	Neurobiology and Anatomy	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1504	Neurobiology and Behavior	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1599	Neurobiology and Neurosciences, Other	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1599c	Computational Neuroscience	Biological and biomedical sciences	Neurobiology and neurosciences	Neurosciences and neurobiology
26.1006	Environmental Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Environmental toxicology
26.1004	Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1005	Molecular Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1099	Pharmacology and Toxicology, Other	Biological and biomedical sciences	Pharmacology and toxicology	Toxicology
26.1001	Pharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology, human and animal
26.1002	Molecular Pharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology, human and animal
26.1003	Neuropharmacology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology, human and animal
26.1007	Pharmacology and Toxicology	Biological and biomedical sciences	Pharmacology and toxicology	Pharmacology, human and animal
26.0904	Endocrinology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Endocrinology
26.0911	Oncology and Cancer Biology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Cancer biology
26.1401	Molecular Medicine	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Molecular medicine
26.0910	Pathology/ Experimental Pathology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Pathology, human and animal
26.0999b	Pathobiology/ Integrative Pathobiology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Pathology, human and animal
51.0811	Pathology/ Pathologist Assistant	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Pathology, human and animal

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.0707	Animal Physiology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Physiology, human and animal
26.0901	Physiology, General	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Physiology, human and animal
26.0902	Molecular Physiology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Physiology, human and animal
26.0903	Cell Physiology	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Physiology, human and animal
26.0999	Physiology, Pathology, and Related Sciences, Other	Biological and biomedical sciences	Physiology, pathology, and cancer biology	Physiology, human and animal
26.1201	Biotechnology	Biological and biomedical sciences	Biology and biomedical sciences, other	Biotechnology
26.0805	Plant Genetics	Biological and biomedical sciences	Biology and biomedical sciences, other	Plant genetics
26.0305	Plant Pathology/ Phytopathology (BIOLOGY)	Biological and biomedical sciences	Biology and biomedical sciences, other	Plant pathology and phytopathology (biological sciences)
26.0307	Plant Physiology	Biological and biomedical sciences	Biology and biomedical sciences, other	Plant physiology
26.0301	Botany/ Plant Biology	Biological and biomedical sciences	Biology and biomedical sciences, other	Botany and plant biology
26.0308	Plant Molecular Biology	Biological and biomedical sciences	Biology and biomedical sciences, other	Botany and plant biology
26.0399	Botany/ Plant Biology, Other	Biological and biomedical sciences	Biology and biomedical sciences, other	Botany and plant biology
01.0310	Apiculture	Biological and biomedical sciences	Biology and biomedical sciences, other	Entomology
26.0702	Entomology	Biological and biomedical sciences	Biology and biomedical sciences, other	Entomology
26.0702c	Entomology and Nematology	Biological and biomedical sciences	Biology and biomedical sciences, other	Entomology
19.0504	Human Nutrition	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
30.1901	Nutrition Sciences	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
51.3101	Dietetics/ Dietitian	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
51.3102	Clinical Nutrition/ Nutritionist	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
51.3103	Dietetic Technician	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
51.3104	Dietitian Assistant	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
51.3199	Dietetics and Clinical Nutrition Services, Other	Biological and biomedical sciences	Biology and biomedical sciences, other	Nutrition sciences
26.0709	Wildlife Biology	Biological and biomedical sciences	Biology and biomedical sciences, other	Wildlife biology
26.0701	Zoology/ Animal Biology	Biological and biomedical sciences	Biology and biomedical sciences, other	Zoology
26.0799	Zoology/ Animal Biology, Other	Biological and biomedical sciences	Biology and biomedical sciences, other	Zoology
15.0401	Biomedical Technology	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
26.0702b	Nematology	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.0909	Vision Science/ Physiological Optics	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
26.0912	Aerospace Physiology and Medicine	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
26.0913	Biomechanics	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
30.0101	Biological and Physical Sciences	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
30.5301	Thanatology	Biological and biomedical sciences	Biology and biomedical sciences, other	Biological and biomedical sciences, other
11.0102	Artificial Intelligence	Computer and information sciences	Computer science	Computer science
11.0104	Informatics	Computer and information sciences	Computer science	Computer science
11.0701	Computer Science	Computer and information sciences	Computer science	Computer science
11.0701b	Computing Theory and Practice (COMPUTER SCIENCE)	Computer and information sciences	Computer science	Computer science
30.3101	Human Computer Interaction	Computer and information sciences	Computer science	Computer science
11.0103	Information Technology	Computer and information sciences	Computer and information sciences, other	Information science and systems
11.0301	Data Processing and Data Processing Technology	Computer and information sciences	Computer and information sciences, other	Information science and systems
11.0401	Information Science/ Studies	Computer and information sciences	Computer and information sciences, other	Information science and systems
29.0406	Military Information Systems Technology	Computer and information sciences	Computer and information sciences, other	Information science and systems
11.0101	Computer and Information Sciences, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0201	Computer Programming/ Programmer, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0202	Computer Programming, Specific Applications	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0203	Computer Programming, Vendor/ Product Certification	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0204	Computer Game Programming	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0205	Computer Programming, Specific Platforms	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0901	Computer Systems Networking and Telecommunications	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0902	Cloud Computing	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.0999	Computer Systems Networking and Telecommunications, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
11.1006	Computer Support Specialist	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, general
10.0308	Computer Typography and Composition Equipment Operator	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0105	Human-Centered Technology Design	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0199	Computer and Information Sciences, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
11.0299	Computer Programming, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0501	Computer Systems Analysis/ Analyst	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0801	Web Page, Digital/ Multimedia and Information Resources Design	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0802	Data Modeling/ Warehousing and Database Administration	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0803	Computer Graphics	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0804	Modeling, Virtual Environments and Simulation	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.0899	Computer Software and Media Applications, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1001	Network and System Administration/ Administrator	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1002	System, Networking, and LAN/ WAN Management/ Manager	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1003	Computer and Information Systems Security/ Auditing/ Information Assurance	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1004	Web/ Multimedia Management and Webmaster	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1005	Information Technology Project Management	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.1099	Computer/ Information Technology Services Administration and Management, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
11.9999	Computer and Information Sciences and Support Services, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
29.0207	Cyber/ Electronic Operations and Warfare (MILITARY)	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
29.0299	Intelligence, Command Control and Information Operations, Other (MILITARY)	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
30.7001	Data Science, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
30.7099	Data Science, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
30.7099b	Data Mining and Machine Learning	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
30.7101	Data Analytics, General	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
30.7199	Data Analytics, Other	Computer and information sciences	Computer and information sciences, other	Computer and information sciences, other
14.0201	Aerospace, Aeronautical, and Astronautical/ Space Engineering, General	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
14.0202	Astronautical Engineering	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
14.0202b	Aeronautics and Astronautics	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
14.0299	Aerospace, Aeronautical, and Astronautical/ Space Engineering, Other	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
14.1901b	Mechanical and Aerospace Engineering	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
15.0801	Aeronautical/ Aerospace Engineering Technology	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
29.0305	Space Systems Operations (MILITARY)	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
29.0401	Aerospace Ground Equipment Technology (MILITARY)	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
29.0402	Air and Space Operations Technology (MILITARY)	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
29.0403	Aircraft Armament Systems Technology (MILITARY)	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
29.0407	Missile and Space Systems Technology	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
49.0101	Aeronautics/ Aviation/ Aerospace Science and Technology, General	Engineering	Aerospace, aeronautical, and astronautical engineering	Aerospace, aeronautical, and astronautical engineering
14.0501	Bioengineering and Biomedical Engineering	Engineering	Bioengineering and biomedical engineering	Bioengineering and biomedical engineering
14.4501	Biological/ Biosystems Engineering	Engineering	Bioengineering and biomedical engineering	Bioengineering and biomedical engineering
14.0701	Chemical Engineering	Engineering	Chemical and petroleum engineering	Chemical engineering
14.0702	Chemical and Biomolecular Engineering	Engineering	Chemical and petroleum engineering	Chemical engineering
14.0799	Chemical Engineering, Other	Engineering	Chemical and petroleum engineering	Chemical engineering
14.4301	Biochemical Engineering	Engineering	Chemical and petroleum engineering	Chemical engineering
15.0615	Chemical Engineering Technology	Engineering	Chemical and petroleum engineering	Chemical engineering
14.2501	Petroleum Engineering	Engineering	Chemical and petroleum engineering	Petroleum engineering
15.0903	Petroleum Technology	Engineering	Chemical and petroleum engineering	Petroleum engineering
15.0999	Mining and Petroleum Technologies, Other	Engineering	Chemical and petroleum engineering	Petroleum engineering
14.3201	Polymer/ Plastics Engineering	Engineering	Chemical and petroleum engineering	Polymer and plastics engineering
15.0607	Plastics and Polymer Engineering Technology	Engineering	Chemical and petroleum engineering	Polymer and plastics engineering
14.0401	Architectural Engineering	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0801	Civil Engineering, General	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0899	Civil Engineering, Other	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0899b	Civil and Environmental Engineering	Engineering	Civil, environmental, and transportation engineering	Civil engineering

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
14.3301	Construction Engineering	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.3801	Surveying Engineering	Engineering	Civil, environmental, and transportation engineering	Civil engineering
15.0201	Civil Engineering Technologies	Engineering	Civil, environmental, and transportation engineering	Civil engineering
15.1001	Construction Engineering Technology	Engineering	Civil, environmental, and transportation engineering	Civil engineering
15.1102	Surveying Technology/ Surveying	Engineering	Civil, environmental, and transportation engineering	Civil engineering
15.1103	Hydraulics and Fluid Power Technology	Engineering	Civil, environmental, and transportation engineering	Civil engineering
15.1304	Civil Drafting and Civil Engineering CAD/ CADD	Engineering	Civil, environmental, and transportation engineering	Civil engineering
14.0803	Structural Engineering	Engineering	Civil, environmental, and transportation engineering	Structural engineering
14.0805	Water Resources Engineering	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
14.1401	Environmental/ Environmental Health Engineering	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
14.3401	Forest Engineering	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
15.0507	Environmental/ Environmental Engineering Technology	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
15.0508	Hazardous Materials Management and Waste Technology	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
15.0599	Environmental Control Technologies, Other	Engineering	Civil, environmental, and transportation engineering	Environmental/ environmental health engineering
14.0802	Geotechnical and Geoenvironmental Engineering	Engineering	Civil, environmental, and transportation engineering	Geotechnical and geoenvironmental engineering
14.3901	Geological/ Geophysical Engineering	Engineering	Civil, environmental, and transportation engineering	Geotechnical and geoenvironmental engineering
14.0804	Transportation and Highway Engineering	Engineering	Civil, environmental, and transportation engineering	Transportation and highway engineering
14.1099b	Communications Engineering	Engineering	Electrical and computer engineering	Communications engineering
14.0901	Computer Engineering, General	Engineering	Electrical and computer engineering	Computer engineering
14.0902	Computer Hardware Engineering	Engineering	Electrical and computer engineering	Computer engineering
14.0903	Computer Software Engineering	Engineering	Electrical and computer engineering	Computer engineering
14.0999	Computer Engineering, Other	Engineering	Electrical and computer engineering	Computer engineering
15.1201	Computer Engineering Technology	Engineering	Electrical and computer engineering	Computer engineering
15.1202	Computer/ Computer Systems Technology	Engineering	Electrical and computer engineering	Computer engineering
15.1203	Computer Hardware Technology	Engineering	Electrical and computer engineering	Computer engineering
15.1204	Computer Software Technology	Engineering	Electrical and computer engineering	Computer engineering

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
15.1299	Computer Engineering Technologies, Other	Engineering	Electrical and computer engineering	Computer engineering
30.9999d	Computer Science and Engineering	Engineering	Electrical and computer engineering	Computer engineering
14.1001	Electrical and Electronics Engineering	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
14.1003	Laser and Optical Engineering	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
14.1004	Telecommunications Engineering	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
14.1099	Electrical, Electronics, and Communications Engineering, Other	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
14.4701	Electrical and Computer Engineering	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0303	Electrical, Electronic, and Communications Engineering Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0304	Laser and Optical Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0305	Telecommunications Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0306	Integrated Circuit Design Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0307	Audio Engineering Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0399	Electrical/ Electronic Engineering Technologies, Other	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
15.0403	Electromechanical/ Electromechanical Engineering Technology	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
29.0409	Radar Communications and Systems Technology (MILITARY)	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
30.9999b	Electrical Engineering and Computer Science	Engineering	Electrical and computer engineering	Electrical, electronics, and communications engineering
14.3501	Industrial Engineering	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
14.3501b	Industrial and Systems Engineering	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
14.3601	Manufacturing Engineering	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0612	Industrial Technology	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0613	Manufacturing Engineering Technology	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0616	Semiconductor Manufacturing Technology	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0699	Industrial Production Technologies, Other	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0703	Industrial Safety Technology	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
15.0704	Hazardous Materials Information Systems Technology	Engineering	Industrial engineering and operations research	Industrial and manufacturing engineering
14.3701	Operations Research (ENGINEERING)	Engineering	Industrial engineering and operations research	Operations research (engineering)
14.2701	Systems Engineering	Engineering	Industrial engineering and operations research	Systems engineering

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
29.0301	Combat Systems Engineering (MILITARY)	Engineering	Industrial engineering and operations research	Systems engineering
14.0601	Ceramic Sciences and Engineering	Engineering	Materials and mining engineering	Materials science engineering
14.1801	Materials Engineering	Engineering	Materials and mining engineering	Materials science engineering
14.1801b	Materials Science and Engineering	Engineering	Materials and mining engineering	Materials science engineering
14.2801	Textile Sciences and Engineering	Engineering	Materials and mining engineering	Materials science engineering
14.4001	Paper Science and Engineering	Engineering	Materials and mining engineering	Materials science engineering
15.0617	Composite Materials Technology	Engineering	Materials and mining engineering	Materials science engineering
30.9999e	Polymer Science and Engineering	Engineering	Materials and mining engineering	Materials science engineering
40.1001	Materials Science	Engineering	Materials and mining engineering	Materials science engineering
40.1099	Materials Sciences, Other	Engineering	Materials and mining engineering	Materials science engineering
14.2001	Metallurgical Engineering	Engineering	Materials and mining engineering	Metallurgical engineering
15.0611	Metallurgical Technology	Engineering	Materials and mining engineering	Metallurgical engineering
15.0614	Welding Engineering Technology	Engineering	Materials and mining engineering	Metallurgical engineering
14.1901	Mechanical Engineering	Engineering	Mechanical engineering	Mechanical engineering
14.4101	Electromechanical Engineering	Engineering	Mechanical engineering	Mechanical engineering
15.0406	Automation Engineer Technology	Engineering	Mechanical engineering	Mechanical engineering
15.0499	Electromechanical Technologies, Other	Engineering	Mechanical engineering	Mechanical engineering
15.0805	Mechanical/ Mechanical Engineering Technology	Engineering	Mechanical engineering	Mechanical engineering
15.0899	Mechanical Engineering Related Technologies, Other	Engineering	Mechanical engineering	Mechanical engineering
14.4201	Mechatronics, Robotics, and Automation Engineering	Engineering	Mechanical engineering	Robotics
15.0405	Robotics Technology	Engineering	Mechanical engineering	Robotics
15.0407	Mechatronics, Robotics, and Automation Engineering Technology	Engineering	Mechanical engineering	Robotics
14.0301	Agricultural Engineering	Engineering	Engineering, other	Agricultural engineering
14.1101	Engineering Mechanics	Engineering	Engineering, other	Engineering mechanics
14.1101b	Computational Mechanics	Engineering	Engineering, other	Engineering mechanics
14.1201	Engineering Physics	Engineering	Engineering, other	Engineering physics
29.0303	Engineering Acoustics (MILITARY)	Engineering	Engineering, other	Engineering physics
29.0304	Low-Observables and Stealth Technology (MILITARY)	Engineering	Engineering, other	Engineering physics
14.1301	Engineering Science	Engineering	Engineering, other	Engineering science
14.4401	Engineering Chemistry	Engineering	Engineering, other	Engineering science
15.0404	Instrumentation Technology	Engineering	Engineering, other	Engineering science
14.2301	Nuclear Engineering	Engineering	Engineering, other	Nuclear engineering
15.1401	Nuclear Engineering Technology	Engineering	Engineering, other	Nuclear engineering
14.2201	Naval Architecture and Marine Engineering	Engineering	Engineering, other	Ocean engineering
14.2401	Ocean Engineering	Engineering	Engineering, other	Ocean engineering

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
14.9999c	Engineering Management and Administration	Engineering	Engineering, other	Engineering management and administration
15.0702	Quality Control Technology	Engineering	Engineering, other	Engineering management and administration
15.0705	Process Safety Technology	Engineering	Engineering, other	Engineering management and administration
15.0799	Quality Control and Safety Technologies, Other	Engineering	Engineering, other	Engineering management and administration
15.1501	Engineering/ Industrial Management	Engineering	Engineering, other	Engineering management and administration
14.0101	Engineering, General	Engineering	Engineering, other	Engineering, general
14.0102	Pre-Engineering	Engineering	Engineering, other	Engineering, general
14.0103	Applied Engineering	Engineering	Engineering, other	Engineering, general
15.0000	Engineering Technologies, General	Engineering	Engineering, other	Engineering, general
15.0001	Applied Engineering Technologies	Engineering	Engineering, other	Engineering, general
15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology	Engineering	Engineering, other	Engineering, general
15.1301	Drafting and Design Technology, General	Engineering	Engineering, other	Engineering, general
15.1302	CAD/ CADD Drafting and/ or Design Technology	Engineering	Engineering, other	Engineering, general
15.1303	Architectural Drafting and Architectural CAD/ CADD	Engineering	Engineering, other	Engineering, general
15.1305	Electrical/ Electronics Drafting and Electrical/ Electronics CAD/ CADD	Engineering	Engineering, other	Engineering, general
15.1306	Mechanical Drafting and Mechanical Drafting CAD/ CADD	Engineering	Engineering, other	Engineering, general
15.1307	3-D Modeling and Design Technology	Engineering	Engineering, other	Engineering, general
15.1502	Engineering Design	Engineering	Engineering, other	Engineering, general
14.2101	Mining and Mineral Engineering	Engineering	Engineering, other	Engineering, other
14.4801	Energy Systems Engineering, General	Engineering	Engineering, other	Engineering, other
14.4802	Power Plant Engineering	Engineering	Engineering, other	Engineering, other
14.4899	Energy Systems Engineering, Other	Engineering	Engineering, other	Engineering, other
14.9999	Engineering, Other	Engineering	Engineering, other	Engineering, other
14.9999d	Computational Engineering	Engineering	Engineering, other	Engineering, other
14.9999e	Nanoengineering/ Nanoscale Engineering	Engineering	Engineering, other	Engineering, other
15.0101	Architectural Engineering Technologies	Engineering	Engineering, other	Engineering, other
15.0701	Occupational Safety and Health Technology	Engineering	Engineering, other	Engineering, other
15.0803	Automotive Engineering Technology	Engineering	Engineering, other	Engineering, other
15.0806	Marine Engineering Technology	Engineering	Engineering, other	Engineering, other
15.0807	Motorsports Engineering Technology	Engineering	Engineering, other	Engineering, other
15.0901	Mining Technology	Engineering	Engineering, other	Engineering, other
15.1199	Engineering-Related Technologies, Other	Engineering	Engineering, other	Engineering, other
15.1399	Drafting/ Design Engineering Technologies, Other	Engineering	Engineering, other	Engineering, other
15.1503	Packaging Science	Engineering	Engineering, other	Engineering, other
15.1599	Engineering-Related Fields, Other	Engineering	Engineering, other	Engineering, other
15.1601	Nanotechnology	Engineering	Engineering, other	Engineering, other
15.1701	Energy Systems Technology	Engineering	Engineering, other	Engineering, other
15.1702	Power Plant Technology	Engineering	Engineering, other	Engineering, other
15.1703	Solar Energy Technology	Engineering	Engineering, other	Engineering, other
15.1704	Wind Energy Technology	Engineering	Engineering, other	Engineering, other
15.1705	Hydroelectric Energy Technology	Engineering	Engineering, other	Engineering, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
15.1706	Geothermal Energy Technology	Engineering	Engineering, other	Engineering, other
15.1799	Energy Systems Technologies, Other	Engineering	Engineering, other	Engineering, other
15.9999	Engineering/ Engineering-Related Technologies, Other	Engineering	Engineering, other	Engineering, other
29.0302	Directed Energy Systems (MILITARY)	Engineering	Engineering, other	Engineering, other
29.0408	Munitions Systems/ Ordinance Technology (MILITARY)	Engineering	Engineering, other	Engineering, other
30.3001b	Computational Science and Engineering	Engineering	Engineering, other	Engineering, other
30.3001c	Computational Science, Engineering, and Mathematics	Engineering	Engineering, other	Engineering, other
30.9999c	Nanosciences/ Nanoscale Sciences	Engineering	Engineering, other	Engineering, other
40.0601c	Geology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geology
40.0602	Geochemistry	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geochemistry
40.0603	Geophysics and Seismology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geophysics and seismology
40.0604	Paleontology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Paleontology
40.0606	Geochemistry and Petrology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Mineralogy and petrology
40.0699c	Stratigraphy and Sedimentation	Geosciences, atmospheric, and ocean sciences	Geological sciences	Stratigraphy and sedimentation
40.0699b	Geomorphology and Glacial Geology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geomorphology and glacial geology
30.3801	Earth Systems Science	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
30.3801b	Earth & Environmental Sciences	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
30.4101	Environmental Geosciences	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
30.4201	Geoarchaeology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
30.4301	Geobiology	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
40.0601	Geology/ Earth Science, General	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
40.0601b	Earth Science	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, general
40.0699	Geological and Earth Sciences/ Geosciences, Other	Geosciences, atmospheric, and ocean sciences	Geological sciences	Geological and earth sciences, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
26.1302	Marine Biology and Biological Oceanography	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine biology and biological oceanography
30.3501	Climate Science	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric chemistry and climatology
40.0402	Atmospheric Chemistry and Climatology	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric chemistry and climatology
40.0403	Atmospheric Physics and Dynamics	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric physics and dynamics
40.0404	Meteorology	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Meteorology
40.0401	Atmospheric Sciences and Meteorology, General	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric science/ meteorology, general
30.5001	Mathematics and Atmospheric/ Oceanic Science	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric science/ meteorology, other
40.0499	Atmospheric Sciences and Meteorology, Other	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric science/ meteorology, other
40.0499b	Planetary Sciences	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Atmospheric science/ meteorology, other
03.0205	Water, Wetlands, and Marine Resources Management	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Hydrology and water resources
40.0605	Hydrology and Water Resources Science	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Hydrology and water resources
29.0306	Operational Oceanography (MILITARY)	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Oceanography, chemical and physical
40.0607	Oceanography, Chemical and Physical	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Oceanography, chemical and physical
30.2901	Maritime Studies	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine sciences
30.3201	Marine Sciences	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Marine sciences
30.3201b	Ocean/ Marine Science, Other	Geosciences, atmospheric, and ocean sciences	Ocean, marine, and atmospheric sciences	Ocean/ marine sciences, other
51.1105	Pre-Nursing Studies	Health sciences	Nursing science	Nursing science
51.3801	Registered Nursing/ Registered Nurse	Health sciences	Nursing science	Nursing science
51.3802	Nursing Administration	Health sciences	Nursing science	Nursing science
51.3803	Adult Health Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3804	Nurse Anesthetist	Health sciences	Nursing science	Nursing science
51.3805	Family Practice Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3806	Maternal/ Child Health and Neonatal Nurse/ Nursing	Health sciences	Nursing science	Nursing science

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.3807	Nurse Midwife/ Nursing Midwifery	Health sciences	Nursing science	Nursing science
51.3808	Nursing Science	Health sciences	Nursing science	Nursing science
51.3809	Pediatric Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3810	Psychiatric/ Mental Health Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3811	Public Health/ Community Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3812	Perioperative/ Operating Room and Surgical Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3813	Clinical Nurse Specialist	Health sciences	Nursing science	Nursing science
51.3814	Critical Care Nursing	Health sciences	Nursing science	Nursing science
51.3815	Occupational and Environmental Health Nursing	Health sciences	Nursing science	Nursing science
51.3816	Emergency Room/ Trauma Nursing	Health sciences	Nursing science	Nursing science
51.3818	Nursing Practice	Health sciences	Nursing science	Nursing science
51.3819	Palliative Care Nursing	Health sciences	Nursing science	Nursing science
51.3820	Clinical Nurse Leader	Health sciences	Nursing science	Nursing science
51.3821	Geriatric Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3822	Women's Health Nurse/ Nursing	Health sciences	Nursing science	Nursing science
51.3824	Forensic Nursing	Health sciences	Nursing science	Nursing science
51.3899	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	Health sciences	Nursing science	Nursing science
51.3901	Licensed Practical/ Vocational Nurse Training	Health sciences	Nursing science	Nursing science
51.3902	Nursing Assistant/ Aide and Patient Care Assistant/ Aide	Health sciences	Nursing science	Nursing science
51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other	Health sciences	Nursing science	Nursing science
51.0805	Pharmacy Technician/ Assistant	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.1103	Pre-Pharmacy Studies	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2001	Pharmacy	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2002	Pharmacy Administration and Pharmacy Policy and Regulatory Affairs	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2003	Pharmaceutics and Drug Design	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2006	Clinical and Industrial Drug Development	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2007	Pharmacoeconomics/ Pharmaceutical Economics	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2008	Clinical, Hospital, and Managed Care Pharmacy	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2009	Industrial and Physical Pharmacy and Cosmetic Sciences	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2010	Pharmaceutical Sciences	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2011	Pharmaceutical Marketing and Management	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2099	Pharmacy, Pharmaceutical Sciences, and Administration, Other	Health sciences	Pharmaceutical sciences	Pharmaceutical sciences
51.2202	Environmental Health	Health sciences	Public health	Environmental health
51.0707	Health Information/ Medical Records Technology	Health sciences	Public health	Health services research
51.0719	Clinical Research Coordinator	Health sciences	Public health	Health services research
51.0720	Regulatory Science/ Affairs	Health sciences	Public health	Health services research
51.0722	Healthcare Innovation	Health sciences	Public health	Health services research
51.2211b	Health Services Research	Health sciences	Public health	Health services research
51.2213	Patient Safety and Healthcare Quality	Health sciences	Public health	Health services research
51.2201	Public Health, General	Health sciences	Public health	Public health

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.2206	Occupational Health and Industrial Hygiene	Health sciences	Public health	Public health
51.2207	Public Health Education and Promotion	Health sciences	Public health	Public health
51.2208	Community Health and Preventive Medicine	Health sciences	Public health	Public health
51.2209	Maternal and Child Health	Health sciences	Public health	Public health
51.2210	International Public Health/ International Health	Health sciences	Public health	Public health
51.2214	Public Health Genetics	Health sciences	Public health	Public health
51.2299	Public Health, Other	Health sciences	Public health	Public health
51.2212	Behavioral Aspects of Health	Health sciences	Public health	Health and behavior
51.0201	Communication Sciences and Disorders, General	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0202	Audiology/ Audiologist	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0203	Speech-Language Pathology/ Pathologist	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0204	Audiology/ Audiologist and Speech-Language Pathology/ Pathologist	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0299	Communication Disorders Sciences and Services, Other	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0816	Speech-Language Pathology Assistant	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0918	Hearing Instrument Specialist	Health sciences	Health sciences, other	Speech-language pathology and audiology
51.0401	Dentistry	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0501	Dental Clinical Sciences, General	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0502	Advanced General Dentistry	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0503	Oral Biology and Oral and Maxillofacial Pathology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0504	Dental Public Health and Education	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0505	Dental Materials	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0506	Endodontics/ Endodontology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0507	Oral/ Maxillofacial Surgery	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0508	Orthodontics/ Orthodontology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0509	Pediatric Dentistry/ Pedodontics	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0510	Periodontics/ Periodontology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0511	Prosthodontics/ Prosthodontology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0512	Digital Dentistry	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0513	Geriatric Dentistry	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0514	Implantology/ Implant Dentistry	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0599	Advanced/ Graduate Dentistry and Oral Sciences, Other	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0601	Dental Assisting/ Assistant	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0602	Dental Hygiene/ Hygienist	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0603	Dental Laboratory Technology	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0699	Dental Services and Allied Professions, Other	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.1101	Pre-Dentistry Studies	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.1404	Temporomandibular Disorders and Orofacial Pain	Health sciences	Health sciences, other	Oral biology/ oral pathology
51.0701	Health/ Health Care Administration/ Management	Health sciences	Health sciences, other	Health systems administration
51.0702	Hospital and Health Care Facilities Administration/ Management	Health sciences	Health sciences, other	Health systems administration
51.0703	Health Unit Coordinator/ Ward Clerk	Health sciences	Health sciences, other	Health systems administration

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.0704	Health Unit Manager/ Ward Supervisor	Health sciences	Health sciences, other	Health systems administration
51.0705	Medical Office Management/ Administration	Health sciences	Health sciences, other	Health systems administration
51.0706	Health Information/ Medical Records Administration/ Administrator	Health sciences	Health sciences, other	Health systems administration
51.0708	Medical Transcription/ Transcriptionist	Health sciences	Health sciences, other	Health systems administration
51.0709	Medical Office Computer Specialist/ Assistant	Health sciences	Health sciences, other	Health systems administration
51.0710	Medical Office Assistant/ Specialist	Health sciences	Health sciences, other	Health systems administration
51.0711	Medical/ Health Management and Clinical Assistant/ Specialist	Health sciences	Health sciences, other	Health systems administration
51.0712	Medical Reception/ Receptionist	Health sciences	Health sciences, other	Health systems administration
51.0713	Medical Insurance Coding Specialist/ Coder	Health sciences	Health sciences, other	Health systems administration
51.0714	Medical Insurance Specialist/ Medical Biller	Health sciences	Health sciences, other	Health systems administration
51.0715	Health/ Medical Claims Examiner	Health sciences	Health sciences, other	Health systems administration
51.0716	Medical Administrative/ Executive Assistant and Medical Secretary	Health sciences	Health sciences, other	Health systems administration
51.0717	Medical Staff Services Technology	Health sciences	Health sciences, other	Health systems administration
51.0718	Long Term Care Administration/ Management	Health sciences	Health sciences, other	Health systems administration
51.0721	Disease Registry Data Management	Health sciences	Health sciences, other	Health systems administration
51.0723	Healthcare Information Privacy Assurance and Security	Health sciences	Health sciences, other	Health systems administration
51.0799	Health and Medical Administrative Services, Other	Health sciences	Health sciences, other	Health systems administration
51.0801	Medical/ Clinical Assistant	Health sciences	Health sciences, other	Health systems administration
51.0802	Clinical/ Medical Laboratory Assistant	Health sciences	Health sciences, other	Health systems administration
51.0899	Allied Health and Medical Assisting Services, Other	Health sciences	Health sciences, other	Health systems administration
51.0910	Diagnostic Medical Sonography/ Sonographer and Ultrasound Technician	Health sciences	Health sciences, other	Health systems administration
51.1504	Community Health Services/ Liaison/ Counseling	Health sciences	Health sciences, other	Health systems administration
51.2211	Health Services Administration	Health sciences	Health sciences, other	Health systems administration
26.0908	Exercise Physiology and Kinesiology	Health sciences	Health sciences, other	Kinesiology/ exercise science
31.0501	Sports, Kinesiology, and Physical Education/ Fitness, General	Health sciences	Health sciences, other	Kinesiology/ exercise science
31.0505	Exercise Science and Kinesiology	Health sciences	Health sciences, other	Kinesiology/ exercise science
31.0599	Sports, Kinesiology, and Physical Education/ Fitness, Other	Health sciences	Health sciences, other	Kinesiology/ exercise science
31.9999	Parks, Recreation, Leisure, Fitness, and Kinesiology, Other	Health sciences	Health sciences, other	Kinesiology/ exercise science
51.0913	Athletic Training/ Trainer	Health sciences	Health sciences, other	Kinesiology/ exercise science
51.3601	Movement Therapy and Movement Education	Health sciences	Health sciences, other	Kinesiology/ exercise science
51.3602	Yoga Teacher Training/ Yoga Therapy	Health sciences	Health sciences, other	Kinesiology/ exercise science
51.3699	Movement and Mind-Body Therapies and Education, Other	Health sciences	Health sciences, other	Kinesiology/ exercise science
30.1101b	Gerontology (HEALTH SCIENCES)	Health sciences	Health sciences, other	Gerontology (health sciences)
51.1512	Hospice and Palliative Care	Health sciences	Health sciences, other	Gerontology (health sciences)
51.0803	Occupational Therapist Assistant	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.0806	Physical Therapy Assistant	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.1107	Pre-Occupational Therapy Studies	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.1109	Pre-Physical Therapy Studies	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.1501	Substance Abuse/ Addiction Counseling	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2300	Rehabilitation and Therapeutic Professions, General	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2302	Dance Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2306	Occupational Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2307	Orthotist/ Prosthetist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2308	Physical Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2309	Therapeutic Recreation/ Recreational Therapy	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2310	Vocational Rehabilitation Counseling/ Counselor	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2311	Kinesiotherapy/ Kinesiotherapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2312	Assistive/ Augmentative Technology and Rehabilitation Engineering	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2313	Animal-Assisted Therapy	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2314	Rehabilitation Science	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2315	Drama Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2316	Horticulture Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2317	Play Therapy/ Therapist	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2399	Rehabilitation and Therapeutic Professions, Other	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2604	Rehabilitation Aide	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.2605	Physical Therapy Technician/ Aide	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.3501	Massage Therapy/ Therapeutic Massage	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.3502	Asian Bodywork Therapy	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.3503	Somatic Bodywork	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.3599	Somatic Bodywork and Related Therapeutic Services, Other	Health sciences	Health sciences, other	Rehabilitation/ therapeutic services
51.0000	Health Services/ Allied Health/ Health Sciences, General	Health sciences	Health sciences, other	Health sciences, general
51.0000b	Health sciences, general	Health sciences	Health sciences, other	Health sciences, general
51.0001	Health and Wellness, General	Health sciences	Health sciences, other	Health sciences, general
51.0912	Physician Assistant	Health sciences	Health sciences, other	Health sciences, general
30.3701	Design for Human Health	Health sciences	Health sciences, other	Health sciences, other
51.0101	Chiropractic	Health sciences	Health sciences, other	Health sciences, other

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.0809	Anesthesiologist Assistant	Health sciences	Health sciences, other	Health sciences, other
51.0810	Emergency Care Attendant (EMT Ambulance)	Health sciences	Health sciences, other	Health sciences, other
51.0812	Respiratory Therapy Technician/ Assistant	Health sciences	Health sciences, other	Health sciences, other
51.0813	Chiropractic Technician/ Assistant	Health sciences	Health sciences, other	Health sciences, other
51.0815	Lactation Consultant	Health sciences	Health sciences, other	Health sciences, other
51.0901	Cardiovascular Technology/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.0902	Electrocardiograph Technology	Health sciences	Health sciences, other	Health sciences, other
51.0903	Electroneurodiagnostic/ Electroencephalographic Technology/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.0904	Emergency Medical Technology (EMT Paramedic)	Health sciences	Health sciences, other	Health sciences, other
51.0908	Respiratory Care Therapy/ Therapist	Health sciences	Health sciences, other	Health sciences, other
51.0909	Surgical Technology/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.0915	Cardiopulmonary Technology/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.0917	Polysomnography	Health sciences	Health sciences, other	Health sciences, other
51.0921	Hyperbaric Medicine Technology	Health sciences	Health sciences, other	Health sciences, other
51.0922	Intraoperative Neuromonitoring Technology	Health sciences	Health sciences, other	Health sciences, other
51.0923	Orthopedic Technology	Health sciences	Health sciences, other	Health sciences, other
51.0999	Allied Health Diagnostic, Intervention, and Treatment Professions, Other	Health sciences	Health sciences, other	Health sciences, other
51.1001	Blood Bank Technology Specialist	Health sciences	Health sciences, other	Health sciences, other
51.1002	Cytotechnology/ Cytotechnologist	Health sciences	Health sciences, other	Health sciences, other
51.1003	Hematology Technology	Health sciences	Health sciences, other	Health sciences, other
51.1004	Clinical/ Medical Laboratory Technician	Health sciences	Health sciences, other	Health sciences, other
51.1005	Clinical Laboratory Science/ Medical Technology/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.1006	Ophthalmic Laboratory Technology	Health sciences	Health sciences, other	Health sciences, other
51.1007	Histologic Technology/ Histotechnologist	Health sciences	Health sciences, other	Health sciences, other
51.1008	Histologic Technician	Health sciences	Health sciences, other	Health sciences, other
51.1009	Phlebotomy Technician/ Phlebotomist	Health sciences	Health sciences, other	Health sciences, other
51.1011	Renal/ Dialysis Technologist/ Technician	Health sciences	Health sciences, other	Health sciences, other
51.1012	Sterile Processing Technology	Health sciences	Health sciences, other	Health sciences, other
51.1099	Clinical/ Medical Laboratory Science and Allied Professions, Other	Health sciences	Health sciences, other	Health sciences, other
51.1102	Pre-Medicine/ Pre-Medical Studies	Health sciences	Health sciences, other	Health sciences, other
51.1106	Pre-Chiropractic Studies	Health sciences	Health sciences, other	Health sciences, other
51.1108	Pre-Optometry Studies	Health sciences	Health sciences, other	Health sciences, other
51.1110	Pre-Art Therapy	Health sciences	Health sciences, other	Health sciences, other
51.1111	Pre-Physician Assistant	Health sciences	Health sciences, other	Health sciences, other
51.1199	Health/ Medical Preparatory Programs, Other	Health sciences	Health sciences, other	Health sciences, other
51.1201	Medicine	Health sciences	Health sciences, other	Health sciences, other
51.1202	Osteopathic Medicine/ Osteopathy	Health sciences	Health sciences, other	Health sciences, other
51.1203	Podiatric Medicine/ Podiatry	Health sciences	Health sciences, other	Health sciences, other
51.1299	Medicine, Other	Health sciences	Health sciences, other	Health sciences, other
51.1401	Medical Science/ Scientist	Health sciences	Health sciences, other	Health sciences, other
51.1402	Clinical and Translational Science	Health sciences	Health sciences, other	Health sciences, other
51.1403	Pain Management	Health sciences	Health sciences, other	Health sciences, other
51.1499	Medical Clinical Sciences/ Graduate Medical Studies, Other	Health sciences	Health sciences, other	Health sciences, other
51.1499b	Clinical Investigation and Sciences	Health sciences	Health sciences, other	Health sciences, other

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.1701	Optometry	Health sciences	Health sciences, other	Health sciences, other
51.1801	Opticianry/ Ophthalmic Dispensing Optician	Health sciences	Health sciences, other	Health sciences, other
51.1802	Optometric Technician/ Assistant	Health sciences	Health sciences, other	Health sciences, other
51.1803	Ophthalmic Technician/ Technologist	Health sciences	Health sciences, other	Health sciences, other
51.1804	Orthoptics/ Orthoptist	Health sciences	Health sciences, other	Health sciences, other
51.1899	Ophthalmic and Optometric Support Services and Allied Professions, Other	Health sciences	Health sciences, other	Health sciences, other
51.2601	Health Aide	Health sciences	Health sciences, other	Health sciences, other
51.2602	Home Health Aide/ Home Attendant	Health sciences	Health sciences, other	Health sciences, other
51.2603	Medication Aide	Health sciences	Health sciences, other	Health sciences, other
51.2699	Health Aides/ Attendants/ Orderlies, Other	Health sciences	Health sciences, other	Health sciences, other
51.2799	Medical Illustration and Informatics, Other	Health sciences	Health sciences, other	Health sciences, other
51.3204	Medical/ Health Humanities	Health sciences	Health sciences, other	Health sciences, other
51.3300	Alternative and Complementary Medicine and Medical Systems, General	Health sciences	Health sciences, other	Health sciences, other
51.3301	Acupuncture and Oriental Medicine	Health sciences	Health sciences, other	Health sciences, other
51.3302	Traditional Chinese Medicine and Chinese Herbology	Health sciences	Health sciences, other	Health sciences, other
51.3303	Naturopathic Medicine/ Naturopathy	Health sciences	Health sciences, other	Health sciences, other
51.3304	Homeopathic Medicine/ Homeopathy	Health sciences	Health sciences, other	Health sciences, other
51.3305	Ayurvedic Medicine/ Ayurveda	Health sciences	Health sciences, other	Health sciences, other
51.3306	Holistic/ Integrative Health	Health sciences	Health sciences, other	Health sciences, other
51.3399	Alternative and Complementary Medicine and Medical Systems, Other	Health sciences	Health sciences, other	Health sciences, other
51.3401	Direct Entry Midwifery	Health sciences	Health sciences, other	Health sciences, other
51.3499	Alternative and Complementary Medical Support Services, Other	Health sciences	Health sciences, other	Health sciences, other
51.3701	Aromatherapy	Health sciences	Health sciences, other	Health sciences, other
51.3702	Herbalism/ Herbalist	Health sciences	Health sciences, other	Health sciences, other
51.3703	Polarity Therapy	Health sciences	Health sciences, other	Health sciences, other
51.3704	Reiki	Health sciences	Health sciences, other	Health sciences, other
51.3799	Energy and Biologically Based Therapies, Other	Health sciences	Health sciences, other	Health sciences, other
51.9999	Health Professions and Related Clinical Sciences, Other	Health sciences	Health sciences, other	Health sciences, other
51.9999b	Health Sciences, Other	Health sciences	Health sciences, other	Health sciences, other
51.0814	Radiologist Assistant	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0905	Nuclear Medical Technology/ Technologist	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0906	Perfusion Technology/ Perfusionist	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0907	Medical Radiologic Technology/ Science - Radiation Therapist	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0911	Radiologic Technology/ Science - Radiographer	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0916	Radiation Protection/ Health Physics Technician	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0919	Mammography Technology	Health sciences	Health sciences, other	Medical physics/ radiological science
51.0920	Magnetic Resonance Imaging (MRI) Technology	Health sciences	Health sciences, other	Medical physics/ radiological science

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
51.2205	Health/ Medical Physics	Health sciences	Health sciences, other	Medical physics/ radiological science
27.0301	Applied Mathematics, General	Mathematics and statistics	Applied mathematics	Applied mathematics
27.0304	Computational and Applied Mathematics	Mathematics and statistics	Applied mathematics	Applied mathematics
27.0399	Applied Mathematics, Other	Mathematics and statistics	Applied mathematics	Applied mathematics
30.0801	Mathematics and Computer Science	Mathematics and statistics	Applied mathematics	Applied mathematics
30.7103	Data Visualization	Mathematics and statistics	Applied mathematics	Applied mathematics
27.0102	Algebra and Number Theory	Mathematics and statistics	Mathematics	Algebra
27.0102b	Algebra	Mathematics and statistics	Mathematics	Algebra
27.0103	Analysis and Functional Analysis	Mathematics and statistics	Mathematics	Analysis and functional analysis
27.0104	Geometry/ Geometric Analysis	Mathematics and statistics	Mathematics	Geometry/ geometric analysis
27.0199c	Logic (MATHEMATICS)	Mathematics and statistics	Mathematics	Logic
27.0102c	Number Theory	Mathematics and statistics	Mathematics	Number theory
27.0105	Topology and Foundations	Mathematics and statistics	Mathematics	Topology/ foundations
11.0701c	Computing Theory and Practice (MATHEMATICS)	Mathematics and statistics	Mathematics	Computing theory and practice
27.0303	Computational Mathematics	Mathematics and statistics	Mathematics	Computational mathematics
30.3001	Computational Science	Mathematics and statistics	Mathematics	Computational mathematics
27.0501	Statistics (MATHEMATICS)	Mathematics and statistics	Statistics	Statistics (mathematics)
27.0502	Mathematical Statistics and Probability	Mathematics and statistics	Statistics	Statistics (mathematics)
27.0601	Applied Statistics, General	Mathematics and statistics	Statistics	Statistics (mathematics)
14.3701b	Operations Research (MATHEMATICS)	Mathematics and statistics	Mathematics and statistics, other	Operations research (mathematics)
27.0101	Mathematics, General	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, general
27.0101b	Mathematical Sciences	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, general
27.0503	Mathematics and Statistics	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, general
27.0199	Mathematics, Other	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, other
27.0305	Financial Mathematics	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, other
27.0306	Mathematical Biology	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, other
27.0599	Statistics, Other	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, other

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
27.9999	Mathematics and Statistics, Other	Mathematics and statistics	Mathematics and statistics, other	Mathematics/ statistics, other
40.0201	Astronomy	Physical sciences	Astronomy and astrophysics	Astronomy
40.0203	Planetary Astronomy and Science	Physical sciences	Astronomy and astrophysics	Astronomy
40.0202	Astrophysics	Physical sciences	Astronomy and astrophysics	Astrophysics
40.1101	Physics and Astronomy	Physical sciences	Astronomy and astrophysics	Astrophysics
40.0299	Astronomy and Astrophysics, Other	Physical sciences	Astronomy and astrophysics	Astronomy and astrophysics, other
40.0299b	Cosmology	Physical sciences	Astronomy and astrophysics	Astronomy and astrophysics, other
40.0502	Analytical Chemistry	Physical sciences	Chemistry	Analytical chemistry
40.0503	Inorganic Chemistry	Physical sciences	Chemistry	Inorganic chemistry
40.0504	Organic Chemistry	Physical sciences	Chemistry	Organic chemistry
40.0599b	Chemical Biology	Physical sciences	Chemistry	Chemical biology
51.2004	Medicinal and Pharmaceutical Chemistry	Physical sciences	Chemistry	Medicinal chemistry
51.2005	Natural Products Chemistry and Pharmacognosy	Physical sciences	Chemistry	Medicinal chemistry
40.0506	Physical Chemistry	Physical sciences	Chemistry	Physical chemistry
40.0507	Polymer Chemistry	Physical sciences	Chemistry	Polymer chemistry
40.0511	Theoretical Chemistry	Physical sciences	Chemistry	Theoretical chemistry
40.0511b	Computational Chemistry	Physical sciences	Chemistry	Theoretical chemistry
40.0501	Chemistry, General	Physical sciences	Chemistry	Chemistry, general
40.0509	Environmental Chemistry	Physical sciences	Chemistry	Chemistry, other
40.0510	Forensic Chemistry	Physical sciences	Chemistry	Chemistry, other
40.0512	Cheminformatics/ Chemistry Informatics	Physical sciences	Chemistry	Chemistry, other
40.0599	Chemistry, Other	Physical sciences	Chemistry	Chemistry, other
40.1002	Materials Chemistry	Physical sciences	Chemistry	Chemistry, other
40.1099b	Fiber and Polymer Sciences	Physical sciences	Chemistry	Chemistry, other
40.9999b	Polymer Sciences	Physical sciences	Chemistry	Chemistry, other
40.0809	Acoustics	Physical sciences	Physics	Acoustics
40.0508	Chemical Physics	Physical sciences	Physics	Atomic/ molecular/ chemical physics
40.0802	Atomic/ Molecular Physics	Physical sciences	Physics	Atomic/ molecular/ chemical physics
40.0804	Elementary Particle Physics	Physical sciences	Physics	Elementary particle physics
26.0203b	Biophysics (PHYSICS)	Physical sciences	Physics	Biophysics (physics)
40.0806	Nuclear Physics	Physical sciences	Physics	Nuclear physics
40.0807	Optics/ Optical Sciences	Physical sciences	Physics	Optics and photonics
40.0805	Plasma and High-Temperature Physics	Physical sciences	Physics	Plasma/ high-temperature physics
40.0808b	Polymer Physics	Physical sciences	Physics	Polymer physics
40.0808	Condensed Matter and Materials Physics	Physical sciences	Physics	Condensed matter/ low-temperature physics
40.0899b	Applied Physics	Physical sciences	Physics	Applied physics
40.0801	Physics, General	Physical sciences	Physics	Physics, general
40.0101	Physical Sciences, General	Physical sciences	Physics	Physics, other
40.0810	Theoretical and Mathematical Physics	Physical sciences	Physics	Physics, other
40.0899	Physics, Other	Physical sciences	Physics	Physics, other

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
40.9999	Physical Sciences, Other	Physical sciences	Physics	Physics, other
42.2801	Clinical Psychology	Psychology	Clinical psychology	Clinical psychology
42.2899	Clinical, Counseling and Applied Psychology, Other	Psychology	Clinical psychology	Clinical psychology
51.1502	Psychiatric/ Mental Health Services Technician	Psychology	Clinical psychology	Clinical psychology
51.1506	Clinical Pastoral Counseling/ Patient Counseling	Psychology	Clinical psychology	Clinical psychology
51.1507	Psychoanalysis and Psychotherapy	Psychology	Clinical psychology	Clinical psychology
42.2814	Applied Behavior Analysis	Psychology	Counseling and applied psychology	Behavioral analysis
42.2803	Counseling Psychology	Psychology	Counseling and applied psychology	Counseling
51.1509	Genetic Counseling/ Counselor	Psychology	Counseling and applied psychology	Counseling
51.1513	Trauma Counseling	Psychology	Counseling and applied psychology	Counseling
51.1599	Mental and Social Health Services and Allied Professions, Other	Psychology	Counseling and applied psychology	Counseling
30.2801	Dispute Resolution	Psychology	Counseling and applied psychology	Marriage and family therapy/ counseling
51.1505	Marriage and Family Therapy/ Counseling	Psychology	Counseling and applied psychology	Marriage and family therapy/ counseling
51.1510	Infant/ Toddler Mental Health Services	Psychology	Counseling and applied psychology	Marriage and family therapy/ counseling
51.1511	Medical Family Therapy/ Therapist	Psychology	Counseling and applied psychology	Marriage and family therapy/ counseling
42.2810	Health/ Medical Psychology	Psychology	Counseling and applied psychology	Health and medical psychology
51.1508	Mental Health Counseling/ Counselor	Psychology	Counseling and applied psychology	Health and medical psychology
42.2806	Educational Psychology (PSYCHOLOGY)	Psychology	Counseling and applied psychology	Educational psychology (psychology)
42.2811	Family Psychology	Psychology	Counseling and applied psychology	Family psychology
42.2804	Industrial and Organizational Psychology	Psychology	Counseling and applied psychology	Industrial and organizational psychology
42.2805	School Psychology (PSYCHOLOGY)	Psychology	Counseling and applied psychology	School psychology (psychology)
42.2802	Community Psychology	Psychology	Counseling and applied psychology	Community psychology
42.2701	Cognitive Psychology and Psycholinguistics	Psychology	Research and experimental psychology	Cognitive psychology and psycholinguistics
42.2703	Developmental and Child Psychology	Psychology	Research and experimental psychology	Developmental and child psychology
42.2710	Developmental and Adolescent Psychology	Psychology	Research and experimental psychology	Developmental and child psychology
42.2807	Clinical Child Psychology	Psychology	Research and experimental psychology	Developmental and child psychology
42.2704	Experimental Psychology	Psychology	Research and experimental psychology	Experimental psychology
42.2705	Personality Psychology	Psychology	Research and experimental psychology	Personality psychology
26.1599b	Cognitive Neuroscience	Psychology	Research and experimental psychology	Cognitive neuroscience

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
30.1701	Behavioral Sciences	Psychology	Research and experimental psychology	Cognitive neuroscience
30.2501	Cognitive Science, General	Psychology	Research and experimental psychology	Cognitive neuroscience
30.2599	Cognitive Science, Other	Psychology	Research and experimental psychology	Cognitive neuroscience
42.2706	Behavioral Neuroscience	Psychology	Research and experimental psychology	Cognitive neuroscience
30.1001	Biopsychology	Psychology	Research and experimental psychology	Neuropsychology/ physiological psychology
42.2799b	Physiological/ Psychobiology Psychology	Psychology	Research and experimental psychology	Neuropsychology/ physiological psychology
42.2708	Psychometrics and Quantitative Psychology	Psychology	Research and experimental psychology	Psychometrics and quantitative psychology
42.2707	Social Psychology	Psychology	Research and experimental psychology	Social psychology
19.0701	Human Development and Family Studies, General	Psychology	Psychology, other	Human development and family studies
19.0702	Adult Development and Aging	Psychology	Psychology, other	Human development and family studies
19.0704	Family Systems	Psychology	Psychology, other	Human development and family studies
19.0706	Child Development	Psychology	Psychology, other	Human development and family studies
19.0711	Early Childhood and Family Studies	Psychology	Psychology, other	Human development and family studies
19.1001	Work and Family Studies	Psychology	Psychology, other	Human development and family studies
42.0101	Psychology, General	Psychology	Psychology, other	Psychology, general
42.2702	Comparative Psychology	Psychology	Psychology, other	Psychology, general
29.0206	Information/ Psychological Warfare and Military Media Relations	Psychology	Psychology, other	Psychology, other
30.2502	Contemplative Studies/ Inquiry	Psychology	Psychology, other	Psychology, other
42.2709	Psychopharmacology	Psychology	Psychology, other	Psychology, other
42.2799	Research and Experimental Psychology, Other	Psychology	Psychology, other	Psychology, other
42.2799c	Human Factors Psychology	Psychology	Psychology, other	Psychology, other
42.2808	Environmental Psychology	Psychology	Psychology, other	Psychology, other
42.2809	Geropsychology	Psychology	Psychology, other	Psychology, other
42.2812	Forensic Psychology	Psychology	Psychology, other	Psychology, other
42.2813	Applied Psychology	Psychology	Psychology, other	Psychology, other
42.2815	Performance and Sport Psychology	Psychology	Psychology, other	Psychology, other
42.2816	Somatic Psychology	Psychology	Psychology, other	Psychology, other
42.2817	Transpersonal/ Spiritual Psychology	Psychology	Psychology, other	Psychology, other
42.9999	Psychology, Other	Psychology	Psychology, other	Psychology, other
51.3603	Hypnotherapy/ Hypnotherapist	Psychology	Psychology, other	Psychology, other
30.3401	Anthrozoology	Social sciences	Anthropology	Anthropology, general
45.0201	Anthropology, General	Social sciences	Anthropology	Anthropology, general
45.0205	Forensic Anthropology	Social sciences	Anthropology	Anthropology, general
45.0299	Anthropology, Other	Social sciences	Anthropology	Anthropology, general
45.1301	Sociology and Anthropology	Social sciences	Anthropology	Anthropology, general
45.0204	Cultural Anthropology	Social sciences	Anthropology	Anthropology, cultural

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
45.0202	Physical and Biological Anthropology	Social sciences	Anthropology	Anthropology, physical and biological
45.0203	Medical Anthropology	Social sciences	Anthropology	Anthropology, physical and biological
45.0602b	Environmental/ Natural Resource Economics (SOCIAL SCIENCES)	Social sciences	Economics	Natural resources/ environmental economics (social sciences)
30.3901	Economics and Computer Science	Social sciences	Economics	Other economics
30.4001	Economics and Foreign Language/ Literature	Social sciences	Economics	Other economics
30.4901	Mathematical Economics	Social sciences	Economics	Other economics
45.0601	Economics, General	Social sciences	Economics	Other economics
45.0602	Applied Economics	Social sciences	Economics	Other economics
45.0604	Development Economics and International Development	Social sciences	Economics	Other economics
45.0605	International Economics	Social sciences	Economics	Other economics
45.0699	Economics, Other	Social sciences	Economics	Other economics
45.0603	Econometrics and Quantitative Economics	Social sciences	Economics	Econometrics
45.1001	Political Science and Government, General	Social sciences	Political science and government	Political science and government
45.1002	American Government and Politics (United States)	Social sciences	Political science and government	Political science and government
45.1003	Canadian Government and Politics	Social sciences	Political science and government	Political science and government
45.1004	Political Economy	Social sciences	Political science and government	Political science and government
45.1099	Political Science and Government, Other	Social sciences	Political science and government	Political science and government
44.0503	Health Policy Analysis	Social sciences	Public policy analysis	Health policy analysis
30.1202	Cultural Resource Management and Policy Analysis	Social sciences	Public policy analysis	Public policy analysis
44.0501	Public Policy Analysis, General	Social sciences	Public policy analysis	Public policy analysis
44.0504	International Policy Analysis	Social sciences	Public policy analysis	Public policy analysis
44.0599	Public Policy Analysis, Other	Social sciences	Public policy analysis	Public policy analysis
44.0599b	Public Policy and Administration	Social sciences	Public policy analysis	Public policy analysis
45.0501	Demography and Population Studies	Social sciences	Sociology, demography, and population studies	Demography/ population studies
45.0502	Applied Demography	Social sciences	Sociology, demography, and population studies	Demography/ population studies
45.0599	Demography, Other	Social sciences	Sociology, demography, and population studies	Demography/ population studies
45.1101	Sociology, General	Social sciences	Sociology, demography, and population studies	Sociology
45.1102	Applied/ Public Sociology	Social sciences	Sociology, demography, and population studies	Sociology
45.1103	Rural Sociology	Social sciences	Sociology, demography, and population studies	Sociology
45.1199	Sociology, Other	Social sciences	Sociology, demography, and population studies	Sociology
05.0207	Women's Studies	Social sciences	Social sciences, other	Gender and women's studies
05.0208	Gay/ Lesbian Studies	Social sciences	Social sciences, other	Gender and women's studies
05.0101	African Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0103	Asian Studies/ Civilization	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0104	East Asian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
05.0105	Russian, Central European, East European and Eurasian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0106	European Studies/ Civilization	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0107	Latin American Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0109	Pacific Area/ Pacific Rim Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0110	Russian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0111	Scandinavian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0112	South Asian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0113	Southeast Asian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0114	Western European Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0115	Canadian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0116	Balkans Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0117	Baltic Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0118	Slavic Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0119	Caribbean Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0120	Ural-Altai and Central Asian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0121	Commonwealth Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0122	Regional Studies (US, Canadian, Foreign)	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0123	Chinese Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0124	French Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0125	German Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0126	Italian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0127	Japanese Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0128	Korean Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0129	Polish Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0130	Spanish and Iberian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0131	Tibetan Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0132	Ukraine Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0133	Irish Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0134	Latin American and Caribbean Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0135	Appalachian Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0136	Arctic Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0199	Area Studies, Other	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0200	Ethnic Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0202	American Indian/ Native American Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0203	Hispanic-American, Puerto Rican, Latinx, and Mexican-American/ Chicano Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0206	Asian-American Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0209	Folklore Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0210	Disability Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0211	Deaf Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0212	Comparative Group Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.0299	Ethnic, Cultural Minority, Gender, and Group Studies, Other	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
05.9999	Area, Ethnic, Cultural, Gender, and Group Studies, Other	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
30.2301	Intercultural/ Multicultural and Diversity Studies	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
30.2601	Cultural Studies/ Critical Theory and Analysis	Social sciences	Social sciences, other	Area/ ethnic/ cultural studies
45.0301	Archaeology/ Archeology (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Archaeology (social sciences)

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
03.0208	Environmental/ Natural Resources Law Enforcement and Protective Services	Social sciences	Social sciences, other	Criminal justice and corrections
29.0201	Intelligence, General (MILITARY)	Social sciences	Social sciences, other	Criminal justice and corrections
29.0202	Strategic Intelligence (MILITARY)	Social sciences	Social sciences, other	Criminal justice and corrections
29.0203	Signal/ Geospatial Intelligence (MILITARY)	Social sciences	Social sciences, other	Criminal justice and corrections
29.0205	Information Operations/ Joint Information Operations (MILITARY)	Social sciences	Social sciences, other	Criminal justice and corrections
29.0404	Explosive Ordinance/ Bomb Disposal (MILITARY)	Social sciences	Social sciences, other	Criminal justice and corrections
43.0100	Criminal Justice and Corrections, General	Social sciences	Social sciences, other	Criminal justice and corrections
43.0102	Corrections	Social sciences	Social sciences, other	Criminal justice and corrections
43.0103	Criminal Justice/ Law Enforcement Administration	Social sciences	Social sciences, other	Criminal justice and corrections
43.0104	Criminal Justice/ Safety Studies	Social sciences	Social sciences, other	Criminal justice and corrections
43.0107	Criminal Justice/ Police Science	Social sciences	Social sciences, other	Criminal justice and corrections
43.0109	Security and Loss Prevention Services	Social sciences	Social sciences, other	Criminal justice and corrections
43.0110	Juvenile Corrections	Social sciences	Social sciences, other	Criminal justice and corrections
43.0112	Securities Services Administration/ Management	Social sciences	Social sciences, other	Criminal justice and corrections
43.0113	Corrections Administration	Social sciences	Social sciences, other	Criminal justice and corrections
43.0114	Law Enforcement Investigation and Interviewing	Social sciences	Social sciences, other	Criminal justice and corrections
43.0115	Law Enforcement Record-Keeping and Evidence Management	Social sciences	Social sciences, other	Criminal justice and corrections
43.0119	Critical Incident Response/ Special Police Operations	Social sciences	Social sciences, other	Criminal justice and corrections
43.0120	Protective Services Operations	Social sciences	Social sciences, other	Criminal justice and corrections
43.0121	Suspension and Debarment Investigation	Social sciences	Social sciences, other	Criminal justice and corrections
43.0122	Maritime Law Enforcement	Social sciences	Social sciences, other	Criminal justice and corrections
43.0123	Cultural/ Archaeological Resources Protection	Social sciences	Social sciences, other	Criminal justice and corrections
43.0199	Corrections and Criminal Justice, Other	Social sciences	Social sciences, other	Criminal justice and corrections
43.0201	Fire Prevention and Safety Technology	Social sciences	Social sciences, other	Criminal justice and corrections
43.0203	Fire Science/ Fire-fighting	Social sciences	Social sciences, other	Criminal justice and corrections
43.0204	Fire Systems Technology	Social sciences	Social sciences, other	Criminal justice and corrections
43.0205	Fire/ Arson Investigation and Prevention	Social sciences	Social sciences, other	Criminal justice and corrections
43.0206	Wildland/ Forest Firefighting and Investigation	Social sciences	Social sciences, other	Criminal justice and corrections
43.0299	Fire Protection, Other	Social sciences	Social sciences, other	Criminal justice and corrections
43.0301	Homeland Security	Social sciences	Social sciences, other	Criminal justice and corrections
43.0302	Crisis/ Emergency/ Disaster Management	Social sciences	Social sciences, other	Criminal justice and corrections
43.0303	Critical Infrastructure Protection	Social sciences	Social sciences, other	Criminal justice and corrections
43.0304	Terrorism and Counterterrorism Operations	Social sciences	Social sciences, other	Criminal justice and corrections
43.0399	Homeland Security, Other	Social sciences	Social sciences, other	Criminal justice and corrections
43.0401	Security Science and Technology, General	Social sciences	Social sciences, other	Criminal justice and corrections
43.0403	Cyber/ Computer Forensics and Counterterrorism	Social sciences	Social sciences, other	Criminal justice and corrections
43.0404	Cybersecurity Defense Strategy/ Policy	Social sciences	Social sciences, other	Criminal justice and corrections
43.0405	Financial Forensics and Fraud Investigation	Social sciences	Social sciences, other	Criminal justice and corrections
43.0406	Forensic Science and Technology	Social sciences	Social sciences, other	Criminal justice and corrections
43.0407	Geospatial Intelligence	Social sciences	Social sciences, other	Criminal justice and corrections
43.0408	Law Enforcement Intelligence Analysis	Social sciences	Social sciences, other	Criminal justice and corrections

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
43.0499	Security Science and Technology, Other	Social sciences	Social sciences, other	Criminal justice and corrections
43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	Social sciences	Social sciences, other	Criminal justice and corrections
43.0402	Criminalistics and Criminal Science	Social sciences	Social sciences, other	Criminology
45.0401	Criminology	Social sciences	Social sciences, other	Criminology
30.4401	Geography and Environmental Studies	Social sciences	Social sciences, other	Geography
45.0701	Geography	Social sciences	Social sciences, other	Geography
45.0702	Geographic Information Science and Cartography	Social sciences	Social sciences, other	Geography
45.0799	Geography, Other	Social sciences	Social sciences, other	Geography
45.1501	Geography and Anthropology	Social sciences	Social sciences, other	Geography
30.2001	International/ Globalization Studies	Social sciences	Social sciences, other	International relations/ affairs
45.0901	International Relations and Affairs	Social sciences	Social sciences, other	International relations/ affairs
45.0902	National Security Policy Studies	Social sciences	Social sciences, other	International relations/ affairs
45.0999	International Relations and National Security Studies, Other	Social sciences	Social sciences, other	International relations/ affairs
16.0105	Applied Linguistics	Social sciences	Social sciences, other	Applied linguistics
16.0102	Linguistics	Social sciences	Social sciences, other	Linguistics
16.0199	Linguistic, Comparative, and Related Language Studies and Services, Other	Social sciences	Social sciences, other	Linguistics
16.0199b	Translation Studies	Social sciences	Social sciences, other	Linguistics
30.4701	Linguistics and Anthropology	Social sciences	Social sciences, other	Linguistics
30.4801	Linguistics and Computer Science	Social sciences	Social sciences, other	Linguistics
30.1101	Gerontology (MULTIDISCIPLINARY STUDIES)	Social sciences	Social sciences, other	Gerontology (social sciences)
30.1101c	Gerontology (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Gerontology (social sciences)
27.0599b	Statistics (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Statistics (social sciences)
45.0102	Research Methodology and Quantitative Methods	Social sciences	Social sciences, other	Statistics (social sciences)
45.0103	Survey Research/ Methodology	Social sciences	Social sciences, other	Statistics (social sciences)
45.1201	Urban Studies/ Affairs	Social sciences	Social sciences, other	Urban studies/ affairs
03.0206	Land Use Planning and Management/ Development	Social sciences	Social sciences, other	Urban, city, community and regional planning
04.0301	City/ Urban, Community, and Regional Planning	Social sciences	Social sciences, other	Urban, city, community and regional planning
04.1001	Real Estate Development	Social sciences	Social sciences, other	Urban, city, community and regional planning
45.0101	Social Sciences, General	Social sciences	Social sciences, other	Social sciences, general
30.0501	Peace Studies and Conflict Resolution	Social sciences	Social sciences, other	Social sciences, other
30.0501b	Conflict Analysis and Resolution	Social sciences	Social sciences, other	Social sciences, other
45.0199	Social Sciences, Other	Social sciences	Social sciences, other	Social sciences, other
45.9999	Social Sciences, Other	Social sciences	Social sciences, other	Social sciences, other
30.1501	Science, Technology and Society	Social sciences	Social sciences, other	History, science and technology and society
51.3205	History of Medicine	Social sciences	Social sciences, other	History, science and technology and society
54.0104	History and Philosophy of Science and Technology	Social sciences	Social sciences, other	History, science and technology and society
05.0102	American/ United States Studies/ Civilization	Social sciences	Social sciences, other	American/ U.S. studies
30.1601	Accounting and Computer Science	Business	Business	Accounting
52.0301	Accounting	Business	Business	Accounting
52.0302	Accounting Technology and Bookkeeping	Business	Business	Accounting

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
52.0303	Auditing	Business	Business	Accounting
52.0304	Accounting and Finance	Business	Business	Accounting
52.0305	Accounting and Business/ Management	Business	Business	Accounting
52.0399	Accounting and Related Services, Other	Business	Business	Accounting
30.7104	Financial Analytics	Business	Business	Finance
52.0801	Finance, General	Business	Business	Finance
52.0803	Banking and Financial Support Services	Business	Business	Finance
52.0804	Financial Planning and Services	Business	Business	Finance
52.0806	International Finance	Business	Business	Finance
52.0807	Investments and Securities	Business	Business	Finance
52.0808	Public Finance	Business	Business	Finance
52.0809	Credit Management	Business	Business	Finance
52.0810	Financial Risk Management	Business	Business	Finance
52.0899	Finance and Financial Management Services, Other	Business	Business	Finance
01.0102	Agribusiness/ Agricultural Business Operations	Business	Business	Business administration and management
01.0106	Agricultural Business Technology	Business	Business	Business administration and management
52.0101	Business/ Commerce, General	Business	Business	Business administration and management
52.0201	Business Administration and Management, General	Business	Business	Business administration and management
52.0202	Purchasing, Procurement/ Acquisitions and Contracts Management	Business	Business	Business administration and management
52.0203	Logistics, Materials, and Supply Chain Management	Business	Business	Business administration and management
52.0204	Office Management and Supervision	Business	Business	Business administration and management
52.0205	Operations Management and Supervision	Business	Business	Business administration and management
52.0206	Non-Profit/ Public/ Organizational Management	Business	Business	Business administration and management
52.0207	Customer Service Management	Business	Business	Business administration and management
52.0208	E-Commerce/ Electronic Commerce	Business	Business	Business administration and management
52.0209	Transportation/ Mobility Management	Business	Business	Business administration and management
52.0210	Research and Development Management	Business	Business	Business administration and management
52.0212	Retail Management	Business	Business	Business administration and management
52.0299	Business Administration, Management and Operations, Other	Business	Business	Business administration and management
52.0401	Administrative Assistant and Secretarial Science, General	Business	Business	Business administration and management
52.0402	Executive Assistant/ Executive Secretary	Business	Business	Business administration and management
52.0406	Receptionist	Business	Business	Business administration and management
52.0407	Business/ Office Automation/ Technology/ Data Entry	Business	Business	Business administration and management

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
52.0408	General Office Occupations and Clerical Services	Business	Business	Business administration and management
52.0409	Parts, Warehousing, and Inventory Management Operations	Business	Business	Business administration and management
52.0410	Traffic, Customs, and Transportation Clerk/ Technician	Business	Business	Business administration and management
52.0411	Customer Service Support/ Call Center/ Teleservice Operation	Business	Business	Business administration and management
52.0499	Business Operations Support and Secretarial Services, Other	Business	Business	Business administration and management
52.0703	Small Business Administration/ Management	Business	Business	Business administration and management
52.1801	Sales, Distribution, and Marketing Operations, General	Business	Business	Business administration and management
52.1802	Merchandising and Buying Operations	Business	Business	Business administration and management
52.1803	Retailing and Retail Operations	Business	Business	Business administration and management
52.1804	Selling Skills and Sales Operations	Business	Business	Business administration and management
52.1899	General Merchandising, Sales, and Related Marketing Operations, Other	Business	Business	Business administration and management
52.2101	Telecommunications Management	Business	Business	Business administration and management
52.0901	Hospitality Administration/ Management, General	Business	Business	Hospitality, food service and tourism management
52.0903	Tourism and Travel Services Management	Business	Business	Hospitality, food service and tourism management
52.0904	Hotel/ Motel Administration/ Management	Business	Business	Hospitality, food service and tourism management
52.0905	Restaurant/ Food Services Management	Business	Business	Hospitality, food service and tourism management
52.0906	Resort Management	Business	Business	Hospitality, food service and tourism management
52.0907	Meeting and Event Planning	Business	Business	Hospitality, food service and tourism management
52.0908	Casino Management	Business	Business	Hospitality, food service and tourism management
52.0909	Hotel, Motel, and Restaurant Management	Business	Business	Hospitality, food service and tourism management
52.0910	Brewery/ Brewpub Operations/ Management	Business	Business	Hospitality, food service and tourism management
52.0999	Hospitality Administration/ Management, Other	Business	Business	Hospitality, food service and tourism management
52.1905	Tourism and Travel Services Marketing Operations	Business	Business	Hospitality, food service and tourism management
52.1906	Tourism Promotion Operations	Business	Business	Hospitality, food service and tourism management
52.1910	Hospitality and Recreation Marketing Operations	Business	Business	Hospitality, food service and tourism management
52.0601	Business/ Managerial Economics	Business	Business	Business/ managerial economics
52.1101	International Business/ Trade/ Commerce	Business	Business	International business/ trade/ commerce

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
30.7102	Business Analytics	Business	Business	Management information systems/ business statistics
52.1201	Management Information Systems, General	Business	Business	Management information systems/ business statistics
52.1206	Information Resources Management	Business	Business	Management information systems/ business statistics
52.1207	Knowledge Management	Business	Business	Management information systems/ business statistics
52.1299	Management Information Systems and Services, Other	Business	Business	Management information systems/ business statistics
52.1301	Management Science	Business	Business	Management information systems/ business statistics
52.1302	Business Statistics	Business	Business	Management information systems/ business statistics
52.1304	Actuarial Science	Business	Business	Management information systems/ business statistics
52.1399	Management Sciences and Quantitative Methods, Other	Business	Business	Management information systems/ business statistics
52.1401	Marketing/ Marketing Management, General	Business	Business	Marketing management and research
52.1402	Marketing Research	Business	Business	Marketing management and research
52.1403	International Marketing	Business	Business	Marketing management and research
52.1404	Digital Marketing	Business	Business	Marketing management and research
52.1499	Marketing, Other	Business	Business	Marketing management and research
52.1907	Vehicle and Vehicle Parts and Accessories Marketing Operations	Business	Business	Marketing management and research
52.1908	Business and Personal/ Financial Services Marketing Operations	Business	Business	Marketing management and research
52.1909	Special Products Marketing Operations	Business	Business	Marketing management and research
52.1001	Human Resources Management/ Personnel Administration, General	Business	Business	Human resources development
52.1002	Labor and Industrial Relations	Business	Business	Human resources development
52.1004	Labor Studies	Business	Business	Human resources development
52.1005	Human Resources Development	Business	Business	Human resources development
52.1006	Executive/ Career Coaching	Business	Business	Human resources development
52.1099	Human Resources Management and Services, Other	Business	Business	Human resources development
14.3701c	Operations Research (BUSINESS)	Business	Business	Operations research (business)
52.0213	Organizational Leadership	Business	Business	Organizational behavior
52.1003	Organizational Behavior Studies	Business	Business	Organizational behavior
01.0101	Agricultural Business and Management, General	Business	Business	Business management/ administration, general
52.0201b	Business Management/ Administration	Business	Business	Business management/ administration, general
52.0701	Entrepreneurship/ Entrepreneurial Studies	Business	Business	Business management/ administration, general
52.0702	Franchising and Franchise Operations	Business	Business	Business management/ administration, general
52.2001	Construction Management, General	Business	Business	Business management/ administration, general

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
01.0104	Farm/ Farm and Ranch Management	Business	Business	Business management/ administration, other
01.0105	Agricultural/ Farm Supplies Retailing and Wholesaling	Business	Business	Business management/ administration, other
01.0199	Agricultural Business and Management, Other	Business	Business	Business management/ administration, other
01.0301	Agricultural Production Operations, General	Business	Business	Business management/ administration, other
49.0104	Aviation/ Airway Management and Operations	Business	Business	Business management/ administration, other
50.1001	Arts, Entertainment, and Media Management, General	Business	Business	Business management/ administration, other
50.1004	Theatre/ Theatre Arts Management	Business	Business	Business management/ administration, other
52.0211	Project Management	Business	Business	Business management/ administration, other
52.0214	Research Administration	Business	Business	Business management/ administration, other
52.0215	Risk Management	Business	Business	Business management/ administration, other
52.0216	Science/ Technology Management	Business	Business	Business management/ administration, other
52.0502	Grantsmanship	Business	Business	Business management/ administration, other
52.0704	Social Entrepreneurship	Business	Business	Business management/ administration, other
52.0799	Entrepreneurial and Small Business Operations, Other	Business	Business	Business management/ administration, other
52.1501	Real Estate	Business	Business	Business management/ administration, other
52.1601	Taxation	Business	Business	Business management/ administration, other
52.1701	Insurance	Business	Business	Business management/ administration, other
52.1901	Auctioneering	Business	Business	Business management/ administration, other
52.1999	Specialized Merchandising, Sales, and Marketing Operations, Other	Business	Business	Business management/ administration, other
52.2002	Construction Project Management	Business	Business	Business management/ administration, other
52.2099	Construction Management, Other	Business	Business	Business management/ administration, other
52.9999	Business, Management, Marketing, and Related Support Services, Other	Business	Business	Business management/ administration, other
13.0499b	Education and Human Resource Studies/ Development	Education	Education leadership and administration	Educational and human resource studies/ development
13.0402	Administration of Special Education	Education	Education leadership and administration	Educational administration and supervision
13.0403	Adult and Continuing Education Administration	Education	Education leadership and administration	Educational administration and supervision
13.0404	Educational, Instructional, and Curriculum Supervision	Education	Education leadership and administration	Educational administration and supervision
13.0407	Community College Administration	Education	Education leadership and administration	Educational administration and supervision

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
13.0408	Elementary and Middle School Administration/ Principalship	Education	Education leadership and administration	Educational administration and supervision
13.0409	Secondary School Administration/ Principalship	Education	Education leadership and administration	Educational administration and supervision
13.0411	Superintendency and Educational System Administration	Education	Education leadership and administration	Educational administration and supervision
13.0413	Education Entrepreneurship	Education	Education leadership and administration	Educational administration and supervision
13.0414	Early Childhood Program Administration	Education	Education leadership and administration	Educational administration and supervision
13.0499	Educational Administration and Supervision, Other	Education	Education leadership and administration	Educational administration and supervision
13.0410	Urban Education and Leadership	Education	Education leadership and administration	Urban education and leadership
13.0401	Educational Leadership and Administration, General	Education	Education leadership and administration	Educational leadership
13.0412	International School Administration/ Leadership	Education	Education leadership and administration	Educational leadership
13.0499c	Organizational Leadership and Policy Development (Education)	Education	Education leadership and administration	Educational leadership
13.0301	Curriculum and Instruction	Education	Education research	Curriculum and instruction
13.0607	Learning Sciences	Education	Education research	Learning sciences
44.0502	Education Policy Analysis	Education	Education research	Educational policy analysis
13.0501b	Educational/ Instructional Media Design	Education	Education research	Educational/ instructional media design
13.0501c	Learning/ Instructional Design and Technology	Education	Education research	Educational/ instructional media design
13.0501	Educational/ Instructional Technology	Education	Education research	Educational/ instructional technology
13.0601	Educational Evaluation and Research	Education	Education research	Educational statistics/ research methods
13.0603	Educational Statistics and Research Methods	Education	Education research	Educational statistics/ research methods
13.0604	Educational Assessment, Testing, and Measurement	Education	Education research	Educational assessment/ testing/ measurement
13.0699	Educational Assessment, Evaluation, and Research, Other	Education	Education research	Educational assessment/ testing/ measurement
42.2806b	Educational Psychology (EDUCATION)	Education	Education research	Educational psychology (education)
42.2805b	School Psychology (EDUCATION)	Education	Education research	School psychology (education)
13.0901	Social and Philosophical Foundations of Education	Education	Education research	Social/ philosophical foundations of education
13.0701	International and Comparative Education	Education	Education research	International education
13.1212	International Teaching and Learning	Education	Education research	International education
13.1001	Special Education and Teaching, General	Education	Education research	Special education
13.1003	Education/ Teaching of Individuals with Hearing Impairments Including Deafness	Education	Education research	Special education
13.1004	Education/ Teaching of the Gifted and Talented	Education	Education research	Special education
13.1005	Education/ Teaching of Individuals with Emotional Disturbances	Education	Education research	Special education
13.1006	Education/ Teaching of Individuals with Intellectual Disabilities	Education	Education research	Special education
13.1007	Education/ Teaching of Individuals with Multiple Disabilities	Education	Education research	Special education

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
13.1008	Education/ Teaching of Individuals with Orthopedic and Other Physical Health Impairments	Education	Education research	Special education
13.1009	Education/ Teaching of Individuals with Vision Impairments Including Blindness	Education	Education research	Special education
13.1011	Education/ Teaching of Individuals with Specific Learning Disabilities	Education	Education research	Special education
13.1012	Education/ Teaching of Individuals with Speech or Language Impairments	Education	Education research	Special education
13.1013	Education/ Teaching of Individuals with Autism	Education	Education research	Special education
13.1014	Education/ Teaching of Individuals Who are Developmentally Delayed	Education	Education research	Special education
13.1015	Education/ Teaching of Individuals in Early Childhood Special Education Programs	Education	Education research	Special education
13.1016	Education/ Teaching of Individuals with Traumatic Brain Injuries	Education	Education research	Special education
13.1017	Education/ Teaching of Individuals in Elementary Special Education Programs	Education	Education research	Special education
13.1018	Education/ Teaching of Individuals in Junior High/ Middle School Special Education Programs	Education	Education research	Special education
13.1019	Education/ Teaching of Individuals in Secondary Special Education Programs	Education	Education research	Special education
13.1099	Special Education and Teaching, Other	Education	Education research	Special education
13.1101	Counselor Education/ School Counseling and Guidance Services	Education	Education research	Counseling education/ counseling and guidance
13.1102	College Student Counseling and Personnel Services	Education	Education research	Counseling education/ counseling and guidance
13.1199	Student Counseling and Personnel Services, Other	Education	Education research	Counseling education/ counseling and guidance
13.0406	Higher Education/ Higher Education Administration	Education	Education research	Higher education evaluation and research
13.0608	Institutional Research	Education	Education research	Higher education evaluation and research
13.0699b	Higher Education Evaluation and Research	Education	Education research	Higher education evaluation and research
13.1207	Montessori Teacher Education	Education	Teacher education and teaching fields	Pre-elementary/ early childhood teacher education
13.1208	Waldorf/ Steiner Teacher Education	Education	Teacher education and teaching fields	Pre-elementary/ early childhood teacher education
13.1209	Kindergarten/ Preschool Education and Teaching	Education	Teacher education and teaching fields	Pre-elementary/ early childhood teacher education
13.1210	Early Childhood Education and Teaching	Education	Teacher education and teaching fields	Pre-elementary/ early childhood teacher education
13.1202	Elementary Education and Teaching	Education	Teacher education and teaching fields	Elementary teacher education
13.1203	Junior High/ Intermediate/ Middle School Education and Teaching	Education	Teacher education and teaching fields	Secondary teacher education
13.1205	Secondary Education and Teaching	Education	Teacher education and teaching fields	Secondary teacher education
13.1201	Adult and Continuing Education and Teaching	Education	Teacher education and teaching fields	Adult and continuing teacher education
13.1502	Adult Literacy Tutor/ Instructor	Education	Teacher education and teaching fields	Adult and continuing teacher education

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
01.0801	Agricultural and Extension Education Services	Education	Teacher education and teaching fields	Agricultural education
13.1301	Agricultural Teacher Education	Education	Teacher education and teaching fields	Agricultural education
13.1302	Art Teacher Education	Education	Teacher education and teaching fields	Art education
13.1401	Teaching English as a Second or Foreign Language/ ESL Language Instructor	Education	Teacher education and teaching fields	English as a second or foreign language
13.1499	Teaching English or French as a Second or Foreign Language, Other	Education	Teacher education and teaching fields	English as a second or foreign language
16.1701	English as a Second Language	Education	Teacher education and teaching fields	English as a second or foreign language
13.1305	English/ Language Arts Teacher Education	Education	Teacher education and teaching fields	English education
13.0201	Bilingual and Multilingual Education	Education	Teacher education and teaching fields	Bilingual and multilingual education
13.0299	Bilingual, Multilingual, and Multicultural Education, Other	Education	Teacher education and teaching fields	Bilingual and multilingual education
13.1306	Foreign Language Teacher Education	Education	Teacher education and teaching fields	Foreign languages education
13.1325	French Language Teacher Education	Education	Teacher education and teaching fields	Foreign languages education
13.1326	German Language Teacher Education	Education	Teacher education and teaching fields	Foreign languages education
13.1330	Spanish Language Teacher Education	Education	Teacher education and teaching fields	Foreign languages education
13.1333	Latin Teacher Education	Education	Teacher education and teaching fields	Foreign languages education
13.1402	Teaching French as a Second or Foreign Language	Education	Teacher education and teaching fields	Foreign languages education
30.9999g	Second Language Acquisition	Education	Teacher education and teaching fields	Foreign languages education
13.1307	Health Teacher Education	Education	Teacher education and teaching fields	Health education
13.1327	Health Occupations Teacher Education	Education	Teacher education and teaching fields	Health education
51.3202	Health Professions Education	Education	Teacher education and teaching fields	Health education
51.3299	Health Professions Education, Ethics, and Humanities, Other	Education	Teacher education and teaching fields	Health education
13.1308	Family and Consumer Sciences/ Home Economics Teacher Education	Education	Teacher education and teaching fields	Family and consumer/ human science education
13.1311	Mathematics Teacher Education	Education	Teacher education and teaching fields	Mathematics education
13.1312	Music Teacher Education	Education	Teacher education and teaching fields	Music education
51.3203	Nursing Education	Education	Teacher education and teaching fields	Nursing education
13.1314	Physical Education Teaching and Coaching	Education	Teacher education and teaching fields	Physical education and coaching
13.1315	Reading Teacher Education	Education	Teacher education and teaching fields	Literacy and reading education
13.1315b	Language and Literacy Education	Education	Teacher education and teaching fields	Literacy and reading education

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
13.1331	Speech Teacher Education	Education	Teacher education and teaching fields	Literacy and reading education
13.1339	Communication Arts and Literature Teacher Education	Education	Teacher education and teaching fields	Literacy and reading education
13.1213	Science, Technology, Engineering, and Mathematics (STEM) Educational Methods	Education	Teacher education and teaching fields	Science education
13.1316	Science Teacher Education/ General Science Teacher Education	Education	Teacher education and teaching fields	Science education
13.1321	Computer Teacher Education	Education	Teacher education and teaching fields	Science education
13.1322	Biology Teacher Education	Education	Teacher education and teaching fields	Science education
13.1323	Chemistry Teacher Education	Education	Teacher education and teaching fields	Science education
13.1329	Physics Teacher Education	Education	Teacher education and teaching fields	Science education
13.1332	Geography Teacher Education	Education	Teacher education and teaching fields	Science education
13.1335	Psychology Teacher Education	Education	Teacher education and teaching fields	Science education
13.1337	Earth Science Teacher Education	Education	Teacher education and teaching fields	Science education
13.1338	Environmental Education	Education	Teacher education and teaching fields	Science education
14.9999b	Engineering Education	Education	Teacher education and teaching fields	Science education
13.1317	Social Science Teacher Education	Education	Teacher education and teaching fields	Social science education
13.1318	Social Studies Teacher Education	Education	Teacher education and teaching fields	Social science education
13.1328	History Teacher Education	Education	Teacher education and teaching fields	Social science education
13.0202	Multicultural Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.0203	Indian/ Native American Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1206	Teacher Education, Multiple Levels	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1211	Online Educator/ Online Teaching	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1214	College/ Postsecondary/ University Teaching	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1214b	Developmental Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1299b	Teaching and Learning	Education	Teacher education and teaching fields	Teacher education and professional development, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
13.1303	Business and Innovation/ Entrepreneurship Teacher Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1304	Driver and Safety Teacher Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1309	Technology Teacher Education/ Industrial Arts Teacher Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1310	Sales and Marketing Operations/ Marketing and Distribution Teacher Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1324	Drama and Dance Teacher Education	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1334	School Librarian/ School Library Media Specialist	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1399	Teacher Education and Professional Development, Specific Subject Areas, Other	Education	Teacher education and teaching fields	Teacher education and professional development, other
13.1201b	Workforce Education and Development	Education	Education, other	Workforce education and development
13.1319	Technical Teacher Education	Education	Education, other	Workforce education and development
13.1320	Trade and Industrial Teacher Education	Education	Education, other	Workforce education and development
13.0101	Education, General	Education	Education, other	Education, general
13.0101b	Educational Studies	Education	Education, other	Education, general
13.1501	Teacher Assistant/ Aide	Education	Education, other	Education, general
13.1599	Teaching Assistants/ Aides, Other	Education	Education, other	Education, general
13.9999	Education, Other	Education	Education, other	Education, other
16.1200	Classics and Classical Languages, Literatures, and Linguistics, General	Humanities and arts	Letters	Classics
16.1202	Ancient/ Classical Greek Language and Literature	Humanities and arts	Letters	Classics
16.1203	Latin Language and Literature	Humanities and arts	Letters	Classics
16.1299	Classics and Classical Languages, Literatures, and Linguistics, Other	Humanities and arts	Letters	Classics
30.2201	Ancient Studies/ Civilization	Humanities and arts	Letters	Classics
30.2202	Classical, Ancient Mediterranean, and Near Eastern Studies and Archaeology	Humanities and arts	Letters	Classics
30.2299	Classical and Ancient Studies, Other	Humanities and arts	Letters	Classics
16.0104	Comparative Literature	Humanities and arts	Letters	Comparative literature
30.3601	Cultural Studies and Comparative Literature	Humanities and arts	Letters	Comparative literature
23.1401	General Literature	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1402	American Literature (United States)	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1403	American Literature (Canadian)	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1405	Children's and Adolescent Literature	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1499	Literature, Other	Humanities and arts	Letters	American literature (U.S. and Canada)

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
23.1404	English Literature (British and Commonwealth)	Humanities and arts	Letters	English literature (British and commonwealth)
23.0101	English Language and Literature, General	Humanities and arts	Letters	English language
23.9999	English Language and Literature/ Letters, Other	Humanities and arts	Letters	English language
23.1302	Creative Writing	Humanities and arts	Letters	Creative writing
50.0504	Playwriting and Screenwriting	Humanities and arts	Letters	Creative writing
09.0101	Speech Communication and Rhetoric	Humanities and arts	Letters	Speech and rhetorical studies
23.1304	Rhetoric and Composition	Humanities and arts	Letters	Rhetoric and composition
23.1399	Rhetoric and Composition/ Writing Studies, Other	Humanities and arts	Letters	Rhetoric and composition
23.1301	Writing, General	Humanities and arts	Letters	Letters, general
23.1303	Professional, Technical, Business, and Scientific Writing	Humanities and arts	Letters	Letters, general
16.0901	French Language and Literature	Humanities and arts	Foreign languages and literature	French language and literature
16.0500	Germanic Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Germanic language and literature
16.0501	German Language and Literature	Humanities and arts	Foreign languages and literature	Germanic language and literature
16.0599	Germanic Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Germanic language and literature
16.0902	Italian Language and Literature	Humanities and arts	Foreign languages and literature	Italian language and literature
16.0905	Spanish Language and Literature	Humanities and arts	Foreign languages and literature	Spanish language and literature
16.0908	Hispanic and Latin American Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Latin American languages and literature
16.0402	Russian Language and Literature	Humanities and arts	Foreign languages and literature	Russian language and literature
16.0301	Chinese Language and Literature	Humanities and arts	Foreign languages and literature	Chinese language and literature
16.0302	Japanese Language and Literature	Humanities and arts	Foreign languages and literature	Japanese language and literature
16.1101	Arabic Language and Literature	Humanities and arts	Foreign languages and literature	Arabic language and literature
16.0101	Foreign Languages and Literatures, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0103	Language Interpretation and Translation	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0201	African Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0300	East Asian Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0303	Korean Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0304	Tibetan Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0399	East Asian Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0400	Slavic Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0401	Baltic Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
16.0404	Albanian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0405	Bulgarian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0406	Czech Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0407	Polish Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0408	Bosnian, Serbian, and Croatian Languages and Literatures	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0409	Slovak Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0410	Ukrainian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0499	Slavic, Baltic, and Albanian Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0502	Scandinavian Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0503	Danish Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0504	Dutch/ Flemish Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0505	Norwegian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0506	Swedish Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0601	Modern Greek Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0700	South Asian Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0701	Hindi Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0702	Sanskrit and Classical Indian Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0704	Bengali Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0705	Punjabi Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0706	Tamil Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0707	Urdu Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0799	South Asian Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0801	Iranian Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0900	Romance Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0904	Portuguese Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0906	Romanian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.0907	Catalan Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
16.0999	Romance Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1001	American Indian/ Native American Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1100	Middle/ Near Eastern and Semitic Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1102	Hebrew Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1103	Ancient Near Eastern and Biblical Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1199	Middle/ Near Eastern and Semitic Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1301	Celtic Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1400	Southeast Asian Languages, Literatures, and Linguistics, General	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1401	Australian/ Oceanic/ Pacific Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1402	Indonesian/ Malay Languages and Literatures	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1403	Burmese Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1404	Filipino/ Tagalog Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1405	Khmer/ Cambodian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1406	Lao Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1407	Thai Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1408	Vietnamese Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1409	Hawaiian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1499	Southeast Asian and Australasian/ Pacific Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1501	Turkish Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1502	Uralic Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1503	Hungarian/ Magyar Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1504	Mongolian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1599	Turkic, Uralic-Altaic, Caucasian, and Central Asian Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1601	American Sign Language (ASL)	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1602	Linguistics of ASL and Other Sign Languages	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1603	Sign Language Interpretation and Translation	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
16.1699	American Sign Language, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1801	Armenian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.9999	Foreign Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
54.0102	American History (United States)	Humanities and arts	History	American history (U.S. and Canada)
54.0107	Canadian History	Humanities and arts	History	American history (U.S. and Canada)
54.0106	Asian History	Humanities and arts	History	Asian history
30.1301	Medieval and Renaissance Studies	Humanities and arts	History	European history
54.0103	European History	Humanities and arts	History	European history
54.0199c	African History	Humanities and arts	History	African history
54.0199d	Latin American History	Humanities and arts	History	Latin American history
05.0108	Near and Middle Eastern Studies	Humanities and arts	History	Middle/ Near East history
54.0199e	Middle/ Near East History	Humanities and arts	History	Middle/ Near East history
54.0101	History, General	Humanities and arts	History	History, general
30.2101	Holocaust and Related Studies	Humanities and arts	History	History, other
30.4501	History and Language/ Literature	Humanities and arts	History	History, other
30.4601	History and Political Science	Humanities and arts	History	History, other
54.0105	Public/ Applied History	Humanities and arts	History	History, other
54.0108	Military History	Humanities and arts	History	History, other
54.0199	History, Other	Humanities and arts	History	History, other
38.0206	Jewish/ Judaic Studies	Humanities and arts	Philosophy and religious studies	Jewish/ Judaic studies
30.5101	Philosophy, Politics, and Economics	Humanities and arts	Philosophy and religious studies	Philosophy
38.0001	Philosophy and Religious Studies, General	Humanities and arts	Philosophy and religious studies	Philosophy
38.0101	Philosophy	Humanities and arts	Philosophy and religious studies	Philosophy
38.0102	Logic (PHILOSOPHY)	Humanities and arts	Philosophy and religious studies	Philosophy
38.0199	Philosophy, Other	Humanities and arts	Philosophy and religious studies	Philosophy
38.0201	Religion/ Religious Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0202	Buddhist Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0203	Christian Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0204	Hindu Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0205	Islamic Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0207	Talmudic Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0208	Catholic Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0209	Mormon Studies	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
38.0299	Religion/ Religious Studies, Other	Humanities and arts	Philosophy and religious studies	Religion/ religious studies

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
38.9999	Philosophy and Religious Studies, Other	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
39.0802	Religious/ Canon Law	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
39.0899	Religious Institution Administration and Law, Other	Humanities and arts	Philosophy and religious studies	Religion/ religious studies
50.0901	Music, General	Humanities and arts	Music and performing arts	Music
50.0902	Music History, Literature, and Theory	Humanities and arts	Music and performing arts	Music
50.0912	Music Pedagogy	Humanities and arts	Music and performing arts	Music
50.0913	Music Technology	Humanities and arts	Music and performing arts	Music
50.0904	Music Theory and Composition	Humanities and arts	Music and performing arts	Music theory and composition
50.0903	Music Performance, General	Humanities and arts	Music and performing arts	Music performance
50.0906	Conducting	Humanities and arts	Music and performing arts	Music performance
50.0907	Keyboard Instruments	Humanities and arts	Music and performing arts	Music performance
50.0908	Voice and Opera	Humanities and arts	Music and performing arts	Music performance
50.0910	Jazz/ Jazz Studies	Humanities and arts	Music and performing arts	Music performance
50.0911	Stringed Instruments	Humanities and arts	Music and performing arts	Music performance
50.0914	Brass Instruments	Humanities and arts	Music and performing arts	Music performance
50.0915	Woodwind Instruments	Humanities and arts	Music and performing arts	Music performance
50.0916	Percussion Instruments	Humanities and arts	Music and performing arts	Music performance
50.0905	Musicology and Ethnomusicology	Humanities and arts	Music and performing arts	Musicology/ ethnomusicology
50.0917	Sound Arts	Humanities and arts	Music and performing arts	Music, other
50.0999	Music, Other	Humanities and arts	Music and performing arts	Music, other
50.1003	Music Management	Humanities and arts	Music and performing arts	Music, other
50.0501	Drama and Dramatics/ Theatre Arts, General	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0502	Technical Theatre/ Theatre Design and Technology	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0505	Theatre Literature, History and Criticism	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0506	Acting	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0507	Directing and Theatrical Production	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0509	Musical Theatre	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0510	Costume Design	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0511	Comedy Writing and Performance	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0599	Dramatic/ Theatre Arts and Stagecraft, Other	Humanities and arts	Music and performing arts	Drama/ theater arts/ performance studies
50.0301	Dance, General	Humanities and arts	Music and performing arts	Dance
50.0302	Ballet	Humanities and arts	Music and performing arts	Dance
50.0399	Dance, Other	Humanities and arts	Music and performing arts	Dance
05.0201	African-American/ Black Studies	Humanities and arts	Humanities and arts, other	African American studies/ literature/ history
23.1402b	African-American/ Black Literature	Humanities and arts	Humanities and arts, other	African American studies/ literature/ history
30.4501b	African-American/ Black History and Literature	Humanities and arts	Humanities and arts, other	African American studies/ literature/ history
54.0102b	African-American/ Black History	Humanities and arts	Humanities and arts, other	African American studies/ literature/ history

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
30.1201	Historic Preservation and Conservation, General	Humanities and arts	Humanities and arts, other	Archaeology (humanities)
30.1299	Historic Preservation and Conservation, Other	Humanities and arts	Humanities and arts, other	Archaeology (humanities)
45.0301b	Archaeology/ Archeology (HUMANITIES)	Humanities and arts	Humanities and arts, other	Archaeology (humanities)
30.5203	Textual Studies	Humanities and arts	Humanities and arts, other	Art history/ criticism/ conservation
50.0703	Art History, Criticism and Conservation	Humanities and arts	Humanities and arts, other	Art history/ criticism/ conservation
50.0601	Film/ Cinema/ Media Studies	Humanities and arts	Humanities and arts, other	Film/ cinema/ media studies
50.0602	Cinematography and Film/ Video Production	Humanities and arts	Humanities and arts, other	Film/ cinema/ media studies
50.0607	Documentary Production	Humanities and arts	Humanities and arts, other	Film/ cinema/ media studies
50.0699	Film/ Video and Photographic Arts, Other	Humanities and arts	Humanities and arts, other	Film/ cinema/ media studies
50.1099	Arts, Entertainment, and Media Management, Other	Humanities and arts	Humanities and arts, other	Film/ cinema/ media studies
38.0103	Ethics	Humanities and arts	Humanities and arts, other	Ethics
38.0104	Applied and Professional Ethics	Humanities and arts	Humanities and arts, other	Ethics
51.3201	Bioethics/ Medical Ethics	Humanities and arts	Humanities and arts, other	Ethics
39.0201	Bible/ Biblical Studies	Humanities and arts	Humanities and arts, other	Bible/ biblical studies
24.0103	Humanities/ Humanistic Studies	Humanities and arts	Humanities and arts, other	Humanities, general
50.0102	Digital Arts	Humanities and arts	Humanities and arts, other	Humanities, general
50.0409	Graphic Design	Humanities and arts	Humanities and arts, other	Humanities, general
30.1401	Museology/ Museum Studies	Humanities and arts	Humanities and arts, other	Humanities, other
30.5201	Digital Humanities and Textual Studies, General	Humanities and arts	Humanities and arts, other	Humanities, other
30.5202	Digital Humanities	Humanities and arts	Humanities and arts, other	Humanities, other
30.5299	Digital Humanities and Textual Studies, Other	Humanities and arts	Humanities and arts, other	Humanities, other
50.0101	Visual and Performing Arts, General	Humanities and arts	Humanities and arts, other	Humanities, other
50.0201	Crafts/ Craft Design, Folk Art and Artisanry	Humanities and arts	Humanities and arts, other	Humanities, other
50.0406	Commercial Photography	Humanities and arts	Humanities and arts, other	Humanities, other
50.0410	Illustration	Humanities and arts	Humanities and arts, other	Humanities, other
50.0512	Theatre and Dance	Humanities and arts	Humanities and arts, other	Humanities, other
50.0605	Photography	Humanities and arts	Humanities and arts, other	Humanities, other
50.0701	Art/ Art Studies, General	Humanities and arts	Humanities and arts, other	Humanities, other
50.0702	Fine/ Studio Arts, General	Humanities and arts	Humanities and arts, other	Humanities, other
50.0705	Drawing	Humanities and arts	Humanities and arts, other	Humanities, other
50.0706	Intermedia/ Multimedia	Humanities and arts	Humanities and arts, other	Humanities, other
50.0708	Painting	Humanities and arts	Humanities and arts, other	Humanities, other
50.0709	Sculpture	Humanities and arts	Humanities and arts, other	Humanities, other
50.0710	Printmaking	Humanities and arts	Humanities and arts, other	Humanities, other
50.0711	Ceramic Arts and Ceramics	Humanities and arts	Humanities and arts, other	Humanities, other
50.0712	Fiber, Textile and Weaving Arts	Humanities and arts	Humanities and arts, other	Humanities, other
50.0713	Jewelry Arts	Humanities and arts	Humanities and arts, other	Humanities, other
50.0714	Metal Arts	Humanities and arts	Humanities and arts, other	Humanities, other
50.0799	Fine Arts and Art Studies, Other	Humanities and arts	Humanities and arts, other	Humanities, other
50.1002	Fine and Studio Arts Management	Humanities and arts	Humanities and arts, other	Humanities, other
50.1101	Community/ Environmental/ Socially-Engaged Art	Humanities and arts	Humanities and arts, other	Humanities, other
50.9999	Visual and Performing Arts, Other	Humanities and arts	Humanities and arts, other	Humanities, other
51.2301	Art Therapy/ Therapist	Humanities and arts	Humanities and arts, other	Humanities, other
51.2305	Music Therapy/ Therapist	Humanities and arts	Humanities and arts, other	Humanities, other
51.3206	Arts in Medicine/ Health	Humanities and arts	Humanities and arts, other	Humanities, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
39.0301	Missions/ Missionary Studies	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0302	Church Planting	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0399	Missions/ Missionary Studies and Missiology, Other	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0401	Religious Education	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0501	Religious/ Sacred Music	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0502	Worship Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0599	Religious Music and Worship, Other	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0601	Theology/ Theological Studies	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0602	Divinity/ Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0604	Pre-Theology/ Pre-Ministerial Studies	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0605	Rabbinical Studies	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0699	Theological and Ministerial Studies, Other	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0701	Pastoral Studies/ Counseling	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0702	Youth Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0703	Urban Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0704	Women's Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0705	Lay Ministry	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0706	Chaplain/ Chaplaincy Studies	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0799	Pastoral Counseling and Specialized Ministries, Other	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.0801	Religious Institution Administration and Management	Humanities and arts	Humanities and arts, other	Theology/ religious education
39.9999	Theology and Religious Vocations, Other	Humanities and arts	Humanities and arts, other	Theology/ religious education
09.0100b	Communication Research	Other non-science and engineering	Communication	Communication research
09.0407	Science/ Health/ Environmental Journalism	Other non-science and engineering	Communication	Communication research
09.0102	Mass Communication/ Media Studies	Other non-science and engineering	Communication	Mass communication/ media studies
09.0199	Communication and Media Studies, Other	Other non-science and engineering	Communication	Mass communication/ media studies
09.0401	Journalism	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0402	Broadcast Journalism	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0404	Photojournalism	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0405	Business and Economic Journalism	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0406	Cultural Journalism	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0499	Journalism, Other	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0701	Radio and Television	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0702	Digital Communication and Media/ Multimedia	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0799	Radio, Television, and Digital Communication, Other	Other non-science and engineering	Communication	Film, radio, TV and digital communication
10.0201	Photographic and Film/ Video Technology	Other non-science and engineering	Communication	Film, radio, TV and digital communication
10.0202	Radio and Television Broadcasting Technology	Other non-science and engineering	Communication	Film, radio, TV and digital communication

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
10.0203	Recording Arts Technology	Other non-science and engineering	Communication	Film, radio, TV and digital communication
10.0204	Voice Writing Technology	Other non-science and engineering	Communication	Film, radio, TV and digital communication
10.0299	Audiovisual Communications Technologies, Other	Other non-science and engineering	Communication	Film, radio, TV and digital communication
09.0100c	Communication Theory	Other non-science and engineering	Communication	Communication theory
09.0100	Communication, General	Other non-science and engineering	Communication	Communication, general
09.0100d	Communication Studies	Other non-science and engineering	Communication	Communication, general
09.0901	Organizational Communication, General	Other non-science and engineering	Communication	Communication, general
09.0902	Public Relations/ Image Management	Other non-science and engineering	Communication	Communication, general
09.0903	Advertising	Other non-science and engineering	Communication	Communication, general
09.0905	Health Communication	Other non-science and engineering	Communication	Communication, general
10.0105	Communications Technology	Other non-science and engineering	Communication	Communication, general
10.0301	Graphic Communications, General	Other non-science and engineering	Communication	Communication, general
10.0303	Prepress/ Desktop Publishing and Digital Imaging Design	Other non-science and engineering	Communication	Communication, general
10.0304	Animation, Interactive Technology, Video Graphics, and Special Effects	Other non-science and engineering	Communication	Communication, general
10.0305	Graphic and Printing Equipment Operator, General Production	Other non-science and engineering	Communication	Communication, general
10.0306	Platemaker/ Imager	Other non-science and engineering	Communication	Communication, general
10.0307	Printing Press Operator	Other non-science and engineering	Communication	Communication, general
10.0399	Graphic Communications, Other	Other non-science and engineering	Communication	Communication, general
10.9999	Communications Technologies and Support Services, Other	Other non-science and engineering	Communication	Communication, general
51.2703	Medical Illustration/ Medical Illustrator	Other non-science and engineering	Communication	Communication, general
52.0501	Business/ Corporate Communications, General	Other non-science and engineering	Communication	Communication, general
01.0802	Agricultural Communication/ Journalism	Other non-science and engineering	Communication	Communication, other
09.0900	Public Relations, Advertising, and Applied Communication	Other non-science and engineering	Communication	Communication, other
09.0904	Political Communication	Other non-science and engineering	Communication	Communication, other
09.0906	Sports Communication	Other non-science and engineering	Communication	Communication, other
09.0907	International and Intercultural Communication	Other non-science and engineering	Communication	Communication, other
09.0908	Technical and Scientific Communication	Other non-science and engineering	Communication	Communication, other

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
09.0909	Communication Management and Strategic Communications	Other non-science and engineering	Communication	Communication, other
09.0999	Public Relations, Advertising, and Applied Communication, Other	Other non-science and engineering	Communication	Communication, other
09.1001	Publishing	Other non-science and engineering	Communication	Communication, other
09.9999	Communication, Journalism, and Related Programs, Other	Other non-science and engineering	Communication	Communication, other
10.0302	Printing Management	Other non-science and engineering	Communication	Communication, other
50.0401	Design and Visual Communications, General	Other non-science and engineering	Communication	Communication, other
50.0402	Commercial and Advertising Art	Other non-science and engineering	Communication	Communication, other
50.0404	Industrial and Product Design	Other non-science and engineering	Communication	Communication, other
50.0411	Game and Interactive Media Design	Other non-science and engineering	Communication	Communication, other
50.0499	Design and Applied Arts, Other	Other non-science and engineering	Communication	Communication, other
52.0599	Business/ Corporate Communications, Other	Other non-science and engineering	Communication	Communication, other
01.0899	Agricultural Public Services, Other	Other non-science and engineering	Public administration and social services	Public administration
43.0202	Fire Services Administration	Other non-science and engineering	Public administration and social services	Public administration
44.0201	Community Organization and Advocacy	Other non-science and engineering	Public administration and social services	Public administration
44.0401	Public Administration	Other non-science and engineering	Public administration and social services	Public administration
44.0402	Public Works Management	Other non-science and engineering	Public administration and social services	Public administration
44.0403	Transportation and Infrastructure Planning/ Studies	Other non-science and engineering	Public administration and social services	Public administration
44.0499	Public Administration, Other	Other non-science and engineering	Public administration and social services	Public administration
44.9999	Public Administration and Social Service Professions, Other	Other non-science and engineering	Public administration and social services	Public administration
44.9999b	Public Administration and Policy	Other non-science and engineering	Public administration and social services	Public administration
44.0000	Human Services, General	Other non-science and engineering	Public administration and social services	Social work
44.0701	Social Work	Other non-science and engineering	Public administration and social services	Social work
44.0702	Youth Services/ Administration	Other non-science and engineering	Public administration and social services	Social work
44.0703	Forensic Social Work	Other non-science and engineering	Public administration and social services	Social work
44.0799	Social Work, Other	Other non-science and engineering	Public administration and social services	Social work
51.1503	Clinical/ Medical Social Work	Other non-science and engineering	Public administration and social services	Social work
04.0200	Pre-Architecture Studies	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
04.0201	Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0202	Architectural Design	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0299	Architecture, Other	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0401	Environmental Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0402	Healthcare Environment Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0403	Sustainable Design/ Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0499	Environmental Design, Other	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0501	Interior Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0601	Landscape Architecture	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0801	Architectural History and Criticism, General	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0802	Architectural Conservation	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0803	Architectural Studies	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0899	Architectural History, Criticism, and Conservation, Other	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0901	Architectural Technology	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0902	Architectural and Building Sciences/ Technology	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.0999	Architectural Sciences and Technology, Other	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
04.9999	Architecture and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
50.0408	Interior Design	Other non-science and engineering	Non-science and engineering, other	Architecture/ environmental design
19.0101	Family and Consumer Sciences/ Human Sciences, General	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0201	Business Family and Consumer Sciences/ Human Sciences	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0202	Family and Consumer Sciences/ Human Sciences Communication	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0203	Consumer Merchandising/ Retailing Management	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0299	Family and Consumer Sciences/ Human Sciences Business Services, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0401	Family Resource Management Studies, General	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0402	Consumer Economics	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0403	Consumer Services and Advocacy	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0499	Family and Consumer Economics and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
19.0501	Foods, Nutrition, and Wellness Studies, General	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0505	Foodservice Systems Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0599	Foods, Nutrition, and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0601	Housing and Human Environments, General	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0604	Facilities Planning and Management	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0605	Home Furnishings and Equipment Installers	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0699	Housing and Human Environments, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0707	Family and Community Services	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0708	Child Care and Support Services Management	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0709	Child Care Provider/ Assistant	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0710	Developmental Services Worker	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0712	Parent Education Services	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0799	Human Development, Family Studies, and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0901	Apparel and Textiles, General	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0902	Apparel and Textile Manufacture	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0904	Textile Science	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0905	Apparel and Textile Marketing Management	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0906	Fashion and Fabric Consultant	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.0999	Apparel and Textiles, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
19.9999	Family and Consumer Sciences/ Human Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
50.0407	Fashion/ Apparel Design	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
52.1902	Fashion Merchandising	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
52.1903	Fashion Modeling	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
52.1904	Apparel and Accessories Marketing Operations	Other non-science and engineering	Non-science and engineering, other	Family/ consumer sciences/ human sciences
22.0000	Legal Studies	Other non-science and engineering	Non-science and engineering, other	Law
22.0001	Pre-Law Studies	Other non-science and engineering	Non-science and engineering, other	Law
22.0099	Non-Professional Legal Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law

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Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
22.0101	Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0201	Advanced Legal Research/ Studies, General	Other non-science and engineering	Non-science and engineering, other	Law
22.0202	Programs for Foreign Lawyers	Other non-science and engineering	Non-science and engineering, other	Law
22.0203	American/ US Law/ Legal Studies/ Jurisprudence	Other non-science and engineering	Non-science and engineering, other	Law
22.0204	Canadian Law/ Legal Studies/ Jurisprudence	Other non-science and engineering	Non-science and engineering, other	Law
22.0205	Banking, Corporate, Finance, and Securities Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0206	Comparative Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0207	Energy, Environment, and Natural Resources Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0208	Health Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0209	International Law and Legal Studies	Other non-science and engineering	Non-science and engineering, other	Law
22.0210	International Business, Trade, and Tax Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0211	Tax Law/ Taxation	Other non-science and engineering	Non-science and engineering, other	Law
22.0212	Intellectual Property Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0213	Patent Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0214	Agriculture Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0215	Arts and Entertainment Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0216	Compliance Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0217	Criminal Law and Procedure	Other non-science and engineering	Non-science and engineering, other	Law
22.0218	Entrepreneurship Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0219	Family/ Child/ Elder Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0220	Human Resources Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0221	Insurance Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0222	Real Estate and Land Development Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0223	Transportation Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0224	Tribal/ Indigenous Law	Other non-science and engineering	Non-science and engineering, other	Law
22.0299	Legal Research and Advanced Professional Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law
22.0301	Legal Administrative Assistant/ Secretary	Other non-science and engineering	Non-science and engineering, other	Law

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
22.0302	Legal Assistant/ Paralegal	Other non-science and engineering	Non-science and engineering, other	Law
22.0303	Court Reporting and Captioning/ Court Reporter	Other non-science and engineering	Non-science and engineering, other	Law
22.0304	Court Interpreter	Other non-science and engineering	Non-science and engineering, other	Law
22.0305	Scopist	Other non-science and engineering	Non-science and engineering, other	Law
22.0399	Legal Support Services, Other	Other non-science and engineering	Non-science and engineering, other	Law
22.9999	Legal Professions and Studies, Other	Other non-science and engineering	Non-science and engineering, other	Law
25.0101	Library and Information Science	Other non-science and engineering	Non-science and engineering, other	Library science
25.0102	Children and Youth Library Services	Other non-science and engineering	Non-science and engineering, other	Library science
25.0103	Archives/ Archival Administration	Other non-science and engineering	Non-science and engineering, other	Library science
25.0199	Library Science and Administration, Other	Other non-science and engineering	Non-science and engineering, other	Library science
25.0301	Library and Archives Assisting	Other non-science and engineering	Non-science and engineering, other	Library science
25.9999	Library Science, Other	Other non-science and engineering	Non-science and engineering, other	Library science
03.0207	Environmental/ Natural Resource Recreation and Tourism	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0101	Parks, Recreation, and Leisure Studies	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0301	Parks, Recreation, and Leisure Facilities Management, General	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0302	Golf Course Operation and Grounds Management	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0399	Parks, Recreation, and Leisure Facilities Management, Other	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0504	Sport and Fitness Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0507	Physical Fitness Technician	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0508	Sports Studies	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
31.0601	Outdoor Education	Other non-science and engineering	Non-science and engineering, other	Parks/ sports/ recreation/ leisure/ fitness
01.0504	Dog/ Pet/ Animal Grooming	Other non-science and engineering	Non-science and engineering, other	Other fields nec
01.0508	Taxidermy/ Taxidermist	Other non-science and engineering	Non-science and engineering, other	Other fields nec
11.0601	Data Entry/ Microcomputer Applications, General	Other non-science and engineering	Non-science and engineering, other	Other fields nec
11.0602	Word Processing	Other non-science and engineering	Non-science and engineering, other	Other fields nec
11.0699	Data Entry/ Microcomputer Applications, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
24.0101	Liberal Arts and Sciences/ Liberal Studies	Other non-science and engineering	Non-science and engineering, other	Other fields nec

TABLE A-6

Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023

(Field)

SED-CIP code	SED-CIP title	Trend broad field	Trend major field	Trend fine field
24.0102	General Studies	Other non-science and engineering	Non-science and engineering, other	Other fields nec
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0204	Command & Control (C3, C4) Systems and Operations (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0307	Undersea Warfare (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0399	Military Applied Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0405	Joint Command/ Task Force (C3, C4) Systems (MILITARY)	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0499	Military Systems and Maintenance Technology, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.0601	Military Technology and Applied Sciences Management	Other non-science and engineering	Non-science and engineering, other	Other fields nec
29.9999	Military Technologies and Applied Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.0000	Multi-/ Interdisciplinary Studies, General	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.0001	Comprehensive Transition and Postsecondary (CTP) Program	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.0601	Systems Science and Theory	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.9999	Multi-/ Interdisciplinary Studies, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.9999f	Interdisciplinary Leadership/ Leadership Studies	Other non-science and engineering	Non-science and engineering, other	Other fields nec
30.9999z	Multi-/ Interdisciplinary Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Other fields nec

CIP = Classification of Instructional Programs; nec = not elsewhere classified; S&E = science and engineering; SED = Survey of Earned Doctorates; STEM = science, technology, engineering, and mathematics.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the trend fields were constructed using the SED-CIP code crosswalk in this table. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. See [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy and [table A-5](#) for the full list of SED-CIP codes in the new field taxonomy. For more information, see "[Technical Notes](#)" and the SED 2021 Taxonomy Changes Working Paper (available at <https://nces.nsf.gov/pubs/nces23200>).

Source(s):

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

TABLE B-1

SED data table crosswalk: 2020 vs. 2021–23

(Crosswalk)

2020	2021–23	2023 table title
Trends in research doctorate recipient characteristics		
Table 1	Table 1-1	Research doctorate recipients from U.S. colleges and universities: 1958–2023
Table 11	Table 1-2	Research doctorate recipients, by trend broad field of doctorate and 2021 Carnegie Classification of doctorate institution: 2013–23
Table 12	Table 1-3	Research doctorate recipients, by trend major field of doctorate: Selected years, 1993–2023
Table 14	Table 1-4	Research doctorate recipients, by trend broad field of doctorate and sex: Selected years, 1993–2023
Table 15	Table 1-5	Research doctorate recipients, by trend major field of doctorate and sex: 2013–23
Table 17	Table 1-6	Research doctorate recipients, by trend broad field of doctorate and citizenship status: Selected years, 1978–2023
Table 18	Table 1-7	Research doctorate recipients, by trend major field of doctorate and citizenship status: 2013–23
Table 19	Table 1-8	Research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23
Table 20	Table 1-9	Male research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23
Table 21	Table 1-10	Female research doctorate recipients, by ethnicity, race, and citizenship status: 2013–23
Table 23	Table 1-11	U.S. citizen and permanent resident research doctorate recipients, by trend broad field of doctorate, ethnicity, and race: Selected years, 1978–2023
Table 31	Table 1-12	Median years to research doctorate, by trend broad field of doctorate: Selected years, 1973–2023
Table 39	Table 1-13	Education-related debt of research doctorate recipients, by trend broad field of doctorate: 2013–23
Table 34	Table 1-14	Highest educational attainment of either parent of research doctorate recipients: 1970–2023
Trends in postgraduation commitments of research doctorate recipients		
Table 42	Table 2-1	Postgraduation commitment of research doctorate recipients, by trend broad field of doctorate: Selected years, 1993–2023
Table 43	Table 2-2	Postgraduation commitment of research doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023
Table 44	Table 2-3	Postgraduation plans of research doctorate recipients with definite commitments, by trend broad field of doctorate: Selected years, 1993–2023
Table 45	Table 2-4	Postgraduation plans of research doctorate recipients with definite commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023
Table 50	Table 2-5	Sources of support for research doctorate recipients with postdoctoral training commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023
Table 46	Table 2-6	Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by trend broad field of doctorate: Selected years, 1993–2023
Table 47	Table 2-7	Employment sector of research doctorate recipients with definite postgraduation commitments for non-postdoc employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1993–2023
Table 53	Table 2-8	Research doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by region and country or economy of citizenship: 2017–23
Field and demographic characteristics of research doctorate recipients		
Table 13	Table 3-1	Research doctorate recipients, by detailed field of doctorate: 2021–23
Table 16	Table 3-2	Research doctorate recipients, by detailed field of doctorate and sex: 2023
Table 22	Table 3-3	Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2023
Table 24	Table 3-4	U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2023

TABLE B-1

SED data table crosswalk: 2020 vs. 2021–23

(Crosswalk)

2020	2021–23	2023 table title
Table 32	Table 3-5	Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
Table 32	Table 3-6	Median years to non-science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
Table 27	Table 3-7	Median age and age distribution of research doctorate recipients, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023
Financial support and education-related debt of research doctorate recipients		
Table 35	Table 4-1	Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2023
Table 36	Table 4-2	Research doctorate recipients' sources of financial support, by broad field of doctorate and sex: 2023
Table 37	Table 4-3	Research doctorate recipients' sources of financial support, by sex and broad field of doctorate: 2023
Table 38	Table 4-4	Education-related debt of research doctorate recipients, by broad field of doctorate: 2023
Table 40	Table 4-5	Education-related debt of research doctorate recipients, by sex, citizenship status, ethnicity, and race: 2023
Table 41	Table 4-6	U.S. citizen and permanent resident research doctorate recipients with graduate education-related debt, by ethnicity, race, and broad field of doctorate: 2023
Educational and background characteristics of research doctorate recipients		
Table 30	Table 5-1	Research doctorate recipients who ever attended community college, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
New	Table 5-2	Research doctorate recipients who earned a bachelor's degree related to doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
Table 29	Table 5-3	Research doctorate recipients who earned a master's degree related to doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
New	Table 5-4	Baccalaureate-origin institution characteristics of research doctorate recipients, by broad field of doctorate: 2023
Table 33	Table 5-5	Educational attainment of research doctorate recipients' parents, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023
Table 28	Table 5-6	Research doctorate recipients with one or more functional limitations, by broad field of doctorate, sex, and citizenship status: 2023
Postgraduation commitments and salaries of research doctorate recipients		
Table 51	Table 6-1	Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023
Table 51	Table 6-2	U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023
Table 51	Table 6-3	Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023
Table 52	Table 6-4	Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023
Table 52	Table 6-5	Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2023
Table 48	Table 6-6	Median basic annual salary for research doctorate recipients with definite postgraduation plans in the United States, by broad field of doctorate, type of postgraduation plans, and sex: 2023
Table 49	Table 6-7	Median basic annual salary for research doctorate recipients with definite postgraduation plans for non-postdoc employment in the United States, by broad field of doctorate and employment sector: 2023
Doctorate institutions, locations, and countries of origins of research doctorate recipients		
Table 2	Table 7-1	Doctorate-granting institutions and research doctorate recipients per institution: 1973–2023
Table 3	Table 7-2	Top 50 doctorate-granting institutions ranked by total number of research doctorate recipients, by sex: 2023
Table 4	Table 7-3	Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2023
Table 9	Table 7-4	Top 20 doctorate-granting institutions ranked by number of minority U.S. citizen and permanent resident research doctorate recipients, by ethnicity and race: 5-year total, 2019–23

TABLE B-1

SED data table crosswalk: 2020 vs. 2021–23

(Crosswalk)

2020	2021–23	2023 table title
Table 10	Table 7-5	Top 20 doctorate-granting institutions, ranked by number of research doctorate recipients holding temporary visas: 2023
Table 5	Table 7-6	State or location of doctorate institution ranked by total number of research doctorate recipients, by field of doctorate and sex: 2023
Table 26	Table 7-7	Top 10 countries or economies of origin of temporary visa holders earning U.S. research doctorates, by country or economy of citizenship and field of doctorate: 2013–23
Table 25	Table 7-8	Top 40 countries or economies of origin of temporary visa holders earning U.S. research doctorates, by number of doctorate recipients: 2023
New	Table 7-9	Top 20 baccalaureate-origin institutions ranked by 2021 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2023
Table 6	Table 7-10	Research doctorate recipients, by state or location of doctorate institution and broad field of doctorate: 2023
Statistical profiles of research doctorate recipients		
Table 54	Table 8-1	Science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023
Table 54	Table 8-2	Non-science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2023
Table 56	Table 8-3	Agricultural sciences and natural resources research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 56	Table 8-4	Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 60	Table 8-5	Computer and information science research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 64	Table 8-6	Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 58	Table 8-7	Geosciences, atmospheric, and ocean sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 56	Table 8-8	Health sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 60	Table 8-9	Mathematics and statistics research doctorate recipients, statistical profiles by sex and major field of doctorate: 2023
New	Table 8-10	Multidisciplinary/interdisciplinary sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 58	Table 8-11	Physical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 62	Table 8-12	Psychology research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 63	Table 8-13	Social sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 66	Table 8-14	Education research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 68	Table 8-15	Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 70	Table 8-16	Business research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 70	Table 8-17	Visual and performing arts research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 70	Table 8-18	Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2023
Table 72	Table 8-19	Statistical profile of research doctorate recipients, by ethnicity, race, and citizenship status: 2023
Postgraduation plans of research doctorate recipients		
Table 55	Table 9-1	Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023
Table 55	Table 9-2	Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2023

TABLE B-1

SED data table crosswalk: 2020 vs. 2021–23

(Crosswalk)

2020	2021–23	2023 table title
Table 57	Table 9-3	Agricultural sciences and natural resources research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 57	Table 9-4	Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 61	Table 9-5	Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 65	Table 9-6	Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 59	Table 9-7	Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 57	Table 9-8	Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 61	Table 9-9	Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
New	Table 9-10	Multidisciplinary/ interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 59	Table 9-11	Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 62	Table 9-12	Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 63	Table 9-13	Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 67	Table 9-14	Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 69	Table 9-15	Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 71	Table 9-16	Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 71	Table 9-17	Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 71	Table 9-18	Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2023
Table 72	Table 9-19	Postgraduation plans of research doctorate recipients, by ethnicity, race, and citizenship status: 2023
Technical tables		
Table A-2	Table A-1	Research doctoral degrees included in the Survey of Earned Doctorates: 2019–23
Table A-3	Table A-2	Survey response rates: 1970–2023
Table A-4	Table A-3	Item response rates: 2017–23
Table A-6	Table A-4	SED field of doctorate taxonomy, by SED-CIP series/codes: 2023
New	Table A-5	Doctoral SED-CIP codes in new broad, major, and detailed fields: 2023
New	Table A-6	Doctoral SED-CIP code crosswalk to trend broad, major, and fine fields: 2023
New	Table B-1	SED data table crosswalk: 2020 vs. 2021–23
New	Table B-2	Comparison of the new field taxonomy to the trend and historical field taxonomy

CIP = Classification of Instructional Programs; SED = Survey of Earned Doctorates.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection. The new broad, major, and detailed fields were used in tables reporting data from 2021 to the present, and the trend broad and major fields were used in the tables that includes data from years prior to 2021. As a result, the data tables were reorganized and renumbered in 2021 and the field of doctorate data may not be comparable to subsequent years.

Source(s):

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

TABLE B-2

Comparison of the broad and major fields, trend broad and major fields, and historical broad and major fields

(Crosswalk)

Broad and major fields (Cycle 2023 data tables)		Trend broad and major fields (Cycle 2023 data tables)		Historical broad and major fields (Cycles 2021–22 data tables)	
All fields	Level	All fields	Level	All fields	Level
Science and engineering	Area	Science and engineering	Area	na	Area
na	-	na	-	Life sciences	Broad
Agricultural sciences and natural resources	Broad	Agricultural sciences and natural resources ^a	Broad	Agricultural sciences and natural resources	Major
Agricultural, animal, plant, and veterinary sciences	Major	Agricultural sciences ^a	Major	na	-
Natural resources and conservation	Major	Natural resources and conservation	Major	na	-
Biological and biomedical sciences	Broad	Biological and biomedical sciences	Broad	Biological and biomedical sciences	Major
Biochemistry, biophysics, and molecular biology	Major	Biochemistry and biophysics	Major	na	-
Bioinformatics, biostatistics, and computational biology	Major	Bioinformatics, biostatistics, and computational biology	Major	na	-
Biological and biomedical sciences, general	Major	Biology and biomedical sciences, general	Major	na	-
Cell/ cellular biology and anatomy	Major	Cellular and developmental biology, and anatomy	Major	na	-
Ecology, evolutionary biology, and epidemiology	Major	Ecology, evolutionary biology, and epidemiology	Major	na	-
Genetics and genomics	Major	Genetics and genomics	Major	na	-
Microbiology and immunology	Major	Microbiology and immunology	Major	na	-
na	-	Molecular biology	Major	na	-
Neurobiology and neurosciences	Major	Neurobiology and neurosciences	Major	na	-
Pharmacology and toxicology	Major	Pharmacology and toxicology	Major	na	-
Physiology, oncology, and cancer biology	Major	Physiology, pathology, and cancer biology	Major	na	-
Biological and biomedical sciences, other	Major	Biology and biomedical sciences, other	Major	na	-
Computer and information sciences	Broad	Computer and information sciences	Broad	Computer and information sciences	Major
Computer science	Major	Computer science	Major	na	-
Computer and information sciences, other	Major	Computer and information sciences, other	Major	na	-
Engineering	Broad	Engineering	Broad	Engineering	Broad
Aerospace, aeronautical, astronautical and space engineering	Major	Aerospace, aeronautical, and astronautical engineering	Major	Aerospace, aeronautical, and astronautical engineering	Major
Biological, biomedical, and biosystems engineering	Major	Bioengineering and biomedical engineering	Major	Bioengineering and biomedical engineering	Major
Chemical and petroleum engineering	Major	Chemical and petroleum engineering	Major	Chemical engineering	Major
Civil, environmental, and transportation engineering	Major	Civil, environmental, and transportation engineering	Major	Civil engineering	Major
Electrical and computer engineering	Major	Electrical and computer engineering	Major	Electrical, electronics, and communications engineering	Major
Engineering technologies	Major	NA	-	NA	-
Industrial engineering and operations research	Major	Industrial engineering and operations research	Major	Industrial and manufacturing engineering	Major
Materials and mining engineering	Major	Materials and mining engineering	Major	Materials science engineering	Major
Mechanical engineering	Major	Mechanical engineering	Major	Mechanical engineering	Major
Engineering, other	Major	Engineering, other	Major	Other engineering	Major
Geosciences, atmospheric, and ocean sciences	Broad	Geosciences, atmospheric, and ocean sciences	Broad	Geosciences, atmospheric, and ocean sciences	Major
Geological and earth sciences	Major	Geological sciences	Major	na	-
Ocean, marine, and atmospheric sciences	Major	Ocean, marine, and atmospheric sciences	Major	na	-

TABLE B-2

Comparison of the broad and major fields, trend broad and major fields, and historical broad and major fields

(Crosswalk)

Broad and major fields (Cycle 2023 data tables)		Trend broad and major fields (Cycle 2023 data tables)		Historical broad and major fields (Cycles 2021–22 data tables)	
Health sciences	Broad	Health sciences ^a	Broad	Health sciences	Major
Nursing and nursing science	Major	Nursing science	Major	na	-
Pharmacy and pharmaceutical sciences	Major	Pharmaceutical sciences	Major	na	-
Public health	Major	Public health	Major	na	-
Health sciences, other	Major	Health sciences, other	Major	na	-
na	-	na	-	Mathematics and computer sciences	Broad
Mathematics and statistics	Broad	Mathematics and statistics	Broad	Mathematics and statistics	Major
Applied mathematics	Major	Applied mathematics	Major	na	-
Mathematics	Major	Mathematics	Major	na	-
Statistics	Major	Statistics	Major	na	-
na	-	Mathematics and statistics, other	Major	na	-
Multidisciplinary/ interdisciplinary sciences	Broad	NA	-	NA	-
Interdisciplinary computer sciences	Major	NA	-	NA	-
Multidisciplinary/ interdisciplinary sciences, other	Major	NA	-	NA	-
na	-	na	-	Physical sciences and earth sciences	Broad
Physical sciences	Broad	Physical sciences	Broad	na	-
Astronomy and astrophysics	Major	Astronomy and astrophysics	Major	na	-
Chemistry	Major	Chemistry	Major	Chemistry	Major
Materials sciences	Major	NA	-	NA	-
Physics	Major	Physics	Major	Physics and astronomy	Major
na	-	na	-	Psychology and social sciences	Broad
Psychology	Broad	Psychology	Broad	Psychology	Major
Clinical psychology	Major	Clinical psychology	Major	na	-
Counseling and applied psychology	Major	Counseling and applied psychology	Major	na	-
Research and experimental psychology	Major	Research and experimental psychology	Major	na	-
Psychology, other	Major	Psychology, other	Major	na	-
Social sciences	Broad	Social sciences	Broad	na	-
Anthropology	Major	Anthropology	Major	Anthropology	Major
Area, ethnic, cultural, gender, and group studies	Major	na	-	na	-
Economics	Major	Economics	Major	Economics	Major
Political science and government	Major	Political science and government	Major	Political science and government	Major
Public policy analysis	Major	Public policy analysis	Major	na	-
Sociology, demography, and population studies	Major	Sociology, demography, and population studies	Major	Sociology	Major
Social sciences, other	Major	Social sciences, other	Major	Other social sciences	Major
Non-science and engineering	Area	Non-science and engineering	Area	na	-
Business	Broad	Business	Broad	Business management and administration	Major

TABLE B-2

Comparison of the broad and major fields, trend broad and major fields, and historical broad and major fields

(Crosswalk)

Broad and major fields (Cycle 2023 data tables)		Trend broad and major fields (Cycle 2023 data tables)		Historical broad and major fields (Cycles 2021–22 data tables)	
Business administration and management	Major	na	-	na	-
Business, other	Major	na	-	na	-
na	-	Business	Major	na	-
Education	Broad	Education	Broad	Education	Broad
Education leadership and administration	Major	Education leadership and administration	Major	Education administration	Major
Education research	Major	Education research	Major	Education research	Major
Teacher education and teaching fields	Major	Teacher education and teaching fields	Major	Teacher education	Major
na	-	na	-	Teaching fields	Major
Education, other	Major	Education, other	Major	Other education	Major
Humanities	Broad	Humanities and arts	Broad	Humanities and arts	Broad
English language and literature, letters	Major	Letters	Major	Letters	Major
Foreign languages, literatures, and linguistics	Major	Foreign languages and literature	Major	Foreign languages and literature	Major
History	Major	History	Major	History	Major
Philosophy and religious studies	Major	Philosophy and religious studies	Major	na	-
na	Major	Humanities and arts, other	Major	Other humanities and arts	Major
Humanities, other	Major	na	-	na	-
Visual and performing arts	Broad	na	-	na	-
Performing arts	Major	Music and performing arts	Major	na	-
Visual arts, media studies, and design	Major	NA	-	NA	-
Other non-science and engineering	Broad	Other non-science and engineering	Broad	Other	Broad
Communications and journalism	Major	Communication	Major	Communication	Major
Multidisciplinary/ interdisciplinary studies	Major	NA	-	NA	-
Public administration and social services	Major	Public administration and social services	Major	na	-
Non-science and engineering, other	Major	Non-science and engineering, other	Major	Non-science and engineering fields nec	Major

NA = not available, data were not collected at this level; na = not applicable, data were not reported at this level; nec = not elsewhere classified.

^a "Veterinary sciences" currently reported under the trend major field "Agricultural sciences." It was previously reported under the historical major field "Health sciences."

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection and the new broad, major, and detailed fields are used in the tables reporting data from 2021 to present. In 2023, two new major fields "Biological and biomedical sciences, general" and "Aerospace, aeronautical, astronautical, and space engineering" were added to improve data utility. See the SED-CIP code crosswalk to the new field taxonomy in [table A-5](#). Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. See [table A-6](#) for the SED-CIP code crosswalk to the current trend fields. For the SED-CIP code crosswalk to the historical fields, see <https://nces.nsf.gov/pubs/nsf24300/table/A-6>. For more information about the field taxonomy changes, see the "Technical Notes" and the SED 2021 Taxonomy Changes Working Paper (available at <https://nces.nsf.gov/pubs/nces23200>).

Source(s):

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

Notes

1 For most items, all doctorate recipients are in the universe eligible to answer the item. Item response rate calculations for other items were updated to use the American Association for Public Research Association (AAPOR) Response Rate 3 (RR3). This is calculated as the number of doctorates who responded to an item divided by the estimated number of doctorates eligible to answer the item. Eligibility was estimated by imputing missing values for the variables used to determine eligibility.

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