



2021

Doctorate Recipients from U.S. Universities

Data Tables and Resources

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

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Data Tables

These tables present detailed data on the demographic characteristics, educational history, sources of financial support, and postgraduation plans of doctorate recipients. The Survey of Earned Doctorates (SED) data tables were reorganized and renumbered in 2021; see [table B-1](#) in the "[Technical Notes](#)" for a crosswalk of comparable 2020 and 2021 data tables. Explore SED data further via the [interactive data tool](#) and the [Restricted Data Analysis System](#).

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Table 1-1**Research doctorate recipients from U.S. colleges and universities: 1958–2021**

(Number and percent)

Year	Doctorate recipients	% change from previous year
1958	8,773	-
1959	9,213	5.0
1960	9,733	5.6
1961	10,413	7.0
1962	11,500	10.4
1963	12,728	10.7
1964	14,325	12.5
1965	16,340	14.1
1966	17,949	9.8
1967	20,403	13.7
1968	22,937	12.4
1969	25,743	12.2
1970	29,498	14.6
1971	31,867	8.0
1972	33,041	3.7
1973	33,755	2.2
1974	33,047	-2.1
1975	32,952	-0.3
1976	32,946	*
1977	31,716	-3.7
1978	30,875	-2.7
1979	31,238	1.2
1980	31,019	-0.7
1981	31,355	1.1
1982	31,108	-0.8
1983	31,280	0.6
1984	31,334	0.2
1985	31,295	-0.1
1986	31,897	1.9
1987	32,365	1.5
1988	33,497	3.5
1989	34,325	2.5
1990	36,065	5.1
1991	37,530	4.1
1992	38,886	3.6
1993	39,800	2.4
1994	41,034	3.1
1995	41,747	1.7
1996	42,437	1.7
1997	42,539	0.2
1998	42,636	0.2
1999	41,101	-3.6
2000	41,369	0.7
2001	40,744	-1.5
2002	40,031	-1.7
2003	40,762	1.8
2004	42,122	3.3
2005	43,385	3.0
2006	45,620	5.2
2007	48,132	5.5
2008	48,776	1.3

Table 1-1**Research doctorate recipients from U.S. colleges and universities: 1958–2021**

(Number and percent)

Year	Doctorate recipients	% 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	54,552	-0.5
2018	55,080	1.0
2019	55,609	1.0
2020	55,224	-0.7
2021	52,250	-5.4

* = value < |0.05%|.

Source(s):

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

Table 1-2

Research doctorate recipients, by historical broad field of doctorate and 2018 Carnegie Classification of doctorate institution: 2011–21

(Number)

Field and 2018 Carnegie Classification	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All doctorate recipients	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,080	55,609	55,224	52,250
R1: doctoral universities - very high research	39,720	41,251	42,639	43,190	43,624	43,351	43,259	43,600	43,933	43,447	41,025
R2: doctoral universities - high research	5,859	6,126	6,460	6,973	7,280	7,475	7,442	7,408	7,465	7,566	7,066
Doctoral/ professional universities	1,288	1,408	1,484	1,774	1,746	1,847	1,838	1,908	1,877	2,025	2,022
Other universities	2,042	2,158	2,120	2,049	2,236	2,136	2,013	2,164	2,334	2,186	2,137
Life sciences ^a	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,754	12,748	12,549	11,814
R1: doctoral universities - very high research	9,144	9,400	9,653	9,603	9,555	9,619	9,749	9,796	9,763	9,689	9,057
R2: doctoral universities - high research	1,060	1,148	1,183	1,361	1,346	1,385	1,331	1,421	1,384	1,371	1,329
Doctoral/ professional universities	162	172	205	294	290	315	325	309	293	353	282
Other universities	1,169	1,244	1,166	1,226	1,302	1,220	1,149	1,228	1,308	1,136	1,146
Physical sciences and earth sciences	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,330	6,579	6,241	5,757
R1: doctoral universities - very high research	4,619	4,757	4,882	5,108	5,153	5,433	5,323	5,525	5,738	5,410	5,037
R2: doctoral universities - high research	586	590	635	744	701	745	701	727	766	757	646
Doctoral/ professional universities	2	8	2	7	5	6	5	7	4	10	7
Other universities	64	64	65	51	57	67	53	71	71	64	67
Mathematics and computer sciences	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,230	4,387	4,373
R1: doctoral universities - very high research	2,882	3,060	3,175	3,346	3,316	3,365	3,259	3,469	3,618	3,721	3,766
R2: doctoral universities - high research	348	390	438	472	442	536	519	491	558	601	543
Doctoral/ professional universities	27	25	20	26	37	29	37	43	24	34	32
Other universities	16	21	27	18	23	24	27	19	30	31	32
Psychology and social sciences	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,876	9,043	8,932	8,675
R1: doctoral universities - very high research	6,182	6,365	6,413	6,367	6,664	6,603	6,612	6,510	6,535	6,441	6,243
R2: doctoral universities - high research	1,230	1,242	1,275	1,383	1,423	1,409	1,474	1,330	1,379	1,346	1,294
Doctoral/ professional universities	510	582	591	708	666	694	664	733	764	778	792
Other universities	298	309	301	290	320	331	284	303	365	367	346
Engineering	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,164	10,298	10,471	10,240
R1: doctoral universities - very high research	7,152	7,531	7,930	8,546	8,604	8,230	8,521	8,746	8,893	8,986	8,800
R2: doctoral universities - high research	771	845	967	996	1,176	1,140	1,135	1,293	1,279	1,361	1,302
Doctoral/ professional universities	27	22	20	27	27	27	38	33	30	25	31
Other universities	82	71	83	57	68	62	82	92	96	99	107
Education	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,715	4,252
R1: doctoral universities - very high research	3,269	3,372	3,406	3,274	3,334	3,339	3,129	3,128	2,998	3,022	2,661
R2: doctoral universities - high research	986	1,043	1,098	1,093	1,291	1,277	1,299	1,214	1,198	1,191	1,095
Doctoral/ professional universities	305	282	306	339	374	420	325	373	345	396	402
Other universities	110	105	124	83	99	110	73	103	92	106	94
Humanities and arts	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,924	4,137
R1: doctoral universities - very high research	4,327	4,554	4,774	4,596	4,628	4,480	4,329	4,215	4,143	3,979	3,319

Table 1-2**Research doctorate recipients, by historical broad field of doctorate and 2018 Carnegie Classification of doctorate institution: 2011–21**

(Number)

Field and 2018 Carnegie Classification	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
R2: doctoral universities - high research	529	569	520	535	549	615	550	526	498	515	426
Doctoral/ professional universities	101	152	123	117	108	132	115	109	104	111	105
Other universities	268	286	298	276	309	255	292	289	306	319	287
Other ^b	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,977	3,027	3,005	3,002
R1: doctoral universities - very high research	2,145	2,212	2,406	2,350	2,370	2,282	2,337	2,211	2,245	2,199	2,142
R2: doctoral universities - high research	349	299	344	389	352	368	433	406	403	424	431
Doctoral/ professional universities	154	165	217	256	239	224	329	301	313	318	371
Other universities	35	58	56	48	58	67	53	59	66	64	58

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Includes other non-science and engineering fields not shown separately.**Note(s):**

Carnegie classification is based on the 2018 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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table 1-3

Research doctorate recipients, by historical major field of doctorate: Selected years, 1991–2021

(Number and percent)

Field of doctorate	1991		1996		2001		2006		2011		2016		2021	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields	37,530	100.0	42,437	100.0	40,744	100.0	45,620	100.0	48,909	100.0	54,809	100.0	52,250	100.0
Life sciences	6,967	18.6	8,337	19.6	8,369	20.5	9,703	21.3	11,535	23.6	12,539	22.9	11,814	22.6
Agricultural sciences and natural resources	1,277	3.4	1,289	3.0	1,132	2.8	1,146	2.5	1,206	2.5	1,379	2.5	1,334	2.6
Biological and biomedical sciences	4,649	12.4	5,724	13.5	5,697	14.0	6,652	14.6	8,152	16.7	8,863	16.2	8,149	15.6
Health sciences	1,041	2.8	1,324	3.1	1,540	3.8	1,905	4.2	2,177	4.5	2,297	4.2	2,331	4.5
Physical sciences and earth sciences	4,406	11.7	4,550	10.7	4,024	9.9	4,686	10.3	5,271	10.8	6,251	11.4	5,757	11.0
Chemistry	2,194	5.8	2,149	5.1	1,981	4.9	2,364	5.2	2,432	5.0	2,703	4.9	2,555	4.9
Geosciences, atmospheric sciences, and ocean sciences	801	2.1	724	1.7	660	1.6	757	1.7	852	1.7	1,227	2.2	1,064	2.0
Physics and astronomy	1,411	3.8	1,677	4.0	1,383	3.4	1,565	3.4	1,987	4.1	2,321	4.2	2,138	4.1
Mathematics and computer sciences	1,838	4.9	2,042	4.8	1,840	4.5	2,778	6.1	3,273	6.7	3,954	7.2	4,373	8.4
Computer and information sciences	800	2.1	920	2.2	830	2.0	1,453	3.2	1,667	3.4	2,082	3.8	2,361	4.5
Mathematics and statistics	1,038	2.8	1,122	2.6	1,010	2.5	1,325	2.9	1,606	3.3	1,872	3.4	2,012	3.9
Psychology and social sciences	6,470	17.2	7,167	16.9	7,151	17.6	7,231	15.9	8,220	16.8	9,037	16.5	8,675	16.6
Psychology	3,250	8.7	3,494	8.2	3,400	8.3	3,260	7.1	3,576	7.3	3,910	7.1	3,797	7.3
Anthropology	341	0.9	397	0.9	411	1.0	472	1.0	553	1.1	460	0.8	400	0.8
Economics	885	2.4	1,008	2.4	927	2.3	1,029	2.3	1,121	2.3	1,236	2.3	1,230	2.4
Political science and government	434	1.2	622	1.5	658	1.6	616	1.4	685	1.4	745	1.4	581	1.1
Sociology	465	1.2	517	1.2	566	1.4	579	1.3	656	1.3	613	1.1	560	1.1
Other social sciences	1,095	2.9	1,129	2.7	1,189	2.9	1,275	2.8	1,629	3.3	2,073	3.8	2,107	4.0
Engineering	5,213	13.9	6,309	14.9	5,512	13.5	7,186	15.8	8,032	16.4	9,459	17.3	10,240	19.6
Aerospace, aeronautical, and astronautical engineering	206	0.5	287	0.7	203	0.5	238	0.5	262	0.5	370	0.7	373	0.7
Bioengineering and biomedical engineering	149	0.4	220	0.5	233	0.6	525	1.2	898	1.8	1,089	2.0	1,064	2.0
Chemical engineering	621	1.7	681	1.6	636	1.6	799	1.8	823	1.7	921	1.7	1,024	2.0
Civil engineering	509	1.4	600	1.4	501	1.2	655	1.4	634	1.3	564	1.0	621	1.2
Electrical, electronics, and communications engineering	1,206	3.2	1,501	3.5	1,346	3.3	1,786	3.9	1,886	3.9	1,823	3.3	2,081	4.0
Industrial and manufacturing engineering	165	0.4	259	0.6	206	0.5	234	0.5	258	0.5	256	0.5	361	0.7
Materials science engineering	361	1.0	472	1.1	448	1.1	583	1.3	662	1.4	984	1.8	936	1.8
Mechanical engineering	762	2.0	947	2.2	878	2.2	1,045	2.3	1,084	2.2	1,297	2.4	1,444	2.8
Other engineering	1,234	3.3	1,342	3.2	1,061	2.6	1,321	2.9	1,525	3.1	2,155	3.9	2,336	4.5
Education	6,454	17.2	6,785	16.0	6,356	15.6	6,122	13.4	4,670	9.5	5,146	9.4	4,252	8.1
Education administration	1,913	5.1	2,165	5.1	2,077	5.1	2,051	4.5	924	1.9	824	1.5	710	1.4
Education research	2,354	6.3	2,699	6.4	2,637	6.5	2,751	6.0	2,378	4.9	2,328	4.2	2,167	4.1
Teacher education	408	1.1	371	0.9	296	0.7	250	0.5	204	0.4	180	0.3	111	0.2
Teaching fields	973	2.6	864	2.0	723	1.8	707	1.5	805	1.6	1,166	2.1	797	1.5
Other education	806	2.1	686	1.6	623	1.5	363	0.8	359	0.7	648	1.2	467	0.9
Humanities and arts	4,053	10.8	4,982	11.7	5,430	13.3	5,332	11.7	5,225	10.7	5,482	10.0	4,137	7.9

Table 1-3
Research doctorate recipients, by historical major field of doctorate: Selected years, 1991–2021

(Number and percent)

Field of doctorate	1991		1996		2001		2006		2011		2016		2021	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Foreign languages and literature	498	1.3	605	1.4	620	1.5	614	1.3	644	1.3	599	1.1	377	0.7
History	663	1.8	857	2.0	1,031	2.5	973	2.1	1,065	2.2	1,148	2.1	725	1.4
Letters	1,204	3.2	1,493	3.5	1,493	3.7	1,457	3.2	1,513	3.1	1,531	2.8	1,192	2.3
Other humanities and arts	1,688	4.5	2,027	4.8	2,286	5.6	2,288	5.0	2,003	4.1	2,204	4.0	1,843	3.5
Other	2,129	5.7	2,265	5.3	2,062	5.1	2,582	5.7	2,683	5.5	2,941	5.4	3,002	5.7
Business management and administration	1,163	3.1	1,279	3.0	1,064	2.6	1,311	2.9	1,327	2.7	1,509	2.8	1,392	2.7
Communication	332	0.9	389	0.9	390	1.0	510	1.1	650	1.3	672	1.2	507	1.0
Non-science and engineering fields nec	634	1.7	597	1.4	608	1.5	761	1.7	706	1.4	760	1.4	1,103	2.1

nec = not elsewhere classified.

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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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

Table 1-4**Research doctorate recipients, by historical broad field of doctorate and sex: Selected years, 1991–2021**

(Number and percent)

Field and sex	1991		1996		2001		2006		2011		2016		2021	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All fields ^a	37,530	100.0	42,437	100.0	40,744	100.0	45,620	100.0	48,909	100.0	54,809	100.0	52,250	100.0
Male	23,521	62.7	25,288	59.6	22,780	55.9	25,020	54.8	26,188	53.5	29,572	54.0	28,082	53.7
Female	13,873	37.0	16,956	40.0	17,887	43.9	20,559	45.1	22,699	46.4	25,222	46.0	24,156	46.2
Life sciences ^b	6,967	100.0	8,337	100.0	8,369	100.0	9,703	100.0	11,535	100.0	12,539	100.0	11,814	100.0
Male	4,242	60.9	4,688	56.2	4,417	52.8	4,690	48.3	5,243	45.5	5,628	44.9	5,236	44.3
Female	2,701	38.8	3,616	43.4	3,926	46.9	5,006	51.6	6,289	54.5	6,908	55.1	6,576	55.7
Physical sciences and earth sciences	4,406	100.0	4,550	100.0	4,024	100.0	4,686	100.0	5,271	100.0	6,251	100.0	5,757	100.0
Male	3,545	80.5	3,525	77.5	2,992	74.4	3,321	70.9	3,629	68.8	4,285	68.5	3,737	64.9
Female	845	19.2	991	21.8	1,026	25.5	1,360	29.0	1,640	31.1	1,963	31.4	2,018	35.1
Mathematics and computer sciences	1,838	100.0	2,042	100.0	1,840	100.0	2,778	100.0	3,273	100.0	3,954	100.0	4,373	100.0
Male	1,514	82.4	1,656	81.1	1,407	76.5	2,074	74.7	2,456	75.0	2,994	75.7	3,230	73.9
Female	316	17.2	370	18.1	431	23.4	704	25.3	813	24.8	959	24.3	1,143	26.1
Psychology and social sciences	6,470	100.0	7,167	100.0	7,151	100.0	7,231	100.0	8,220	100.0	9,037	100.0	8,675	100.0
Male	3,247	50.2	3,452	48.2	3,234	45.2	3,072	42.5	3,332	40.5	3,741	41.4	3,488	40.2
Female	3,208	49.6	3,696	51.6	3,907	54.6	4,154	57.4	4,887	59.5	5,295	58.6	5,184	59.8
Engineering	5,213	100.0	6,309	100.0	5,512	100.0	7,186	100.0	8,032	100.0	9,459	100.0	10,240	100.0
Male	4,702	90.2	5,491	87.0	4,572	82.9	5,729	79.7	6,242	77.7	7,267	76.8	7,582	74.0
Female	467	9.0	777	12.3	930	16.9	1,452	20.2	1,782	22.2	2,189	23.1	2,656	25.9
Education	6,454	100.0	6,785	100.0	6,356	100.0	6,122	100.0	4,670	100.0	5,146	100.0	4,252	100.0
Male	2,696	41.8	2,579	38.0	2,251	35.4	2,130	34.8	1,432	30.7	1,545	30.0	1,239	29.1
Female	3,748	58.1	4,187	61.7	4,100	64.5	3,985	65.1	3,234	69.3	3,601	70.0	3,012	70.8
Humanities and arts	4,053	100.0	4,982	100.0	5,430	100.0	5,332	100.0	5,225	100.0	5,482	100.0	4,137	100.0
Male	2,249	55.5	2,561	51.4	2,775	51.1	2,680	50.3	2,571	49.2	2,639	48.1	2,115	51.1
Female	1,795	44.3	2,404	48.3	2,647	48.7	2,647	49.6	2,654	50.8	2,842	51.8	2,020	48.8
Other ^c	2,129	100.0	2,265	100.0	2,062	100.0	2,582	100.0	2,683	100.0	2,941	100.0	3,002	100.0
Male	1,326	62.3	1,336	59.0	1,132	54.9	1,324	51.3	1,283	47.8	1,473	50.1	1,455	48.5
Female	793	37.2	915	40.4	920	44.6	1,251	48.5	1,400	52.2	1,465	49.8	1,547	51.5

^a Includes respondents who did not report sex.^b Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^c Includes other non-science and engineering fields not shown separately.**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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table 1-5

Research doctorate recipients, by historical major field of doctorate and sex: 2011–21

(Number and percent)

Field and sex	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
All doctorate recipients ^a	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,080	55,609	55,224	52,250	6.8
Life sciences	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,754	12,748	12,549	11,814	2.4
Agricultural sciences and natural resources	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,470	1,334	10.6
Biological and biomedical sciences	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,678	8,410	8,149	0.0
Health sciences	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,530	2,582	2,669	2,331	7.1
Physical sciences and earth sciences	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,330	6,579	6,241	5,757	9.2
Chemistry	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,807	2,939	2,761	2,555	5.1
Geosciences, atmospheric sciences, and ocean sciences	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,241	1,064	24.9
Physics and astronomy	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,239	2,138	7.6
Mathematics and computer sciences	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,230	4,387	4,373	33.6
Computer and information sciences	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,220	2,363	2,361	41.6
Mathematics and statistics	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,024	2,012	25.3
Psychology and social sciences	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,876	9,043	8,932	8,675	5.5
Psychology	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,871	3,797	6.2
Anthropology	553	547	550	523	492	460	446	424	445	447	400	-27.7
Economics	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,212	1,230	9.7
Political science and government	685	724	803	775	859	745	743	734	707	636	581	-15.2
Sociology	656	633	636	678	741	613	683	668	632	606	560	-14.6
Other social sciences	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,984	2,103	2,160	2,107	29.3
Engineering	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,164	10,298	10,471	10,240	27.5
Aerospace, aeronautical, and astronautical engineering	262	307	348	386	361	370	379	383	379	399	373	42.4
Bioengineering and biomedical engineering	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,082	1,064	18.5
Chemical engineering	823	840	824	973	1,002	921	931	981	980	994	1,024	24.4
Civil engineering	634	495	542	617	632	564	713	675	700	795	621	-2.1
Electrical, electronics, and communications engineering	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973	2,081	10.3
Industrial and manufacturing engineering	258	226	241	298	243	256	249	272	234	304	361	39.9
Materials science engineering	662	743	815	832	871	984	937	992	992	879	936	41.4
Mechanical engineering	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,633	1,444	33.2
Other engineering	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,282	2,519	2,412	2,336	53.2
Education	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,715	4,252	-9.0
Education administration	924	1,057	965	893	920	824	922	895	839	931	710	-23.2
Education research	2,378	2,516	2,638	2,490	2,717	2,328	2,373	2,457	2,253	2,275	2,167	-8.9
Teacher education	204	156	109	152	156	180	114	96	104	113	111	-45.6
Teaching fields	805	757	892	915	953	1,166	925	959	957	939	797	-1.0
Other education	359	316	330	339	352	648	492	411	480	457	467	30.1
Humanities and arts	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,924	4,137	-20.8
Foreign languages and literature	644	684	701	674	656	599	618	617	610	564	377	-41.5

Table 1-5

Research doctorate recipients, by historical major field of doctorate and sex: 2011–21

(Number and percent)

Field and sex	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
History	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	884	725	-31.9
Letters	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,389	1,192	-21.2
Other humanities and arts	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,087	1,843	-8.0
Other	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,977	3,027	3,005	3,002	11.9
Business management and administration	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,473	1,533	1,468	1,392	4.9
Communication	650	595	645	663	667	672	622	630	543	591	507	-22.0
Non-science and engineering fields nec	706	735	827	796	770	760	965	874	951	946	1,103	56.2
Male	26,188	27,362	28,326	29,008	29,532	29,572	29,446	29,743	30,111	29,855	28,082	7.2
Life sciences	5,243	5,335	5,492	5,514	5,563	5,628	5,662	5,648	5,806	5,547	5,236	-0.1
Agricultural sciences and natural resources	652	698	702	691	746	755	763	746	758	745	671	2.9
Biological and biomedical sciences	3,878	3,891	3,941	4,088	4,100	4,154	4,088	4,079	4,192	3,887	3,816	-1.6
Health sciences	713	746	849	735	717	719	811	823	856	915	749	5.0
Physical sciences and earth sciences	3,629	3,684	3,717	3,968	3,928	4,285	4,103	4,211	4,363	4,173	3,737	3.0
Chemistry	1,508	1,521	1,497	1,642	1,592	1,712	1,676	1,741	1,788	1,668	1,474	-2.3
Geosciences, atmospheric sciences, and ocean sciences	522	538	539	622	600	716	657	659	738	736	594	13.8
Physics and astronomy	1,599	1,625	1,681	1,704	1,736	1,857	1,770	1,811	1,837	1,769	1,669	4.4
Mathematics and computer sciences	2,456	2,638	2,792	2,912	2,877	2,994	2,906	3,036	3,137	3,295	3,230	31.5
Computer and information sciences	1,312	1,419	1,502	1,580	1,581	1,662	1,566	1,565	1,711	1,861	1,775	35.3
Mathematics and statistics	1,144	1,219	1,290	1,332	1,296	1,332	1,340	1,471	1,426	1,434	1,455	27.2
Psychology and social sciences	3,332	3,539	3,501	3,507	3,757	3,741	3,718	3,635	3,666	3,583	3,488	4.7
Psychology	1,003	1,040	997	1,063	1,057	1,133	1,132	1,095	1,113	1,080	1,070	6.7
Anthropology	223	187	188	195	185	171	159	126	155	144	120	-46.2
Economics	734	840	767	785	821	819	827	849	818	808	821	11.9
Political science and government	389	420	469	433	527	462	456	429	433	387	339	-12.9
Sociology	254	230	259	247	284	257	266	250	229	243	211	-16.9
Other social sciences	729	822	821	784	883	899	878	886	918	921	927	27.2
Engineering	6,242	6,565	6,946	7,401	7,578	7,267	7,449	7,710	7,830	7,878	7,582	21.5
Aerospace, aeronautical, and astronautical engineering	228	268	293	330	308	314	337	337	323	329	311	36.4
Bioengineering and biomedical engineering	563	608	684	660	698	686	613	687	720	652	631	12.1
Chemical engineering	566	583	566	682	685	624	665	688	664	695	696	23.0
Civil engineering	486	388	417	465	457	437	520	505	541	586	429	-11.7
Electrical, electronics, and communications engineering	1,579	1,594	1,616	1,614	1,704	1,529	1,550	1,599	1,501	1,630	1,721	9.0
Industrial and manufacturing engineering	180	164	176	209	154	185	169	204	172	209	245	36.1
Materials science engineering	496	556	598	617	648	721	698	718	701	637	649	30.8
Mechanical engineering	934	1,042	1,081	1,126	1,265	1,096	1,179	1,285	1,283	1,372	1,182	26.6
Other engineering	1,210	1,362	1,515	1,698	1,659	1,675	1,718	1,687	1,925	1,768	1,718	42.0
Education	1,432	1,500	1,570	1,468	1,605	1,545	1,535	1,494	1,422	1,458	1,239	-13.5

Table 1-5

Research doctorate recipients, by historical major field of doctorate and sex: 2011–21

(Number and percent)

Field and sex	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
Education administration	349	389	372	371	344	304	349	323	342	349	247	-29.2
Education research	678	751	802	701	837	703	764	751	644	664	633	-6.6
Teacher education	38	43	22	35	36	43	21	18	20	28	18	-52.6
Teaching fields	250	229	275	265	294	313	265	271	259	292	215	-14.0
Other education	117	88	99	96	94	182	136	131	157	125	126	7.7
Humanities and arts	2,571	2,741	2,829	2,760	2,763	2,639	2,606	2,564	2,478	2,506	2,115	-17.7
Foreign languages and literature	248	238	271	248	238	228	239	247	215	223	170	-31.5
History	586	602	632	664	632	621	602	513	529	510	409	-30.2
Letters	615	659	665	657	647	600	593	585	560	587	489	-20.5
Other humanities and arts	1,122	1,242	1,261	1,191	1,246	1,190	1,172	1,219	1,174	1,186	1,047	-6.7
Other	1,283	1,360	1,479	1,478	1,461	1,473	1,467	1,445	1,409	1,415	1,455	13.4
Business management and administration	792	837	909	909	934	932	900	863	872	851	795	0.4
Communication	233	244	244	277	256	261	200	234	205	228	213	-8.6
Non-science and engineering fields nec	258	279	326	292	271	280	367	348	332	336	447	73.3
Female	22,699	23,526	24,365	24,813	25,347	25,222	25,084	25,309	25,488	25,364	24,156	6.4
Life sciences	6,289	6,614	6,712	6,930	6,929	6,908	6,887	7,100	6,941	7,001	6,576	4.6
Agricultural sciences and natural resources	554	554	622	646	688	623	728	693	730	724	663	19.7
Biological and biomedical sciences	4,272	4,422	4,410	4,747	4,682	4,707	4,476	4,700	4,485	4,523	4,331	1.4
Health sciences	1,463	1,638	1,680	1,537	1,559	1,578	1,683	1,707	1,726	1,754	1,582	8.1
Physical sciences and earth sciences	1,640	1,730	1,864	1,924	1,987	1,963	1,978	2,116	2,212	2,066	2,018	23.0
Chemistry	922	894	985	1,021	1,074	991	1,022	1,066	1,151	1,091	1,081	17.2
Geosciences, atmospheric sciences, and ocean sciences	330	403	449	475	457	510	512	526	533	505	470	42.4
Physics and astronomy	388	433	430	428	456	462	444	524	528	470	467	20.4
Mathematics and computer sciences	813	855	868	934	939	959	935	982	1,092	1,092	1,143	40.6
Computer and information sciences	353	374	341	400	422	420	432	434	508	502	586	66.0
Mathematics and statistics	460	481	527	534	517	539	503	548	584	590	557	21.1
Psychology and social sciences	4,887	4,955	5,077	5,217	5,315	5,295	5,312	5,239	5,377	5,349	5,184	6.1
Psychology	2,573	2,558	2,594	2,648	2,719	2,776	2,793	2,726	2,796	2,791	2,727	6.0
Anthropology	330	360	362	328	307	289	287	298	290	303	280	-15.2
Economics	387	402	416	404	434	417	410	396	429	404	408	5.4
Political science and government	296	303	333	341	332	283	287	304	274	249	242	-18.2
Sociology	402	402	377	431	457	356	416	418	403	363	349	-13.2
Other social sciences	899	930	995	1,065	1,066	1,174	1,119	1,097	1,185	1,239	1,178	31.0
Engineering	1,782	1,887	2,052	2,184	2,297	2,189	2,321	2,450	2,466	2,592	2,656	49.0
Aerospace, aeronautical, and astronautical engineering	34	39	55	55	53	56	42	46	56	70	62	82.4
Bioengineering and biomedical engineering	335	335	355	384	427	403	419	445	443	430	432	29.0
Chemical engineering	256	256	258	290	317	296	265	293	316	299	328	28.1

Table 1-5**Research doctorate recipients, by historical major field of doctorate and sex: 2011–21**

(Number and percent)

Field and sex	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
Civil engineering	147	106	125	147	175	127	191	170	159	209	192	30.6
Electrical, electronics, and communications engineering	301	336	279	325	293	293	329	344	297	343	360	19.6
Industrial and manufacturing engineering	78	62	65	89	89	71	79	68	62	95	116	48.7
Materials science engineering	166	184	217	211	223	262	239	274	290	242	286	72.3
Mechanical engineering	150	177	196	197	201	201	219	216	249	261	262	74.7
Other engineering	315	392	502	486	519	480	538	594	594	643	618	96.2
Education	3,234	3,298	3,364	3,311	3,492	3,601	3,289	3,323	3,211	3,256	3,012	-6.9
Education administration	574	665	593	522	576	520	573	572	497	581	463	-19.3
Education research	1,697	1,765	1,836	1,783	1,879	1,625	1,608	1,705	1,609	1,611	1,534	-9.6
Teacher education	166	113	87	117	120	137	92	78	84	85	93	-44.0
Teaching fields	555	527	617	649	659	853	660	688	698	647	581	4.7
Other education	242	228	231	240	258	466	356	280	323	332	341	40.9
Humanities and arts	2,654	2,818	2,885	2,760	2,830	2,842	2,679	2,572	2,571	2,418	2,020	-23.9
Foreign languages and literature	396	446	430	424	418	371	379	370	394	341	207	-47.7
History	479	484	516	521	514	527	456	435	383	374	316	-34.0
Letters	898	978	941	894	936	931	869	853	826	802	701	-21.9
Other humanities and arts	881	910	998	921	962	1,013	975	914	968	901	796	-9.6
Other	1,400	1,369	1,543	1,553	1,558	1,465	1,683	1,527	1,618	1,590	1,547	10.5
Business management and administration	535	564	641	669	648	575	664	607	661	617	597	11.6
Communication	417	350	401	383	411	410	422	395	338	363	294	-29.5
Non-science and engineering fields nec	448	455	501	501	499	480	597	525	619	610	656	46.4

nec = not elsewhere classified.

^a Includes respondents 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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table 1-6**Research doctorate recipients, by historical broad field of doctorate and citizenship status: Selected years, 1976–2021**

(Number)

Field and citizenship status	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
All fields	32,946	31,355	31,897	37,530	42,437	40,744	45,620	48,909	54,809	52,250
U.S. citizen or permanent resident	28,829	26,362	24,541	27,437	31,548	28,894	29,028	31,725	35,678	31,674
Temporary visa holder	3,566	3,993	5,318	9,374	9,740	9,812	14,198	14,235	16,477	17,638
Unknown	551	1,000	2,038	719	1,149	2,038	2,394	2,949	2,654	2,938
Life sciences ^a	5,087	5,665	5,767	6,967	8,337	8,369	9,703	11,535	12,539	11,814
U.S. citizen or permanent resident	4,300	4,787	4,593	5,096	6,084	5,956	6,506	7,892	8,683	8,214
Temporary visa holder	679	750	881	1,765	2,088	2,050	2,723	3,029	3,352	3,069
Unknown	108	128	293	106	165	363	474	614	504	531
Physical sciences and earth sciences	3,445	3,156	3,644	4,406	4,550	4,024	4,686	5,271	6,251	5,757
U.S. citizen or permanent resident	2,881	2,547	2,567	2,890	3,078	2,447	2,479	3,048	3,669	3,340
Temporary visa holder	528	527	865	1,445	1,326	1,424	1,976	1,955	2,313	2,171
Unknown	36	82	212	71	146	153	231	268	269	246
Mathematics and computer sciences	1,003	960	1,128	1,838	2,042	1,840	2,778	3,273	3,954	4,373
U.S. citizen or permanent resident	804	714	652	968	1,162	957	1,207	1,603	1,729	1,671
Temporary visa holder	186	228	398	849	828	793	1,462	1,449	2,053	2,450
Unknown	13	18	78	21	52	90	109	221	172	252
Psychology and social sciences	6,452	6,404	6,150	6,470	7,167	7,151	7,231	8,220	9,037	8,675
U.S. citizen or permanent resident	5,769	5,574	4,984	5,199	5,834	5,543	5,381	6,070	6,798	6,167
Temporary visa holder	600	597	746	1,117	1,137	1,187	1,485	1,588	1,753	1,888
Unknown	83	233	420	154	196	421	365	562	486	620
Engineering	2,834	2,528	3,375	5,213	6,309	5,512	7,186	8,032	9,459	10,240
U.S. citizen or permanent resident	1,949	1,472	1,727	2,475	3,390	2,458	2,500	3,350	4,181	4,073
Temporary visa holder	824	952	1,383	2,644	2,767	2,790	4,295	4,164	4,842	5,638
Unknown	61	104	265	94	152	264	391	518	436	529
Education	7,725	7,497	6,649	6,454	6,785	6,356	6,122	4,670	5,146	4,252
U.S. citizen or permanent resident	7,246	6,717	5,803	5,788	6,075	5,462	5,171	3,878	4,303	3,431
Temporary visa holder	346	543	475	516	489	504	611	497	562	553
Unknown	133	237	371	150	221	390	340	295	281	268
Humanities and arts	4,833	3,689	3,443	4,053	4,982	5,430	5,332	5,225	5,482	4,137
U.S. citizen or permanent resident	4,539	3,358	2,911	3,491	4,261	4,601	4,240	4,191	4,450	3,142
Temporary visa holder	216	201	278	483	571	592	796	767	712	727
Unknown	78	130	254	79	150	237	296	267	320	268
Other ^b	1,567	1,456	1,741	2,129	2,265	2,062	2,582	2,683	2,941	3,002
U.S. citizen or permanent resident	1,341	1,193	1,304	1,530	1,664	1,470	1,544	1,693	1,865	1,636
Temporary visa holder	187	195	292	555	534	472	850	786	890	1,142
Unknown	39	68	145	44	67	120	188	204	186	224

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.

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

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table 1-7

Research doctorate recipients, by historical major field of doctorate and citizenship status: 2011–21

(Number and percent)

Field and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
All doctorate recipients ^a	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,080	55,609	55,224	52,250	6.8
Life sciences	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,754	12,748	12,549	11,814	2.4
Agricultural sciences and natural resources	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,470	1,334	10.6
Biological and biomedical sciences	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,678	8,410	8,149	0.0
Health sciences	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,530	2,582	2,669	2,331	7.1
Physical sciences and earth sciences	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,330	6,579	6,241	5,757	9.2
Chemistry	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,807	2,939	2,761	2,555	5.1
Geosciences, atmospheric sciences, and ocean sciences	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,241	1,064	24.9
Physics and astronomy	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,239	2,138	7.6
Mathematics and computer sciences	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,230	4,387	4,373	33.6
Computer and information sciences	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,220	2,363	2,361	41.6
Mathematics and statistics	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,024	2,012	25.3
Psychology and social sciences	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,876	9,043	8,932	8,675	5.5
Psychology	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,871	3,797	6.2
Anthropology	553	547	550	523	492	460	446	424	445	447	400	-27.7
Economics	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,212	1,230	9.7
Political science and government	685	724	803	775	859	745	743	734	707	636	581	-15.2
Sociology	656	633	636	678	741	613	683	668	632	606	560	-14.6
Other social sciences	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,984	2,103	2,160	2,107	29.3
Engineering	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,164	10,298	10,471	10,240	27.5
Aerospace, aeronautical, and astronautical engineering	262	307	348	386	361	370	379	383	379	399	373	42.4
Bioengineering and biomedical engineering	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,082	1,064	18.5
Chemical engineering	823	840	824	973	1,002	921	931	981	980	994	1,024	24.4
Civil engineering	634	495	542	617	632	564	713	675	700	795	621	-2.1
Electrical, electronics, and communications engineering	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973	2,081	10.3
Industrial and manufacturing engineering	258	226	241	298	243	256	249	272	234	304	361	39.9
Materials science engineering	662	743	815	832	871	984	937	992	992	879	936	41.4
Mechanical engineering	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,633	1,444	33.2
Other engineering	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,282	2,519	2,412	2,336	53.2
Education	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,715	4,252	-9.0
Education administration	924	1,057	965	893	920	824	922	895	839	931	710	-23.2
Education research	2,378	2,516	2,638	2,490	2,717	2,328	2,373	2,457	2,253	2,275	2,167	-8.9
Teacher education	204	156	109	152	156	180	114	96	104	113	111	-45.6
Teaching fields	805	757	892	915	953	1,166	925	959	957	939	797	-1.0
Other education	359	316	330	339	352	648	492	411	480	457	467	30.1
Humanities and arts	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,924	4,137	-20.8
Foreign languages and literature	644	684	701	674	656	599	618	617	610	564	377	-41.5

Table 1-7

Research doctorate recipients, by historical major field of doctorate and citizenship status: 2011–21

(Number and percent)

Field and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
History	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	884	725	-31.9
Letters	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,389	1,192	-21.2
Other humanities and arts	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,087	1,843	-8.0
Other	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,977	3,027	3,005	3,002	11.9
Business management and administration	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,473	1,533	1,468	1,392	4.9
Communication	650	595	645	663	667	672	622	630	543	591	507	-22.0
Non-science and engineering fields nec	706	735	827	796	770	760	965	874	951	946	1,103	56.2
U.S. citizen or permanent resident	31,725	32,981	33,964	34,003	35,071	35,678	35,736	35,350	35,227	34,473	31,674	-0.2
Life sciences	7,892	8,184	8,352	8,390	8,470	8,683	8,827	9,028	9,035	8,706	8,214	4.1
Agricultural sciences and natural resources	697	675	737	754	774	771	822	792	821	796	733	5.2
Biological and biomedical sciences	5,614	5,790	5,768	5,993	6,029	6,215	6,147	6,396	6,368	6,006	5,809	3.5
Health sciences	1,581	1,719	1,847	1,643	1,667	1,697	1,858	1,840	1,846	1,904	1,672	5.8
Physical sciences and earth sciences	3,048	3,148	3,247	3,300	3,481	3,669	3,715	3,769	3,900	3,739	3,340	9.6
Chemistry	1,407	1,385	1,443	1,447	1,572	1,581	1,696	1,710	1,780	1,696	1,506	7.0
Geosciences, atmospheric sciences, and ocean sciences	555	623	654	722	704	803	790	760	808	809	678	22.2
Physics and astronomy	1,086	1,140	1,150	1,131	1,205	1,285	1,229	1,299	1,312	1,234	1,156	6.4
Mathematics and computer sciences	1,603	1,627	1,631	1,738	1,663	1,729	1,748	1,736	1,785	1,734	1,671	4.2
Computer and information sciences	790	785	758	807	774	783	801	742	799	807	774	-2.0
Mathematics and statistics	813	842	873	931	889	946	947	994	986	927	897	10.3
Psychology and social sciences	6,070	6,319	6,464	6,389	6,685	6,798	6,843	6,691	6,702	6,597	6,167	1.6
Psychology	3,062	3,046	3,067	3,042	3,103	3,341	3,376	3,309	3,326	3,311	3,127	2.1
Anthropology	455	445	457	405	397	360	349	336	360	366	298	-34.5
Economics	428	517	505	469	552	522	547	483	491	458	436	1.9
Political science and government	488	536	593	574	621	579	572	544	504	459	405	-17.0
Sociology	511	512	516	544	596	506	562	557	511	488	459	-10.2
Other social sciences	1,126	1,263	1,326	1,355	1,416	1,490	1,437	1,462	1,510	1,515	1,442	28.1
Engineering	3,350	3,579	3,767	4,066	4,219	4,181	4,311	4,213	4,251	4,153	4,073	21.6
Aerospace, aeronautical, and astronautical engineering	145	181	194	246	216	233	241	221	212	221	187	29.0
Bioengineering and biomedical engineering	564	602	637	674	723	746	695	743	771	688	730	29.4
Chemical engineering	393	377	365	445	488	470	469	469	480	465	462	17.6
Civil engineering	216	159	182	229	231	219	231	200	200	244	190	-12.0
Electrical, electronics, and communications engineering	617	614	603	575	632	548	581	543	518	552	591	-4.2
Industrial and manufacturing engineering	100	75	77	91	65	82	85	62	84	82	115	15.0
Materials science engineering	278	350	349	363	381	456	470	462	501	399	413	48.6
Mechanical engineering	440	505	547	558	620	585	591	608	600	601	577	31.1
Other engineering	597	716	813	885	863	842	948	905	885	901	808	35.3
Education	3,878	4,040	4,118	3,934	4,196	4,303	4,052	4,025	3,848	3,898	3,431	-11.5

Table 1-7

Research doctorate recipients, by historical major field of doctorate and citizenship status: 2011–21

(Number and percent)

Field and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
Education administration	833	936	844	763	797	727	792	783	755	822	601	-27.9
Education research	1,943	2,107	2,165	2,064	2,234	1,942	1,995	2,026	1,874	1,853	1,760	-9.4
Teacher education	156	134	90	132	134	158	97	87	87	94	89	-42.9
Teaching fields	679	613	741	732	762	950	763	785	769	751	625	-8.0
Other education	267	250	278	243	269	526	405	344	363	378	356	33.3
Humanities and arts	4,191	4,434	4,535	4,361	4,478	4,450	4,297	4,145	3,988	3,908	3,142	-25.0
Foreign languages and literature	426	472	467	469	463	399	430	405	383	350	236	-44.6
History	893	889	947	968	944	950	890	800	741	745	566	-36.6
Letters	1,289	1,383	1,354	1,304	1,353	1,314	1,277	1,232	1,187	1,163	945	-26.7
Other humanities and arts	1,583	1,690	1,767	1,620	1,718	1,787	1,700	1,708	1,677	1,650	1,395	-11.9
Other	1,693	1,650	1,850	1,825	1,879	1,865	1,943	1,743	1,718	1,738	1,636	-3.4
Business management and administration	755	736	831	849	892	845	859	740	748	710	602	-20.3
Communication	473	426	471	473	479	472	458	434	349	411	343	-27.5
Non-science and engineering fields nec	465	488	548	503	508	548	626	569	621	617	691	48.6
Temporary visa holder	14,235	14,784	15,674	15,839	16,129	16,477	16,288	17,582	18,324	18,476	17,638	23.9
Life sciences	3,029	3,197	3,177	3,169	3,264	3,352	3,331	3,360	3,395	3,427	3,069	1.3
Agricultural sciences and natural resources	472	529	516	504	555	561	607	607	646	632	544	15.3
Biological and biomedical sciences	2,124	2,166	2,154	2,229	2,266	2,304	2,180	2,157	2,129	2,173	2,018	-5.0
Health sciences	433	502	507	436	443	487	544	596	620	622	507	17.1
Physical sciences and earth sciences	1,955	1,959	2,032	2,196	2,099	2,313	2,160	2,373	2,484	2,311	2,171	11.0
Chemistry	907	880	888	1,000	929	1,000	919	1,021	1,071	993	940	3.6
Geosciences, atmospheric sciences, and ocean sciences	246	281	290	326	307	390	332	392	429	391	343	39.4
Physics and astronomy	802	798	854	870	863	923	909	960	984	927	888	10.7
Mathematics and computer sciences	1,449	1,617	1,833	1,850	1,917	2,053	1,926	2,128	2,303	2,475	2,450	69.1
Computer and information sciences	759	870	990	1,029	1,094	1,201	1,105	1,163	1,328	1,455	1,420	87.1
Mathematics and statistics	690	747	843	821	823	852	821	965	975	1,020	1,030	49.3
Psychology and social sciences	1,588	1,601	1,634	1,549	1,622	1,753	1,668	1,768	1,915	1,834	1,888	18.9
Psychology	238	254	282	249	260	305	286	284	339	257	334	40.3
Anthropology	73	74	76	86	68	76	65	70	66	63	81	11.0
Economics	623	656	615	627	606	656	641	707	708	690	721	15.7
Political science and government	150	150	163	145	178	128	140	159	173	152	139	-7.3
Sociology	113	85	92	90	101	89	93	88	104	102	83	-26.5
Other social sciences	391	382	406	352	409	499	443	460	525	570	530	35.5
Engineering	4,164	4,355	4,759	4,961	5,108	4,842	5,037	5,575	5,680	5,953	5,638	35.4
Aerospace, aeronautical, and astronautical engineering	100	107	138	124	132	121	123	146	153	163	162	62.0
Bioengineering and biomedical engineering	291	292	352	318	348	301	300	362	359	364	301	3.4
Chemical engineering	379	414	409	482	461	401	426	478	478	482	513	35.4

Table 1-7**Research doctorate recipients, by historical major field of doctorate and citizenship status: 2011–21**

(Number and percent)

Field and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change 2011–21
Civil engineering	373	303	333	339	359	307	427	442	461	513	384	2.9
Electrical, electronics, and communications engineering	1,109	1,181	1,160	1,217	1,237	1,160	1,215	1,316	1,198	1,344	1,394	25.7
Industrial and manufacturing engineering	152	140	156	185	161	164	157	196	140	199	232	52.6
Materials science engineering	350	334	435	419	448	494	428	500	461	463	474	35.4
Mechanical engineering	568	631	664	686	783	652	741	831	879	983	787	38.6
Other engineering	842	953	1,112	1,191	1,179	1,242	1,220	1,304	1,551	1,442	1,391	65.2
Education	497	460	515	478	539	562	534	611	615	659	553	11.3
Education administration	41	46	44	39	35	33	51	52	54	59	47	14.6
Education research	281	269	307	255	313	266	297	353	303	370	300	6.8
Teacher education	26	13	17	14	13	13	12	8	16	18	20	-23.1
Teaching fields	96	101	116	134	145	181	132	155	165	163	132	37.5
Other education	53	31	31	36	33	69	42	43	77	49	54	1.9
Humanities and arts	767	761	779	731	713	712	692	739	826	742	727	-5.2
Foreign languages and literature	180	160	179	142	151	164	159	181	202	185	117	-35.0
History	131	136	134	147	131	142	125	112	130	120	128	-2.3
Letters	157	141	150	140	122	126	122	139	149	132	172	9.6
Other humanities and arts	299	324	316	302	309	280	286	307	345	305	310	3.7
Other	786	834	945	905	867	890	940	1,028	1,106	1,075	1,142	45.3
Business management and administration	477	542	600	589	546	553	588	642	689	658	683	43.2
Communication	132	107	133	137	137	160	122	165	163	153	140	6.1
Non-science and engineering fields nec	177	185	212	179	184	177	230	221	254	264	319	80.2

nec = not elsewhere classified.

^a Includes respondents 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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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: 2011–21**

(Number)

Ethnicity, race, and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All doctorate recipients	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,080	55,609	55,224	52,250
U.S. citizen or permanent resident	31,725	32,981	33,964	34,003	35,071	35,678	35,736	35,350	35,227	34,473	31,674
Temporary visa holder	14,235	14,784	15,674	15,839	16,129	16,477	16,288	17,582	18,324	18,476	17,638
Unknown citizenship	2,949	3,178	3,065	4,144	3,686	2,654	2,528	2,148	2,058	2,275	2,938
Hispanic or Latino	2,915	3,064	3,073	3,147	3,422	3,572	3,566	3,592	4,000	4,108	4,013
U.S. citizen or permanent resident	1,989	2,144	2,135	2,190	2,449	2,548	2,536	2,572	2,844	2,850	2,856
Temporary visa holder	922	916	921	944	964	1,016	997	1,016	1,146	1,253	1,148
Unknown citizenship	4	4	17	13	9	8	33	4	10	5	9
Not Hispanic or Latino											
American Indian or Alaska Native	135	107	126	109	141	136	111	116	124	100	105
U.S. citizen or permanent resident	127	104	119	103	131	128	109	115	119	97	100
Temporary visa holder ^a	8	D	7	6	10	8	D	D	5	D	D
Unknown citizenship	0	D	0	0	0	0	D	D	0	D	D
Asian	12,311	12,850	13,430	13,556	13,833	14,052	14,260	14,801	15,181	15,094	14,595
U.S. citizen or permanent resident	2,832	2,943	2,892	2,881	3,072	3,084	3,499	3,302	3,418	3,217	3,022
Temporary visa holder	9,451	9,889	10,514	10,662	10,741	10,931	10,731	11,464	11,718	11,845	11,551
Unknown citizenship	28	18	24	13	20	37	30	35	45	32	22
Black or African American	2,313	2,528	2,655	2,654	2,773	2,866	2,952	3,050	3,092	3,090	3,040
U.S. citizen or permanent resident	1,899	2,055	2,172	2,172	2,275	2,358	2,400	2,449	2,512	2,453	2,431
Temporary visa holder	404	469	479	477	493	502	530	595	570	625	593
Unknown citizenship	10	4	4	5	5	6	22	6	10	12	16
White	26,173	26,982	27,871	27,947	28,619	28,766	28,347	28,554	28,079	27,775	24,710
U.S. citizen or permanent resident	23,278	24,010	24,749	24,829	25,375	25,502	24,844	24,925	24,214	23,934	21,333
Temporary visa holder	2,841	2,931	3,070	3,086	3,180	3,224	3,428	3,595	3,770	3,785	3,341
Unknown citizenship	54	41	52	32	64	40	75	34	95	56	36
More than one race	780	868	929	939	971	1,116	1,110	1,211	1,266	1,251	1,202
U.S. citizen or permanent resident	722	807	858	879	903	1,033	1,015	1,100	1,121	1,135	1,088
Temporary visa holder	58	61	71	60	67	83	D	D	145	D	D
Unknown citizenship	0	0	0	0	1	0	D	D	0	D	D
Other race or race not reported	464	462	447	411	458	470	788	861	894	831	926
U.S. citizen or permanent resident	248	293	279	272	249	272	471	371	381	353	376
Temporary visa holder	212	D	147	125	171	174	279	476	475	454	500
Unknown citizenship	4	D	21	14	38	24	38	14	38	24	50
Ethnicity not reported	3,818	4,082	4,172	5,223	4,669	3,831	3,418	2,895	2,973	2,975	3,659
U.S. citizen or permanent resident	630	625	760	677	617	753	862	516	618	434	468
Temporary visa holder	339	355	465	479	503	539	228	324	495	395	386
Unknown citizenship	2,849	3,102	2,947	4,067	3,549	2,539	2,328	2,055	1,860	2,146	2,805

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: 2011–21

(Number)

Ethnicity, race, and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male doctorate recipients	26,188	27,362	28,326	29,008	29,532	29,572	29,446	29,743	30,111	29,855	28,082
U.S. citizen or permanent resident	15,396	16,072	16,550	16,660	17,218	17,530	17,565	17,312	17,263	16,776	15,231
Temporary visa holder	9,179	9,556	10,103	10,204	10,395	10,671	10,601	11,308	11,767	11,870	11,399
Unknown citizenship	1,613	1,734	1,673	2,144	1,919	1,371	1,280	1,123	1,081	1,209	1,452
Hispanic or Latino	1,494	1,549	1,523	1,588	1,758	1,766	1,805	1,865	2,011	2,047	2,005
U.S. citizen or permanent resident	893	948	905	999	1,119	1,134	1,152	1,196	1,302	1,266	1,279
Temporary visa holder	598	599	612	580	634	630	634	666	706	778	724
Unknown citizenship	3	2	6	9	5	2	19	3	3	3	2
Not Hispanic or Latino											
American Indian or Alaska Native	56	42	62	54	64	63	49	44	58	39	40
U.S. citizen or permanent resident	50	41	56	49	58	57	48	43	56	39	38
Temporary visa holder ^a	D	D	D	D	D	6	D	D	D	0	D
Unknown citizenship	D	D	D	D	D	0	D	D	D	0	D
Asian	7,407	7,730	8,038	8,091	8,235	8,538	8,670	8,902	9,182	9,192	8,930
U.S. citizen or permanent resident	1,263	1,312	1,264	1,243	1,359	1,432	1,656	1,562	1,626	1,535	1,442
Temporary visa holder	6,131	6,405	6,761	6,842	6,867	7,081	6,998	7,315	7,532	7,638	7,474
Unknown citizenship	13	13	13	6	9	25	16	25	24	19	14
Black or African American	917	1,047	1,101	1,151	1,113	1,205	1,205	1,324	1,261	1,317	1,243
U.S. citizen or permanent resident	666	741	801	821	807	863	850	923	893	917	879
Temporary visa holder	248	303	297	329	306	341	347	398	365	396	358
Unknown citizenship	3	3	3	1	0	1	8	3	3	4	6
White	13,601	14,041	14,608	14,624	15,101	15,155	14,950	14,982	14,887	14,568	12,867
U.S. citizen or permanent resident	11,737	12,168	12,582	12,590	12,978	13,033	12,667	12,608	12,366	12,087	10,670
Temporary visa holder	1,838	1,859	2,005	2,021	2,101	2,103	2,246	2,360	2,477	2,449	2,182
Unknown citizenship	26	14	21	13	22	19	37	14	44	32	15
More than one race	381	384	432	451	436	511	517	556	588	607	550
U.S. citizen or permanent resident	346	347	388	411	394	455	462	485	495	531	485
Temporary visa holder	35	37	44	40	42	56	D	D	D	76	D
Unknown citizenship	0	0	0	0	0	0	D	D	D	0	D
Other race or race not reported	273	260	243	249	291	278	476	528	521	478	584
U.S. citizen or permanent resident	136	148	148	162	152	149	269	215	207	175	209
Temporary visa holder	D	D	D	D	D	118	191	305	298	293	350
Unknown citizenship	D	D	D	D	D	11	16	8	16	10	25
Ethnicity not reported	2,059	2,309	2,319	2,800	2,534	2,056	1,774	1,542	1,603	1,607	1,863
U.S. citizen or permanent resident	305	367	406	385	351	407	461	280	318	226	229
Temporary visa holder	189	243	290	305	320	336	129	192	294	240	244
Unknown citizenship	1,565	1,699	1,623	2,110	1,863	1,313	1,184	1,070	991	1,141	1,390

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: 2011–21**

(Number)

Ethnicity, race, and citizenship status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Female doctorate recipients	22,699	23,526	24,365	24,813	25,347	25,222	25,084	25,309	25,488	25,364	24,156
U.S. citizen or permanent resident	16,329	16,909	17,414	17,343	17,853	18,147	18,170	18,037	17,963	17,697	16,441
Temporary visa holder	5,056	5,224	5,571	5,633	5,734	5,805	5,686	6,274	6,556	6,606	6,239
Unknown citizenship	1,314	1,393	1,380	1,837	1,760	1,270	1,228	998	969	1,061	1,476
Hispanic or Latino	1,421	1,515	1,550	1,559	1,664	1,806	1,761	1,726	1,989	2,061	2,008
U.S. citizen or permanent resident	1,096	1,196	1,230	1,191	1,330	1,414	1,384	1,375	1,542	1,584	1,577
Temporary visa holder	324	317	309	364	330	386	363	350	440	475	424
Unknown citizenship	1	2	11	4	4	6	14	1	7	2	7
Not Hispanic or Latino											
American Indian or Alaska Native	79	65	64	55	77	73	62	72	66	61	65
U.S. citizen or permanent resident	77	63	63	54	73	71	61	72	63	58	62
Temporary visa holder ^a	D	D	D	D	D	D	D	0	D	D	D
Unknown citizenship	D	D	D	D	D	D	D	0	D	D	D
Asian	4,904	5,117	5,392	5,465	5,598	5,513	5,588	5,899	5,999	5,902	5,665
U.S. citizen or permanent resident	1,569	1,631	1,628	1,638	1,713	1,652	1,842	1,740	1,792	1,682	1,580
Temporary visa holder	3,320	3,481	3,753	3,820	3,874	3,849	3,732	4,149	4,186	4,207	4,077
Unknown citizenship	15	5	11	7	11	12	14	10	21	13	8
Black or African American	1,396	1,481	1,554	1,503	1,660	1,661	1,747	1,726	1,831	1,773	1,797
U.S. citizen or permanent resident	1,233	1,314	1,371	1,351	1,468	1,495	1,550	1,526	1,619	1,536	1,552
Temporary visa holder	156	166	182	148	187	161	183	197	205	229	235
Unknown citizenship	7	1	1	4	5	5	14	3	7	8	10
White	12,572	12,941	13,263	13,323	13,518	13,611	13,397	13,572	13,191	13,207	11,841
U.S. citizen or permanent resident	11,541	11,842	12,167	12,239	12,397	12,469	12,177	12,317	11,847	11,847	10,661
Temporary visa holder	1,003	1,072	1,065	1,065	1,079	1,121	1,182	1,235	1,293	1,336	1,159
Unknown citizenship	28	27	31	19	42	21	38	20	51	24	21
More than one race	399	484	497	488	535	605	593	655	678	644	652
U.S. citizen or permanent resident	376	460	470	468	509	578	553	615	626	604	603
Temporary visa holder	23	24	27	20	25	27	D	40	D	D	D
Unknown citizenship	0	0	0	0	1	0	D	0	D	D	D
Other race or race not reported	191	202	204	162	167	192	312	333	373	353	342
U.S. citizen or permanent resident	112	145	131	110	97	123	202	156	174	178	167
Temporary visa holder	D	D	D	D	D	D	88	171	177	161	150
Unknown citizenship	D	D	D	D	D	D	22	6	22	14	25
Ethnicity not reported	1,737	1,721	1,841	2,258	2,128	1,761	1,624	1,326	1,361	1,363	1,786
U.S. citizen or permanent resident	325	258	354	292	266	345	401	236	300	208	239
Temporary visa holder	150	111	175	172	183	203	99	132	200	155	142
Unknown citizenship	1,262	1,352	1,312	1,794	1,679	1,213	1,124	958	861	1,000	1,405

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 historical broad field of doctorate, ethnicity, and race: Selected years, 1976–2021

(Number)

Field, ethnicity, and race	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
All fields, U.S. citizens and permanent residents	28,829	26,362	24,541	27,437	31,548	28,894	29,028	31,725	35,678	31,674
Hispanic or Latino	377	530	679	869	1,115	1,266	1,532	1,989	2,548	2,856
Not Hispanic or Latino										
American Indian or Alaska Native	40	85	99	132	186	142	113	127	128	100
Asian ^a	964	1,071	1,058	1,529	3,674	2,134	2,391	2,832	3,084	3,022
Black or African American	1,141	1,109	950	1,166	1,446	1,640	1,789	1,899	2,358	2,431
White	24,854	22,478	21,235	23,184	24,668	22,179	21,923	23,278	25,502	21,333
More than one race	na	na	na	na	na	301	464	722	1,033	1,088
Other race or race not reported ^b	158	10	150	127	192	355	287	248	272	376
Ethnicity not reported	1,295	1,079	370	430	267	877	529	630	753	468
Life sciences ^c	4,300	4,787	4,593	5,096	6,084	5,956	6,506	7,892	8,683	8,214
Hispanic or Latino	34	64	97	130	184	220	306	471	652	744
Not Hispanic or Latino										
American Indian or Alaska Native	3	13	24	19	32	21	16	25	26	24
Asian ^a	196	215	223	336	1,068	666	696	853	914	913
Black or African American	79	92	85	123	174	211	299	428	510	531
White	3,771	4,196	4,075	4,401	4,536	4,588	4,927	5,753	6,113	5,552
More than one race	na	na	na	na	na	55	97	180	263	271
Other race or race not reported ^b	28	1	18	26	42	69	61	67	54	79
Ethnicity not reported	189	206	71	61	48	126	104	115	151	100
Physical sciences and earth sciences	2,881	2,547	2,567	2,890	3,078	2,447	2,479	3,048	3,669	3,340
Hispanic or Latino	18	36	45	80	87	74	100	159	186	261
Not Hispanic or Latino										
American Indian or Alaska Native	0	1	6	13	7	12	5	9	8	9
Asian ^a	198	162	159	185	571	226	206	252	302	275
Black or African American	24	26	27	35	61	59	55	86	97	87
White	2,463	2,164	2,245	2,502	2,292	1,958	2,022	2,388	2,879	2,509
More than one race	na	na	na	na	na	29	27	75	110	132
Other race or race not reported ^b	16	0	23	12	24	32	24	28	17	34
Ethnicity not reported	162	158	62	63	36	57	40	51	70	33
Mathematics and computer sciences	804	714	652	968	1,162	957	1,207	1,603	1,729	1,671
Hispanic or Latino	9	5	19	21	27	23	33	50	95	107
Not Hispanic or Latino										
American Indian or Alaska Native	0	1	1	1	5	3	2	4	3	1
Asian ^a	48	56	65	123	251	113	201	234	216	254
Black or African American	5	11	7	19	20	31	34	51	79	70

Table 1-11
U.S. citizen and permanent resident research doctorate recipients, by historical broad field of doctorate, ethnicity, and race: Selected years, 1976–2021

(Number)

Field, ethnicity, and race	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
White	696	611	537	773	834	742	882	1,179	1,207	1,119
More than one race	na	na	na	na	na	9	21	35	65	64
Other race or race not reported ^b	5	0	8	3	8	8	15	11	16	27
Ethnicity not reported	41	30	15	28	17	28	19	39	48	29
Psychology and social sciences	5,769	5,574	4,984	5,199	5,834	5,543	5,381	6,070	6,798	6,167
Hispanic or Latino	61	123	158	217	264	285	372	503	581	692
Not Hispanic or Latino										
American Indian or Alaska Native	8	13	21	21	40	32	22	33	30	24
Asian ^a	96	133	129	169	374	275	338	396	428	450
Black or African American	179	210	204	264	284	329	355	399	491	541
White	5,133	4,883	4,367	4,418	4,789	4,304	3,996	4,380	4,823	4,056
More than one race	na	na	na	na	na	71	113	156	218	225
Other race or race not reported ^b	28	4	27	22	39	79	57	49	72	82
Ethnicity not reported	264	208	78	88	44	168	128	154	155	97
Engineering	1,949	1,472	1,727	2,475	3,390	2,458	2,500	3,350	4,181	4,073
Hispanic or Latino	16	17	35	61	99	91	113	188	271	331
Not Hispanic or Latino										
American Indian or Alaska Native	0	4	6	6	14	6	4	7	8	6
Asian ^a	278	285	262	405	896	421	441	563	644	635
Black or African American	20	19	24	55	74	85	102	130	173	163
White	1,517	1,093	1,354	1,838	2,263	1,738	1,720	2,294	2,811	2,706
More than one race	na	na	na	na	na	24	45	72	120	126
Other race or race not reported ^b	14	0	16	20	9	30	32	22	35	59
Ethnicity not reported	104	54	30	90	35	63	43	74	119	47
Education	7,246	6,717	5,803	5,788	6,075	5,462	5,171	3,878	4,303	3,431
Hispanic or Latino	129	162	204	189	218	275	296	230	320	322
Not Hispanic or Latino										
American Indian or Alaska Native	21	39	26	56	60	38	35	30	30	22
Asian ^a	67	120	95	130	180	137	174	181	210	187
Black or African American	679	593	463	472	607	633	639	495	642	562
White	6,105	5,576	4,921	4,888	4,939	4,061	3,844	2,763	2,891	2,134
More than one race	na	na	na	na	na	47	58	83	102	113
Other race or race not reported ^b	39	3	32	23	33	41	47	25	33	29
Ethnicity not reported	206	224	62	30	38	230	78	71	75	62
Humanities and arts	4,539	3,358	2,911	3,491	4,261	4,601	4,240	4,191	4,450	3,142
Hispanic or Latino	84	105	98	139	184	239	239	287	319	285

Table 1-11
U.S. citizen and permanent resident research doctorate recipients, by historical broad field of doctorate, ethnicity, and race: Selected years, 1976–2021

(Number)

Field, ethnicity, and race	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
Not Hispanic or Latino										
American Indian or Alaska Native	2	11	6	10	20	22	21	13	19	6
Asian ^a	54	52	50	88	194	201	224	198	181	152
Black or African American	97	86	71	101	129	165	170	156	169	171
White	4,012	2,960	2,625	3,093	3,669	3,707	3,390	3,328	3,529	2,311
More than one race	na	na	na	na	na	49	82	84	112	109
Other race or race not reported ^b	22	1	21	13	30	74	37	28	28	47
Ethnicity not reported	268	143	40	47	35	144	77	97	93	61
Other ^d	1,341	1,193	1,304	1,530	1,664	1,470	1,544	1,693	1,865	1,636
Hispanic or Latino	26	18	23	32	52	59	73	101	124	114
Not Hispanic or Latino										
American Indian or Alaska Native	6	3	9	6	8	8	8	6	4	8
Asian ^a	27	48	75	93	140	95	111	155	189	156
Black or African American	58	72	69	97	97	127	135	154	197	306
White	1,157	995	1,111	1,271	1,346	1,081	1,142	1,193	1,249	946
More than one race	na	na	na	na	na	17	21	37	43	48
Other race or race not reported ^b	6	1	5	8	7	22	14	18	17	19
Ethnicity not reported	61	56	12	23	14	61	40	29	42	39

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

^a Includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.
^b Before 2001, this category included respondents who selected More than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.
^c Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.
^d Includes other non-science and engineering fields not shown separately.

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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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

Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021

[illegible]

Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021

[illegible]

Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021

[illegible]

Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021

[illegible]

Table 1-12**Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021**

(Median years)

Field and time to degree	1971	1976	1981	1986	1991	1996	2001	2006	2011	2016	2021
Foreign languages and literature											
Since earning bachelor's	9.2	10.0	11.3	12.2	12.0	11.0	10.8	11.8	11.0	10.6	11.7
Since starting graduate school	7.7	9.0	9.9	10.7	10.2	9.2	9.0	9.7	9.2	8.7	9.9
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.7	6.8
History											
Since earning bachelor's	8.7	10.0	11.2	12.4	12.2	11.5	11.5	12.0	11.2	10.9	11.0
Since starting graduate school	7.7	8.9	9.7	10.6	10.3	9.7	9.7	9.7	9.2	9.2	9.3
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	7.2	6.9
Letters											
Since earning bachelor's	9.0	9.5	10.9	12.2	12.0	11.5	11.3	11.0	10.7	10.6	10.9
Since starting graduate school	7.7	8.7	9.2	10.7	9.9	9.2	9.2	9.2	8.9	9.0	9.0
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.7	6.7
Other humanities and arts											
Since earning bachelor's	10.0	10.1	11.0	12.3	13.0	13.0	12.6	12.0	11.9	11.4	11.4
Since starting graduate school	9.2	9.1	9.7	10.7	11.1	10.7	10.3	9.8	9.9	9.7	9.8
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	7.2	6.8
Other											
Since earning bachelor's	10.2	10.3	11.0	13.0	13.4	13.5	13.6	12.3	12.0	11.2	11.3
Since starting graduate school	7.9	8.2	8.9	10.2	10.7	10.2	10.7	9.8	9.3	9.0	9.1
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.3	5.3
Business management and administration											
Since earning bachelor's	9.0	9.8	10.5	12.0	12.2	12.7	13.0	11.9	11.8	10.8	10.7
Since starting graduate school	7.0	7.7	8.2	9.7	9.4	9.7	10.1	9.2	9.1	8.7	8.7
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.0	5.0
Communication											
Since earning bachelor's	13.3	8.7	10.0	12.2	13.2	12.0	12.3	11.6	10.7	10.6	10.0
Since starting graduate school	9.3	7.3	8.2	9.7	10.2	8.7	9.6	9.0	8.3	8.3	8.3
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	5.7	5.0
Non-science and engineering fields nec											
Since earning bachelor's	13.6	12.0	12.5	15.0	16.0	17.3	16.4	14.0	14.1	13.0	13.0
Since starting graduate school	11.7	9.7	10.3	12.2	13.7	13.7	13.7	11.5	11.2	10.6	10.5
Since starting doctoral program ^a	na	na	na	na	na	na	na	na	na	6.0	5.8

na = not available; data were not provided prior to 2014.

nec = not elsewhere classified.

^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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table 1-13**Education-related graduate debt of research doctorate recipients, by historical broad field of doctorate: 2011–21**

(Number)

Education-related debt level and field	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Doctorate recipients reporting education-related debt	44,781	46,490	46,449	46,819	48,759	49,778	49,231	50,042	50,731	50,381	47,286
No debt	28,663	29,297	28,883	29,333	30,890	31,987	32,604	33,848	34,713	35,095	33,847
\$10,000 or less	3,697	4,030	3,931	3,842	4,189	4,071	3,801	3,831	3,469	3,399	2,738
\$10,001–\$30,000	4,314	4,565	4,609	4,435	4,464	4,376	3,897	3,720	3,791	3,411	2,942
\$30,001–\$70,000	4,579	4,789	4,782	4,735	4,500	4,528	4,107	3,902	3,675	3,482	3,178
\$70,001 or more	3,528	3,809	4,244	4,474	4,716	4,816	4,822	4,741	5,083	4,994	4,581
Life sciences ^a	10,673	11,115	10,867	10,917	11,306	11,636	11,617	11,788	11,899	11,689	10,861
No debt	7,451	7,658	7,318	7,427	7,812	8,100	8,213	8,401	8,489	8,436	8,117
\$10,000 or less	853	943	904	860	940	914	913	875	836	803	646
\$10,001–\$30,000	909	1,001	1,016	997	943	940	818	815	852	724	586
\$30,001–\$70,000	915	906	945	917	857	904	846	836	791	790	678
\$70,001 or more	545	607	684	716	754	778	827	861	931	936	834
Physical sciences and earth sciences	4,900	5,009	5,005	5,203	5,328	5,748	5,625	5,871	6,123	5,801	5,350
No debt	3,734	3,833	3,831	4,023	4,164	4,530	4,584	4,825	5,023	4,909	4,596
\$10,000 or less	401	426	421	404	460	484	392	446	394	359	278
\$10,001–\$30,000	353	377	380	365	324	335	298	269	317	234	224
\$30,001–\$70,000	281	265	244	268	237	243	217	200	206	171	150
\$70,001 or more	131	108	129	143	143	156	134	131	183	128	102
Mathematics and computer sciences	2,999	3,149	3,273	3,415	3,407	3,589	3,468	3,675	3,889	4,036	3,982
No debt	2,381	2,505	2,633	2,685	2,747	2,885	2,835	3,045	3,250	3,404	3,373
\$10,000 or less	217	202	204	238	222	190	218	215	211	208	202
\$10,001–\$30,000	178	187	182	189	175	217	175	170	169	189	166
\$30,001–\$70,000	138	163	142	177	144	165	115	139	141	112	123
\$70,001 or more	85	92	112	126	119	132	125	106	118	123	118
Psychology and social sciences	7,363	7,598	7,442	7,435	7,853	8,073	7,956	7,920	8,062	7,974	7,658
No debt	3,523	3,560	3,446	3,431	3,635	3,966	4,057	4,168	4,339	4,445	4,354
\$10,000 or less	630	657	615	609	670	687	644	609	550	569	445
\$10,001–\$30,000	882	983	880	860	947	881	840	736	724	699	640
\$30,001–\$70,000	1,096	1,167	1,186	1,138	1,125	1,064	977	918	840	759	745
\$70,001 or more	1,232	1,231	1,315	1,397	1,476	1,475	1,438	1,489	1,609	1,502	1,474
Engineering	7,363	7,747	7,964	8,445	8,827	8,549	8,854	9,288	9,429	9,652	9,396
No debt	5,654	5,907	5,981	6,426	6,787	6,555	7,034	7,488	7,573	7,879	7,736
\$10,000 or less	635	692	706	746	774	759	679	716	639	635	549
\$10,001–\$30,000	504	549	615	617	613	568	520	516	577	494	493
\$30,001–\$70,000	373	401	422	413	420	416	361	341	345	317	339
\$70,001 or more	197	198	240	243	233	251	260	227	295	327	279
Education	4,255	4,397	4,300	4,079	4,490	4,621	4,300	4,356	4,204	4,269	3,776

Table 1-13**Education-related graduate debt of research doctorate recipients, by historical broad field of doctorate: 2011–21**

(Number)

Education-related debt level and field	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
No debt	2,152	2,115	1,898	1,725	1,942	2,038	1,893	1,952	1,979	2,005	1,873
\$10,000 or less	312	373	361	347	396	369	340	339	267	292	227
\$10,001–\$30,000	542	534	574	502	555	557	483	480	422	433	337
\$30,001–\$70,000	732	742	728	732	711	718	673	667	622	601	497
\$70,001 or more	517	633	739	773	886	939	911	918	914	938	842
Humanities and arts	4,808	5,059	4,974	4,771	4,939	4,953	4,735	4,614	4,507	4,369	3,661
No debt	2,459	2,451	2,431	2,325	2,437	2,551	2,544	2,550	2,564	2,511	2,233
\$10,000 or less	477	539	525	450	543	466	444	457	402	355	244
\$10,001–\$30,000	657	671	667	629	633	611	509	483	476	429	285
\$30,001–\$70,000	688	792	727	726	649	657	554	513	466	473	409
\$70,001 or more	527	606	624	641	677	668	684	611	599	601	490
Other ^b	2,420	2,416	2,624	2,554	2,609	2,609	2,676	2,530	2,618	2,591	2,602
No debt	1,309	1,268	1,345	1,291	1,366	1,362	1,444	1,419	1,496	1,506	1,565
\$10,000 or less	172	198	195	188	184	202	171	174	170	178	147
\$10,001–\$30,000	289	263	295	276	274	267	254	251	254	209	211
\$30,001–\$70,000	356	353	388	364	357	361	364	288	264	259	237
\$70,001 or more	294	334	401	435	428	417	443	398	434	439	442

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Includes other non-science and engineering fields not shown separately.**Note(s):**

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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: 1970–2021**

(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	26.3	22.1	9.4	11.4
2018	16.3	12.9	26.5	22.2	9.6	12.4
2019	16.6	13.1	26.5	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: 1970–2021

(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

na = not applicable; added to survey in 1990.

^a Includes those who earned an associate's degree or attended college but did not earn a bachelor's degree.

^b Includes professional doctorate such as MD, DDS, DVM, JD, PsyD, DDiv.

Note(s):

Percentages may not sum to 100 due to rounding and doctorate recipients who reported "not applicable or unknown" for both parents' education or did not report either parent's education. If a respondent provided data for one parent, that response is used; for respondents who provided data for two parents, the higher attainment is reported in this table.

Source(s):

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

Table 2-1

Postgraduation commitment of research doctorate recipients, by historical broad field of doctorate: Selected years, 1991–2021

(Number and percent)

Commitment status and year	All fields	Science and engineering						Non-science and engineering			
		Total	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Total	Education	Humanities and arts	Other ^b
All doctorate recipients (number)											
1991	37,530	24,894	6,967	4,406	1,838	6,470	5,213	12,636	6,454	4,053	2,129
1996	42,437	28,405	8,337	4,550	2,042	7,167	6,309	14,032	6,785	4,982	2,265
2001	40,744	26,896	8,369	4,024	1,840	7,151	5,512	13,848	6,356	5,430	2,062
2006	45,620	31,584	9,703	4,686	2,778	7,231	7,186	14,036	6,122	5,332	2,582
2011	48,909	36,331	11,535	5,271	3,273	8,220	8,032	12,578	4,670	5,225	2,683
2016	54,809	41,240	12,539	6,251	3,954	9,037	9,459	13,569	5,146	5,482	2,941
2021	52,250	40,859	11,814	5,757	4,373	8,675	10,240	11,391	4,252	4,137	3,002
All postgraduation commitments											
1991	34,350	22,684	6,481	4,048	1,684	5,874	4,597	11,666	5,976	3,774	1,916
1996	38,634	25,986	7,690	4,180	1,861	6,508	5,747	12,648	6,054	4,576	2,018
2001	37,127	24,632	7,719	3,727	1,673	6,487	5,026	12,495	5,670	4,982	1,843
2006	42,069	29,209	9,030	4,376	2,599	6,613	6,591	12,860	5,645	4,904	2,311
2011	44,703	33,247	10,674	4,898	3,000	7,353	7,322	11,456	4,246	4,805	2,405
2016	49,818	37,648	11,655	5,759	3,588	8,085	8,561	12,170	4,619	4,951	2,600
2021	47,433	37,352	10,899	5,363	3,991	7,695	9,404	10,081	3,798	3,677	2,606
Definite commitment for employment or postdoctoral training (%) ^c											
1991	70.5	69.6	74.0	72.4	65.4	69.6	62.5	72.2	74.7	65.2	78.3
1996	67.5	67.0	70.7	68.0	66.6	65.1	63.6	68.6	74.1	59.2	73.1
2001	72.9	73.5	72.9	77.1	75.3	72.5	72.5	71.6	74.3	65.9	78.5
2006	71.6	71.2	71.7	72.0	74.2	74.1	66.0	72.3	74.9	66.7	77.8
2011	65.5	66.0	62.6	69.0	69.8	69.0	64.1	64.3	68.1	57.3	71.5
2016	61.8	62.2	59.6	62.0	67.4	67.4	58.6	60.5	64.8	52.1	69.0
2021	70.0	70.9	69.8	71.1	75.4	73.8	67.8	66.8	71.1	59.0	71.5
No definite commitment for employment or postdoctoral training (%) ^{c,d}											
1991	29.5	30.4	26.0	27.6	34.6	30.4	37.5	27.8	25.3	34.8	21.7
1996	32.5	33.0	29.3	32.0	33.4	34.9	36.4	31.4	25.9	40.8	26.9
2001	27.1	26.5	27.1	22.9	24.7	27.5	27.5	28.4	25.7	34.1	21.5
2006	28.4	28.8	28.3	28.0	25.8	25.9	34.0	27.7	25.1	33.3	22.2
2011	34.5	34.0	37.4	31.0	30.2	31.0	35.9	35.7	31.9	42.7	28.5
2016	38.2	37.8	40.4	38.0	32.6	32.6	41.4	39.5	35.2	47.9	31.0
2021	30.0	29.1	30.2	28.9	24.6	26.2	32.2	33.2	28.9	41.0	28.5

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Includes other non-science and engineering fields not shown separately.^c Percentages based on number responding to the survey item on postgraduation commitment.^d Includes respondents who indicated "other" in all years, respondents who indicated "do not plan to work or study" in 2004 and later years, and respondents who indicated definite plans for "other full-time degree program" in 2007 and later years.

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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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, 1991–2021

(Number and percent)

Commitment status and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
						Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder		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)													
1991	37,530	23,521	13,873	27,437	9,374	869	132	1,529	1,166	23,184	na	127	430
1996	42,437	25,288	16,956	31,548	9,740	1,115	186	3,674	1,446	24,668	na	192	267
2001	40,744	22,780	17,887	28,894	9,812	1,266	142	2,134	1,640	22,179	301	355	877
2006	45,620	25,020	20,559	29,028	14,198	1,532	113	2,391	1,789	21,923	464	287	529
2011	48,909	26,188	22,699	31,725	14,235	1,989	127	2,832	1,899	23,278	722	248	630
2016	54,809	29,572	25,222	35,678	16,477	2,548	128	3,084	2,358	25,502	1,033	272	753
2021	52,250	28,082	24,156	31,674	17,638	2,856	100	3,022	2,431	21,333	1,088	376	468
All postgraduation commitments													
1991	34,350	21,490	12,855	26,013	8,332	820	127	1,422	1,050	22,252	na	105	237
1996	38,634	23,124	15,505	29,695	8,909	1,051	171	3,447	1,299	23,429	na	183	115
2001	37,127	20,817	16,309	27,780	9,303	1,210	135	2,078	1,569	21,722	296	334	436
2006	42,069	23,037	19,030	28,307	13,682	1,457	109	2,359	1,743	21,674	455	267	243
2011	44,703	23,965	20,737	30,802	13,660	1,880	117	2,767	1,849	22,886	718	222	363
2016	49,818	26,965	22,852	34,158	15,526	2,422	121	3,016	2,239	24,953	1,021	222	164
2021	47,433	25,662	21,769	30,374	16,814	2,729	91	2,937	2,328	20,717	1,074	306	192
Definite commitment for employment or postdoctoral training (%) ^d													
1991	70.5	70.3	70.8	72.8	63.4	68.8	67.7	61.7	68.6	73.9	na	68.6	71.7
1996	67.5	67.6	67.4	69.3	61.5	70.9	69.6	61.9	67.9	70.4	na	65.0	71.3
2001	72.9	74.2	71.1	73.4	71.4	74.0	68.9	69.3	69.5	74.2	70.9	65.0	70.9
2006	71.6	72.8	70.1	73.5	67.5	71.7	67.9	68.5	68.8	74.7	72.1	69.7	72.4
2011	65.5	67.1	63.7	66.3	63.8	60.7	63.2	60.5	59.7	68.3	62.3	61.7	60.1
2016	61.8	62.7	60.6	63.2	58.6	59.0	62.0	57.6	53.5	65.1	63.3	63.5	59.1
2021	70.0	70.3	69.7	70.3	69.4	70.0	76.9	68.3	67.5	71.0	71.5	67.6	64.1
No definite commitment for employment or postdoctoral training (%) ^{d,e}													
1991	29.5	29.7	29.2	27.2	36.6	31.2	32.3	38.3	31.4	26.1	na	31.4	28.3
1996	32.5	32.4	32.6	30.7	38.5	29.1	30.4	38.1	32.1	29.6	na	35.0	28.7
2001	27.1	25.8	28.9	26.6	28.6	26.0	31.1	30.7	30.5	25.8	29.1	35.0	29.1
2006	28.4	27.2	29.9	26.5	32.5	28.3	32.1	31.5	31.2	25.3	27.9	30.3	27.6
2011	34.5	32.9	36.3	33.7	36.2	39.3	36.8	39.5	40.3	31.7	37.7	38.3	39.9

Table 2-2**Postgraduation commitment of research doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021**

(Number and percent)

Commitment status and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
						Hispanic or Latino	Not Hispanic or Latino					Ethnicity not reported	
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder		American Indian or Alaska Native	Asian ^b	Black or African American	White	More than one race		Other race or race not reported ^c
2016	38.2	37.3	39.4	36.8	41.4	41.0	38.0	42.4	46.5	34.9	36.7	36.5	40.9
2021	30.0	29.7	30.3	29.7	30.6	30.0	23.1	31.7	32.5	29.0	28.5	32.4	35.9

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

^a Includes respondents who did not report sex and respondents who did not report citizenship status.^b Includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.^c Before 2001, this category included respondents who selected More than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.^d Percentages based on number responding to the survey item on postgraduation commitment.^e Includes respondents who indicated "other" in all years, respondents who indicated "do not plan to work or study" in 2004 and later years, and respondents who indicated definite plans for "other full-time degree program" in 2007 and later years.**Note(s):**

Due to rounding, percentages may not sum to 100.

Source(s):

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

Table 2-3**Postgraduation plans of research doctorate recipients with definite commitments, by historical broad field of doctorate: Selected years, 1991–2021**

(Number and percent)

Definite commitment, plan, and year	All fields	Science and engineering						Non-science and engineering			
		Total	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Total	Education	Humanities and arts	Other ^b
All definite commitments (number)											
1991	24,217	15,793	4,798	2,932	1,102	4,090	2,871	8,424	4,462	2,462	1,500
1996	26,077	17,406	5,435	2,841	1,240	4,235	3,655	8,671	4,484	2,711	1,476
2001	27,052	18,107	5,630	2,873	1,259	4,702	3,643	8,945	4,215	3,283	1,447
2006	30,106	20,810	6,474	3,152	1,929	4,902	4,353	9,296	4,226	3,273	1,797
2011	29,295	21,928	6,684	3,379	2,095	5,077	4,693	7,367	2,893	2,754	1,720
2016	30,768	23,403	6,942	3,572	2,420	5,449	5,020	7,365	2,991	2,579	1,795
2021	33,216	26,482	7,603	3,815	3,010	5,682	6,372	6,734	2,701	2,171	1,862
Reported type of plan											
1991	24,114	15,759	4,788	2,930	1,099	4,081	2,861	8,355	4,419	2,443	1,493
1996	26,031	17,377	5,427	2,837	1,238	4,226	3,649	8,654	4,477	2,705	1,472
2001	26,906	18,039	5,612	2,866	1,255	4,677	3,629	8,867	4,183	3,246	1,438
2006	29,501	20,455	6,334	3,118	1,902	4,809	4,292	9,046	4,107	3,183	1,756
2011	27,744	20,883	6,367	3,272	2,007	4,796	4,441	6,861	2,721	2,554	1,586
2016	29,296	22,468	6,658	3,472	2,331	5,160	4,847	6,828	2,789	2,389	1,650
2021	33,170	26,440	7,586	3,808	3,010	5,671	6,365	6,730	2,700	2,170	1,860
Employment plans (%) ^c											
1991	72.5	60.3	37.6	41.8	77.3	82.7	78.9	95.5	96.1	93.4	97.0
1996	70.5	58.0	35.2	39.8	73.7	78.1	77.6	95.7	97.2	92.8	96.4
2001	71.0	60.3	39.1	47.6	73.0	73.9	81.1	92.7	94.1	90.4	94.1
2006	66.1	54.3	35.5	35.7	68.5	71.1	70.4	92.9	95.1	89.4	94.1
2011	57.3	46.9	30.7	30.9	58.9	63.1	59.0	88.8	92.1	83.2	92.1
2016	61.2	53.3	38.4	38.9	68.1	63.1	66.6	87.3	92.1	78.3	92.1
2021	58.7	52.2	42.1	37.8	66.6	57.3	61.5	84.0	89.9	74.1	86.8
Postdoctoral training plans (%) ^c											
1991	27.5	39.7	62.4	58.2	22.7	17.3	21.1	4.5	3.9	6.6	3.0
1996	29.5	42.0	64.8	60.2	26.3	21.9	22.4	4.3	2.8	7.2	3.6
2001	29.0	39.7	60.9	52.4	27.0	26.1	18.9	7.3	5.9	9.6	5.9
2006	33.9	45.7	64.5	64.3	31.5	28.9	29.6	7.1	4.9	10.6	5.9
2011	42.7	53.1	69.3	69.1	41.1	36.9	41.0	11.2	7.9	16.8	7.9
2016	38.8	46.7	61.6	61.1	31.9	36.9	33.4	12.7	7.9	21.7	7.9
2021	41.3	47.8	57.9	62.2	33.4	42.7	38.5	16.0	10.1	25.9	13.2

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Includes other non-science and engineering fields not shown separately.^c Percentages based on number reporting definite postgraduation commitments with response to type of plan (employment or postdoctoral study).**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 historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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, 1991–2021**

(Number and percent)

Definite commitment, plan, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							Ethnicity not reported
						Not Hispanic or Latino							
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder	Hispanic or Latino	American Indian or Alaska Native	Asian ^b	Black or African American	White	More than one race	Other race or race not reported ^c	
All definite commitments (number)													
1991	24,217	15,116	9,096	18,929	5,284	564	86	878	720	16,439	na	72	170
1996	26,077	15,623	10,449	20,580	5,481	745	119	2,132	882	16,501	na	119	82
2001	27,052	15,452	11,599	20,380	6,646	895	93	1,441	1,090	16,125	210	217	309
2006	30,106	16,766	13,338	20,805	9,241	1,044	74	1,616	1,199	16,182	328	186	176
2011	29,295	16,075	13,219	20,424	8,716	1,141	74	1,673	1,103	15,631	447	137	218
2016	30,768	16,910	13,857	21,579	9,095	1,430	75	1,738	1,197	16,255	646	141	97
2021	33,216	18,052	15,163	21,362	11,670	1,909	70	2,005	1,571	14,709	768	207	123
Reported type of plan													
1991	24,114	15,053	9,056	18,850	5,260	563	86	872	710	16,377	na	72	170
1996	26,031	15,596	10,430	20,546	5,470	745	119	2,127	881	16,473	na	119	82
2001	26,906	15,381	11,525	20,279	6,608	890	92	1,435	1,086	16,051	209	213	303
2006	29,501	16,465	13,034	20,353	9,100	1,013	73	1,579	1,164	15,863	322	175	164
2011	27,744	15,264	12,479	19,266	8,335	1,057	67	1,560	1,029	14,795	428	130	200
2016	29,296	16,190	13,106	20,442	8,764	1,331	72	1,662	1,121	15,407	617	138	94
2021	33,170	18,029	15,140	21,332	11,656	1,907	70	2,005	1,570	14,684	768	206	122
Employment plans (%) ^d													
1991	72.5	69.8	77.0	75.3	62.5	74.4	77.9	63.2	86.3	75.5	na	63.9	72.4
1996	70.5	68.0	74.3	73.2	60.7	75.2	83.2	55.4	84.9	74.7	na	76.5	65.9
2001	71.0	70.0	72.2	72.7	65.7	72.1	81.5	64.3	77.6	73.0	71.8	74.6	77.9
2006	66.1	64.4	68.3	69.1	59.4	69.7	84.9	58.1	76.8	69.7	63.4	70.9	71.3
2011	57.3	55.9	58.9	60.6	49.7	54.9	71.6	54.7	67.2	61.3	55.6	55.4	59.0
2016	61.2	60.7	61.8	62.9	57.3	58.2	75.0	59.3	71.5	63.2	56.6	67.4	72.3
2021	58.7	58.3	59.0	60.9	54.5	58.6	67.1	58.5	74.6	60.1	57.2	68.9	69.7
Postdoctoral training plans (%) ^d													
1991	27.5	30.2	23.0	24.7	37.5	25.6	22.1	36.8	13.7	24.5	na	36.1	27.6
1996	29.5	32.0	25.7	26.8	39.3	24.8	16.8	44.6	15.1	25.3	na	23.5	34.1
2001	29.0	30.0	27.8	27.3	34.3	27.9	18.5	35.7	22.4	27.0	28.2	25.4	22.1
2006	33.9	35.6	31.7	30.9	40.6	30.3	15.1	41.9	23.2	30.3	36.6	29.1	28.7
2011	42.7	44.1	41.1	39.4	50.3	45.1	28.4	45.3	32.8	38.7	44.4	44.6	41.0
2016	38.8	39.3	38.2	37.1	42.7	41.8	25.0	40.7	28.5	36.8	43.4	32.6	27.7
2021	41.3	41.7	41.0	39.1	45.5	41.4	32.9	41.5	25.4	39.9	42.8	31.1	30.3

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

^a Includes respondents who did not report sex and respondents who did not report citizenship status.^b Includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.^c Before 2001, this category included respondents who selected More than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.^d Percentages based on number reporting definite commitments and type of plan (employment or postdoctoral study).

Note(s):

Due to rounding, percentages may not sum to 100.

Source(s):

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

Sources of support for research doctorate recipients with postdoctoral training commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021

[illegible]

Table 2-5**Sources of support for research doctorate recipients with postdoctoral training commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021**

(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		
1991	2.5	2.4	2.7	2.3	3.1	D	D	D	2.1	2.3	na	D	2.1	
1996	3.1	2.9	3.5	2.9	3.5	3.2	D	D	0.8	2.8	na	D	0.0	
2001	3.3	3.0	3.8	3.0	4.2	D	D	3.7	3.7	3.0	D	D	1.5	
2006	2.7	2.2	3.4	2.7	2.8	3.6	D	2.7	4.8	2.5	D	D	2.1	
2011	3.5	2.7	4.6	3.5	3.5	4.0	D	3.4	4.4	3.6	D	D	2.4	
2016	3.6	2.9	4.5	3.9	3.1	4.3	D	2.5	D	4.0	4.1	D	0.0	
2021	2.9	2.3	3.6	3.3	2.2	3.2	D	2.8	D	3.2	4.6	6.3	2.7	
Other (%) ^d														
1991	10.3	10.9	9.1	9.5	12.2	9.7	10.5	8.1	4.1	9.6	na	19.2	12.8	
1996	9.6	9.3	10.1	9.2	10.7	8.6	10.0	7.4	7.5	9.8	na	7.1	3.6	
2001	11.6	11.8	11.2	10.7	13.6	8.5	17.6	11.9	7.8	10.8	15.3	9.3	10.4	
2006	8.4	8.3	8.4	7.7	9.4	6.5	9.1	8.2	7.4	7.9	5.9	5.9	6.4	
2011	8.8	9.5	7.8	7.9	10.4	7.5	10.5	5.8	7.1	8.2	6.8	6.9	12.2	
2016	9.2	9.1	9.2	8.5	10.5	9.3	D	9.0	D	8.5	8.6	6.7	11.5	
2021	8.3	8.4	8.2	7.5	9.5	6.1	D	8.3	D	7.6	10.9	10.9	2.7	
Unknown (%) ^d														
1991	13.2	12.1	15.6	13.8	11.8	17.4	21.1	12.1	25.8	13.6	na	7.7	8.5	
1996	12.5	10.9	15.5	12.6	12.4	10.3	10.0	14.2	22.6	12.0	na	10.7	14.3	
2001	8.2	7.4	9.4	8.0	8.7	8.1	0.0	9.6	14.4	7.4	3.4	13.0	16.4	
2006	7.7	7.1	8.4	7.8	7.4	10.4	0.0	9.8	12.2	7.0	4.2	15.7	17.0	
2011	10.6	10.4	10.7	9.8	11.5	11.5	D	12.3	10.9	9.2	D	19.0	11.0	
2016	9.1	9.0	9.3	8.6	9.9	9.7	22.2	10.8	10.9	7.9	10.8	13.3	11.5	
2021	14.8	15.1	14.4	12.8	17.5	13.7	13.0	15.4	12.8	12.2	10.3	23.4	32.4	

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

^a Includes respondents who did not report sex and respondents who did not report citizenship status.^b Includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.^c Before 2001, this category included respondents who selected More than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.^d Percentages based on number reporting definite commitments for postdoctoral study or training.**Source(s):**

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

Table 2-6

Employment sector of research doctorate recipients with definite postgraduation commitments for employment in the United States, by historical broad field of doctorate: Selected years, 1991–2021

(Number and percent)

Employment commitment, sector, and year	All fields	Science and engineering						Non-science and engineering			
		Total	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Total	Education	Humanities and arts	Other ^b
All U.S. employment commitments (number)											
1991	15,465	8,102	1,427	1,092	745	3,007	1,831	7,363	3,997	2,069	1,297
1996	16,273	8,665	1,542	1,023	806	2,865	2,429	7,608	4,113	2,285	1,210
2001	17,304	9,660	1,848	1,270	845	3,070	2,627	7,644	3,710	2,712	1,222
2006	17,681	9,888	1,993	1,026	1,190	2,993	2,686	7,793	3,717	2,631	1,445
2011	14,167	8,603	1,746	919	1,077	2,586	2,275	5,564	2,369	1,952	1,243
2016	16,303	10,812	2,300	1,265	1,480	2,841	2,926	5,491	2,435	1,717	1,339
2021	17,404	12,360	2,908	1,324	1,820	2,774	3,534	5,044	2,286	1,437	1,321
Academe (%) ^c											
1991	52.1	43.0	51.1	21.0	64.4	52.3	25.8	62.1	46.6	80.2	81.3
1996	48.8	38.1	51.8	24.8	46.8	53.4	14.1	61.1	46.4	79.2	76.5
2001	48.4	36.2	45.8	20.2	45.8	54.0	13.4	63.7	49.0	79.1	74.4
2006	51.1	39.8	47.4	27.7	44.4	59.9	14.3	65.5	51.0	80.8	74.7
2011	51.8	39.1	48.7	25.8	36.4	60.9	13.6	71.4	57.9	82.5	79.6
2016	44.6	32.6	38.4	20.0	29.5	54.2	14.0	68.1	58.2	76.3	75.7
2021	35.9	25.8	30.5	14.9	26.3	43.8	11.6	60.5	53.9	64.7	67.4
Government (%) ^c											
1991	8.6	11.9	14.8	13.6	4.4	12.3	11.1	5.0	6.6	2.2	4.4
1996	7.9	10.9	15.2	9.4	4.1	11.3	10.6	4.6	6.4	1.3	4.5
2001	6.5	8.7	11.6	6.7	4.0	10.4	7.3	3.6	4.5	2.1	4.7
2006	6.0	8.1	12.0	7.1	4.3	9.5	5.6	3.4	3.8	2.1	4.8
2011	8.0	11.1	13.3	10.9	7.9	11.1	10.9	3.2	3.2	2.4	4.5
2016	7.3	9.2	10.4	8.8	3.4	12.3	8.2	3.8	3.8	2.4	5.5
2021	7.7	8.9	9.1	8.9	3.7	14.5	7.1	4.8	4.2	3.5	7.0
Industry or business (%) ^{c,d}											
1991	21.1	35.3	25.2	61.6	28.6	17.0	60.3	5.6	5.7	3.5	8.5
1996	25.9	42.4	24.5	62.6	46.4	17.7	73.0	7.2	6.3	5.0	14.1
2001	29.4	46.4	33.1	68.3	44.9	20.4	76.0	7.9	6.6	6.5	15.1
2006	25.0	40.6	25.8	56.4	45.7	13.9	72.9	5.2	3.6	3.8	11.7
2011	26.9	40.7	26.6	56.4	51.3	13.6	71.1	5.6	4.3	4.4	9.9
2016	34.6	48.9	37.6	65.8	62.0	19.1	72.9	6.4	4.8	5.1	11.0
2021	43.2	56.5	48.9	70.3	65.8	27.1	75.8	10.7	8.0	8.8	17.3
Nonprofit organization (%) ^c											
1991	6.7	7.0	7.1	2.7	2.0	12.5	2.3	6.5	5.6	9.7	4.2
1996	6.1	6.1	6.7	1.7	1.6	12.2	1.9	6.1	4.5	10.4	3.5
2001	5.3	5.5	6.5	2.4	2.7	9.8	2.1	5.1	4.4	7.0	3.2
2006	4.5	4.7	6.2	2.5	1.4	7.7	2.5	4.3	4.3	4.7	3.5
2011	5.7	6.0	8.7	3.9	2.8	9.2	2.7	5.1	5.4	6.1	3.1
2016	5.7	5.6	9.2	3.2	2.8	7.9	3.1	5.8	5.4	7.7	4.0
2021	6.7	6.2	8.7	3.9	2.8	9.9	3.7	8.1	6.5	12.8	5.8

Table 2-6**Employment sector of research doctorate recipients with definite postgraduation commitments for employment in the United States, by historical broad field of doctorate: Selected years, 1991–2021**

(Number and percent)

Employment commitment, sector, and year	All fields	Science and engineering						Non-science and engineering			
		Total	Life sciences ^a	Physical sciences and earth sciences	Mathematics and computer sciences	Psychology and social sciences	Engineering	Total	Education	Humanities and arts	Other ^b
Other or unknown (%) ^{c,e}											
1991	11.4	2.8	1.8	1.0	0.5	5.9	0.4	20.8	35.6	4.4	1.6
1996	11.2	2.5	1.8	1.6	1.1	5.4	0.4	21.1	36.3	4.1	1.3
2001	10.4	3.2	3.0	2.5	2.6	5.4	1.1	19.6	35.5	5.4	2.6
2006	13.4	6.9	8.6	6.2	4.2	9.0	4.7	21.7	37.3	8.6	5.3
2011	7.7	3.1	2.7	3.0	1.6	5.2	1.8	14.7	29.3	4.6	2.8
2016	7.8	3.7	4.4	2.2	2.2	6.4	1.8	15.9	27.8	8.4	3.8
2021	6.5	2.6	2.8	2.0	1.4	4.7	1.8	15.9	27.3	10.1	2.3

^a Includes agricultural sciences and natural resources, biological and biomedical sciences, and health sciences.^b Includes other non-science and engineering fields not shown separately.^c Percentages based on number reporting definite employment commitments in the United States.^d Includes doctorate recipients who indicated self-employment.^e Other is mainly composed of elementary and secondary schools.**Note(s):**

Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection; the historical fields were constructed using the SED-CIP code crosswalk in [table A-6](#). Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

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 employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021

(Number and percent)

Employment commitment, sector, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
						Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder		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)													
1991	15,465	8,919	6,544	13,845	1,618	409	64	519	605	12,092	na	42	114
1996	16,273	9,066	7,205	14,632	1,629	544	99	1,088	731	12,032	na	87	51
2001	17,304	9,549	7,755	14,385	2,910	626	73	880	834	11,448	148	149	227
2006	17,681	9,432	8,248	13,757	3,892	689	60	861	888	10,827	200	120	112
2011	14,167	7,438	6,728	11,364	2,740	555	D	810	681	8,856	D	69	111
2016	16,303	8,790	7,513	12,573	3,682	759	D	947	790	9,538	332	D	66
2021	17,404	9,216	8,188	12,729	4,578	1,103	44	1,143	1,158	8,634	431	135	81
Academe (%) ^d													
1991	52.1	48.3	57.3	51.8	54.6	62.8	53.1	37.6	58.7	51.7	na	54.8	50.9
1996	48.8	43.3	55.8	50.5	34.1	60.3	54.5	27.5	52.8	51.9	na	57.5	47.1
2001	48.4	42.5	55.6	52.0	30.3	60.7	52.1	34.7	50.5	52.9	54.1	55.7	55.1
2006	51.1	46.3	56.7	54.7	38.3	55.6	66.7	38.7	50.3	56.4	54.0	47.5	50.0
2011	51.8	44.7	59.5	55.5	36.8	62.2	68.1	42.0	57.7	56.3	51.9	62.3	43.2
2016	44.6	38.0	52.3	48.5	31.5	49.8	D	36.4	47.3	49.8	45.8	D	40.9
2021	35.9	29.5	43.1	39.9	24.8	41.8	59.1	30.5	42.6	40.7	38.1	33.3	33.3
Government (%) ^d													
1991	8.6	9.4	7.5	9.4	1.9	7.6	9.4	8.9	8.9	9.5	na	4.8	10.5
1996	7.9	8.7	7.0	8.6	1.6	8.6	15.2	6.3	10.1	8.7	na	8.0	13.7
2001	6.5	7.1	5.8	7.5	1.7	7.5	9.6	5.5	9.5	7.5	5.4	9.4	4.8
2006	6.0	6.2	5.8	7.4	1.2	8.0	8.3	7.9	9.8	7.1	6.0	10.8	8.0
2011	8.0	9.0	6.8	9.5	2.0	10.5	D	9.0	11.3	9.3	8.1	D	17.1
2016	7.3	8.0	6.6	9.0	1.6	8.7	9.4	8.7	12.2	8.7	11.1	13.6	10.6
2021	7.7	8.0	7.4	10.0	1.6	10.1	11.4	7.5	12.7	9.8	10.0	14.8	17.3
Industry or business (%) ^{d,e}													
1991	21.1	27.0	13.2	19.2	38.0	13.4	14.1	46.8	7.9	18.7	na	21.4	26.3
1996	25.9	34.7	14.9	22.2	59.5	15.4	12.1	59.0	10.4	20.0	na	14.9	29.4
2001	29.4	38.4	18.4	22.4	63.8	14.9	20.5	52.0	13.9	21.1	26.4	26.2	23.3
2006	25.0	32.9	15.9	17.1	52.9	14.5	10.0	39.4	9.5	16.1	18.0	18.3	20.5
2011	26.9	35.8	17.1	19.8	56.7	14.4	10.6	39.1	9.0	19.2	D	D	20.7
2016	34.6	43.9	23.8	26.5	62.1	25.2	13.2	43.2	17.1	25.6	28.0	30.7	33.3
2021	43.2	52.1	33.2	33.8	69.4	30.0	D	50.4	21.6	33.9	34.6	D	30.9
Nonprofit organization (%) ^d													
1991	6.7	6.4	7.2	7.2	2.9	6.8	D	3.3	5.0	7.5	na	D	8.8
1996	6.1	5.3	7.1	6.6	2.2	6.8	D	4.2	5.1	6.9	na	D	2.0
2001	5.3	4.7	6.0	5.9	2.3	6.2	6.8	5.1	4.8	6.1	6.1	4.7	5.3

Table 2-7**Employment sector of research doctorate recipients with definite postgraduation commitments for employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021**

(Number and percent)

Employment commitment, sector, and year	Total ^a	Sex		Citizenship status		U.S. citizens and permanent residents							
						Hispanic or Latino	Not Hispanic or Latino						Ethnicity not reported
		Male	Female	U.S. citizen or permanent resident	Temporary visa holder		American Indian or Alaska Native	Asian ^b	Black or African American	White	More than one race	Other race or race not reported ^c	
2006	4.5	3.4	5.7	5.2	2.1	4.6	D	4.8	6.1	5.2	4.0	D	3.6
2011	5.7	4.9	6.5	6.4	2.7	6.1	12.8	5.8	5.9	6.4	8.9	8.7	6.3
2016	5.7	4.5	7.0	6.7	2.5	6.1	11.3	7.3	7.2	6.6	6.3	6.8	7.6
2021	6.7	5.9	7.7	8.2	2.7	8.4	D	7.7	9.7	7.9	9.0	D	9.9
Other or unknown (%) ^{d,f}													
1991	11.4	8.9	14.8	12.4	2.5	9.3	20.3	3.5	19.5	12.6	na	11.9	3.5
1996	11.2	8.0	15.3	12.2	2.6	8.8	14.1	3.0	21.6	12.6	na	10.3	7.8
2001	10.4	7.3	14.3	12.1	1.9	10.7	11.0	2.7	21.3	12.5	8.1	4.0	11.5
2006	13.4	11.2	15.9	15.6	5.5	17.3	8.3	9.3	24.3	15.2	18.0	15.0	17.9
2011	7.7	5.5	10.1	8.8	1.9	6.8	6.4	4.1	16.2	8.7	10.2	10.1	12.6
2016	7.8	5.6	10.3	9.4	2.3	10.3	5.7	4.4	16.2	9.3	8.7	9.1	7.6
2021	6.5	4.6	8.6	8.2	1.6	9.7	11.4	3.8	13.5	7.8	8.4	8.9	8.6

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

^a Includes respondents who did not report sex and respondents who did not report citizenship.^b Includes Native Hawaiians or Other Pacific Islanders through 2000 but excludes them since 2001.^c Before 2001, this category included respondents who selected More than one race. Since 2001, this category has included Native Hawaiians or Other Pacific Islanders, who previously had been included in the category Asian.^d Percentages based on number reporting definite employment commitments and sector.^e Includes doctorate recipients who indicated self-employment.^f Other is mainly composed of elementary and secondary schools.**Note(s):**

Due to rounding, percentages may not sum to 100.

Source(s):

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

Table 2-8

Research doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country or economy of citizenship: 2015–21

(Number and percent)

Country or economy of citizenship	2015		2016		2017		2018		2019		2020		2021	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
All temporary visa holders reporting intention to stay	16,129	71.3	16,477	72.5	16,288	74.3	17,582	72.0	18,324	71.2	18,476	73.0	17,638	71.3
Africa	649	66.4	653	70.8	700	70.9	745	70.6	743	72.0	788	72.6	758	74.0
Egypt	129	62.8	117	66.7	156	69.9	156	73.7	163	74.8	127	81.1	133	80.5
Nigeria	83	75.9	112	83.9	113	77.9	147	75.5	145	81.4	161	79.5	193	78.2
Ghana	83	65.1	87	70.1	85	71.8	103	66.0	88	72.7	106	73.6	88	79.5
Libya	60	71.7	67	65.7	48	75.0	56	76.8	61	68.9	61	77.0	56	78.6
Kenya	57	68.4	60	66.7	57	63.2	50	68.0	38	78.9	57	70.2	53	58.5
Ethiopia	28	75.0	42	85.7	31	83.9	31	D	35	71.4	28	82.1	30	76.7
South Africa	25	52.0	20	60.0	20	45.0	26	53.8	29	51.7	24	54.2	23	60.9
Uganda	23	60.9	16	56.3	19	47.4	20	50.0	20	45.0	30	53.3	28	42.9
Zimbabwe	22	77.3	15	D	24	D	18	66.7	16	D	22	D	18	D
Cameroon	20	D	17	D	23	D	17	70.6	18	D	14	D	11	D
Tunisia	10	D	11	72.7	14	D	8	D	14	D	15	D	13	D
Tanzania	15	40.0	6	D	17	29.4	9	D	7	D	10	D	12	D
Other	94	59.6	83	59.0	93	67.7	104	66.3	109	60.6	133	59.4	100	69.0
Americas	1,480	55.7	1,503	57.5	1,445	56.5	1,474	60.0	1,534	60.8	1,663	60.3	1,492	64.5
Canada	454	56.6	408	56.6	409	59.2	431	62.2	427	62.3	398	57.8	367	54.8
Brazil	149	50.3	156	56.4	168	61.3	178	61.2	253	63.6	318	60.7	273	72.5
Mexico	194	53.1	221	61.1	180	69.4	185	71.4	187	64.2	236	64.0	214	72.0
Colombia	183	68.3	187	61.5	190	48.4	205	52.7	202	58.9	191	60.2	190	66.8
Chile	103	32.0	130	32.3	128	25.8	91	39.6	100	35.0	106	43.4	85	54.1
Argentina	64	53.1	65	61.5	52	69.2	60	66.7	52	61.5	64	68.8	46	63.0
Peru	53	66.0	56	69.6	50	70.0	46	50.0	51	76.5	55	72.7	48	72.9
Ecuador	42	38.1	42	40.5	49	36.7	44	38.6	50	42.0	49	63.3	54	59.3
Jamaica	36	69.4	34	76.5	29	69.0	44	54.5	32	68.8	30	80.0	30	60.0
Costa Rica	31	38.7	33	42.4	24	45.8	28	50.0	26	38.5	31	41.9	35	51.4
Venezuela	29	75.9	27	D	31	67.7	26	76.9	28	82.1	32	D	30	D
Uruguay	19	68.4	13	D	7	D	15	D	18	55.6	15	46.7	16	50.0
Guatemala	17	52.9	12	D	12	41.7	12	D	11	D	17	70.6	13	46.2
Honduras	11	D	15	D	12	58.3	14	D	13	D	10	D	13	100.0
Dominican Republic	10	D	13	D	8	D	10	50.0	6	D	18	33.3	8	D
Other	85	60.0	91	D	96	63.5	85	74.1	78	66.7	93	D	70	67.1
Asia	10,885	76.0	11,016	78.1	10,640	80.0	11,323	77.5	11,622	77.2	11,816	79.0	11,557	75.5
China ^a	5,374	81.1	5,527	81.0	5,553	83.3	6,188	79.4	6,316	79.2	6,336	80.1	6,148	74.4
India	2,229	84.6	2,195	87.2	1,970	88.5	2,045	87.1	2,056	85.9	2,250	88.0	2,291	86.1
South Korea	1,234	62.9	1,229	66.7	1,128	68.5	1,039	63.6	1,168	65.3	1,056	67.0	1,025	64.5
Taiwan	614	70.4	592	77.9	520	76.7	514	78.0	492	73.4	468	76.9	409	74.1
Bangladesh	154	87.7	185	90.3	236	88.1	280	88.2	292	86.0	392	86.0	397	88.2
Nepal	177	88.1	222	88.7	221	91.9	225	88.9	241	89.6	226	94.7	251	93.2
Thailand	220	21.4	185	30.3	171	25.7	177	31.1	159	30.2	127	30.7	124	D
Sri Lanka	133	76.7	132	78.0	146	81.5	150	85.3	151	83.4	174	85.1	180	76.7
Vietnam	134	74.6	124	71.8	133	75.9	122	80.3	168	76.2	167	73.7	150	80.7
Japan	164	39.6	166	53.6	117	58.1	118	50.0	128	51.6	114	50.0	122	50.0
Pakistan	124	54.0	102	45.1	113	54.0	110	59.1	112	64.3	157	70.7	135	64.4
Singapore	102	36.3	91	38.5	101	41.6	81	25.9	100	38.0	107	49.5	70	38.6

Table 2-8**Research doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country or economy of citizenship: 2015–21**

(Number and percent)

Country or economy of citizenship	2015		2016		2017		2018		2019		2020		2021	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Indonesia	53	37.7	92	43.5	69	50.7	81	34.6	79	43.0	77	44.2	76	47.4
Malaysia	79	38.0	72	55.6	65	47.7	83	59.0	71	50.7	59	52.5	61	70.5
Philippines	40	75.0	51	76.5	47	70.2	57	73.7	38	65.8	45	64.4	58	51.7
Kazakhstan	11	D	12	D	6	D	8	D	11	D	17	70.6	18	72.2
Myanmar	6	D	8	D	6	D	6	D	9	D	9	D	7	D
Other	37	64.9	31	58.1	38	57.9	39	69.2	31	71.0	35	60.0	35	68.6
Australia-Oceania	83	55.4	65	61.5	79	62.0	66	57.6	81	71.6	80	63.8	69	63.8
Australia	52	48.1	42	66.7	47	72.3	37	64.9	53	73.6	51	66.7	39	64.1
New Zealand	26	65.4	23	52.2	D	D	23	56.5	D	D	D	D	30	63.3
Other	5	80.0	0	0.0	D	D	6	16.7	D	D	D	D	0	0.0
Europe	1,832	61.4	1,776	62.7	1,785	67.4	1,807	63.3	1,757	64.4	1,711	67.2	1,677	63.9
Turkey	469	59.7	472	57.6	496	61.1	454	59.7	406	64.5	371	70.1	330	63.0
Germany	195	51.3	183	61.2	154	68.2	144	54.2	152	57.9	151	54.3	187	58.3
Italy	126	65.1	167	65.9	161	70.8	139	72.7	174	63.8	170	64.1	145	57.2
Russian Federation	118	78.0	108	69.4	112	81.3	154	73.4	111	73.0	120	82.5	110	67.3
United Kingdom	100	55.0	115	54.8	103	60.2	110	60.0	128	62.5	119	66.4	153	58.8
France	131	58.8	105	66.7	107	69.2	133	64.7	118	67.8	118	66.9	105	67.6
Spain	98	60.2	73	61.6	100	74.0	104	61.5	130	57.7	122	62.3	128	71.9
Greece	84	71.4	84	71.4	89	73.0	114	78.1	90	73.3	89	77.5	112	75.0
Romania	57	82.5	51	88.2	43	81.4	47	61.7	48	D	25	D	27	77.8
Ukraine	42	85.7	31	71.0	37	83.8	35	74.3	43	81.4	43	83.7	32	75.0
Poland	48	70.8	27	70.4	30	66.7	33	60.6	34	70.6	34	61.8	34	73.5
Netherlands	23	56.5	40	50.0	27	55.6	30	66.7	38	55.3	39	59.0	39	43.6
Switzerland	23	65.2	18	44.4	32	65.6	42	38.1	21	38.1	22	63.6	27	66.7
Bulgaria	34	70.6	44	88.6	30	D	23	78.3	21	D	15	D	16	D
Portugal	24	45.8	33	39.4	32	56.3	25	52.0	24	62.5	20	55.0	17	58.8
Serbia	28	78.6	25	80.0	20	70.0	16	D	21	71.4	24	D	21	D
Hungary	23	56.5	20	45.0	20	D	20	40.0	17	D	24	66.7	15	60.0
Ireland	26	42.3	21	61.9	13	61.5	20	55.0	24	45.8	17	D	7	D
Austria	16	31.3	21	71.4	17	D	14	50.0	17	52.9	22	54.5	20	50.0
Belgium	17	41.2	15	40.0	16	31.3	18	55.6	13	53.8	16	50.0	16	D
Sweden	18	50.0	19	63.2	14	64.3	14	64.3	12	D	15	46.7	7	D
Cyprus	13	61.5	14	64.3	16	68.8	11	45.5	9	D	11	D	10	D
Croatia	12	50.0	13	46.2	17	76.5	10	D	6	D	7	D	8	D
Albania	7	D	10	D	8	75.0	9	88.9	14	D	12	D	9	D
Finland	10	50.0	12	50.0	11	54.5	6	D	7	D	10	50.0	7	D
Other	90	D	55	D	80	D	82	62.2	79	64.6	95	56.8	95	58.9
Middle East	1,131	66.9	1,309	63.9	1,500	62.1	1,749	62.3	2,079	56.6	2,102	58.0	1,732	58.1
Iran	629	89.7	695	91.1	767	92.6	935	91.4	964	91.5	963	92.2	809	91.5
Saudi Arabia	134	14.2	238	10.1	339	10.3	403	14.9	554	12.8	614	14.3	477	9.9
Iraq	15	53.3	28	25.0	50	36.0	122	27.0	202	19.8	192	35.4	151	44.4
Jordan	128	44.5	98	44.9	114	44.7	77	57.1	89	56.2	114	51.8	83	59.0
Israel	86	59.3	83	51.8	77	49.4	64	50.0	80	53.8	69	50.7	65	55.4
Lebanon	39	64.1	57	70.2	52	78.8	51	76.5	53	79.2	39	84.6	41	D
Kuwait	29	D	42	D	38	D	46	D	68	7.4	45	11.1	46	10.9
Syria	6	D	12	D	9	D	7	D	12	D	10	D	6	D

Table 2-8**Research doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country or economy of citizenship: 2015–21**

(Number and percent)

Country or economy of citizenship	2015		2016		2017		2018		2019		2020		2021	
	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying	Number	% staying
Oman	7	D	6	D	10	D	13	D	7	D	8	D	10	D
Other	58	43.1	50	58.0	44	61.4	31	54.8	50	62.0	48	64.6	44	68.2
Country or economy unknown	69	47.8	155	12.9	139	62.6	418	45.5	508	49.4	316	48.4	353	56.7

D = suppressed to avoid disclosure of confidential information.

^a Includes Hong Kong.**Note(s):**

Percentages based on all doctorate recipients on temporary visas who indicated where they intended to stay after graduation (United States vs. foreign location) 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**

(Number)

Field of doctorate	2021
All fields	52,250
Science and engineering	41,356
Agricultural sciences and natural resources	1,223
Agricultural, animal, plant, and veterinary sciences	807
Agronomy and crop science	69
Animal sciences	160
Food science and technology	175
Plant sciences	152
Soil sciences	79
Veterinary biomedical and clinical sciences	78
Agricultural, animal, plant, and veterinary sciences nec	94
Natural resources and conservation	416
Environmental science	117
Environmental/ natural resources management and policy	78
Forestry	74
Natural resources conservation and research	74
Natural resources and conservation nec	73
Biological and biomedical sciences	8,259
Biochemistry, biophysics, and molecular biology	1,348
Biochemistry	417
Biochemistry and molecular biology	263
Biophysics	206
Molecular biology	260
Biochemistry, biophysics, and molecular biology nec	202
Bioinformatics, biostatistics, and computational biology	563
Bioinformatics	136
Biostatistics	224
Computational biology	106
Bioinformatics, biostatistics, and computational biology nec	97
Cell/ cellular biology and anatomy	657
Cell/ cellular and molecular biology	482
Developmental biology and embryology	103
Cell/ cellular biology and anatomy nec	72
Ecology, evolutionary biology, and epidemiology	984
Ecology	227
Ecology and evolutionary biology	243
Epidemiology	298
Epidemiology and biostatistics	54
Evolutionary biology	68
Ecology, evolutionary biology, and epidemiology nec	94
Genetics and genomics	398
Genetics, general	121
Genome sciences and genomics	72
Human/ medical genetics	62
Molecular genetics	72
Genetics nec	71
Microbiology and immunology	974
Immunology	303
Microbiology and immunology	217
Microbiology, general	257
Virology	107

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

(Number)

Field of doctorate	2021
Microbiology and immunology nec	90
Neurobiology and neurosciences	1,014
Cognitive neuroscience	102
Neurobiology and anatomy	94
Neuroscience	686
Neurobiology and neurosciences nec	132
Pharmacology and toxicology	311
Pharmacology	131
Toxicology	106
Pharmacology and toxicology nec	74
Physiology, oncology and cancer biology	713
Biomechanics	77
Exercise physiology and kinesiology	76
Oncology and cancer biology	315
Physiology, general	76
Physiology, oncology and cancer biology nec	169
Biological and biomedical sciences, other	1,297
Biology/ biological sciences, general	331
Biomedical sciences, general	331
Botany and plant biology	62
Entomology	114
Plant physiology and biology nec	60
Plant pathology and phytopathology	119
Zoology and animal biology	96
Biological and biomedical sciences nec	184
Computer and information sciences	2,195
Computer science	1,545
Computer science	1,545
Computer and information sciences, other	650
Artificial intelligence	167
Computer and information sciences, general	110
Computer systems networking and telecommunications	113
Informatics and information technology	88
Information science/ studies	103
Computer and information sciences nec	69
Engineering	9,563
Biological, biomedical, and biosystems engineering	1,071
Bioengineering and biomedical engineering	978
Biological/ biosystems engineering and biomedical technology	93
Chemical and petroleum engineering	1,292
Chemical and biomolecular engineering	189
Chemical engineering	803
Petroleum engineering	132
Chemical and petroleum engineering nec	168
Civil, environmental, and transportation engineering	1,020
Civil engineering	571
Environmental/ environmental health engineering	93
Geotechnical and geoenvironmental engineering	76
Structural engineering	135
Transportation and highway engineering	76
Civil, environmental, and transportation engineering nec	69

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

(Number)

Field of doctorate	2021
Electrical and computer engineering	2,047
Computer engineering	264
Electrical and computer engineering	1,205
Electrical and electronics engineering	512
Electrical and computer engineering nec	66
Engineering technologies	452
Electrical and electronic engineering technologies	80
Electromechanical technologies	59
Environmental control technologies	148
Engineering technologies nec	165
Industrial engineering and operations research	604
Industrial engineering	325
Operations research	160
Systems and manufacturing engineering	119
Materials and mining engineering	672
Materials engineering	194
Materials science and engineering	429
Materials and mining engineering nec	49
Mechanical engineering	1,413
Mechanical engineering, general	1,413
Engineering, other	992
Aerospace, aeronautical, astronautical, and space engineering	350
Engineering mechanics, physics, and science	111
Nanotechnology	61
Nuclear engineering	156
Engineering nec	314
Geosciences, atmospheric, and ocean sciences	1,044
Geological and earth sciences	613
Geochemistry	60
Geology	109
Geology/ earth science, general	104
Geophysics and seismology	101
Hydrology and water resources science	81
Geological and earth sciences nec	158
Ocean/ marine sciences and atmospheric science	431
Atmospheric sciences and meteorology, general	94
Climatology, atmospheric chemistry and physics	60
Marine biology and biological oceanography	89
Marine sciences	57
Oceanography, chemical and physical	84
Atmospheric sciences and meteorology nec	47
Health sciences	2,582
Nursing and nursing science	603
Nursing education	89
Nursing science	357
Nursing specialties and practice	157
Pharmacy and pharmaceutical sciences	408
Medicinal and pharmaceutical chemistry	64
Pharmaceutical sciences	243
Pharmacy, pharmaceutical sciences, and administration nec	101
Public health	696

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

(Number)

Field of doctorate	2021
Environmental health	66
Health services research	86
Health/ medical physics	70
Public health education and promotion	95
Public health, general	179
Public health nec	200
Health sciences, other	875
Communication disorders sciences	127
Exercise science and kinesiology	92
Health sciences, general	66
Marriage and family therapy/ counseling	58
Medical clinical science	60
Medical, biomedical, and health informatics	61
Mental health, counseling, and therapy services and sciences	91
Rehabilitation and therapeutic sciences	121
Health sciences nec	199
Mathematics and statistics	1,915
Applied mathematics	475
Applied mathematics, general	265
Computational and applied mathematics	141
Applied mathematics nec	69
Mathematics	827
Algebra and number theory	69
Mathematics, general	640
Mathematics nec	118
Statistics	613
Applied statistics, general	56
Mathematics and statistics	90
Statistics	402
Statistics nec	65
Multidisciplinary/ interdisciplinary sciences	1,299
Interdisciplinary computer sciences	448
Computer science and engineering	119
Electrical engineering and computer science	224
Interdisciplinary computer sciences nec	105
Multidisciplinary/ interdisciplinary sciences, other	851
Behavioral and cognitive sciences	79
Computational science and engineering	104
Data science and data analytics	106
History/ philosophy of science, technology and society	68
Nanoscience/ nanoscale science	57
Nutrition sciences	138
Multidisciplinary/ interdisciplinary sciences nec	299
Physical sciences	4,811
Astronomy and astrophysics	263
Astronomy	71
Astrophysics	113
Astronomy and astrophysics nec	79
Chemistry	2,369
Analytical chemistry	321
Chemical biology	151

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

(Number)

Field of doctorate	2021
Chemistry, general	495
Inorganic chemistry	283
Organic chemistry	454
Physical chemistry	293
Polymer chemistry	121
Theoretical chemistry	108
Chemistry nec	143
Materials sciences	429
Materials science	276
Materials chemistry and materials science nec	153
Physics	1,750
Applied physics	133
Atomic/ molecular physics	89
Condensed matter and materials physics	358
Elementary particle physics	166
Nuclear physics	79
Optics/ optical sciences	120
Physics and astronomy	193
Physics, general	339
Plasma and high-temperature physics	57
Theoretical and mathematical physics	99
Physics and physical sciences nec	117
Psychology	3,716
Clinical psychology	1,256
Clinical child psychology	52
Clinical psychology	1,204
Counseling and applied psychology	1,338
Applied behavior analysis	59
Counseling psychology	365
Educational psychology	229
Industrial and organizational psychology	181
School psychology	259
Counseling and applied psychology nec	245
Research and experimental psychology	651
Behavioral neuroscience	87
Cognitive psychology and psycholinguistics	106
Developmental and child psychology	78
Experimental psychology	98
Social psychology	143
Research and experimental psychology nec	139
Psychology, other	471
Human development	142
Psychology, general	261
Psychology nec	68
Social sciences	4,749
Anthropology	388
Anthropology, general	80
Cultural anthropology	186
Physical and biological anthropology	71
Anthropology nec	51
Area, ethnic, cultural, gender, and group studies	383

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

(Number)

Field of doctorate	2021
Area studies	224
Ethnic studies	81
Area, ethnic, cultural, gender, and group studies nec	78
Economics	1,317
Agricultural economics	76
Applied economics	134
Development economics and international development	54
Econometrics and quantitative economics	145
Economics, general	802
Environmental/ natural resource economics	54
Economics nec	52
Political science and government	581
Political science and government, general	488
Political science and government nec	93
Public policy analysis	399
Education policy analysis	131
Health policy analysis	52
Public policy analysis, general	158
Public policy nec	58
Sociology, demography, and population studies	578
Sociology, general	501
Sociology, demography, and population studies nec	77
Social sciences, other	1,103
Applied linguistics	74
Archeology	83
Criminal justice and corrections	126
Criminology	97
Geography and cartography	223
International relations and national security studies	105
Linguistics	203
Social sciences nec	192
Non-science and engineering	10,894
Business	1,340
Business administration and management	456
Business management and administration	235
Organizational leadership	117
Business administration and management nec	104
Business, other	884
Accounting and accounting-related	135
Finance and financial management	192
Management information systems	88
Management sciences	73
Marketing	119
Organizational behavior studies	103
Business nec	174
Education	3,711
Education leadership and administration	1,082
Educational leadership and administration, general	500
Higher education and community college administration	391
Education leadership and administration nec	191
Education research	1,204

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

(Number)

Field of doctorate	2021
Curriculum and instruction	425
Educational assessment, evaluation, and research methods	222
Educational/ instructional technology and media design	155
Higher education evaluation and research	61
Student counseling and personnel services	267
Education research nec	74
Teacher education	1,010
Adult, continuing, and workforce education and development	66
Bilingual, multilingual, and multicultural education	77
Mathematics teacher education	75
Music teacher education	73
Special education and teaching	235
STEM educational methods	70
Teacher education, science and engineering	68
Teacher education, specific levels and methods	154
Teacher education, specific subject areas	192
Education, other	415
Education, general	268
Education nec	147
Humanities	3,076
English language and literature, letters	933
American literature (United States)	113
Creative writing	68
English language and literature, general	362
English literature (British and commonwealth)	131
Rhetoric and composition, and writing studies	190
English language and literature nec	69
Foreign languages, literatures, and linguistics	505
Comparative literature	118
Hispanic/ Latin American languages, literatures, and linguistics	70
Romance languages, literatures, and linguistics	72
Spanish language and literature	79
Foreign languages, literatures, and linguistics nec	166
History	672
American history (United States)	209
European history	88
History, general	169
History, regional focus	133
History nec	73
Philosophy and religious studies	592
Philosophy	399
Religion/ religious studies	126
Philosophy and religious studies nec	67
Humanities, other	374
Bible/ biblical studies	71
Humanities and humanistic studies	62
Theological and ministerial studies	241
Visual and performing arts	771
Performing arts	491
Dance, drama, theatre arts and stagecraft	82
Music performance	128

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

(Number)

Field of doctorate	2021
Music theory and composition	86
Music nec	79
Musicology and ethnomusicology	116
Visual arts, media studies/ design	280
Art history, criticism and conservation	167
Film, cinema, and media studies	62
Visual arts, media studies/ design, and arts management nec	51
Other non-science and engineering	1,996
Communications and journalism	520
Applied communication, advertising, and public relations	94
Communication and media studies	160
Communication, general	85
Mass communication/ media studies	95
Communications and journalism nec	86
Multidisciplinary/ interdisciplinary studies	331
Classical and ancient studies	91
Multidisciplinary/ interdisciplinary studies nec	240
Public administration and social services	490
Public administration	202
Social work and human services	288
Non-science and engineering, other	655
Architecture and architectural studies	134
City/ urban, community, and regional planning	101
Family, consumer sciences and human sciences	140
Homeland security and protective services	50
Law, legal studies and research	80
Parks, recreation, leisure, fitness, and sport studies and management	87
Other non-science and engineering nec	63

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
All fields	52,250	28,082	24,156	46.2
Science and engineering	41,356	23,408	17,939	43.4
Agricultural sciences and natural resources	1,223	602	621	50.8
Agricultural, animal, plant, and veterinary sciences	807	404	403	49.9
Agronomy and crop science	69	46	23	33.3
Animal sciences	160	82	78	48.8
Food science and technology	175	76	99	56.6
Plant sciences	152	86	66	43.4
Soil sciences	79	35	44	55.7
Veterinary biomedical and clinical sciences	78	31	47	60.3
Agricultural, animal, plant, and veterinary sciences nec	94	48	46	48.9
Natural resources and conservation	416	198	218	52.4
Environmental science	117	54	63	53.8
Environmental/ natural resources management and policy	78	39	39	50.0
Forestry	74	38	36	48.6
Natural resources conservation and research	74	25	49	66.2
Natural resources and conservation nec	73	42	31	42.5
Biological and biomedical sciences	8,259	3,946	4,312	52.2
Biochemistry, biophysics, and molecular biology	1,348	718	630	46.7
Biochemistry	417	215	202	48.4
Biochemistry and molecular biology	263	130	133	50.6
Biophysics	206	143	63	30.6
Molecular biology	260	113	147	56.5
Biochemistry, biophysics, and molecular biology nec	202	117	85	42.1
Bioinformatics, biostatistics, and computational biology	563	329	234	41.6
Bioinformatics	136	85	51	37.5
Biostatistics	224	115	109	48.7
Computational biology	106	67	39	36.8
Bioinformatics, biostatistics, and computational biology nec	97	62	35	36.1
Cell/ cellular biology and anatomy	657	311	346	52.7
Cell/ cellular and molecular biology	482	233	249	51.7
Developmental biology and embryology	103	45	58	56.3
Cell/ cellular biology and anatomy nec	72	33	39	54.2
Ecology, evolutionary biology, and epidemiology	984	395	589	59.9
Ecology	227	91	136	59.9
Ecology and evolutionary biology	243	115	128	52.7
Epidemiology	298	86	212	71.1
Epidemiology and biostatistics	54	22	32	59.3
Evolutionary biology	68	36	32	47.1
Ecology, evolutionary biology, and epidemiology nec	94	45	49	52.1
Genetics and genomics	398	189	209	52.5
Genetics, general	121	52	69	57.0
Genome sciences and genomics	72	38	34	47.2
Human/ medical genetics	62	25	37	59.7
Molecular genetics	72	33	39	54.2
Genetics nec	71	41	30	42.3
Microbiology and immunology	974	425	549	56.4
Immunology	303	141	162	53.5
Microbiology and immunology	217	93	124	57.1
Microbiology, general	257	105	152	59.1
Virology	107	50	57	53.3

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Microbiology and immunology nec	90	36	54	60.0
Neurobiology and neurosciences	1,014	458	556	54.8
Cognitive neuroscience	102	40	62	60.8
Neurobiology and anatomy	94	38	56	59.6
Neuroscience	686	309	377	55.0
Neurobiology and neurosciences nec	132	71	61	46.2
Pharmacology and toxicology	311	147	164	52.7
Pharmacology	131	67	64	48.9
Toxicology	106	43	63	59.4
Pharmacology and toxicology nec	74	37	37	50.0
Physiology, oncology and cancer biology	713	372	341	47.8
Biomechanics	77	48	29	37.7
Exercise physiology and kinesiology	76	48	28	36.8
Oncology and cancer biology	315	148	167	53.0
Physiology, general	76	49	27	35.5
Physiology, oncology and cancer biology nec	169	79	90	53.3
Biological and biomedical sciences, other	1,297	602	694	53.5
Biology/ biological sciences, general	331	148	182	55.0
Biomedical sciences, general	331	147	184	55.6
Botany and plant biology	62	31	31	50.0
Entomology	114	57	57	50.0
Plant physiology and biology nec	60	29	31	51.7
Plant pathology and phytopathology	119	57	62	52.1
Zoology and animal biology	96	43	53	55.2
Biological and biomedical sciences nec	184	90	94	51.1
Computer and information sciences	2,195	1,669	526	24.0
Computer science	1,545	1,209	336	21.7
Computer science	1,545	1,209	336	21.7
Computer and information sciences, other	650	460	190	29.2
Artificial intelligence	167	140	27	16.2
Computer and information sciences, general	110	81	29	26.4
Computer systems networking and telecommunications	113	87	26	23.0
Informatics and information technology	88	53	35	39.8
Information science/ studies	103	53	50	48.5
Computer and information sciences nec	69	46	23	33.3
Engineering	9,563	7,050	2,511	26.3
Biological, biomedical, and biosystems engineering	1,071	636	434	40.5
Bioengineering and biomedical engineering	978	573	404	41.3
Biological/ biosystems engineering and biomedical technology	93	63	30	32.3
Chemical and petroleum engineering	1,292	912	380	29.4
Chemical and biomolecular engineering	189	122	67	35.4
Chemical engineering	803	556	247	30.8
Petroleum engineering	132	114	18	13.6
Chemical and petroleum engineering nec	168	120	48	28.6
Civil, environmental, and transportation engineering	1,020	703	317	31.1
Civil engineering	571	391	180	31.5
Environmental/ environmental health engineering	93	53	40	43.0
Geotechnical and geoenvironmental engineering	76	54	22	28.9
Structural engineering	135	105	30	22.2
Transportation and highway engineering	76	58	18	23.7
Civil, environmental, and transportation engineering nec	69	42	27	39.1

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Electrical and computer engineering	2,047	1,681	366	17.9
Computer engineering	264	208	56	21.2
Electrical and computer engineering	1,205	1,000	205	17.0
Electrical and electronics engineering	512	420	92	18.0
Electrical and computer engineering nec	66	53	13	19.7
Engineering technologies	452	322	130	28.8
Electrical and electronic engineering technologies	80	67	13	16.3
Electromechanical technologies	59	47	12	20.3
Environmental control technologies	148	75	73	49.3
Engineering technologies nec	165	133	32	19.4
Industrial engineering and operations research	604	434	170	28.1
Industrial engineering	325	218	107	32.9
Operations research	160	123	37	23.1
Systems and manufacturing engineering	119	93	26	21.8
Materials and mining engineering	672	459	212	31.5
Materials engineering	194	141	52	26.8
Materials science and engineering	429	286	143	33.3
Materials and mining engineering nec	49	32	17	34.7
Mechanical engineering	1,413	1,154	259	18.3
Mechanical engineering, general	1,413	1,154	259	18.3
Engineering, other	992	749	243	24.5
Aerospace, aeronautical, astronautical, and space engineering	350	294	56	16.0
Engineering mechanics, physics, and science	111	78	33	29.7
Nanotechnology	61	41	20	32.8
Nuclear engineering	156	137	19	12.2
Engineering nec	314	199	115	36.6
Geosciences, atmospheric, and ocean sciences	1,044	583	461	44.2
Geological and earth sciences	613	359	254	41.4
Geochemistry	60	28	32	53.3
Geology	109	62	47	43.1
Geology/ earth science, general	104	55	49	47.1
Geophysics and seismology	101	63	38	37.6
Hydrology and water resources science	81	55	26	32.1
Geological and earth sciences nec	158	96	62	39.2
Ocean/ marine sciences and atmospheric science	431	224	207	48.0
Atmospheric sciences and meteorology, general	94	54	40	42.6
Climatology, atmospheric chemistry and physics	60	31	29	48.3
Marine biology and biological oceanography	89	38	51	57.3
Marine sciences	57	28	29	50.9
Oceanography, chemical and physical	84	46	38	45.2
Atmospheric sciences and meteorology nec	47	27	20	42.6
Health sciences	2,582	806	1,776	68.8
Nursing and nursing science	603	66	537	89.1
Nursing education	89	7	82	92.1
Nursing science	357	38	319	89.4
Nursing specialties and practice	157	21	136	86.6
Pharmacy and pharmaceutical sciences	408	194	214	52.5
Medicinal and pharmaceutical chemistry	64	35	29	45.3
Pharmaceutical sciences	243	116	127	52.3
Pharmacy, pharmaceutical sciences, and administration nec	101	43	58	57.4
Public health	696	222	474	68.1

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Environmental health	66	21	45	68.2
Health services research	86	30	56	65.1
Health/ medical physics	70	45	25	35.7
Public health education and promotion	95	24	71	74.7
Public health, general	179	45	134	74.9
Public health nec	200	57	143	71.5
Health sciences, other	875	324	551	63.0
Communication disorders sciences	127	20	107	84.3
Exercise science and kinesiology	92	55	37	40.2
Health sciences, general	66	18	48	72.7
Marriage and family therapy/ counseling	58	20	38	65.5
Medical clinical science	60	29	31	51.7
Medical, biomedical, and health informatics	61	37	24	39.3
Mental health, counseling, and therapy services and sciences	91	22	69	75.8
Rehabilitation and therapeutic sciences	121	45	76	62.8
Health sciences nec	199	78	121	60.8
Mathematics and statistics	1,915	1,381	534	27.9
Applied mathematics	475	332	143	30.1
Applied mathematics, general	265	176	89	33.6
Computational and applied mathematics	141	107	34	24.1
Applied mathematics nec	69	49	20	29.0
Mathematics	827	641	186	22.5
Algebra and number theory	69	53	16	23.2
Mathematics, general	640	495	145	22.7
Mathematics nec	118	93	25	21.2
Statistics	613	408	205	33.4
Applied statistics, general	56	36	20	35.7
Mathematics and statistics	90	61	29	32.2
Statistics	402	267	135	33.6
Statistics nec	65	44	21	32.3
Multidisciplinary/ interdisciplinary sciences	1,299	762	536	41.3
Interdisciplinary computer sciences	448	349	99	22.1
Computer science and engineering	119	95	24	20.2
Electrical engineering and computer science	224	188	36	16.1
Interdisciplinary computer sciences nec	105	66	39	37.1
Multidisciplinary/ interdisciplinary sciences, other	851	413	437	51.4
Behavioral and cognitive sciences	79	32	47	59.5
Computational science and engineering	104	80	24	23.1
Data science and data analytics	106	72	34	32.1
History/ philosophy of science, technology and society	68	35	33	48.5
Nanoscience/ nanoscale science	57	39	18	31.6
Nutrition sciences	138	31	107	77.5
Multidisciplinary/ interdisciplinary sciences nec	299	124	174	58.2
Physical sciences	4,811	3,246	1,563	32.5
Astronomy and astrophysics	263	162	101	38.4
Astronomy	71	36	35	49.3
Astrophysics	113	79	34	30.1
Astronomy and astrophysics nec	79	47	32	40.5
Chemistry	2,369	1,369	1,000	42.2
Analytical chemistry	321	153	168	52.3
Chemical biology	151	84	67	44.4

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Chemistry, general	495	280	215	43.4
Inorganic chemistry	283	169	114	40.3
Organic chemistry	454	286	168	37.0
Physical chemistry	293	185	108	36.9
Polymer chemistry	121	75	46	38.0
Theoretical chemistry	108	76	32	29.6
Chemistry nec	143	61	82	57.3
Materials sciences	429	299	130	30.3
Materials science	276	200	76	27.5
Materials chemistry and materials science nec	153	99	54	35.3
Physics	1,750	1,416	332	19.0
Applied physics	133	100	33	24.8
Atomic/ molecular physics	89	82	7	7.9
Condensed matter and materials physics	358	286	72	20.1
Elementary particle physics	166	139	27	16.3
Nuclear physics	79	62	17	21.5
Optics/ optical sciences	120	99	21	17.5
Physics and astronomy	193	149	44	22.8
Physics, general	339	273	64	18.9
Plasma and high-temperature physics	57	50	7	12.3
Theoretical and mathematical physics	99	89	10	10.1
Physics and physical sciences nec	117	87	30	25.6
Psychology	3,716	1,005	2,711	73.0
Clinical psychology	1,256	317	939	74.8
Clinical child psychology	52	9	43	82.7
Clinical psychology	1,204	308	896	74.4
Counseling and applied psychology	1,338	334	1,004	75.0
Applied behavior analysis	59	19	40	67.8
Counseling psychology	365	93	272	74.5
Educational psychology	229	56	173	75.5
Industrial and organizational psychology	181	64	117	64.6
School psychology	259	37	222	85.7
Counseling and applied psychology nec	245	65	180	73.5
Research and experimental psychology	651	229	422	64.8
Behavioral neuroscience	87	29	58	66.7
Cognitive psychology and psycholinguistics	106	40	66	62.3
Developmental and child psychology	78	16	62	79.5
Experimental psychology	98	40	58	59.2
Social psychology	143	57	86	60.1
Research and experimental psychology nec	139	47	92	66.2
Psychology, other	471	125	346	73.5
Human development	142	26	116	81.7
Psychology, general	261	75	186	71.3
Psychology nec	68	24	44	64.7
Social sciences	4,749	2,358	2,388	50.3
Anthropology	388	117	271	69.8
Anthropology, general	80	26	54	67.5
Cultural anthropology	186	55	131	70.4
Physical and biological anthropology	71	25	46	64.8
Anthropology nec	51	11	40	78.4
Area, ethnic, cultural, gender, and group studies	383	135	247	64.5

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Area studies	224	88	135	60.3
Ethnic studies	81	33	48	59.3
Area, ethnic, cultural, gender, and group studies nec	78	14	64	82.1
Economics	1,317	870	446	33.9
Agricultural economics	76	42	34	44.7
Applied economics	134	75	59	44.0
Development economics and international development	54	27	27	50.0
Econometrics and quantitative economics	145	101	44	30.3
Economics, general	802	555	246	30.7
Environmental/ natural resource economics	54	35	19	35.2
Economics nec	52	35	17	32.7
Political science and government	581	339	242	41.7
Political science and government, general	488	282	206	42.2
Political science and government nec	93	57	36	38.7
Public policy analysis	399	169	230	57.6
Education policy analysis	131	47	84	64.1
Health policy analysis	52	18	34	65.4
Public policy analysis, general	158	80	78	49.4
Public policy nec	58	24	34	58.6
Sociology, demography, and population studies	578	219	359	62.1
Sociology, general	501	195	306	61.1
Sociology, demography, and population studies nec	77	24	53	68.8
Social sciences, other	1,103	509	593	53.8
Applied linguistics	74	33	41	55.4
Archeology	83	36	47	56.6
Criminal justice and corrections	126	56	70	55.6
Criminology	97	39	58	59.8
Geography and cartography	223	119	104	46.6
International relations and national security studies	105	66	39	37.1
Linguistics	203	92	111	54.7
Social sciences nec	192	68	123	64.1
Non-science and engineering	10,894	4,674	6,217	57.1
Business	1,340	756	584	43.6
Business administration and management	456	259	197	43.2
Business management and administration	235	142	93	39.6
Organizational leadership	117	48	69	59.0
Business administration and management nec	104	69	35	33.7
Business, other	884	497	387	43.8
Accounting and accounting-related	135	71	64	47.4
Finance and financial management	192	138	54	28.1
Management information systems	88	52	36	40.9
Management sciences	73	49	24	32.9
Marketing	119	50	69	58.0
Organizational behavior studies	103	53	50	48.5
Business nec	174	84	90	51.7
Education	3,711	1,111	2,599	70.0
Education leadership and administration	1,082	377	705	65.2
Educational leadership and administration, general	500	188	312	62.4
Higher education and community college administration	391	138	253	64.7
Education leadership and administration nec	191	51	140	73.3
Education research	1,204	370	834	69.3

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Curriculum and instruction	425	127	298	70.1
Educational assessment, evaluation, and research methods	222	83	139	62.6
Educational/ instructional technology and media design	155	56	99	63.9
Higher education evaluation and research	61	21	40	65.6
Student counseling and personnel services	267	67	200	74.9
Education research nec	74	16	58	78.4
Teacher education	1,010	252	757	75.0
Adult, continuing, and workforce education and development	66	17	49	74.2
Bilingual, multilingual, and multicultural education	77	9	68	88.3
Mathematics teacher education	75	21	54	72.0
Music teacher education	73	35	38	52.1
Special education and teaching	235	45	190	80.9
STEM educational methods	70	25	45	64.3
Teacher education, science and engineering	68	26	42	61.8
Teacher education, specific levels and methods	154	25	129	83.8
Teacher education, specific subject areas	192	49	142	74.0
Education, other	415	112	303	73.0
Education, general	268	78	190	70.9
Education nec	147	34	113	76.9
Humanities	3,076	1,619	1,455	47.3
English language and literature, letters	933	363	568	60.9
American literature (United States)	113	49	64	56.6
Creative writing	68	25	43	63.2
English language and literature, general	362	147	213	58.8
English literature (British and commonwealth)	131	55	76	58.0
Rhetoric and composition, and writing studies	190	61	129	67.9
English language and literature nec	69	26	43	62.3
Foreign languages, literatures, and linguistics	505	217	288	57.0
Comparative literature	118	44	74	62.7
Hispanic/ Latin American languages, literatures, and linguistics	70	35	35	50.0
Romance languages, literatures, and linguistics	72	26	46	63.9
Spanish language and literature	79	33	46	58.2
Foreign languages, literatures, and linguistics nec	166	79	87	52.4
History	672	381	291	43.3
American history (United States)	209	114	95	45.5
European history	88	50	38	43.2
History, general	169	95	74	43.8
History, regional focus	133	78	55	41.4
History nec	73	44	29	39.7
Philosophy and religious studies	592	379	213	36.0
Philosophy	399	264	135	33.8
Religion/ religious studies	126	76	50	39.7
Philosophy and religious studies nec	67	39	28	41.8
Humanities, other	374	279	95	25.4
Bible/ biblical studies	71	59	12	16.9
Humanities and humanistic studies	62	22	40	64.5
Theological and ministerial studies	241	198	43	17.8
Visual and performing arts	771	349	422	54.7
Performing arts	491	263	228	46.4
Dance, drama, theatre arts and stagecraft	82	31	51	62.2
Music performance	128	70	58	45.3

Table 3-2**Research doctorate recipients, by detailed field of doctorate and sex: 2021**

(Number and percent)

Field of doctorate	Total ^a	Male	Female	% female
Music theory and composition	86	63	23	26.7
Music nec	79	48	31	39.2
Musicology and ethnomusicology	116	51	65	56.0
Visual arts, media studies/ design	280	86	194	69.3
Art history, criticism and conservation	167	37	130	77.8
Film, cinema, and media studies	62	27	35	56.5
Visual arts, media studies/ design, and arts management nec	51	22	29	56.9
Other non-science and engineering	1,996	839	1,157	58.0
Communications and journalism	520	221	299	57.5
Applied communication, advertising, and public relations	94	35	59	62.8
Communication and media studies	160	69	91	56.9
Communication, general	85	36	49	57.6
Mass communication/ media studies	95	49	46	48.4
Communications and journalism nec	86	32	54	62.8
Multidisciplinary/ interdisciplinary studies	331	151	180	54.4
Classical and ancient studies	91	54	37	40.7
Multidisciplinary/ interdisciplinary studies nec	240	97	143	59.6
Public administration and social services	490	159	331	67.6
Public administration	202	96	106	52.5
Social work and human services	288	63	225	78.1
Non-science and engineering, other	655	308	347	53.0
Architecture and architectural studies	134	72	62	46.3
City/ urban, community, and regional planning	101	40	61	60.4
Family, consumer sciences and human sciences	140	35	105	75.0
Homeland security and protective services	50	34	16	32.0
Law, legal studies and research	80	44	36	45.0
Parks, recreation, leisure, fitness, and sport studies and management	87	38	49	56.3
Other non-science and engineering nec	63	45	18	28.6

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

^a Includes respondents 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	
All fields	52,250	17,638	31,674	2,856	100	3,022	2,431	21,333	1,088	376	468
Science and engineering	41,356	15,259	23,906	2,166	66	2,553	1,459	16,235	834	283	310
Agricultural sciences and natural resources	1,223	477	695	44	4	40	30	538	12	10	17
Agricultural, animal, plant, and veterinary sciences	807	340	440	24	0	23	16	355	5	6	11
Agronomy and crop science	69	27	42	4	0	2	0	34	0	2	0
Animal sciences	160	66	88	2	0	3	0	81	1	0	1
Food science and technology	175	94	77	4	0	6	6	57	0	2	2
Plant sciences	152	57	88	5	0	7	3	69	0	0	4
Soil sciences	79	36	42	1	0	3	4	30	1	2	1
Veterinary biomedical and clinical sciences	78	30	44	4	0	1	2	34	1	0	2
Agricultural, animal, plant, and veterinary sciences nec	94	30	59	4	0	1	1	50	2	0	1
Natural resources and conservation	416	137	255	20	4	17	14	183	7	4	6
Environmental science	117	46	66	5	1	5	4	46	2	2	1
Environmental/ natural resources management and policy	78	37	37	2	1	6	2	25	0	0	1
Forestry	74	28	44	2	0	3	4	33	0	1	1
Natural resources conservation and research	74	13	56	6	2	2	4	37	2	1	2
Natural resources and conservation nec	73	13	52	5	0	1	0	42	3	0	1
Biological and biomedical sciences	8,259	2,067	5,876	571	13	700	269	4,001	214	52	56
Biochemistry, biophysics, and molecular biology	1,348	426	882	82	1	98	40	618	34	7	2
Biochemistry	417	141	262	24	1	22	12	191	9	2	1
Biochemistry and molecular biology	263	79	182	15	0	20	12	125	8	1	1
Biophysics	206	87	112	9	0	14	1	81	6	1	0
Molecular biology	260	54	199	20	0	26	9	133	8	3	0
Biochemistry, biophysics, and molecular biology nec	202	65	127	14	0	16	6	88	3	0	0
Bioinformatics, biostatistics, and computational biology	563	252	296	23	1	65	10	175	11	6	5
Bioinformatics	136	56	79	4	0	12	3	51	5	2	2
Biostatistics	224	110	105	10	0	25	5	60	3	1	1

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(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	
Computational biology	106	43	61	6	1	18	1	29	2	3	1
Bioinformatics, biostatistics, and computational biology nec	97	43	51	3	0	10	1	35	1	0	1
Cell/ cellular biology and anatomy	657	173	455	57	1	62	18	285	24	5	3
Cell/ cellular and molecular biology	482	137	324	42	1	46	14	194	20	4	3
Developmental biology and embryology	103	21	81	9	0	12	1	54	4	1	0
Cell/ cellular biology and anatomy nec	72	15	50	6	0	4	3	37	0	0	0
Ecology, evolutionary biology, and epidemiology	984	166	793	61	0	67	45	591	20	5	4
Ecology	227	31	195	13	0	7	1	167	4	3	0
Ecology and evolutionary biology	243	27	214	24	0	5	6	172	6	0	1
Epidemiology	298	61	232	10	0	40	30	146	5	1	0
Epidemiology and biostatistics	54	12	31	2	0	7	5	14	2	0	1
Evolutionary biology	68	14	52	4	0	6	2	39	1	0	0
Ecology, evolutionary biology, and epidemiology nec	94	21	69	8	0	2	1	53	2	1	2
Genetics and genomics	398	93	291	28	0	34	10	201	12	4	2
Genetics, general	121	25	90	10	0	11	1	62	3	2	1
Genome sciences and genomics	72	14	55	4	0	7	3	40	1	0	0
Human/ medical genetics	62	16	46	5	0	5	1	31	2	1	1
Molecular genetics	72	16	52	7	0	8	3	33	1	0	0
Genetics nec	71	22	48	2	0	3	2	35	5	1	0
Microbiology and immunology	974	179	766	83	3	72	36	540	24	2	6
Immunology	303	44	250	33	0	39	13	152	13	0	0
Microbiology and immunology	217	31	176	13	0	14	9	136	3	1	0
Microbiology, general	257	50	201	19	2	14	10	148	5	0	3
Virology	107	22	83	14	1	3	3	59	1	1	1
Microbiology and immunology nec	90	32	56	4	0	2	1	45	2	0	2
Neurobiology and neurosciences	1,014	180	795	84	2	101	21	544	26	9	8
Cognitive neuroscience	102	24	77	7	0	8	1	60	0	0	1
Neurobiology and anatomy	94	14	76	10	1	10	0	53	1	1	0

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(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	
Neuroscience	686	111	545	53	1	73	14	374	20	3	7
Neurobiology and neurosciences nec	132	31	97	14	0	10	6	57	5	5	0
Pharmacology and toxicology	311	72	222	23	0	32	14	137	8	2	6
Pharmacology	131	30	94	13	0	19	5	51	3	1	2
Toxicology	106	19	79	6	0	6	9	51	3	1	3
Pharmacology and toxicology nec	74	23	49	4	0	7	0	35	2	0	1
Physiology, oncology and cancer biology	713	165	517	50	2	68	32	336	16	6	7
Biomechanics	77	21	55	6	0	2	2	41	4	0	0
Exercise physiology and kinesiology	76	10	65	6	2	1	1	54	1	0	0
Oncology and cancer biology	315	70	231	22	0	40	16	141	5	3	4
Physiology, general	76	23	48	3	0	8	2	29	3	2	1
Physiology, oncology and cancer biology nec	169	41	118	13	0	17	11	71	3	1	2
Biological and biomedical sciences, other	1,297	361	859	80	3	101	43	574	39	6	13
Biology/ biological sciences, general	331	76	216	21	1	33	12	135	4	3	7
Biomedical sciences, general	331	84	225	27	0	29	17	133	15	1	3
Botany and plant biology	62	15	47	2	0	5	1	38	1	0	0
Entomology	114	24	89	7	0	5	3	67	6	0	1
Plant physiology and biology nec	60	21	39	7	0	1	1	29	1	0	0
Plant pathology and phytopathology	119	66	46	5	0	3	1	37	0	0	0
Zoology and animal biology	96	16	79	3	1	3	0	65	6	0	1
Biological and biomedical sciences nec	184	59	118	8	1	22	8	70	6	2	1
Computer and information sciences	2,195	1,334	703	32	0	136	36	450	27	11	11
Computer science	1,545	953	480	20	0	95	19	316	17	6	7
Computer science	1,545	953	480	20	0	95	19	316	17	6	7
Computer and information sciences, other	650	381	223	12	0	41	17	134	10	5	4
Artificial intelligence	167	111	51	2	0	15	0	29	3	2	0
Computer and information sciences, general	110	74	23	1	0	4	0	15	2	1	0

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(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	
Computer systems networking and telecommunications	113	75	25	3	0	5	3	11	2	0	1
Informatics and information technology	88	39	44	2	0	4	8	27	0	1	2
Information science/ studies	103	42	54	2	0	7	6	35	3	1	0
Computer and information sciences nec	69	40	26	2	0	6	0	17	0	0	1
Engineering	9,563	5,266	3,785	311	6	582	156	2,515	115	53	47
Biological, biomedical, and biosystems engineering	1,071	306	732	68	1	148	20	447	29	11	8
Bioengineering and biomedical engineering	978	264	685	66	1	137	19	416	27	11	8
Biological/ biosystems engineering and biomedical technology	93	42	47	2	0	11	1	31	2	0	0
Chemical and petroleum engineering	1,292	689	540	33	0	80	21	372	24	3	7
Chemical and biomolecular engineering	189	82	100	6	0	15	5	68	5	1	0
Chemical engineering	803	416	345	19	0	53	8	249	11	1	4
Petroleum engineering	132	103	17	1	0	5	4	3	2	1	1
Chemical and petroleum engineering nec	168	88	78	7	0	7	4	52	6	0	2
Civil, environmental, and transportation engineering	1,020	642	325	33	1	46	14	214	7	8	2
Civil engineering	571	351	173	15	1	19	9	121	3	4	1
Environmental/ environmental health engineering	93	40	50	6	0	9	2	29	3	1	0
Geotechnical and geoenvironmental engineering	76	53	21	1	0	2	0	16	1	1	0
Structural engineering	135	93	42	6	0	7	2	26	0	1	0
Transportation and highway engineering	76	61	15	1	0	5	1	7	0	0	1
Civil, environmental, and transportation engineering nec	69	44	24	4	0	4	0	15	0	1	0
Electrical and computer engineering	2,047	1,384	553	40	0	99	32	356	8	8	10
Computer engineering	264	182	64	5	0	12	3	41	0	1	2

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(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	
Electrical and computer engineering	1,205	817	356	27	0	63	24	229	5	5	3
Electrical and electronics engineering	512	334	118	8	0	20	4	76	3	2	5
Electrical and computer engineering nec	66	51	15	0	0	4	1	10	0	0	0
Engineering technologies	452	310	132	8	2	31	9	77	5	0	0
Electrical and electronic engineering technologies	80	61	18	1	0	6	0	10	1	0	0
Electromechanical technologies	59	38	17	1	0	4	2	10	0	0	0
Environmental control technologies	148	91	57	6	1	9	3	36	2	0	0
Engineering technologies nec	165	120	40	0	1	12	4	21	2	0	0
Industrial engineering and operations research	604	376	203	17	1	34	11	126	6	4	4
Industrial engineering	325	211	100	6	0	19	7	61	2	2	3
Operations research	160	105	49	5	0	10	3	29	0	2	0
Systems and manufacturing engineering	119	60	54	6	1	5	1	36	4	0	1
Materials and mining engineering	672	336	288	27	0	43	12	186	11	5	4
Materials engineering	194	105	61	4	0	8	6	41	0	2	0
Materials science and engineering	429	208	204	22	0	31	6	129	11	2	3
Materials and mining engineering nec	49	23	23	1	0	4	0	16	0	1	1
Mechanical engineering	1,413	764	571	52	1	57	20	413	10	9	9
Mechanical engineering, general	1,413	764	571	52	1	57	20	413	10	9	9
Engineering, other	992	459	441	33	0	44	17	324	15	5	3
Aerospace, aeronautical, astronautical, and space engineering	350	152	175	17	0	17	3	127	7	3	1
Engineering mechanics, physics, and science	111	67	32	2	0	6	0	21	0	1	2
Nanotechnology	61	38	23	0	0	8	1	14	0	0	0
Nuclear engineering	156	55	93	4	0	6	3	76	3	1	0
Engineering nec	314	147	118	10	0	7	10	86	5	0	0
Geosciences, atmospheric, and ocean sciences	1,044	336	665	48	2	30	13	528	33	7	4

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(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	
Geological and earth sciences	613	211	373	26	1	14	10	296	19	3	4
Geochemistry	60	12	47	4	0	1	0	38	4	0	0
Geology	109	27	81	7	0	4	1	64	3	1	1
Geology/ earth science, general	104	35	63	3	0	4	1	52	1	0	2
Geophysics and seismology	101	57	40	5	1	2	2	29	1	0	0
Hydrology and water resources science	81	34	44	0	0	1	2	34	5	1	1
Geological and earth sciences nec	158	46	98	7	0	2	4	79	5	1	0
Ocean/ marine sciences and atmospheric science	431	125	292	22	1	16	3	232	14	4	0
Atmospheric sciences and meteorology, general	94	33	57	3	1	3	1	47	2	0	0
Climatology, atmospheric chemistry and physics	60	22	37	3	0	6	0	26	1	1	0
Marine biology and biological oceanography	89	11	76	8	0	4	0	58	4	2	0
Marine sciences	57	12	42	5	0	1	0	34	1	1	0
Oceanography, chemical and physical	84	32	49	2	0	2	1	40	4	0	0
Atmospheric sciences and meteorology nec	47	15	31	1	0	0	1	27	2	0	0
Health sciences	2,582	528	1,886	139	9	182	263	1,192	55	16	30
Nursing and nursing science	603	60	510	40	3	29	60	361	8	4	5
Nursing education	89	5	84	8	0	4	8	61	2	1	0
Nursing science	357	33	316	23	3	20	30	233	4	2	1
Nursing specialties and practice	157	22	110	9	0	5	22	67	2	1	4
Pharmacy and pharmaceutical sciences	408	189	196	14	1	35	15	118	7	2	4
Medicinal and pharmaceutical chemistry	64	24	38	2	1	1	1	31	2	0	0
Pharmaceutical sciences	243	113	117	11	0	26	10	63	3	2	2
Pharmacy, pharmaceutical sciences, and administration nec	101	52	41	1	0	8	4	24	2	0	2
Public health	696	131	527	45	3	64	110	278	17	4	6
Environmental health	66	19	42	6	0	8	2	26	0	0	0

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(Number)

Field of doctorate	All doctorate recipients a	Temporary visa holders	U.S. citizens and permanent residents								
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Health services research	86	19	60	5	0	14	7	30	2	0	2
Health/ medical physics	70	19	50	3	0	5	1	38	2	1	0
Public health education and promotion	95	8	83	4	1	5	25	43	4	1	0
Public health, general	179	28	139	18	1	18	38	60	3	0	1
Public health nec	200	38	153	9	1	14	37	81	6	2	3
Health sciences, other	875	148	653	40	2	54	78	435	23	6	15
Communication disorders sciences	127	21	99	4	1	7	8	76	2	0	1
Exercise science and kinesiology	92	22	67	6	0	3	3	51	2	1	1
Health sciences, general	66	3	52	5	0	3	8	32	0	2	2
Marriage and family therapy/ counseling	58	3	52	3	0	1	15	27	2	0	4
Medical clinical science	60	6	41	4	0	3	2	29	2	1	0
Medical, biomedical, and health informatics	61	23	33	2	0	9	1	20	1	0	0
Mental health, counseling, and therapy services and sciences	91	4	82	4	1	5	16	52	3	0	1
Rehabilitation and therapeutic sciences	121	19	95	3	0	4	7	75	3	1	2
Health sciences nec	199	47	132	9	0	19	18	73	8	1	4
Mathematics and statistics	1,915	987	847	65	0	96	28	597	33	13	15
Applied mathematics	475	235	228	15	0	22	14	161	8	5	3
Applied mathematics, general	265	124	132	5	0	11	5	104	3	2	2
Computational and applied mathematics	141	76	63	4	0	7	9	36	3	3	1
Applied mathematics nec	69	35	33	6	0	4	0	21	2	0	0
Mathematics	827	356	428	38	0	45	6	312	18	4	5
Algebra and number theory	69	30	38	1	0	5	0	31	0	0	1
Mathematics, general	640	275	327	34	0	31	3	233	18	4	4
Mathematics nec	118	51	63	3	0	9	3	48	0	0	0
Statistics	613	396	191	12	0	29	8	124	7	4	7
Applied statistics, general	56	34	20	2	0	0	4	12	1	0	1
Mathematics and statistics	90	50	38	2	0	2	1	29	2	1	1
Statistics	402	267	116	8	0	21	2	74	4	2	5
Statistics nec	65	45	17	0	0	6	1	9	0	1	0

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(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
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Multidisciplinary/ interdisciplinary sciences	1,299	544	674	68	2	70	51	439	27	9	8
Interdisciplinary computer sciences	448	255	175	16	1	33	6	104	9	5	1
Computer science and engineering	119	71	40	2	0	9	2	22	3	2	0
Electrical engineering and computer science	224	138	83	7	0	17	1	52	4	2	0
Interdisciplinary computer sciences nec	105	46	52	7	1	7	3	30	2	1	1
Multidisciplinary/ interdisciplinary sciences, other	851	289	499	52	1	37	45	335	18	4	7
Behavioral and cognitive sciences	79	19	60	9	0	4	7	34	5	0	1
Computational science and engineering	104	48	46	4	0	6	3	30	1	1	1
Data science and data analytics	106	67	34	2	0	8	2	19	1	1	1
History/ philosophy of science, technology and society	68	12	49	5	1	1	0	40	0	1	1
Nanoscience/ nanoscale science	57	29	28	2	0	3	2	20	1	0	0
Nutrition sciences	138	48	84	9	0	3	5	66	0	0	1
Multidisciplinary/ interdisciplinary sciences nec	299	66	198	21	0	12	26	126	10	1	2
Physical sciences	4,811	1,901	2,712	216	6	266	76	1,994	96	28	30
Astronomy and astrophysics	263	72	183	12	1	11	4	146	7	2	0
Astronomy	71	21	46	2	0	4	0	39	1	0	0
Astrophysics	113	33	77	3	1	4	2	65	1	1	0
Astronomy and astrophysics nec	79	18	60	7	0	3	2	42	5	1	0
Chemistry	2,369	875	1,390	124	4	121	56	1,004	52	13	16
Analytical chemistry	321	125	192	14	0	19	10	139	7	3	0
Chemical biology	151	49	101	7	0	16	6	67	5	0	0
Chemistry, general	495	185	231	22	2	21	15	148	7	4	12
Inorganic chemistry	283	95	186	20	0	14	2	145	4	1	0
Organic chemistry	454	165	285	28	0	16	14	216	7	3	1
Physical chemistry	293	111	180	17	0	14	3	131	11	1	3
Polymer chemistry	121	51	67	5	0	10	4	45	3	0	0
Theoretical chemistry	108	49	56	3	1	3	0	43	6	0	0
Chemistry nec	143	45	92	8	1	8	2	70	2	1	0
Materials sciences	429	195	226	12	0	40	5	162	6	1	0
Materials science	276	138	135	6	0	27	2	94	5	1	0

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(Number)

Field of doctorate	All doctorate recipients a	Temporary visa holders	U.S. citizens and permanent residents								
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Materials chemistry and materials science nec	153	57	91	6	0	13	3	68	1	0	0
Physics	1,750	759	913	68	1	94	11	682	31	12	14
Applied physics	133	52	70	7	0	12	1	46	4	0	0
Atomic/ molecular physics	89	33	55	1	0	11	0	40	2	0	1
Condensed matter and materials physics	358	192	162	8	1	20	0	118	7	5	3
Elementary particle physics	166	79	86	5	0	8	1	67	2	1	2
Nuclear physics	79	28	49	3	0	2	0	40	3	0	1
Optics/ optical sciences	120	56	56	7	0	3	1	41	4	0	0
Physics and astronomy	193	80	109	8	0	10	0	87	2	0	2
Physics, general	339	122	172	19	0	11	3	128	2	5	4
Plasma and high- temperature physics	57	11	46	4	0	5	1	33	3	0	0
Theoretical and mathematical physics	99	49	49	4	0	4	0	40	1	0	0
Physics and physical sciences nec	117	57	59	2	0	8	4	42	1	1	1
Psychology	3,716	309	3,070	360	9	195	243	2,031	125	47	60
Clinical psychology	1,256	54	1,090	138	1	73	61	732	44	18	23
Clinical child psychology	52	1	47	8	0	2	3	31	2	0	1
Clinical psychology	1,204	53	1,043	130	1	71	58	701	42	18	22
Counseling and applied psychology	1,338	105	1,133	131	6	65	135	716	42	13	25
Applied behavior analysis	59	4	52	6	0	4	2	40	0	0	0
Counseling psychology	365	16	313	45	4	21	35	177	11	3	17
Educational psychology	229	43	171	14	0	8	22	117	4	5	1
Industrial and organizational psychology	181	20	149	17	0	14	13	97	6	2	0
School psychology	259	4	242	24	1	10	28	162	14	0	3
Counseling and applied psychology nec	245	18	206	25	1	8	35	123	7	3	4
Research and experimental psychology	651	102	530	52	1	46	14	381	23	11	2
Behavioral neuroscience	87	11	73	11	1	7	1	47	3	2	1
Cognitive psychology and psycholinguistics	106	23	78	6	0	6	1	58	6	1	0

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(Number)

Field of doctorate	All doctorate recipients a	Temporary visa holders	U.S. citizens and permanent residents								Ethnicity not reported
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Developmental and child psychology	78	11	67	11	0	8	1	44	2	1	0
Experimental psychology	98	15	80	7	0	5	2	63	1	1	1
Social psychology	143	13	127	8	0	10	8	91	7	3	0
Research and experimental psychology nec	139	29	105	9	0	10	1	78	4	3	0
Psychology, other	471	48	317	39	1	11	33	202	16	5	10
Human development	142	23	101	9	1	6	13	58	11	0	3
Psychology, general	261	20	155	22	0	5	15	99	4	4	6
Psychology nec	68	5	61	8	0	0	5	45	1	1	1
Social sciences	4,749	1,510	2,993	312	15	256	294	1,950	97	37	32
Anthropology	388	75	294	35	3	26	8	190	20	8	4
Anthropology, general	80	11	55	5	1	7	0	32	5	3	2
Cultural anthropology	186	48	136	16	2	14	6	84	9	4	1
Physical and biological anthropology	71	9	59	7	0	3	1	42	4	1	1
Anthropology nec	51	7	44	7	0	2	1	32	2	0	0
Area, ethnic, cultural, gender, and group studies	383	69	283	58	4	21	46	131	15	2	6
Area studies	224	55	151	24	0	12	16	89	6	0	4
Ethnic studies	81	5	72	23	4	7	20	9	6	2	1
Area, ethnic, cultural, gender, and group studies nec	78	9	60	11	0	2	10	33	3	0	1
Economics	1,317	773	467	39	0	82	18	305	10	6	7
Agricultural economics	76	47	26	3	0	2	0	18	0	2	1
Applied economics	134	78	54	1	0	11	3	38	0	0	1
Development economics and international development	54	32	22	3	0	2	5	12	0	0	0
Econometrics and quantitative economics	145	122	20	2	0	5	1	10	0	2	0
Economics, general	802	438	298	28	0	52	6	198	9	1	4
Environmental/ natural resource economics	54	23	30	0	0	8	2	18	0	1	1
Economics nec	52	33	17	2	0	2	1	11	1	0	0
Political science and government	581	139	405	22	1	19	24	316	12	5	6
Political science and government, general	488	123	333	20	0	17	20	258	8	4	6
Political science and government nec	93	16	72	2	1	2	4	58	4	1	0

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(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
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Public policy analysis	399	70	316	26	0	26	65	187	9	1	2
Education policy analysis	131	15	115	8	0	10	16	78	2	0	1
Health policy analysis	52	7	45	6	0	4	3	29	3	0	0
Public policy analysis, general	158	40	113	10	0	12	23	63	3	1	1
Public policy nec	58	8	43	2	0	0	23	17	1	0	0
Sociology, demography, and population studies	578	91	469	56	2	36	59	295	12	7	2
Sociology, general	501	74	409	45	2	34	48	263	11	5	1
Sociology, demography, and population studies nec	77	17	60	11	0	2	11	32	1	2	1
Social sciences, other	1,103	293	759	76	5	46	74	526	19	8	5
Applied linguistics	74	32	42	10	0	6	0	26	0	0	0
Archeology	83	12	70	5	0	2	1	61	1	0	0
Criminal justice and corrections	126	10	102	12	1	1	26	58	2	1	1
Criminology	97	7	87	10	0	2	11	60	2	2	0
Geography and cartography	223	82	134	12	2	6	7	99	5	2	1
International relations and national security studies	105	30	71	7	0	8	2	53	1	0	0
Linguistics	203	81	109	9	1	11	3	77	5	2	1
Social sciences nec	192	39	144	11	1	10	24	92	3	1	2
Non-science and engineering	10,894	2,379	7,768	690	34	469	972	5,098	254	93	158
Business	1,340	644	590	28	1	78	112	330	19	6	16
Business administration and management	456	180	219	10	0	24	58	109	10	2	6
Business management and administration	235	107	94	3	0	16	21	46	2	0	6
Organizational leadership	117	18	90	5	0	3	30	45	6	1	0
Business administration and management nec	104	55	35	2	0	5	7	18	2	1	0
Business, other	884	464	371	18	1	54	54	221	9	4	10
Accounting and accounting-related	135	67	64	2	0	13	7	40	2	0	0
Finance and financial management	192	117	62	2	0	12	2	41	2	2	1
Management information systems	88	53	29	1	0	6	8	10	2	1	1
Management sciences	73	38	31	3	0	3	4	14	0	0	7
Marketing	119	69	43	3	0	8	4	27	1	0	0
Organizational behavior studies	103	28	69	3	0	9	13	42	1	1	0

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(Number)

Field of doctorate	All doctorate recipients a	Temporary visa holders	U.S. citizens and permanent residents								Ethnicity not reported
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Business nec	174	92	73	4	1	3	16	47	1	0	1
Education	3,711	496	2,962	284	21	159	512	1,810	94	26	56
Education leadership and administration	1,082	64	937	93	8	28	229	514	41	8	16
Educational leadership and administration, general	500	30	425	48	5	11	103	230	13	5	10
Higher education and community college administration	391	17	352	35	3	12	86	188	19	3	6
Education leadership and administration nec	191	17	160	10	0	5	40	96	9	0	0
Education research	1,204	209	924	85	4	60	133	589	21	13	19
Curriculum and instruction	425	66	330	35	1	17	39	220	8	2	8
Educational assessment, evaluation, and research methods	222	63	151	7	1	16	14	100	4	6	3
Educational/ instructional technology and media design	155	42	100	4	0	14	19	57	2	2	2
Higher education evaluation and research	61	7	54	6	0	1	6	36	2	2	1
Student counseling and personnel services	267	17	235	28	1	7	44	146	4	1	4
Education research nec	74	14	54	5	1	5	11	30	1	0	1
Teacher education	1,010	181	778	55	6	51	103	520	24	4	15
Adult, continuing, and workforce education and development	66	11	51	1	0	4	14	31	1	0	0
Bilingual, multilingual, and multicultural education	77	19	49	15	3	0	5	23	1	0	2
Mathematics teacher education	75	12	63	3	0	4	8	42	3	2	1
Music teacher education	73	9	63	0	0	1	9	52	0	0	1
Special education and teaching	235	42	183	10	0	15	16	134	7	0	1
STEM educational methods	70	9	60	4	0	3	6	43	2	1	1
Teacher education, science and engineering	68	8	56	4	1	6	7	34	1	1	2

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(Number)

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Teacher education, specific levels and methods	154	23	125	10	1	10	21	75	4	0	4
Teacher education, specific subject areas	192	48	128	8	1	8	17	86	5	0	3
Education, other	415	42	323	51	3	20	47	187	8	1	6
Education, general	268	29	194	25	1	13	23	120	6	1	5
Education nec	147	13	129	26	2	7	24	67	2	0	1
Humanities	3,076	547	2,339	224	3	114	111	1,721	80	37	49
English language and literature, letters	933	100	776	46	2	36	38	599	30	7	18
American literature (United States)	113	16	96	4	0	4	2	81	4	1	0
Creative writing	68	6	60	4	0	4	3	44	5	0	0
English language and literature, general	362	38	284	18	0	13	21	208	8	3	13
English literature (British and commonwealth)	131	14	116	5	0	8	3	93	5	1	1
Rhetoric and composition, and writing studies	190	16	164	12	1	5	7	134	3	2	0
English language and literature nec	69	10	56	3	1	2	2	39	5	0	4
Foreign languages, literatures, and linguistics	505	167	305	70	1	19	11	179	12	6	7
Comparative literature	118	46	63	6	0	9	2	41	3	1	1
Hispanic/ Latin American languages, literatures, and linguistics	70	19	48	27	0	1	1	18	1	0	0
Romance languages, literatures, and linguistics	72	19	50	7	0	3	5	35	0	0	0
Spanish language and literature	79	27	47	27	0	0	0	16	1	1	2
Foreign languages, literatures, and linguistics nec	166	56	97	3	1	6	3	69	7	4	4
History	672	117	524	51	0	15	23	403	17	6	9
American history (United States)	209	14	193	11	0	0	7	164	8	0	3
European history	88	19	68	3	0	0	2	61	2	0	0
History, general	169	32	110	15	0	7	4	72	3	3	6
History, regional focus	133	44	88	16	0	5	8	56	1	2	0
History nec	73	8	65	6	0	3	2	50	3	1	0
Philosophy and religious studies	592	102	457	35	0	23	21	347	11	11	9
Philosophy	399	73	305	26	0	12	8	235	9	7	8

Table 3-3

Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021

(Number)

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Religion/ religious studies	126	21	97	8	0	6	13	67	1	2	0
Philosophy and religious studies nec	67	8	55	1	0	5	0	45	1	2	1
Humanities, other	374	61	277	22	0	21	18	193	10	7	6
Bible/ biblical studies	71	9	53	1	0	4	2	41	3	2	0
Humanities and humanistic studies	62	10	44	5	0	5	9	19	5	1	0
Theological and ministerial studies	241	42	180	16	0	12	7	133	2	4	6
Visual and performing arts	771	147	571	43	2	33	17	440	22	5	9
Performing arts	491	89	368	28	1	26	11	282	12	3	5
Dance, drama, theatre arts and stagecraft	82	11	65	7	0	5	3	45	3	1	1
Music performance	128	25	93	7	0	9	3	69	4	1	0
Music theory and composition	86	17	68	4	0	4	1	57	0	1	1
Music nec	79	15	49	1	0	2	0	42	2	0	2
Musicology and ethnomusicology	116	21	93	9	1	6	4	69	3	0	1
Visual arts, media studies/ design	280	58	203	15	1	7	6	158	10	2	4
Art history, criticism and conservation	167	16	141	12	1	5	2	110	8	2	1
Film, cinema, and media studies	62	23	37	3	0	2	3	28	1	0	0
Visual arts, media studies/ design, and arts management nec	51	19	25	0	0	0	1	20	1	0	3
Other non-science and engineering	1,996	545	1,306	111	7	85	220	797	39	19	28
Communications and journalism	520	138	358	23	1	24	40	242	15	3	10
Applied communication, advertising, and public relations	94	30	61	7	0	4	9	36	1	0	4
Communication and media studies	160	39	118	5	0	9	7	87	5	3	2
Communication, general	85	11	66	4	0	4	7	44	4	0	3
Mass communication/ media studies	95	34	54	4	1	4	8	35	1	0	1
Communications and journalism nec	86	24	59	3	0	3	9	40	4	0	0
Multidisciplinary/ interdisciplinary studies	331	57	233	22	3	10	33	153	3	4	5
Classical and ancient studies	91	14	71	5	0	2	1	61	0	1	1

Table 3-3**Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021**

(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	
Multidisciplinary/ interdisciplinary studies nec	240	43	162	17	3	8	32	92	3	3	4
Public administration and social services	490	98	357	33	3	23	108	170	10	6	4
Public administration	202	61	127	14	1	9	44	55	1	2	1
Social work and human services	288	37	230	19	2	14	64	115	9	4	3
Non-science and engineering, other	655	252	358	33	0	28	39	232	11	6	9
Architecture and architectural studies	134	61	59	4	0	10	1	41	1	1	1
City/ urban, community, and regional planning	101	39	54	9	0	3	7	33	0	2	0
Family, consumer sciences and human sciences	140	37	94	14	0	4	17	51	4	0	4
Homeland security and protective services	50	21	28	2	0	0	3	21	1	0	1
Law, legal studies and research	80	53	20	1	0	3	2	12	2	0	0
Parks, recreation, leisure, fitness, and sport studies and management	87	22	63	2	0	5	5	45	1	2	3
Other non-science and engineering nec	63	19	40	1	0	3	4	29	2	1	0

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

^a Includes respondents who did not report citizenship.**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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP code in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number and percent distribution)

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						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
All fields	31,674	100.0	9.0	0.3	9.5	7.7	67.4	3.4	1.2	1.5
Science and engineering	23,906	100.0	9.1	0.3	10.7	6.1	67.9	3.5	1.2	1.3
Agricultural sciences and natural resources	695	100.0	6.3	0.6	5.8	4.3	77.4	1.7	1.4	2.4
Agricultural, animal, plant, and veterinary sciences	440	100.0	5.5	0.0	5.2	3.6	80.7	1.1	1.4	2.5
Natural resources and conservation	255	100.0	7.8	1.6	6.7	5.5	71.8	2.7	1.6	2.4
Biological and biomedical sciences	5,876	100.0	9.7	0.2	11.9	4.6	68.1	3.6	0.9	1.0
Biochemistry, biophysics, and molecular biology	882	100.0	9.3	0.1	11.1	4.5	70.1	3.9	0.8	0.2
Bioinformatics, biostatistics, and computational biology	296	100.0	7.8	0.3	22.0	3.4	59.1	3.7	2.0	1.7
Cell/ cellular biology and anatomy	455	100.0	12.5	0.2	13.6	4.0	62.6	5.3	1.1	0.7
Ecology, evolutionary biology, and epidemiology	793	100.0	7.7	0.0	8.4	5.7	74.5	2.5	0.6	0.5
Genetics and genomics	291	100.0	9.6	0.0	11.7	3.4	69.1	4.1	1.4	0.7
Microbiology and immunology	766	100.0	10.8	0.4	9.4	4.7	70.5	3.1	0.3	0.8
Neurobiology and neurosciences	795	100.0	10.6	0.3	12.7	2.6	68.4	3.3	1.1	1.0
Pharmacology and toxicology	222	100.0	10.4	0.0	14.4	6.3	61.7	3.6	0.9	2.7
Physiology, oncology and cancer biology	517	100.0	9.7	0.4	13.2	6.2	65.0	3.1	1.2	1.4
Biological and biomedical sciences, other	859	100.0	9.3	0.3	11.8	5.0	66.8	4.5	0.7	1.5
Computer and information sciences	703	100.0	4.6	0.0	19.3	5.1	64.0	3.8	1.6	1.6
Computer science	480	100.0	4.2	0.0	19.8	4.0	65.8	3.5	1.3	1.5
Computer and information sciences, other	223	100.0	5.4	0.0	18.4	7.6	60.1	4.5	2.2	1.8
Engineering	3,785	100.0	8.2	0.2	15.4	4.1	66.4	3.0	1.4	1.2
Biological, biomedical, and biosystems engineering	732	100.0	9.3	0.1	20.2	2.7	61.1	4.0	1.5	1.1
Chemical and petroleum engineering	540	100.0	6.1	0.0	14.8	3.9	68.9	4.4	0.6	1.3
Civil, environmental, and transportation engineering	325	100.0	10.2	0.3	14.2	4.3	65.8	2.2	2.5	0.6

Table 3-4

U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2021

(Number and percent distribution)

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						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Electrical and computer engineering	553	100.0	7.2	0.0	17.9	5.8	64.4	1.4	1.4	1.8
Engineering technologies	132	100.0	6.1	1.5	23.5	6.8	58.3	3.8	0.0	0.0
Industrial engineering and operations research	203	100.0	8.4	0.5	16.7	5.4	62.1	3.0	2.0	2.0
Materials and mining engineering	288	100.0	9.4	0.0	14.9	4.2	64.6	3.8	1.7	1.4
Mechanical engineering	571	100.0	9.1	0.2	10.0	3.5	72.3	1.8	1.6	1.6
Engineering, other	441	100.0	7.5	0.0	10.0	3.9	73.5	3.4	1.1	0.7
Geosciences, atmospheric, and ocean sciences	665	100.0	7.2	0.3	4.5	2.0	79.4	5.0	1.1	0.6
Geological and earth sciences	373	100.0	7.0	0.3	3.8	2.7	79.4	5.1	0.8	1.1
Ocean/ marine sciences and atmospheric science	292	100.0	7.5	0.3	5.5	1.0	79.5	4.8	1.4	0.0
Health sciences	1,886	100.0	7.4	0.5	9.7	13.9	63.2	2.9	0.8	1.6
Nursing and nursing science	510	100.0	7.8	0.6	5.7	11.8	70.8	1.6	0.8	1.0
Pharmacy and pharmaceutical sciences	196	100.0	7.1	0.5	17.9	7.7	60.2	3.6	1.0	2.0
Public health	527	100.0	8.5	0.6	12.1	20.9	52.8	3.2	0.8	1.1
Health sciences, other	653	100.0	6.1	0.3	8.3	11.9	66.6	3.5	0.9	2.3
Mathematics and statistics	847	100.0	7.7	0.0	11.3	3.3	70.5	3.9	1.5	1.8
Applied mathematics	228	100.0	6.6	0.0	9.6	6.1	70.6	3.5	2.2	1.3
Mathematics	428	100.0	8.9	0.0	10.5	1.4	72.9	4.2	0.9	1.2
Statistics	191	100.0	6.3	0.0	15.2	4.2	64.9	3.7	2.1	3.7
Multidisciplinary/ interdisciplinary sciences	674	100.0	10.1	0.3	10.4	7.6	65.1	4.0	1.3	1.2
Interdisciplinary computer sciences	175	100.0	9.1	0.6	18.9	3.4	59.4	5.1	2.9	0.6
Multidisciplinary/ interdisciplinary sciences, other	499	100.0	10.4	0.2	7.4	9.0	67.1	3.6	0.8	1.4
Physical sciences	2,712	100.0	8.0	0.2	9.8	2.8	73.5	3.5	1.0	1.1
Astronomy and astrophysics	183	100.0	6.6	0.5	6.0	2.2	79.8	3.8	1.1	0.0
Chemistry	1,390	100.0	8.9	0.3	8.7	4.0	72.2	3.7	0.9	1.2
Materials sciences	226	100.0	5.3	0.0	17.7	2.2	71.7	2.7	0.4	0.0
Physics	913	100.0	7.4	0.1	10.3	1.2	74.7	3.4	1.3	1.5
Psychology	3,070	100.0	11.7	0.3	6.4	7.9	66.2	4.1	1.5	2.0
Clinical psychology	1,090	100.0	12.7	0.1	6.7	5.6	67.2	4.0	1.7	2.1

Table 3-4**U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2021**

(Number and percent distribution)

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						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Counseling and applied psychology	1,133	100.0	11.6	0.5	5.7	11.9	63.2	3.7	1.1	2.2
Research and experimental psychology	530	100.0	9.8	0.2	8.7	2.6	71.9	4.3	2.1	0.4
Psychology, other	317	100.0	12.3	0.3	3.5	10.4	63.7	5.0	1.6	3.2
Social sciences	2,993	100.0	10.4	0.5	8.6	9.8	65.2	3.2	1.2	1.1
Anthropology	294	100.0	11.9	1.0	8.8	2.7	64.6	6.8	2.7	1.4
Area, ethnic, cultural, gender, and group studies	283	100.0	20.5	1.4	7.4	16.3	46.3	5.3	0.7	2.1
Economics	467	100.0	8.4	0.0	17.6	3.9	65.3	2.1	1.3	1.5
Political science and government	405	100.0	5.4	0.2	4.7	5.9	78.0	3.0	1.2	1.5
Public policy analysis	316	100.0	8.2	0.0	8.2	20.6	59.2	2.8	0.3	0.6
Sociology, demography, and population studies	469	100.0	11.9	0.4	7.7	12.6	62.9	2.6	1.5	0.4
Social sciences, other	759	100.0	10.0	0.7	6.1	9.7	69.3	2.5	1.1	0.7
Non-science and engineering	7,768	100.0	8.9	0.4	6.0	12.5	65.6	3.3	1.2	2.0
Business	590	100.0	4.7	0.2	13.2	19.0	55.9	3.2	1.0	2.7
Business administration and management	219	100.0	4.6	0.0	11.0	26.5	49.8	4.6	0.9	2.7
Business, other	371	100.0	4.9	0.3	14.6	14.6	59.6	2.4	1.1	2.7
Education	2,962	100.0	9.6	0.7	5.4	17.3	61.1	3.2	0.9	1.9
Education leadership and administration	937	100.0	9.9	0.9	3.0	24.4	54.9	4.4	0.9	1.7
Education research	924	100.0	9.2	0.4	6.5	14.4	63.7	2.3	1.4	2.1
Teacher education	778	100.0	7.1	0.8	6.6	13.2	66.8	3.1	0.5	1.9
Education, other	323	100.0	15.8	0.9	6.2	14.6	57.9	2.5	0.3	1.9
Humanities	2,339	100.0	9.6	0.1	4.9	4.7	73.6	3.4	1.6	2.1
English language and literature, letters	776	100.0	5.9	0.3	4.6	4.9	77.2	3.9	0.9	2.3
Foreign languages, literatures, and linguistics	305	100.0	23.0	0.3	6.2	3.6	58.7	3.9	2.0	2.3
History	524	100.0	9.7	0.0	2.9	4.4	76.9	3.2	1.1	1.7
Philosophy and religious studies	457	100.0	7.7	0.0	5.0	4.6	75.9	2.4	2.4	2.0
Humanities, other	277	100.0	7.9	0.0	7.6	6.5	69.7	3.6	2.5	2.2
Visual and performing arts	571	100.0	7.5	0.4	5.8	3.0	77.1	3.9	0.9	1.6
Performing arts	368	100.0	7.6	0.3	7.1	3.0	76.6	3.3	0.8	1.4
Visual arts, media studies/ design	203	100.0	7.4	0.5	3.4	3.0	77.8	4.9	1.0	2.0
Other non-science and engineering	1,306	100.0	8.5	0.5	6.5	16.8	61.0	3.0	1.5	2.1

Table 3-4**U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2021**

(Number and percent distribution)

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						Ethnicity not reported
				American Indian or Alaska Native	Asian	Black or African American	White	More than one race	Other race or race not reported	
Communications and journalism	358	100.0	6.4	0.3	6.7	11.2	67.6	4.2	0.8	2.8
Multidisciplinary/interdisciplinary studies	233	100.0	9.4	1.3	4.3	14.2	65.7	1.3	1.7	2.1
Public administration and social services	357	100.0	9.2	0.8	6.4	30.3	47.6	2.8	1.7	1.1
Non-science and engineering, other	358	100.0	9.2	0.0	7.8	10.9	64.8	3.1	1.7	2.5

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	49,332	8.7	39,132	8.0	1,144	8.6	7,880	8.0	2,051	8.8	9,096	7.5	1,005	8.0	2,362	11.3	1,839	7.0	1,224	8.9	4,602	6.6	3,405	8.6	4,524	10.0
Sex																										
Male	26,610	8.3	22,238	8.0	562	8.6	3,768	8.0	1,572	8.6	6,733	7.6	558	8.0	729	10.0	1,327	7.0	723	8.4	3,098	6.7	927	8.6	2,241	9.8
Female	22,718	9.0	16,891	8.3	582	8.4	4,112	7.8	479	9.1	2,362	7.2	447	7.8	1,633	12.0	512	7.0	501	9.1	1,503	6.3	2,478	8.6	2,282	10.3
Citizenship status																										
U.S. citizen or permanent resident	31,287	9.0	23,620	8.0	687	8.3	5,811	7.7	692	9.0	3,760	7.0	663	7.6	1,825	12.0	844	6.8	670	9.2	2,686	6.3	3,016	8.6	2,966	10.3
Temporary visa holder	17,216	8.3	14,894	8.1	445	8.8	1,987	8.3	1,310	8.6	5,176	7.8	331	8.1	496	9.8	968	7.2	535	8.3	1,860	7.2	305	8.4	1,481	9.4
Ethnicity and race (U.S. citizens and permanent residents)																										
Hispanic or Latino	2,808	8.6	2,134	8.0	42	8.5	565	7.4	32	8.5	311	6.6	48	7.5	132	12.3	65	6.6	67	8.8	216	6.3	346	8.4	310	10.1
Not Hispanic or Latino																										
American Indian or Alaska Native	97	11.0	63	9.0	D	D	D	D	0	-	6	6.4	D	D	8	13.6	0	-	D	D	D	D	9	11.3	15	9.4
Asian	2,986	8.6	2,521	8.3	40	9.0	D	D	136	8.5	579	7.3	30	8.8	174	11.3	96	7.2	70	8.2	D	D	190	9.0	254	10.0
Black or African American	2,397	12.3	1,439	10.2	30	10.9	262	8.3	35	11.6	155	8.8	13	8.3	259	15.0	28	9.6	50	12.8	76	6.3	239	10.0	292	12.0
White	21,142	8.6	16,090	7.8	533	8.0	3,969	7.6	441	9.0	2,500	6.9	526	7.5	1,161	12.0	596	6.6	439	9.2	1,980	6.3	2,012	8.3	1,933	10.3
More than one race	1,084	8.3	830	7.6	12	8.4	211	7.5	27	9.0	115	6.5	33	7.9	54	11.2	33	6.4	27	8.1	96	6.3	125	8.3	97	10.0
Other race or race not reported	363	10.0	273	8.8	D	D	52	8.8	11	8.3	51	8.0	D	D	14	13.5	13	8.0	D	D	26	6.3	45	9.3	35	9.3
Ethnicity not reported	410	10.3	270	8.8	16	7.8	51	8.3	10	10.4	43	8.9	4	7.8	23	11.0	13	7.3	6	10.5	24	6.4	50	8.5	30	10.4
Years since entering graduate school																										
Doctorate recipients reporting year of graduate school entry	47,958	7.3	38,204	6.8	1,119	7.3	7,778	6.3	2,003	7.3	8,832	6.7	993	6.8	2,349	8.9	1,794	6.1	1,197	7.6	4,510	5.9	3,196	6.9	4,433	8.4
Sex																										
Male	25,925	7.0	21,762	6.8	555	7.3	3,720	6.5	1,523	7.3	6,548	6.8	554	6.9	725	7.8	1,293	6.1	713	7.3	3,043	6.0	884	7.0	2,204	8.3
Female	22,028	7.6	16,438	6.9	564	7.0	4,058	6.3	480	7.4	2,284	6.3	439	6.7	1,624	9.6	501	6.2	483	7.8	1,466	5.8	2,312	6.9	2,227	8.7
Citizenship status																										
U.S. citizen or permanent resident	30,394	7.3	23,051	6.7	657	6.9	5,708	6.3	681	7.8	3,666	6.2	654	6.3	1,817	9.7	824	6.0	648	7.8	2,635	5.8	2,855	6.9	2,906	8.5
Temporary visa holder	16,838	7.3	14,612	7.0	447	7.7	1,992	6.9	1,277	7.3	5,044	6.9	326	7.3	496	7.6	942	6.6	531	7.4	1,827	6.3	278	7.3	1,452	8.5
Ethnicity and race (U.S. citizens and permanent residents)																										
Hispanic or Latino	2,730	7.3	2,070	6.8	41	7.8	551	6.3	31	7.3	299	6.0	47	6.0	136	10.1	63	6.2	66	7.0	209	5.8	320	7.0	307	8.3
Not Hispanic or Latino																										
American Indian or Alaska Native	92	8.8	61	7.9	D	D	D	D	0	-	D	D	D	D	9	8.3	0	-	D	D	5	7.0	8	8.3	15	8.9
Asian	2,938	7.0	2,484	6.8	39	8.0	684	6.5	135	7.3	569	6.4	30	7.0	177	9.3	91	6.0	68	7.1	261	6.0	180	7.0	250	8.3
Black or African American	2,327	9.8	1,414	8.3	28	8.7	261	6.8	36	9.1	155	7.0	13	6.6	257	11.3	28	8.6	47	10.3	73	5.7	231	8.0	285	10.0
White	20,725	7.0	15,822	6.3	518	6.7	3,917	6.2	436	7.8	2,460	6.0	521	6.3	1,157	9.0	588	6.0	427	7.8	1,953	5.8	1,940	6.8	1,905	8.3
More than one race	1,074	6.9	824	6.3	11	5.8	212	6.3	26	7.0	113	5.8	33	6.0	54	8.4	32	6.0	27	6.5	96	5.8	124	6.1	96	8.3
Other race or race not reported	306	8.2	225	7.7	D	D	D	D	11	6.8	D	D	D	D	13	9.8	12	7.4	D	D	22	5.9	33	7.3	33	8.8
Ethnicity not reported	202	8.0	151	7.3	8	7.2	28	6.7	6	6.0	31	7.3	2	6.7	14	9.7	10	6.7	2	8.3	16	6.3	19	8.3	15	9.0

Table 3-5
Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2021

(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	
Years since entering doctoral program ^a																										
Doctorate recipients reporting year of doctoral program entry ^b	46,743	5.7	37,259	5.6	1,090	5.0	7,632	5.8	1,941	5.8	8,605	5.3	967	5.3	2,279	5.3	1,759	5.3	1,160	5.5	4,405	5.5	3,077	6.0	4,344	6.0
Sex																										
Male	25,250	5.7	21,205	5.5	535	4.9	3,639	5.8	1,476	5.8	6,376	5.3	540	5.3	710	5.3	1,264	5.3	695	5.7	2,965	5.8	847	5.9	2,158	5.8
Female	21,488	5.8	16,050	5.7	555	5.0	3,993	5.7	465	5.6	2,229	5.3	427	5.3	1,569	5.2	495	5.3	464	5.4	1,439	5.3	2,230	6.0	2,184	6.0
Citizenship status																										
U.S. citizen or permanent resident	29,543	5.8	22,422	5.8	637	5.1	5,595	5.8	662	6.0	3,553	5.3	636	5.5	1,761	5.3	803	5.7	623	5.8	2,571	5.4	2,743	6.0	2,838	6.0
Temporary visa holder	16,486	5.3	14,306	5.3	438	4.8	1,960	5.7	1,235	5.4	4,935	5.3	318	5.3	482	5.0	928	5.2	519	5.3	1,786	5.7	273	5.8	1,432	5.8
Ethnicity and race (U.S. citizens and permanent residents)																										
Hispanic or Latino	2,640	5.8	2,007	5.8	41	5.6	532	5.8	30	5.8	295	5.3	43	5.8	131	5.3	61	5.7	61	5.8	206	5.5	308	6.0	299	6.3
Not Hispanic or Latino																										
American Indian or Alaska Native	88	6.0	59	5.9	D	D	D	D	0	-	D	D	D	D	9	6.0	0	-	D	D	D	D	7	6.2	15	5.8
Asian	2,860	5.8	2,414	5.8	39	5.5	671	5.8	132	6.1	554	5.6	30	6.0	174	5.1	86	5.3	66	5.8	250	5.7	171	6.0	241	6.7
Black or African American	2,220	5.8	1,351	5.8	25	5.8	254	5.8	36	5.9	149	5.5	11	5.3	245	5.8	28	5.2	42	5.5	71	5.3	221	6.2	269	6.0
White	20,218	5.8	15,440	5.7	502	5.0	3,853	5.7	425	6.0	2,381	5.3	511	5.3	1,124	5.3	575	5.7	416	5.8	1,912	5.4	1,868	5.9	1,873	6.0
More than one race	1,044	5.8	803	5.8	11	4.8	205	5.7	26	6.3	110	5.3	33	5.9	53	5.3	32	5.8	26	6.0	93	5.5	119	5.8	95	6.0
Other race or race not reported	288	5.9	213	5.8	D	D	D	D	10	5.8	D	D	D	D	11	4.0	11	6.3	D	D	D	D	32	6.0	32	6.0
Ethnicity not reported	185	5.8	135	5.9	7	6.7	26	5.3	3	6.3	28	5.9	1	5.3	14	5.0	10	6.0	2	5.8	13	5.9	17	6.0	14	7.0

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

^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 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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 ^a	
	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	49,332	8.7	10,200	12.3	1,255	10.8	3,486	15.0	2,878	11.3	729	11.0	1,852	11.7
Sex														
Male	26,610	8.3	4,372	12.0	709	10.8	1,038	15.0	1,518	11.5	332	10.7	775	11.6
Female	22,718	9.0	5,827	12.7	546	10.8	2,448	15.3	1,359	11.2	397	11.4	1,077	11.8
Citizenship status														
U.S. citizen or permanent resident	31,287	9.0	7,667	13.0	583	13.3	2,931	15.8	2,306	11.3	564	11.0	1,283	12.5
Temporary visa holder	17,216	8.3	2,322	10.8	630	9.3	489	11.9	526	11.4	142	10.9	535	10.5
Ethnicity and race (U.S. citizens and permanent residents)														
Hispanic or Latino	2,808	8.6	674	12.4	28	12.3	279	15.0	221	10.9	43	10.6	103	11.0
Not Hispanic or Latino														
American Indian or Alaska Native	97	11.0	34	17.7	D	D	21	18.1	D	D	D	D	7	17.3
Asian	2,986	8.6	465	12.0	77	11.1	157	14.0	114	11.3	32	10.5	85	12.1
Black or African American	2,397	12.3	958	15.6	109	20.0	507	16.0	106	12.0	17	9.0	219	15.3
White	21,142	8.6	5,052	12.8	328	12.5	1,796	16.0	1,708	11.2	434	11.0	786	12.0
More than one race	1,084	8.3	254	12.6	19	9.3	94	14.3	80	12.1	22	12.0	39	11.0
Other race or race not reported	363	10.0	90	13.0	D	D	26	18.0	D	D	D	D	19	11.0
Ethnicity not reported	410	10.3	140	14.0	16	16.5	51	16.0	39	12.2	9	13.6	25	15.0
Years since entering graduate school														
Doctorate recipients	47,958	7.3	9,754	10.0	1,191	8.8	3,325	12.0	2,773	9.8	700	9.3	1,765	9.5

Table 3-6**Median years to non-science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2021**

(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 ^a	
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median
reporting year of graduate school entry														
Sex														
Male	25,925	7.0	4,163	9.8	664	8.8	973	11.8	1,460	9.8	318	8.8	748	9.3
Female	22,028	7.6	5,590	10.3	527	8.8	2,351	12.0	1,313	9.4	382	9.8	1,017	9.7
Citizenship status														
U.S. citizen or permanent resident	30,394	7.3	7,343	10.8	547	10.6	2,812	12.8	2,213	9.8	548	9.3	1,223	10.0
Temporary visa holder	16,838	7.3	2,226	8.9	605	8.0	452	9.3	517	9.8	141	8.9	511	8.9
Ethnicity and race (U.S. citizens and permanent residents)														
Hispanic or Latino	2,730	7.3	660	10.3	28	12.0	273	11.8	212	9.5	43	9.0	104	9.5
Not Hispanic or Latino														
American Indian or Alaska Native	92	8.8	31	14.3	D	D	19	14.3	D	D	D	D	6	12.8
Asian	2,938	7.0	454	10.1	74	8.8	154	11.3	111	9.3	31	9.8	84	10.1
Black or African American	2,327	9.8	913	12.4	105	15.1	480	12.8	99	10.9	17	8.7	212	11.7
White	20,725	7.0	4,903	10.5	311	10.0	1,749	12.9	1,668	9.7	424	9.3	751	9.8
More than one race	1,074	6.9	250	10.8	19	8.6	93	12.3	78	10.7	22	10.5	38	9.8
Other race or race not reported	306	8.2	81	10.9	D	D	26	12.9	D	D	D	D	17	10.8
Ethnicity not reported	202	8.0	51	11.3	4	19.8	18	12.8	13	9.9	5	10.3	11	11.5
Years since entering doctoral program ^b														
Doctorate recipients reporting year of doctoral program entry ^c	46,743	5.7	9,484	5.9	1,160	5.0	3,217	5.7	2,710	6.8	681	6.7	1,716	5.8

Table 3-6**Median years to non-science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2021**

(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 ^a	
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median
Sex														
Male	25,250	5.7	4,045	5.9	643	5.0	943	5.5	1,425	6.8	308	6.0	726	5.7
Female	21,488	5.8	5,438	5.9	517	5.0	2,273	5.7	1,285	6.8	373	6.8	990	5.8
Citizenship status														
U.S. citizen or permanent resident	29,543	5.8	7,121	6.0	529	5.3	2,717	5.8	2,156	6.8	535	6.7	1,184	6.0
Temporary visa holder	16,486	5.3	2,180	5.5	592	5.0	440	5.3	511	6.3	135	6.0	502	5.3
Ethnicity and race (U.S. citizens and permanent residents)														
Hispanic or Latino	2,640	5.8	633	6.1	28	6.5	262	5.8	202	6.8	42	6.9	99	5.9
Not Hispanic or Latino														
American Indian or Alaska Native	88	6.0	29	6.8	D	D	17	7.0	D	D	D	D	6	5.5
Asian	2,860	5.8	446	6.0	73	5.8	152	5.8	106	6.9	31	7.0	84	6.1
Black or African American	2,220	5.8	869	5.9	103	5.3	447	5.8	96	6.8	16	6.8	207	6.1
White	20,218	5.8	4,778	6.0	299	5.0	1,709	5.7	1,633	6.8	414	6.6	723	6.0
More than one race	1,044	5.8	241	6.3	18	5.3	88	5.8	76	7.0	22	7.0	37	6.3
Other race or race not reported	288	5.9	75	6.0	D	D	24	6.5	D	D	D	D	17	5.6
Ethnicity not reported	185	5.8	50	5.8	3	8.8	18	5.2	13	6.0	5	6.3	11	5.3

D = suppressed to avoid disclosure of confidential information.

^a Includes other non-science and engineering fields not shown separately.^b 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.^c 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021

may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Median age and percent distribution)

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	0.8	44.7	30.9	11.6	5.1	6.9
Science and engineering	30.8	100.0	0.9	51.7	30.3	9.3	3.6	4.2
Agricultural sciences and natural resources	31.7	100.0	0.7	42.5	34.8	11.8	5.8	4.5
Biological and biomedical sciences	30.4	100.0	0.7	55.7	31.8	7.9	2.3	1.5
Computer and information sciences	31.3	100.0	1.2	45.3	35.2	9.4	4.4	4.6
Engineering	30.2	100.0	1.3	58.9	28.0	7.4	2.2	2.2
Geosciences, atmospheric, and ocean sciences	30.7	100.0	0.7	53.4	32.1	7.4	4.2	2.2
Health sciences	34.5	100.0	0.6	26.4	29.2	15.1	9.6	19.1
Mathematics and statistics	29.4	100.0	1.9	64.2	24.7	6.0	1.8	1.6
Multidisciplinary/ interdisciplinary sciences	31.6	100.0	1.0	43.2	31.8	12.6	5.6	5.7
Physical sciences	29.2	100.0	1.1	70.3	22.4	4.4	1.1	0.6
Psychology	31.2	100.0	0.6	46.4	31.2	10.3	4.6	6.9
Social sciences	33.1	100.0	0.2	30.9	38.4	16.8	6.2	7.5
Non-science and engineering	35.8	100.0	0.1	17.6	33.4	20.4	11.1	17.3
Business	33.9	100.0	0.5	26.4	33.3	15.2	7.9	16.7
Education	38.8	100.0	D	11.0	25.6	22.1	D	26.2
Humanities	34.6	100.0	D	19.0	40.5	21.2	D	10.9
Visual and performing arts	33.9	100.0	0.0	22.8	43.0	18.9	8.7	6.7
Other ^a	35.3	100.0	D	19.9	32.9	20.2	D	15.5
Sex								
Male	31.3	100.0	0.7	46.4	32.0	11.2	4.5	5.3
Female	31.7	100.0	0.8	42.8	29.7	12.1	5.9	8.8
Citizenship status, ethnicity, and race								
U.S. citizen or permanent resident	31.7	100.0	0.8	43.1	28.2	12.2	6.3	9.6
Hispanic or Latino	31.8	100.0	0.5	41.4	30.3	12.8	6.3	8.8
Not Hispanic or Latino								
American Indian or Alaska Native	37.3	100.0	D	23.2	20.2	16.2	17.2	D
Asian	31.3	100.0	1.1	46.2	32.2	10.6	5.3	4.6
Black or African American	36.6	100.0	0.3	25.1	23.0	15.9	11.0	24.7
White	31.4	100.0	0.8	45.0	28.0	11.7	5.8	8.7
More than one race	31.1	100.0	0.8	47.6	26.0	13.3	4.6	7.6
Other race or race not reported	32.9	100.0	D	37.5	32.7	16.2	7.9	D
Ethnicity not reported	33.8	100.0	0.0	31.3	28.5	15.2	9.0	16.1
Temporary visa holder	31.1	100.0	0.8	47.8	35.8	10.5	3.1	2.0

D = suppressed to avoid disclosure of confidential information.

^a Includes other non-science and engineering fields not shown separately.**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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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)	52,250	28,082	24,156	31,674	17,638	2,856	100	3,022	2,431	21,333	1,088	376	468
All doctorate recipients reporting primary source of support, all fields (number)	46,056	24,907	21,147	29,394	16,399	2,620	87	2,848	2,202	20,144	1,036	286	171
Teaching assistantships	21.3	21.9	20.5	19.5	24.4	18.4	10.3	17.0	10.6	21.0	18.9	21.3	23.4
Research assistantships or traineeships ^b	34.7	39.9	28.6	27.6	47.4	20.6	13.8	35.1	13.2	29.4	23.9	24.1	21.1
Fellowships, scholarships, or dissertation grants	24.2	22.5	26.3	27.0	19.4	34.4	36.8	31.6	25.8	25.1	33.7	25.9	24.0
Own resources	15.3	11.1	20.2	21.3	4.4	23.2	33.3	13.4	44.3	19.6	20.7	22.4	26.3
Employer or other sources	4.5	4.7	4.4	4.6	4.5	3.4	5.7	2.9	6.0	4.8	2.8	6.3	5.3
Science and engineering (number)	36,741	20,930	15,809	22,312	14,223	1,993	59	2,400	1,339	15,389	798	213	121
Teaching assistantships	20.2	21.0	19.2	17.9	23.9	16.8	D	15.2	11.2	19.1	16.3	D	22.3
Research assistantships or traineeships ^b	40.8	45.5	34.7	33.8	51.7	25.0	D	39.8	17.3	35.9	29.2	D	27.3
Fellowships, scholarships, or dissertation grants	23.9	21.5	27.1	28.5	16.9	37.9	37.3	31.5	32.0	26.1	35.8	27.7	23.1
Own resources	11.1	7.8	15.5	16.2	3.2	17.6	27.1	10.9	35.9	15.0	16.4	15.5	21.5
Employer or other sources	3.9	4.2	3.5	3.6	4.4	2.7	6.8	2.6	3.7	3.9	2.3	6.1	5.8
Agricultural sciences and natural resources (number)	1,072	527	545	634	436	39	D	39	25	502	11	D	6
Teaching assistantships	12.0	9.9	14.1	11.8	12.2	D	0.0	D	D	11.8	D	12.5	33.3
Research assistantships or traineeships ^b	52.0	54.5	49.5	49.4	56.0	46.2	0.0	53.8	28.0	51.4	45.5	50.0	0.0
Fellowships, scholarships, or dissertation grants	20.0	18.6	21.3	20.2	19.7	25.6	D	D	28.0	18.9	D	D	16.7
Own resources	9.4	8.3	10.5	13.9	2.8	D	0.0	15.4	D	12.7	D	0.0	50.0
Employer or other sources	6.6	8.7	4.6	4.7	9.4	5.1	25.0	0.0	4.0	5.2	0.0	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: 2021

(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)	7,515	3,581	3,934	5,542	1,940	529	12	659	252	3,820	204	41	25
Teaching assistantships	13.8	15.0	12.8	12.8	17.0	10.8	D	7.9	D	14.3	9.3	9.8	16.0
Research assistantships or traineeships ^b	38.3	38.8	37.9	35.3	47.0	29.3	D	35.7	D	37.2	28.4	29.3	28.0
Fellowships, scholarships, or dissertation grants	37.4	36.0	38.7	40.9	27.6	52.0	41.7	44.9	54.0	37.2	52.9	43.9	36.0
Own resources	7.2	6.8	7.5	8.8	2.7	6.6	D	9.1	D	8.9	6.9	9.8	12.0
Employer or other sources	3.2	3.4	3.1	2.3	5.8	1.3	0.0	2.4	2.0	2.4	2.5	7.3	8.0
Computer and information sciences (number)	1,913	1,458	455	661	1,233	30	0	131	35	425	26	11	3
Teaching assistantships	17.1	15.7	21.8	13.5	19.2	D	0.0	17.6	D	13.4	D	18.2	0.0
Research assistantships or traineeships ^b	57.9	60.8	48.4	45.4	64.6	26.7	0.0	45.8	25.7	48.0	46.2	45.5	66.7
Fellowships, scholarships, or dissertation grants	13.8	12.3	18.5	19.7	10.7	33.3	0.0	21.4	25.7	17.9	19.2	18.2	0.0
Own resources	6.4	5.8	8.1	14.5	1.9	D	0.0	9.9	D	13.2	D	9.1	0.0
Employer or other sources	4.8	5.3	3.3	7.0	3.6	0.0	0.0	5.3	8.6	7.5	7.7	9.1	33.3
Engineering (number)	8,511	6,312	2,199	3,543	4,912	294	D	551	148	2,382	D	32	23
Teaching assistantships	11.9	12.0	11.7	8.5	14.4	9.9	0.0	8.3	12.8	8.3	4.6	6.3	8.7
Research assistantships or traineeships ^b	59.6	61.0	55.8	49.1	67.3	35.4	D	55.7	25.0	51.3	D	53.1	34.8
Fellowships, scholarships, or dissertation grants	18.4	16.4	24.1	28.9	10.9	40.1	0.0	26.0	41.9	26.7	46.8	18.8	26.1
Own resources	4.9	4.9	4.8	7.6	2.9	9.9	D	6.7	14.9	7.0	D	6.3	17.4
Employer or other sources	5.1	5.7	3.5	6.0	4.6	4.8	0.0	3.3	5.4	6.7	4.6	15.6	13.0

Table 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2021

(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)	954	534	420	633	318	42	D	30	11	508	33	D	2
Teaching assistantships	21.0	19.5	22.9	19.4	23.9	21.4	0.0	20.0	45.5	19.1	15.2	0.0	50.0
Research assistantships or traineeships ^b	46.8	49.1	43.8	42.7	55.0	19.0	D	50.0	D	44.5	D	D	0.0
Fellowships, scholarships, or dissertation grants	24.4	22.7	26.7	28.4	16.7	D	0.0	D	D	27.0	39.4	0.0	0.0
Own resources	6.0	6.2	5.7	8.1	1.6	D	D	D	0.0	8.1	D	0.0	50.0
Employer or other sources	1.9	2.6	1.0	1.4	2.8	4.8	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Health sciences (number)	2,250	699	1,551	1,753	478	129	9	174	242	1,123	52	11	13
Teaching assistantships	11.0	13.4	9.9	8.3	21.1	10.9	D	9.2	D	8.5	D	27.3	0.0
Research assistantships or traineeships ^b	22.9	29.5	19.9	18.8	37.9	16.3	0.0	25.3	9.5	20.1	19.2	9.1	38.5
Fellowships, scholarships, or dissertation grants	22.0	24.0	21.1	22.1	21.5	27.9	D	31.0	D	21.5	25.0	27.3	7.7
Own resources	35.2	24.0	40.3	42.8	7.5	40.3	D	27.6	64.0	40.9	D	27.3	46.2
Employer or other sources	8.9	9.0	8.8	8.0	11.9	4.7	11.1	6.9	6.6	9.0	3.8	9.1	7.7
Mathematics and statistics (number)	1,732	1,246	486	801	922	61	0	87	28	574	31	11	9
Teaching assistantships	63.4	65.2	58.8	61.3	65.3	52.5	0.0	60.9	42.9	63.6	51.6	45.5	88.9
Research assistantships or traineeships ^b	14.7	14.7	14.8	12.9	16.2	13.1	0.0	13.8	D	12.7	D	18.2	0.0
Fellowships, scholarships, or dissertation grants	16.1	14.2	20.8	19.4	13.2	D	0.0	D	32.1	17.1	22.6	27.3	0.0
Own resources	4.0	4.4	3.1	5.1	3.1	D	0.0	D	D	5.1	D	9.1	11.1
Employer or other sources	1.8	1.5	2.5	1.4	2.2	1.6	0.0	1.1	0.0	1.6	0.0	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: 2021

(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)	1,143	683	460	622	517	61	D	66	42	415	26	D	2
Teaching assistantships	20.8	21.2	20.2	18.5	23.6	21.3	0.0	D	14.3	19.8	D	25.0	0.0
Research assistantships or traineeships ^b	41.8	46.1	35.4	33.6	51.5	24.6	0.0	51.5	19.0	33.0	46.2	25.0	50.0
Fellowships, scholarships, or dissertation grants	21.3	18.7	25.2	24.4	17.8	31.1	D	D	26.2	22.9	30.8	25.0	50.0
Own resources	11.7	10.0	14.3	18.3	3.9	16.4	0.0	7.6	35.7	19.3	D	D	0.0
Employer or other sources	4.3	4.0	4.8	5.1	3.3	6.6	0.0	6.1	4.8	5.1	0.0	12.5	0.0
Physical sciences (number)	4,361	2,937	1,423	2,564	1,776	204	D	250	71	1,908	D	22	12
Teaching assistantships	24.9	24.9	24.9	22.5	28.4	25.0	D	20.8	D	22.7	21.5	18.2	8.3
Research assistantships or traineeships ^b	53.5	56.0	48.3	49.8	58.7	35.3	D	57.6	D	51.4	46.2	40.9	66.7
Fellowships, scholarships, or dissertation grants	17.6	15.3	22.3	22.7	10.4	33.8	D	18.8	45.1	20.9	D	27.3	8.3
Own resources	2.6	2.3	3.2	3.8	0.9	4.9	0.0	2.4	D	3.7	D	9.1	16.7
Employer or other sources	1.4	1.5	1.3	1.2	1.6	1.0	0.0	0.4	1.4	1.4	1.1	4.5	0.0
Psychology (number)	3,013	828	2,185	2,726	271	305	7	172	215	1,864	118	32	13
Teaching assistantships	23.1	26.4	21.8	22.3	31.0	15.1	D	27.3	7.0	25.1	19.5	D	30.8
Research assistantships or traineeships ^b	23.9	22.5	24.4	23.4	28.8	18.4	0.0	24.4	13.0	25.8	22.0	18.8	0.0
Fellowships, scholarships, or dissertation grants	17.6	18.1	17.3	17.1	23.2	20.7	D	20.3	22.8	15.1	20.3	D	23.1
Own resources	33.5	30.3	34.6	35.4	12.5	44.9	D	26.7	55.3	31.9	37.3	D	46.2
Employer or other sources	2.1	2.7	1.8	1.8	4.4	1.0	0.0	1.2	1.9	2.1	0.8	0.0	0.0
Social sciences (number)	4,277	2,125	2,151	2,833	1,420	299	15	241	270	1,868	95	32	13

Table 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2021

(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	31.8	33.5	30.1	27.1	40.9	24.4	D	23.7	D	29.1	33.7	43.8	38.5
Research assistantships or traineeships ^b	14.8	14.7	14.9	14.7	14.9	11.4	D	17.4	D	15.6	10.5	9.4	15.4
Fellowships, scholarships, or dissertation grants	32.3	32.7	31.8	31.0	34.8	38.8	D	D	28.1	28.6	31.6	28.1	46.2
Own resources	17.2	14.7	19.8	23.1	5.5	21.1	D	D	41.9	22.1	22.1	15.6	0.0
Employer or other sources	4.0	4.5	3.4	4.1	3.9	4.3	13.3	0.8	3.3	4.6	2.1	3.1	0.0
Non-science and engineering (number)	9,315	3,977	5,338	7,082	2,176	627	28	448	863	4,755	238	73	50
Teaching assistantships	25.3	26.6	24.4	24.6	27.6	23.8	D	26.3	9.7	27.2	27.7	D	26.0
Research assistantships or traineeships ^b	10.6	10.3	10.8	8.0	18.7	6.4	D	10.0	6.8	8.5	6.3	D	6.0
Fellowships, scholarships, or dissertation grants	25.4	27.7	23.7	22.3	35.7	23.0	35.7	32.6	16.3	22.0	26.5	20.5	26.0
Own resources	31.6	28.3	34.1	37.5	12.3	41.1	46.4	26.8	57.4	34.5	34.9	42.5	38.0
Employer or other sources	7.1	7.1	7.0	7.5	5.7	5.7	3.6	4.2	9.7	7.9	4.6	6.8	4.0
Business (number)	1,132	627	505	528	588	28	D	74	102	298	18	D	4
Teaching assistantships	16.3	14.4	18.6	10.2	21.6	D	0.0	16.2	D	10.7	D	D	0.0
Research assistantships or traineeships ^b	20.8	D	D	15.9	25.3	D	0.0	12.2	9.8	19.5	D	33.3	0.0
Fellowships, scholarships, or dissertation grants	30.6	32.2	28.5	22.2	37.9	25.0	0.0	44.6	4.9	21.1	38.9	0.0	50.0
Own resources	26.9	24.4	30.1	43.6	12.1	46.4	D	23.0	73.5	39.3	D	33.3	25.0
Employer or other sources	5.4	D	D	8.1	3.1	D	0.0	4.1	D	9.4	0.0	0.0	25.0
Education (number)	3,156	929	2,227	2,697	443	259	16	151	445	1,697	88	23	18
Teaching assistantships	11.5	11.9	11.3	10.2	18.7	7.3	0.0	12.6	5.8	11.7	11.4	13.0	0.0

Table 4-1

Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2021

(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	
Research assistantships or traineeships ^b	15.0	15.4	14.8	12.5	30.2	10.0	D	17.9	D	13.8	11.4	4.3	5.6
Fellowships, scholarships, or dissertation grants	12.7	11.4	13.3	11.5	21.0	14.7	D	18.5	D	9.8	14.8	8.7	16.7
Own resources	48.1	47.1	48.5	52.9	18.3	58.3	50.0	42.4	61.1	50.6	52.3	60.9	72.2
Employer or other sources	12.7	14.1	12.1	12.9	11.7	9.7	6.3	8.6	13.0	14.1	10.2	13.0	5.6
Humanities (number)	2,668	1,403	1,265	2,150	510	200	D	108	94	1,630	75	D	13
Teaching assistantships	40.7	37.9	43.7	41.7	36.5	44.5	D	37.0	D	42.5	44.0	D	46.2
Research assistantships or traineeships ^b	1.2	1.1	1.4	1.1	1.8	D	0.0	D	D	1.0	0.0	D	0.0
Fellowships, scholarships, or dissertation grants	36.5	37.0	36.0	33.3	50.4	30.5	D	D	40.4	32.2	37.3	40.7	38.5
Own resources	18.6	20.2	16.7	21.3	6.9	22.0	0.0	18.5	27.7	21.3	17.3	22.2	15.4
Employer or other sources	3.0	3.8	2.1	2.6	4.5	D	0.0	1.9	D	2.9	1.3	0.0	0.0
Visual and performing arts (number)	670	301	369	530	135	42	D	31	16	410	22	D	4
Teaching assistantships	36.4	39.9	33.6	37.4	32.6	D	0.0	54.8	D	37.6	36.4	D	75.0
Research assistantships or traineeships ^b	1.9	D	D	1.3	4.4	D	0.0	D	0.0	1.2	0.0	0.0	0.0
Fellowships, scholarships, or dissertation grants	39.3	36.9	41.2	36.6	50.4	38.1	0.0	D	D	35.9	D	33.3	25.0
Own resources	21.0	18.6	23.0	23.6	10.4	26.2	D	D	37.5	23.9	D	33.3	0.0
Employer or other sources	1.3	D	D	1.1	2.2	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Other (number) ^c	1,689	717	972	1,177	500	98	6	84	206	720	35	17	11
Teaching assistantships	28.6	28.6	28.6	27.2	32.0	23.5	16.7	35.7	14.6	29.9	34.3	29.4	36.4
Research assistantships or traineeships ^b	13.6	13.5	13.7	10.1	21.6	8.2	0.0	8.3	5.3	12.4	5.7	0.0	18.2

Table 4-1**Research doctorate recipients' primary source of financial support, by broad field of doctorate, sex, citizenship status, ethnicity, and race: 2021**

(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	22.4	22.7	22.2	20.5	27.2	22.4	50.0	36.9	17.0	19.9	11.4	5.9	18.2
Own resources	28.9	27.1	30.2	35.5	13.4	39.8	33.3	17.9	56.3	30.3	45.7	52.9	27.3
Employer or other sources	6.5	8.1	5.2	6.7	5.8	6.1	0.0	1.2	6.8	7.6	2.9	11.8	0.0

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who did not report citizenship or sex.^b Includes research assistantships, other assistantships, traineeships, and internships or clinical residencies.^c Includes other non-science and engineering fields not shown separately.**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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Percent)

Financial source	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 ^a	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Doctorate recipients reporting source of support and sex (number)	24,923	21,172	20,942	15,828	528	546	3,583	3,940	1,459	456	6,312	2,201	534	420	699	1,553	1,248	486	683	460	2,939	1,423	829	2,188	2,128	2,155	3,981	5,344	628	505	930	2,230	1,404	1,265	301	370	718	974
Fellowship or scholarship	63.8	68.3	62.8	69.3	66.3	73.4	71.0	74.2	54.7	56.4	57.9	66.3	69.5	78.8	58.1	60.8	61.1	64.6	60.3	73.5	60.0	68.4	57.5	61.7	76.1	78.0	68.6	65.4	65.0	65.1	45.8	49.4	83.5	85.2	85.7	89.5	64.9	67.2
Dissertation grant	14.3	21.5	12.2	19.7	14.4	19.0	12.8	15.7	5.8	11.4	7.1	9.0	14.4	16.0	15.9	22.4	8.6	8.8	11.0	22.2	7.2	10.0	22.1	23.4	34.0	43.1	25.3	26.8	14.5	14.9	12.8	15.4	38.2	45.9	32.2	40.8	23.0	28.9
Assistantship																																						
Teaching	69.8	65.7	70.5	66.9	46.4	59.2	54.1	54.5	75.7	80.0	65.5	66.3	76.0	80.2	51.5	42.5	94.2	89.7	74.8	72.0	86.7	88.5	72.7	69.2	81.3	81.4	66.5	62.0	65.9	63.2	35.2	39.9	82.5	88.3	90.0	87.6	66.4	68.3
Research	71.1	62.6	76.5	69.0	82.0	81.3	65.7	65.1	84.8	83.6	85.1	84.8	85.0	85.7	55.9	48.0	62.4	61.1	78.6	70.0	90.4	87.9	57.8	60.6	62.6	63.2	42.4	43.7	58.0	58.4	34.8	37.8	37.3	40.1	29.9	34.1	53.9	57.7
Other	7.0	10.0	6.0	8.2	8.9	8.4	4.1	4.0	5.6	6.6	4.8	4.5	5.4	4.8	9.0	7.5	5.4	5.1	7.0	7.2	3.0	3.0	20.7	20.7	9.5	12.7	12.4	15.3	6.1	8.5	14.9	16.0	14.4	18.3	15.6	16.5	9.3	12.8
Traineeship	3.3	5.0	3.8	6.3	2.1	2.2	11.6	12.9	D	D	1.7	3.5	1.7	3.8	7.7	7.6	1.8	2.9	D	D	1.8	3.1	6.2	6.5	1.9	2.3	0.8	1.2	D	0.5	1.0	1.0	1.1	D	D	0.7	2.1	
Internship or clinical residency	12.1	11.1	13.7	13.6	4.4	6.2	13.6	4.2	39.0	36.4	18.6	15.9	11.2	10.2	8.6	5.5	13.7	23.0	22.0	14.6	4.9	7.0	36.8	43.1	4.3	4.0	4.1	3.8	4.6	3.6	3.3	3.7	3.6	2.9	2.7	7.0	6.3	4.1
Loan (any source)	18.5	27.1	15.2	22.6	15.7	20.1	15.8	13.8	8.4	9.4	10.1	7.6	14.0	13.8	30.9	44.2	9.1	7.6	16.1	20.0	8.1	8.4	49.8	47.5	28.3	31.7	35.9	40.3	21.2	26.3	46.9	46.5	34.3	33.7	42.9	38.6	34.5	42.8
Personal sources																																						
Savings	47.0	54.4	44.2	51.7	51.5	51.6	43.3	47.5	40.7	42.1	41.7	41.6	41.0	45.2	57.5	65.0	38.1	41.8	47.0	54.8	34.4	38.9	68.0	65.7	57.1	59.5	61.6	62.3	58.4	65.0	67.0	64.3	60.4	58.4	63.1	63.2	59.2	61.1
Other earnings during graduate school	24.7	34.8	20.1	29.2	27.7	28.4	18.5	20.4	16.0	18.0	14.2	14.6	19.1	25.5	37.1	49.2	17.8	17.9	23.4	33.5	11.7	13.1	46.9	46.3	37.9	43.7	48.6	51.7	25.5	28.1	58.1	57.5	54.0	53.4	62.5	58.4	40.1	45.6
Spouse's, partner's, or family's earnings or savings	33.6	44.8	31.9	42.6	33.9	43.0	32.8	39.3	29.2	34.4	30.5	35.3	28.3	33.3	34.9	47.5	29.9	39.9	33.7	39.6	25.8	30.9	44.9	59.6	39.8	47.8	42.5	51.4	37.4	50.3	38.8	49.7	45.7	53.4	48.2	54.3	43.2	52.1
Employer reimbursement or assistance	9.2	11.2	8.0	8.9	9.8	8.6	6.7	6.9	10.0	8.1	7.9	5.9	7.3	6.4	15.3	22.4	5.6	5.6	7.8	11.3	6.2	4.8	9.4	8.2	9.6	10.3	15.4	18.0	11.3	14.9	28.6	28.0	10.5	8.1	4.3	6.8	16.0	14.2
Foreign (non-U.S.) support	6.9	4.9	6.8	5.0	11.6	8.1	5.1	4.5	8.0	9.4	8.5	6.5	6.0	4.5	8.6	4.1	5.7	7.2	7.3	5.4	3.5	3.2	3.1	2.3	8.8	6.7	7.4	4.7	6.2	5.5	5.7	3.3	7.5	4.9	5.6	7.3	10.9	6.0
Other	0.9	1.1	0.8	0.9	0.6	1.3	0.7	0.8	0.4	0.0	0.6	0.3	0.7	0.5	1.1	2.1	0.8	0.2	0.7	1.1	0.4	0.5	1.4	1.3	1.7	1.2	1.6	1.7	1.6	2.2	2.2	1.7	1.5	0.9	0.3	1.6	1.7	2.5

D = suppressed to avoid disclosure of confidential information.

^a Includes other non-science and engineering fields not shown separately.

Note(s):

In this table, a respondent counts once in each source category from which the respondent 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent distribution)

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 ^a
Male doctorate recipients reporting source of support	24,923	100.0	84.0	2.1	14.4	5.9	25.3	2.1	2.8	5.0	2.7	11.8	3.3	8.5	16.0	2.5	3.7	5.6	1.2	2.9
Fellowship or scholarship	15,889	100.0	82.8	2.2	16.0	5.0	23.0	2.3	2.6	4.8	2.6	11.1	3.0	10.2	17.2	2.6	2.7	7.4	1.6	2.9
Dissertation grant	3,566	100.0	71.7	2.1	12.8	2.4	12.6	2.2	3.1	3.0	2.1	6.0	5.1	20.3	28.3	2.6	3.3	15.1	2.7	4.6
Assistantship																				
Teaching	17,402	100.0	84.8	1.4	11.1	6.3	23.8	2.3	2.1	6.8	2.9	14.6	3.5	9.9	15.2	2.4	1.9	6.7	1.6	2.7
Research	17,716	100.0	90.5	2.4	13.3	7.0	30.3	2.6	2.2	4.4	3.0	15.0	2.7	7.5	9.5	2.1	1.8	3.0	0.5	2.2
Other	1,746	100.0	71.8	2.7	8.5	4.7	17.5	1.7	3.6	3.9	2.7	5.0	9.9	11.6	28.2	2.2	8.0	11.6	2.7	3.8
Traineeship	818	100.0	96.1	1.3	51.0	D	13.1	1.1	6.6	2.7	D	6.5	6.2	5.0	3.9	D	0.6	1.7	D	0.6
Internship or clinical residency	3,023	100.0	94.6	0.8	3.8	18.8	38.7	2.0	2.0	5.7	5.0	4.8	10.1	3.0	5.4	1.0	1.0	1.7	0.3	1.5
Loan (any source)	4,602	100.0	69.0	1.8	12.3	2.7	13.8	1.6	4.7	2.5	2.4	5.2	9.0	13.1	31.0	2.9	9.5	10.5	2.8	5.4
Personal sources																				
Savings	11,714	100.0	79.1	2.3	13.3	5.1	22.5	1.9	3.4	4.1	2.7	8.6	4.8	10.4	20.9	3.1	5.3	7.2	1.6	3.6
Other earnings during graduate school	6,153	100.0	68.6	2.4	10.8	3.8	14.5	1.7	4.2	3.6	2.6	5.6	6.3	13.1	31.4	2.6	8.8	12.3	3.1	4.7
Spouse's, partner's, or family's earnings or savings	8,370	100.0	79.8	2.1	14.0	5.1	23.0	1.8	2.9	4.5	2.7	9.1	4.4	10.1	20.2	2.8	4.3	7.7	1.7	3.7
Employer reimbursement or assistance	2,281	100.0	73.1	2.3	10.5	6.4	21.8	1.7	4.7	3.1	2.3	7.9	3.4	8.9	26.9	3.1	11.7	6.5	0.6	5.0
Foreign (non-U.S.) support	1,720	100.0	83.0	3.5	10.6	6.7	31.2	1.9	3.5	4.1	2.9	6.0	1.5	10.9	17.0	2.3	3.1	6.2	1.0	4.5
Other	227	100.0	71.8	1.3	11.0	2.6	18.1	1.8	3.5	4.4	2.2	5.3	5.3	16.3	28.2	4.4	8.8	9.3	0.4	5.3
Female doctorate recipients reporting source of support	21,172	100.0	74.8	2.6	18.6	2.2	10.4	2.0	7.3	2.3	2.2	6.7	10.3	10.2	25.2	2.4	10.5	6.0	1.7	4.6
Fellowship or scholarship	14,464	100.0	75.8	2.8	20.2	1.8	10.1	2.3	6.5	2.2	2.3	6.7	9.3	11.6	24.2	2.3	7.6	7.5	2.3	4.5
Dissertation grant	4,548	100.0	68.5	2.3	13.6	1.1	4.4	1.5	7.7	0.9	2.2	3.1	11.3	20.4	31.5	1.6	7.6	12.8	3.3	6.2
Assistantship																				
Teaching	13,901	100.0	76.2	2.3	15.4	2.6	10.5	2.4	4.7	3.1	2.4	9.1	10.9	12.6	23.8	2.3	6.4	8.0	2.3	4.8
Research	13,256	100.0	82.4	3.3	19.3	2.9	14.1	2.7	5.6	2.2	2.4	9.4	10.0	10.3	17.6	2.2	6.4	3.8	1.0	4.2
Other	2,112	100.0	61.4	2.2	7.5	1.4	4.7	0.9	5.5	1.2	1.6	2.0	21.4	12.9	38.6	2.0	16.9	10.9	2.9	5.9
Traineeship	1,064	100.0	94.1	1.1	47.9	D	7.1	1.5	11.1	1.3	D	4.1	13.3	4.6	5.9	D	2.1	1.3	D	1.9
Internship or clinical residency	2,355	100.0	91.3	1.4	7.0	7.0	14.8	1.8	3.7	4.8	2.8	4.2	40.1	3.7	8.7	0.8	3.5	1.6	1.1	1.7
Loan (any source)	5,735	100.0	62.4	1.9	9.5	0.7	2.9	1.0	12.0	0.6	1.6	2.1	18.1	11.9	37.6	2.3	18.1	7.4	2.5	7.3
Personal sources																				
Savings	11,517	100.0	71.1	2.4	16.2	1.7	8.0	1.6	8.8	1.8	2.2	4.8	12.5	11.1	28.9	2.8	12.5	6.4	2.0	5.2
Other earnings during graduate school	7,376	100.0	62.6	2.1	10.9	1.1	4.4	1.5	10.4	1.2	2.1	2.5	13.7	12.8	37.4	1.9	17.4	9.2	2.9	6.0
Spouse's, partner's, or family's earnings or savings	9,490	100.0	71.1	2.5	16.3	1.7	8.2	1.5	7.8	2.0	1.9	4.6	13.7	10.9	28.9	2.7	11.7	7.1	2.1	5.3
Employer reimbursement or assistance	2,374	100.0	59.4	2.0	11.5	1.6	5.4	1.1	14.7	1.1	2.2	2.9	7.6	9.4	40.6	3.2	26.3	4.3	1.1	5.8
Foreign (non-U.S.) support	1,038	100.0	76.0	4.2	17.0	4.1	13.8	1.8	6.1	3.4	2.4	4.3	4.9	14.0	24.0	2.7	7.1	6.0	2.6	5.6
Other	236	100.0	61.4	3.0	13.1	0.0	2.5	0.8	14.0	0.4	2.1	3.0	11.9	10.6	38.6	4.7	16.1	5.1	2.5	10.2

D = suppressed to avoid disclosure of confidential information.

^a Includes other non-science and engineering fields not shown separately.

Note(s):

In this table, a 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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 ^a			
Cumulative debt																																								
All reporting education-related debt (number)	47,344		37,763		1,107		7,713		1,972		8,755		980		2,312		1,766		1,182		4,472		3,133		4,371		9,581		1,163		3,262		2,727		692		1,737			
Median debt	\$40,000		\$35,000		\$30,000		\$30,000		\$25,000		\$25,000		\$25,000		\$70,000		\$25,000		\$40,000		\$25,000		\$80,000		\$50,000		\$65,000		\$60,000		\$80,000		\$45,000		\$60,000		\$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		
No debt	28,610	60.4	23,815	63.1	671	60.6	4,779	62.0	1,584	80.3	6,397	73.1	635	64.8	1,045	45.2	1,304	73.8	781	66.1	3,058	68.4	1,200	38.3	2,361	54.0	4,795	50.0	762	65.5	1,475	45.2	1,390	51.0	344	49.7	824	47.4		
\$10,000 or less	3,261	6.9	2,654	7.0	98	8.9	580	7.5	115	5.8	648	7.4	77	7.9	157	6.8	106	6.0	80	6.8	318	7.1	157	5.0	318	7.3	607	6.3	57	4.9	181	5.5	207	7.6	46	6.6	116	6.7		
\$10,001–\$20,000	2,482	5.2	2,030	5.4	79	7.1	498	6.5	54	2.7	414	4.7	65	6.6	92	4.0	90	5.1	45	3.8	290	6.5	162	5.2	241	5.5	452	4.7	40	3.4	133	4.1	151	5.5	33	4.8	95	5.5		
\$20,001–\$30,000	2,136	4.5	1,716	4.5	50	4.5	422	5.5	49	2.5	318	3.6	54	5.5	101	4.4	69	3.9	45	3.8	245	5.5	162	5.2	201	4.6	420	4.4	42	3.6	125	3.8	157	5.8	28	4.0	68	3.9		
\$30,001–\$40,000	1,621	3.4	1,256	3.3	38	3.4	288	3.7	31	1.6	213	2.4	36	3.7	110	4.8	34	1.9	31	2.6	176	3.9	129	4.1	170	3.9	365	3.8	28	2.4	109	3.3	121	4.4	34	4.9	73	4.2		
\$40,001–\$50,000	1,159	2.4	862	2.3	27	2.4	195	2.5	22	1.1	157	1.8	17	1.7	67	2.9	38	2.2	22	1.9	86	1.9	108	3.4	123	2.8	297	3.1	22	1.9	110	3.4	86	3.2	14	2.0	65	3.7		
\$50,001–\$60,000	927	2.0	688	1.8	23	2.1	157	2.0	26	1.3	98	1.1	14	1.4	63	2.7	23	1.3	25	2.1	61	1.4	96	3.1	102	2.3	239	2.5	16	1.4	90	2.8	72	2.6	24	3.5	37	2.1		
\$60,001–\$70,000	733	1.5	528	1.4	23	2.1	108	1.4	8	0.4	58	0.7	12	1.2	64	2.8	16	0.9	18	1.5	48	1.1	82	2.6	91	2.1	205	2.1	14	1.2	74	2.3	54	2.0	24	3.5	39	2.2		
\$70,001–\$80,000	693	1.5	488	1.3	D	D	104	1.3	D	D	64	0.7	D	D	54	2.3	16	0.9	21	1.8	33	0.7	81	2.6	86	2.0	205	2.1	19	1.6	77	2.4	53	1.9	19	2.7	37	2.1		
\$80,001–\$90,000	634	1.3	444	1.2	10	0.9	89	1.2	8	0.4	55	0.6	8	0.8	55	2.4	11	0.6	14	1.2	35	0.8	84	2.7	75	1.7	190	2.0	10	0.9	83	2.5	46	1.7	10	1.4	41	2.4		
\$90,001–\$100,000	758	1.6	527	1.4	15	1.4	126	1.6	13	0.7	71	0.8	13	1.3	67	2.9	9	0.5	12	1.0	45	1.0	82	2.6	74	1.7	231	2.4	17	1.5	102	3.1	52	1.9	21	3.0	39	2.2		
\$100,001–\$120,000	997	2.1	622	1.6	12	1.1	99	1.3	16	0.8	72	0.8	8	0.8	93	4.0	14	0.8	21	1.8	23	0.5	152	4.9	112	2.6	375	3.9	24	2.1	174	5.3	109	4.0	14	2.0	54	3.1		
\$120,001–\$140,000	691	1.5	442	1.2	14	1.3	62	0.8	12	0.6	48	0.5	10	1.0	75	3.2	6	0.3	14	1.2	16	0.4	107	3.4	78	1.8	249	2.6	18	1.5	114	3.5	48	1.8	22	3.2	47	2.7		
\$140,001–\$160,000	565	1.2	378	1.0	D	D	66	0.9	D	D	44	0.5	D	D	56	2.4	11	0.6	17	1.4	12	0.3	84	2.7	74	1.7	187	2.0	22	1.9	77	2.4	37	1.4	17	2.5	34	2.0		
\$160,001 or more	2,077	4.4	1,313	3.5	28	2.5	140	1.8	26	1.3	98	1.1	15	1.5	213	9.2	19	1.1	36	3.0	26	0.6	447	14.3	265	6.1	764	8.0	72	6.2	338	10.4	144	5.3	42	6.1	168	9.7		
Graduate debt																																								
All reporting graduate debt (number)	47,286		37,719		1,105		7,707		1,970		8,743		980		2,309		1,766		1,182		4,466		3,125		4,366		9,567		1,163		3,258		2,719		691		1,736			
Median debt	\$45,000		\$35,000		\$25,000		\$25,000		\$25,000		\$15,000		\$15,000		\$65,000		\$25,000		\$35,000		\$15,000		\$75,000		\$45,000		\$55,000		\$55,000		\$65,000		\$45,000		\$55,000		\$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		
No debt	33,847	71.6	28,415	75.3	801	72.5	6,191	80.3	1,679	85.2	7,173	82.0	785	80.1	1,229	53.2	1,499	84.9	892	75.5	3,904	87.4	1,500	48.0	2,762	63.3	5,432	56.8	809	69.6	1,621	49.8	1,675	61.6	396	57.3	931	53.6		
\$10,000 or less	2,738	5.8	2,151	5.7	93	8.4	417	5.4	101	5.1	519	5.9	70	7.1	145	6.3	88	5.0	59	5.0	212	4.7	163	5.2	284	6.5	587	6.1	47	4.0	191	5.9	185	6.8	46	6.7	118	6.8		
\$10,001–\$20,000	1,611	3.4	1,211	3.2	51	4.6	199	2.6	35	1.8	285	3.3	28	2.9	87	3.8	36	2.0	41	3.5	103	2.3	143	4.6	203	4.6	400	4.2	42	3.6	144	4.4	107	3.9	30	4.3	77	4.4		
\$20,001–\$30,000	1,331	2.8	943	2.5	32	2.9	161	2.1	44	2.2	186	2.1	23	2.3	77	3.3	37	2.1	34	2.9	65	1.5	126	4.0	158	3.6	388	4.1	42	3.6	142	4.4	112	4.1	20	2.9	72	4.1		
\$30,001–\$40,000	999	2.1	683	1.8	21	1.9	109	1.4	20	1.0	130	1.5	14	1.4	93	4.0	11	0.6	19	1.6	45	1.0	96	3.1	125	2.9	316	3.3	24	2.1	112	3.4	89	3.3	21	3.0	70	4.0		
\$40,001–\$50,000	813	1.7	528	1.4	14	1.3	96	1.2	9	0.5	85	1.0	11	1.1	71	3.1	18	1.0	18	1.5	26	0.6	85	2.7	95	2.2	285	3.0	17	1.5	118	3.6	71	2.6	18	2.6	61	3.5		
\$50,001–\$60,000	750	1.6	489	1.3	D	D	86	1.1	22	1.1	60	0.7	D	D	64	2.8	13	0.7	15	1.3	27	0.6	87	2.8	94	2.2	261	2.7	19	1.6	100	3.1	69	2.5	25	3.6	48	2.8		
\$60,001–\$70,000	616	1.3	388	1.0	D	D	73	0.9	6	0.3	42	0.5	D	D	64	2.8	10	0.6	11	0.9	16	0.4	76	2.4	68	1.6	228	2.4	10	0.9	94	2.9	61	2.2	27	3.9	36	2.1		
\$70,001–\$80,000	512	1.1	335	0.9	8	0.7	59	0.8	D	D	35	0.4	9	0.9	50	2.2	9	0.5	11	0.9	D	D	76	2.4	62	1.4	177	1.9	17	1.5	75	2.3	42	1.5	14	2.0	29	1.7		
\$80,001–\$90,000	421	0.9	265	0.7	5	0.5	32	0.4	6	0.3	24	0.3	D	D	46	2.0	9	0.5	6	0.5	D	D	67	2.1	63	1.4	156	1.6	14	1.2	70	2.1	37	1.4	7	1.0	28	1.6		
\$90,001–\$100,000	502	1.1	310	0.8	8	0.7	52	0.7	8	0.4	23	0.3	D	D	62	2.7	6	0.3	11	0.9	D	D	72	2.3	52	1.2														

Table 4-4

Education-related debt of research doctorate recipients, by broad field of doctorate: 2021

(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 ^a	
\$140,001–\$160,000	562	1.2	366	1.0	7	0.6	45	0.6	D	D	45	0.5	D	D	60	2.6	8	0.5	8	0.7	11	0.2	80	2.6	97	2.2	196	2.0	21	1.8	81	2.5	40	1.5	14	2.0	40	2.3
\$160,001 or more	1,296	2.7	839	2.2	21	1.9	82	1.1	12	0.6	57	0.7	6	0.6	135	5.8	10	0.6	26	2.2	5	0.1	334	10.7	151	3.5	457	4.8	45	3.9	200	6.1	84	3.1	24	3.5	104	6.0
Undergraduate debt																																						
All reporting undergraduate debt (number)	47,289		37,718		1,100		7,706		1,969		8,747		980		2,309		1,766		1,178		4,469		3,128		4,366		9,571		1,163		3,255		2,726		691		1,736	
Median debt	\$25,000		\$25,000		\$25,000		\$25,000		\$25,000		\$15,000		\$25,000		\$35,000		\$25,000		\$25,000		\$25,000		\$25,000		\$25,000		\$25,000		\$25,000		\$35,000		\$25,000		\$25,000		\$25,000	
	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
No debt	34,328	72.6	27,847	73.8	810	73.6	5,368	69.7	1,748	88.8	7,219	82.5	701	71.5	1,566	67.8	1,405	79.6	909	77.2	3,270	73.2	1,823	58.3	3,028	69.4	6,481	67.7	944	81.2	2,084	64.0	1,812	66.5	466	67.4	1,175	67.7
\$10,000 or less	2,885	6.1	2,259	6.0	64	5.8	520	6.7	61	3.1	480	5.5	65	6.6	130	5.6	91	5.2	69	5.9	259	5.8	220	7.0	300	6.9	626	6.5	48	4.1	219	6.7	204	7.5	53	7.7	102	5.9
\$10,001–\$20,000	2,460	5.2	1,902	5.0	73	6.6	479	6.2	35	1.8	291	3.3	54	5.5	102	4.4	84	4.8	42	3.6	261	5.8	233	7.4	248	5.7	558	5.8	33	2.8	191	5.9	191	7.0	45	6.5	98	5.6
\$20,001–\$30,000	2,261	4.8	1,771	4.7	41	3.7	435	5.6	34	1.7	244	2.8	56	5.7	136	5.9	76	4.3	32	2.7	238	5.3	243	7.8	236	5.4	490	5.1	29	2.5	163	5.0	171	6.3	42	6.1	85	4.9
\$30,001–\$40,000	1,660	3.5	1,265	3.4	42	3.8	302	3.9	25	1.3	156	1.8	40	4.1	92	4.0	45	2.5	40	3.4	182	4.1	176	5.6	165	3.8	395	4.1	29	2.5	144	4.4	116	4.3	26	3.8	80	4.6
\$40,001–\$50,000	1,002	2.1	725	1.9	25	2.3	167	2.2	20	1.0	109	1.2	15	1.5	65	2.8	21	1.2	23	2.0	76	1.7	112	3.6	92	2.1	277	2.9	21	1.8	114	3.5	76	2.8	15	2.2	51	2.9
\$50,001–\$60,000	779	1.6	570	1.5	15	1.4	130	1.7	14	0.7	57	0.7	15	1.5	53	2.3	12	0.7	19	1.6	57	1.3	106	3.4	92	2.1	209	2.2	12	1.0	96	2.9	46	1.7	13	1.9	42	2.4
\$60,001–\$70,000	464	1.0	348	0.9	9	0.8	70	0.9	10	0.5	44	0.5	10	1.0	33	1.4	10	0.6	12	1.0	41	0.9	64	2.0	45	1.0	116	1.2	D	D	50	1.5	33	1.2	D	D	22	1.3
\$70,001–\$80,000	339	0.7	257	0.7	D	D	63	0.8	D	D	44	0.5	7	0.7	28	1.2	9	0.5	D	D	23	0.5	34	1.1	32	0.7	82	0.9	7	0.6	33	1.0	17	0.6	8	1.2	17	1.0
\$80,001–\$90,000	330	0.7	237	0.6	D	D	69	0.9	D	D	34	0.4	7	0.7	19	0.8	6	0.3	D	D	21	0.5	30	1.0	37	0.8	93	1.0	D	D	38	1.2	17	0.6	D	D	27	1.6
\$90,001 or more	781	1.7	537	1.4	9	0.8	103	1.3	13	0.7	69	0.8	10	1.0	85	3.7	7	0.4	22	1.9	41	0.9	87	2.8	91	2.1	244	2.5	28	2.4	123	3.8	43	1.6	13	1.9	37	2.1

D = suppressed to avoid disclosure of confidential information.

^a Includes other non-science and engineering fields not shown separately.

Note(s):

Median calculations and percentages are based only on valid responses to debt questions. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	
											American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported			
Cumulative debt																								
All reporting education-related debt (number)	25,636		21,706		30,304		16,784		2,724		90		2,931		2,304		20,699		1,071		299		186	
Median debt	\$35,000		\$50,000		\$50,000		\$15,000		\$50,000		\$80,000		\$30,000		\$110,000		\$45,000		\$55,000		\$50,000		\$60,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	16,138	63.0	12,470	57.4	14,988	49.5	13,456	80.2	1,018	37.4	23	25.6	2,030	69.3	448	19.4	10,703	51.7	495	46.2	167	55.9	104	55.9
\$10,000 or less	1,877	7.3	1,384	6.4	1,998	6.6	1,240	7.4	223	8.2	8	8.9	177	6.0	111	4.8	1,378	6.7	71	6.6	22	7.4	8	4.3
\$10,001–\$20,000	1,384	5.4	1,098	5.1	1,920	6.3	554	3.3	212	7.8	9	10.0	172	5.9	112	4.9	1,328	6.4	67	6.3	13	4.3	7	3.8
\$20,001–\$30,000	1,182	4.6	954	4.4	1,761	5.8	372	2.2	172	6.3	5	5.6	110	3.8	105	4.6	1,270	6.1	76	7.1	15	5.0	8	4.3
\$30,001–\$40,000	851	3.3	770	3.5	1,359	4.5	256	1.5	148	5.4	D	D	87	3.0	D	D	972	4.7	39	3.6	10	3.3	6	3.2
\$40,001–\$50,000	638	2.5	521	2.4	966	3.2	188	1.1	104	3.8	0	0.0	57	1.9	98	4.3	658	3.2	32	3.0	8	2.7	9	4.8
\$50,001–\$60,000	477	1.9	450	2.1	804	2.7	122	0.7	97	3.6	6	6.7	31	1.1	84	3.6	540	2.6	33	3.1	9	3.0	4	2.2
\$60,001–\$70,000	349	1.4	384	1.8	663	2.2	66	0.4	73	2.7	D	D	36	1.2	D	D	461	2.2	29	2.7	1	0.3	1	0.5
\$70,001–\$80,000	330	1.3	363	1.7	627	2.1	64	0.4	57	2.1	D	D	36	1.2	D	D	428	2.1	22	2.1	7	2.3	3	1.6
\$80,001–\$90,000	303	1.2	331	1.5	565	1.9	65	0.4	63	2.3	0	0.0	23	0.8	85	3.7	366	1.8	22	2.1	3	1.0	3	1.6
\$90,001–\$100,000	336	1.3	422	1.9	673	2.2	78	0.5	70	2.6	D	D	38	1.3	D	D	422	2.0	24	2.2	4	1.3	7	3.8
\$100,001–\$120,000	422	1.6	575	2.6	899	3.0	93	0.6	108	4.0	7	7.8	25	0.9	172	7.5	533	2.6	41	3.8	8	2.7	5	2.7
\$120,001–\$140,000	292	1.1	399	1.8	637	2.1	51	0.3	87	3.2	5	5.6	24	0.8	105	4.6	385	1.9	25	2.3	4	1.3	2	1.1
\$140,001–\$160,000	239	0.9	326	1.5	509	1.7	52	0.3	69	2.5	D	D	22	0.8	D	D	285	1.4	17	1.6	6	2.0	4	2.2
\$160,001 or more	818	3.2	1,259	5.8	1,935	6.4	127	0.8	223	8.2	14	15.6	63	2.1	550	23.9	970	4.7	78	7.3	22	7.4	15	8.1
Graduate debt																								
All reporting graduate debt (number)	25,613		21,671		30,269		16,764		2,723		89		2,929		2,298		20,679		1,070		298		183	
Median debt	\$35,000		\$45,000		\$55,000		\$15,000		\$55,000		\$55,000		\$35,000		\$85,000		\$45,000		\$55,000		\$55,000		\$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
No debt	19,102	74.6	14,743	68.0	19,642	64.9	14,027	83.7	1,493	54.8	30	33.7	2,386	81.5	690	30.0	14,063	68.0	661	61.8	203	68.1	116	63.4
\$10,000 or less	1,532	6.0	1,206	5.6	1,648	5.4	1,070	6.4	174	6.4	10	11.2	113	3.9	128	5.6	1,130	5.5	65	6.1	17	5.7	11	6.0
\$10,001–\$20,000	885	3.5	726	3.4	1,120	3.7	485	2.9	118	4.3	D	D	78	2.7	104	4.5	750	3.6	D	D	10	3.4	7	3.8
\$20,001–\$30,000	688	2.7	643	3.0	1,032	3.4	297	1.8	131	4.8	D	D	53	1.8	116	5.0	673	3.3	D	D	6	2.0	6	3.3
\$30,001–\$40,000	510	2.0	489	2.3	796	2.6	198	1.2	103	3.8	D	D	49	1.7	75	3.3	534	2.6	21	2.0	D	D	3	1.6
\$40,001–\$50,000	396	1.5	417	1.9	661	2.2	146	0.9	79	2.9	D	D	40	1.4	76	3.3	433	2.1	22	2.1	D	D	6	3.3
\$50,001–\$60,000	348	1.4	402	1.9	650	2.1	100	0.6	64	2.4	6	6.7	29	1.0	96	4.2	411	2.0	34	3.2	7	2.3	3	1.6
\$60,001–\$70,000	281	1.1	335	1.5	543	1.8	70	0.4	54	2.0	D	D	24	0.8	83	3.6	350	1.7	23	2.1	D	D	2	1.1
\$70,001–\$80,000	222	0.9	290	1.3	460	1.5	47	0.3	51	1.9	D	D	25	0.9	70	3.0	289	1.4	D	D	5	1.7	3	1.6
\$80,001–\$90,000	195	0.8	226	1.0	385	1.3	35	0.2	49	1.8	D	D	15	0.5	76	3.3	228	1.1	D	D	1	0.3	3	1.6
\$90,001–\$100,000	224	0.9	278	1.3	447	1.5	50	0.3	60	2.2	D	D	18	0.6	78	3.4	266	1.3	D	D	0	0.0	4	2.2
\$100,001–\$120,000	309	1.2	478	2.2	719	2.4	60	0.4	87	3.2	D	D	20	0.7	127	5.5	442	2.1	D	D	7	2.3	5	2.7

Table 4-5

Education-related debt of research doctorate recipients, by sex, citizenship status, ethnicity, and race: 2021

(Median debt, number, and percent)

Debt level	Sex				Citizenship status				U.S. citizens and permanent residents															
									Not Hispanic or Latino												Ethnicity not reported			
	Male		Female		U.S. citizen or permanent resident		Temporary visa holder		Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		White		More than one race				Other race or race not reported	
\$120,001–\$140,000	195	0.8	306	1.4	471	1.6	29	0.2	66	2.4	5	5.6	15	0.5	100	4.4	260	1.3	19	1.8	5	1.7	1	0.5
\$140,001–\$160,000	237	0.9	325	1.5	500	1.7	58	0.3	51	1.9	D	D	18	0.6	129	5.6	273	1.3	D	D	6	2.0	2	1.1
\$160,001 or more	489	1.9	807	3.7	1,195	3.9	92	0.5	143	5.3	6	6.7	46	1.6	350	15.2	577	2.8	49	4.6	13	4.4	11	6.0
Undergraduate debt																								
All reporting undergraduate debt (number)	25,605		21,682		30,270		16,768		2,722		90		2,929		2,300		20,677		1,071		298		183	
Median debt	\$25,000		\$25,000		\$25,000		\$15,000		\$25,000		\$35,000		\$25,000		\$35,000		\$25,000		\$25,000		\$25,000		\$25,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No debt	19,006	74.2	15,320	70.7	18,965	62.7	15,165	90.4	1,459	53.6	34	37.8	2,290	78.2	906	39.4	13,324	64.4	638	59.6	193	64.8	121	66.1
\$10,000 or less	1,588	6.2	1,297	6.0	2,146	7.1	725	4.3	268	9.8	9	10.0	159	5.4	179	7.8	1,432	6.9	67	6.3	21	7.0	11	6.0
\$10,001–\$20,000	1,275	5.0	1,185	5.5	2,171	7.2	282	1.7	251	9.2	7	7.8	157	5.4	187	8.1	1,453	7.0	88	8.2	20	6.7	8	4.4
\$20,001–\$30,000	1,184	4.6	1,077	5.0	2,035	6.7	218	1.3	209	7.7	10	11.1	124	4.2	202	8.8	1,382	6.7	71	6.6	24	8.1	13	7.1
\$30,001–\$40,000	819	3.2	841	3.9	1,527	5.0	124	0.7	138	5.1	7	7.8	79	2.7	195	8.5	1,023	4.9	62	5.8	11	3.7	12	6.6
\$40,001–\$50,000	502	2.0	500	2.3	915	3.0	87	0.5	114	4.2	5	5.6	31	1.1	140	6.1	566	2.7	47	4.4	8	2.7	4	2.2
\$50,001–\$60,000	351	1.4	428	2.0	720	2.4	55	0.3	81	3.0	6	6.7	21	0.7	127	5.5	447	2.2	33	3.1	4	1.3	1	0.5
\$60,001–\$70,000	222	0.9	242	1.1	436	1.4	26	0.2	46	1.7	0	0.0	8	0.3	58	2.5	301	1.5	16	1.5	5	1.7	2	1.1
\$70,001–\$80,000	179	0.7	160	0.7	325	1.1	12	0.1	29	1.1	D	D	21	0.7	58	2.5	202	1.0	10	0.9	D	D	0	0.0
\$80,001–\$90,000	162	0.6	168	0.8	306	1.0	24	0.1	38	1.4	D	D	15	0.5	65	2.8	173	0.8	6	0.6	D	D	2	1.1
\$90,001 or more	317	1.2	464	2.1	724	2.4	50	0.3	89	3.3	5	5.6	24	0.8	183	8.0	374	1.8	33	3.1	7	2.3	9	4.9

D = suppressed to avoid disclosure of confidential information.

Note(s):

Median calculations and percentages are based only on valid responses to debt questions.

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: 202

(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 ^a	
U.S. citizens and permanent residents reporting graduate debt																				
Total (number) ^b	30,269	22,969	657	5,696	678	3,659	651	1,803	819	647	2,628	2,832	2,899	7,300	545	2,793	2,201	544	1,217	
Debt > \$30,000 (%)	22.6	18.5	15.1	11.4	10.8	7.7	9.2	39.3	9.5	19.5	5.4	41.0	29.8	35.4	33.8	39.4	28.0	34.9	40.5	
Debt > \$70,000 (%)	13.8	11.3	7.8	6.0	5.5	3.7	4.5	24.9	4.9	12.7	2.1	29.4	18.5	21.8	24.2	25.2	15.6	18.4	25.3	
Hispanic or Latino																				
Total (number) ^b	2,723	2,067	41	551	31	299	47	136	62	66	209	318	307	656	28	272	211	43	102	
Debt > \$30,000 (%)	29.6	25.6	19.5	14.3	22.6	12.7	17.0	46.3	14.5	34.8	10.0	56.0	30.9	42.4	42.9	45.2	32.7	51.2	51.0	
Debt > \$70,000 (%)	18.6	16.3	D	6.7	D	7.0	D	24.3	D	21.2	4.8	43.4	22.5	25.9	D	27.2	19.0	D	34.3	
Not Hispanic or Latino																				
American Indian or Alaska Native																				
Total (number) ^b	89	61	D	12	0	D	D	9	0	D	D	8	15	28	D	16	D	D	6	
Debt > \$30,000 (%)	39.3	32.8	0.0	D	-	D	D	D	-	0.0	D	D	33.3	53.6	0.0	D	D	D	D	
Debt > \$70,000 (%)	27.0	D	0.0	0.0	-	D	0.0	D	-	0.0	D	62.5	33.3	D	0.0	D	D	D	D	
Asian																				
Total (number) ^b	2,929	2,476	39	681	134	566	30	177	91	68	261	178	251	453	74	153	111	31	84	
Debt > \$30,000 (%)	10.2	8.8	D	6.0	D	3.7	D	D	D	D	3.8	D	11.2	17.9	14.9	17.0	18.9	16.1	21.4	
Debt > \$70,000 (%)	5.4	4.4	0.0	2.9	D	1.2	0.0	D	D	D	D	19.7	4.0	10.4	D	11.1	14.4	D	9.5	
Black or African American																				
Total (number) ^b	2,298	1,398	29	260	36	D	13	252	28	47	D	227	281	900	104	472	97	17	210	
Debt > \$30,000 (%)	54.8	49.1	34.5	31.5	44.4	D	D	67.5	46.4	46.8	D	66.1	62.6	63.8	64.4	65.7	50.5	64.7	65.2	
Debt > \$70,000 (%)	40.5	36.2	D	18.5	27.8	13.6	D	52.0	D	D	D	55.5	44.1	47.1	53.8	49.4	27.8	D	D	
White																				
Total (number) ^b	20,679	15,793	519	3,912	434	2,462	519	1,150	586	426	1,950	1,931	1,904	4,886	311	1,745	1,660	421	749	
Debt > \$30,000 (%)	19.6	16.4	14.3	10.8	9.4	7.2	8.3	34.3	7.3	16.2	4.5	36.8	27.7	30.2	27.0	32.7	25.7	33.5	33.6	
Debt > \$70,000 (%)	11.3	9.5	6.9	5.7	4.6	D	D	20.3	3.9	10.6	1.6	25.2	16.1	17.1	18.3	19.0	13.9	18.1	18.4	
More than one race																				
Total (number) ^b	1,070	821	11	212	26	112	33	54	32	27	96	122	96	249	19	93	77	22	38	
Debt > \$30,000 (%)	24.1	17.7	D	10.8	D	5.4	D	35.2	D	25.9	8.3	36.9	26.0	45.4	42.1	D	45.5	D	50.0	
Debt > \$70,000 (%)	14.8	10.4	D	6.1	D	D	D	D	D	D	0.0	23.8	17.7	29.3	D	D	27.3	D	36.8	
Other race or race not reported																				
Total (number) ^b	298	220	D	43	11	34	D	12	11	D	22	32	32	78	D	25	D	D	16	
Debt > \$30,000 (%)	20.8	15.5	0.0	D	9.1	5.9	16.7	25.0	27.3	D	4.5	40.6	15.6	35.9	25.0	48.0	D	0.0	D	
Debt > \$70,000 (%)	12.4	D	0.0	0.0	9.1	2.9	16.7	8.3	D	11.1	0.0	25.0	12.5	D	0.0	36.0	D	0.0	31.3	
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: 2021

(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 ^a
Total (number) ^b	183	133	6	25	6	28	1	13	9	2	14	16	13	50	4	17	13	4	12
Debt > \$30,000 (%)	23.5	17.3	33.3	8.0	0.0	21.4	0.0	23.1	0.0	0.0	0.0	50.0	15.4	40.0	25.0	52.9	30.8	25.0	41.7
Debt > \$70,000 (%)	15.8	12.0	33.3	0.0	0.0	10.7	0.0	23.1	0.0	0.0	0.0	43.8	7.7	26.0	25.0	41.2	23.1	0.0	16.7

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

^a Includes other non-science and engineering fields not shown separately.

^b Includes all persons who responded to the graduate-school debt question, even if they reported they had no debt.

Note(s):

Percentages were calculated based on the number of cases in each category. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

Source(s):

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

Table 5-1
Research doctorate recipients who attended community college, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2021

(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 ^a
Doctorate recipients reporting community college attendance	21.2	19.7	26.1	22.7	9.2	12.5	20.7	35.5	14.3	18.5	17.3	29.8	21.3	27.0	18.7	35.1	24.6	20.3	24.0
Sex																			
Male	18.8	17.6	24.0	23.4	8.5	12.2	21.1	29.8	15.2	16.5	17.5	31.2	20.1	24.9	17.2	33.1	26.2	18.5	21.1
Female	24.1	22.6	28.1	22.0	11.8	13.4	20.2	38.0	12.1	21.3	17.0	29.2	22.5	28.6	20.7	36.0	22.8	21.7	26.0
Citizenship status																			
U.S. citizen or permanent resident	30.8	29.9	39.8	29.1	22.5	24.8	30.0	43.3	27.6	29.8	27.0	32.0	30.2	33.5	34.1	39.5	28.8	23.2	32.3
Temporary visa holder	4.0	3.8	5.6	4.1	2.1	3.7	1.9	8.1	2.9	4.5	3.4	6.8	3.5	5.8	5.0	7.4	6.5	8.6	4.0
Ethnicity and race (U.S. citizens and permanent residents)																			
Hispanic or Latino	37.4	36.6	26.8	35.0	35.5	32.8	29.8	48.9	34.9	30.8	33.5	40.9	39.3	40.2	50.0	50.2	29.7	32.6	35.6
Not Hispanic or Latino																			
American Indian or Alaska Native	55.4	54.1	D	D	-	D	D	55.6	-	0.0	D	D	80.0	58.1	D	52.6	D	D	83.3
Asian	21.3	21.3	15.8	20.6	20.0	18.9	23.3	27.4	26.1	14.7	19.2	34.8	17.9	21.2	20.3	26.6	D	D	20.2
Black or African American	33.7	31.4	31.0	D	13.9	D	D	40.5	28.6	34.0	D	D	34.4	37.2	42.9	39.0	D	D	34.6
White	30.5	29.9	43.5	29.5	23.2	24.7	30.8	45.6	26.8	31.3	27.3	29.8	28.9	32.4	33.4	38.5	29.0	21.8	31.6
More than one race	34.7	32.5	45.5	31.3	19.2	27.7	30.3	40.7	18.8	40.7	31.3	36.3	37.5	41.9	26.3	48.4	38.2	45.5	39.5
Other race or race not reported	36.8	38.1	D	41.9	27.3	34.3	D	41.7	66.7	22.2	23.8	39.4	45.5	33.3	D	42.3	D	D	35.3
Ethnicity not reported	31.2	30.7	12.5	42.9	16.7	29.0	50.0	50.0	20.0	0.0	40.0	27.8	12.5	32.7	33.3	33.3	16.7	50.0	41.7

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

^a Includes other non-science and engineering fields not shown separately.

Note(s):
Percentages based on total number of doctorate recipients. 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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 ^a
Doctorate recipients reporting bachelor's degree	98.4	98.4	96.5	98.2	98.2	99.0	98.8	96.3	98.9	98.4	98.8	98.6	98.5	98.3	97.9	98.4	98.2	98.9	98.4
Sex																			
Male	98.4	98.5	95.7	98.2	98.6	99.0	98.6	95.2	98.9	98.2	98.6	98.3	98.4	98.4	98.5	98.4	98.4	99.1	98.1
Female	98.3	98.4	97.3	98.3	96.8	98.8	99.1	96.8	99.0	98.8	99.1	98.8	98.6	98.3	97.2	98.4	98.1	98.8	98.5
Citizenship status																			
U.S. citizen or permanent resident	99.5	99.5	D	99.4	99.3	99.8	D	97.7	99.9	100.0	99.7	99.7	99.7	99.6	99.3	99.6	99.6	100.0	99.5
Temporary visa holder	98.6	98.5	94.7	96.7	99.4	99.3	D	94.7	D	98.9	98.7	99.3	99.1	98.7	98.7	99.8	97.4	97.9	99.1
Ethnicity and race (U.S. citizens and permanent residents)																			
Hispanic or Latino	99.2	99.3	D	99.3	100.0	100.0	100.0	95.0	100.0	100.0	100.0	99.4	D	99.0	100.0	99.3	99.6	100.0	96.3
Not Hispanic or Latino																			
American Indian or Alaska Native	99.0	98.5	D	D	-	100.0	D	D	-	D	100.0	100.0	100.0	100.0	D	100.0	D	D	100.0
Asian	99.3	99.3	100.0	98.7	100.0	D	100.0	D	100.0	100.0	99.2	100.0	100.0	99.8	100.0	99.4	100.0	100.0	100.0
Black or African American	99.3	99.2	100.0	D	D	D	100.0	D	100.0	D	100.0	99.2	100.0	99.5	D	99.6	D	100.0	D
White	99.6	99.6	100.0	99.5	D	99.8	D	97.8	D	100.0	99.8	99.8	99.7	99.7	D	99.7	99.6	100.0	D
More than one race	99.9	99.9	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Other race or race not reported	99.2	99.6	D	100.0	100.0	100.0	D	100.0	100.0	D	100.0	100.0	97.2	97.8	83.3	100.0	D	D	100.0
Ethnicity not reported	99.5	99.3	100.0	100.0	100.0	100.0	100.0	100.0	D	D	96.2	98.0	D	100.0	100.0	100.0	100.0	100.0	100.0
Bachelor's degree in the same field as doctorate	61.7	65.8	49.6	64.3	40.9	82.3	53.0	44.5	80.1	12.3	78.6	72.7	56.2	45.4	36.5	25.4	73.4	69.1	35.9
Sex																			
Male	64.5	67.7	52.9	62.7	41.7	83.8	55.0	36.0	79.7	12.8	78.6	69.6	58.4	48.0	32.7	24.3	73.6	67.6	34.5
Female	58.3	63.4	46.3	65.7	38.4	78.0	50.6	48.3	80.9	11.5	78.4	73.8	54.0	43.4	41.2	25.8	73.2	70.3	37.0
Citizenship status																			
U.S. citizen or permanent resident	61.4	66.5	46.9	69.1	46.3	80.7	53.2	42.2	83.3	11.4	81.1	75.0	57.1	45.3	36.4	24.5	74.8	70.6	32.5
Temporary visa holder	64.0	66.4	54.9	52.0	39.0	84.5	54.4	55.1	78.6	13.7	76.2	63.0	56.6	48.2	37.9	33.8	71.0	66.7	45.3
Ethnicity and race (U.S. citizens and permanent residents)																			
Hispanic or Latino	61.1	67.8	34.1	72.4	61.3	82.3	46.8	33.1	85.7	16.7	79.9	80.6	55.2	40.1	39.3	16.4	69.3	62.8	33.7
Not Hispanic or Latino																			
American Indian or Alaska Native	47.3	52.5	0.0	D	-	D	D	D	-	0.0	100.0	62.5	46.7	36.7	D	33.3	D	D	0.0
Asian	60.6	64.2	51.3	67.0	43.7	D	50.0	D	80.4	16.2	73.7	75.1	51.0	40.7	35.1	17.5	70.3	74.2	36.9
Black or African American	46.2	57.5	31.0	D	47.2	79.4	69.2	D	64.3	D	76.7	68.2	51.6	28.7	D	18.3	D	76.5	D
White	63.7	67.9	48.7	69.1	46.1	81.5	54.5	45.5	85.5	11.2	82.9	75.6	59.3	50.0	D	28.6	77.4	71.2	D
More than one race	58.2	63.2	D	71.2	53.8	77.9	45.5	29.6	71.9	D	69.8	68.5	57.3	41.6	47.4	16.1	71.8	63.6	26.3
Other race or race not reported	56.7	64.0	D	76.7	27.3	91.4	D	38.5	66.7	D	73.9	69.7	54.5	36.6	20.0	15.4	D	D	23.5
Ethnicity not reported	51.5	55.8	50.0	64.3	42.9	60.0	50.0	28.6	70.0	0.0	81.3	52.6	44.4	38.5	25.0	22.2	84.6	60.0	8.3

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

^a Includes other non-science and engineering fields not shown separately.

Note(s):

Percentages based on total number of doctorate recipients. Due to rounding, percentages may not sum to 100. A bachelor's degree is considered as related to doctorate if the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields, where broad field categories need to be the same. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIPs code in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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 ^a
Doctorate recipients reporting master's degree	75.1	70.1	78.3	45.0	77.6	76.6	69.9	80.3	72.4	78.9	52.7	91.0	90.0	94.3	88.9	96.8	93.3	94.0	94.8
Sex																			
Male	73.9	70.0	81.0	44.7	77.2	78.2	72.3	73.7	70.6	78.4	54.4	89.4	89.0	94.5	90.7	97.1	94.3	95.0	94.8
Female	76.4	70.4	75.6	45.3	78.9	71.8	67.0	83.3	77.1	79.8	49.1	91.6	91.1	94.1	86.7	96.7	92.2	93.2	94.8
Citizenship status																			
U.S. citizen or permanent resident	73.0	65.7	73.5	37.9	80.4	69.7	63.8	81.0	70.4	78.4	45.3	92.0	89.7	95.6	90.7	98.1	93.9	94.7	95.4
Temporary visa holder	80.3	78.2	87.7	65.6	77.3	82.1	83.5	81.3	75.4	81.4	63.9	90.7	93.5	94.4	89.1	97.8	95.6	94.3	96.7
Ethnicity and race (U.S. citizens and permanent residents)																			
Hispanic or Latino	71.7	64.5	75.6	33.2	90.3	67.9	53.2	84.6	66.7	72.7	41.1	90.3	92.9	94.3	D	97.8	92.5	D	92.3
Not Hispanic or Latino																			
American Indian or Alaska Native	90.2	85.2	D	58.3	-	D	D	D	-	D	D	100.0	100.0	100.0	D	100.0	D	D	100.0
Asian	69.0	64.4	79.5	41.7	73.3	70.3	63.3	78.5	63.0	77.9	52.7	90.1	86.9	94.1	89.2	96.8	91.0	96.8	96.4
Black or African American	86.5	79.2	93.1	42.7	D	78.7	D	D	D	D	D	92.3	93.7	97.9	97.1	99.2	D	D	97.2
White	72.0	64.7	72.1	37.1	81.0	69.2	64.7	78.7	70.4	77.3	45.0	92.5	88.9	95.4	88.4	97.9	94.1	95.8	95.2
More than one race	70.8	63.2	63.6	39.6	D	D	51.5	75.9	65.6	D	41.7	91.9	87.5	95.6	D	97.8	93.6	D	94.7
Other race or race not reported	79.5	74.3	D	58.1	72.7	80.0	50.0	76.9	D	D	43.5	84.8	93.9	93.9	80.0	96.2	96.7	75.0	94.1
Ethnicity not reported	84.1	78.8	50.0	58.6	100.0	80.6	100.0	85.7	90.0	100.0	62.5	89.5	100.0	100.0	D	100.0	100.0	D	100.0
Master's degree in the same field as doctorate	57.6	54.9	52.1	30.5	52.0	68.1	52.3	59.7	66.1	25.6	45.5	75.9	68.8	68.4	59.0	62.1	81.7	82.2	60.6
Sex																			
Male	58.0	55.7	55.3	29.2	52.0	70.5	53.1	50.6	64.5	25.6	47.2	74.5	70.5	70.1	59.6	59.7	83.9	84.5	59.7
Female	57.2	53.7	49.0	31.7	52.0	61.5	51.3	63.8	70.3	25.6	42.2	76.4	67.1	67.2	58.2	63.1	79.3	80.2	61.2
Citizenship status																			
U.S. citizen or permanent resident	56.1	51.5	49.8	26.1	57.3	63.0	49.2	61.8	65.7	26.1	40.3	77.6	66.2	70.4	62.9	63.4	83.1	84.9	60.5
Temporary visa holder	62.0	61.3	57.0	43.6	50.2	72.6	59.8	55.7	67.8	25.8	53.7	69.8	76.8	66.0	57.5	60.9	80.5	77.3	62.9
Ethnicity and race (U.S. citizens and permanent residents)																			
Hispanic or Latino	54.7	50.5	41.5	24.3	74.2	61.5	42.6	68.4	61.9	15.2	39.7	75.6	65.3	67.9	D	59.1	83.0	D	60.2
Not Hispanic or Latino																			
American Indian or Alaska Native	57.1	49.2	D	D	-	D	D	D	-	0.0	D	87.5	46.7	73.3	D	77.8	D	D	D
Asian	52.8	49.6	56.4	29.1	48.9	61.3	36.7	54.8	58.7	23.5	42.4	79.0	66.1	70.3	67.6	65.6	75.7	87.1	67.9
Black or African American	58.1	55.4	48.3	31.0	D	69.7	D	D	D	D	D	68.2	55.8	62.1	67.6	61.5	D	D	56.6
White	56.5	51.6	50.8	25.1	59.4	63.2	51.4	61.1	65.8	28.6	40.5	78.9	67.9	72.4	59.8	64.1	84.9	86.3	61.5
More than one race	54.0	49.0	D	27.8	D	D	30.3	53.7	65.6	25.9	34.4	79.0	65.6	70.4	D	62.4	78.2	86.4	D
Other race or race not reported	61.7	60.2	D	D	54.5	74.3	16.7	53.8	D	D	43.5	78.8	72.7	65.9	60.0	73.1	73.3	50.0	47.1
Ethnicity not reported	59.6	57.0	37.5	42.9	50.0	63.3	100.0	42.9	60.0	50.0	62.5	68.4	68.8	67.3	D	66.7	84.6	D	25.0

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

^a Includes other non-science and engineering fields not shown separately.

Note(s):

Percentages based on total number of doctorate recipients. Due to rounding, percentages may not sum to 100. A master's degree is considered as related to doctorate if the doctorate recipient's first or most recent master's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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 ^a		
Doctorate recipients reporting bachelor's degree	49,523	39,263	1,147	7,901	2,059	9,122	1,006	2,380	1,847	1,228	4,612	3,425	4,536	10,260	1,261	3,508	2,892	733	1,866		
U.S. baccalaureate-origin institutions	31,036	23,597	667	5,869	653	3,649	653	1,790	899	646	2,763	3,105	2,903	7,439	574	2,834	2,241	567	1,223		
Institution control																					
Public	18,629	14,279	506	3,556	362	2,455	433	1,117	479	398	1,589	1,773	1,611	4,350	325	1,938	1,082	249	756		
Private, not-for-profit	12,305	9,241	161	2,309	289	1,188	219	656	419	248	1,174	1,305	1,273	3,064	240	886	1,157	318	463		
Private, for-profit	102	77	0	4	2	6	1	17	1	0	0	27	19	25	9	10	2	0	4		
2018 Carnegie Classification																					
R1: doctoral universities - very high research	15,934	12,897	396	3,254	388	2,594	365	805	479	348	1,394	1,460	1,414	3,037	271	1,089	923	239	515		
R2: doctoral universities - high research	4,143	3,021	76	691	84	498	80	258	93	98	343	425	375	1,122	81	543	252	70	176		
Doctoral/ professional universities	1,340	930	19	201	19	49	19	132	39	22	116	182	132	410	30	151	118	30	81		
Master's colleges and universities	4,935	3,362	98	830	69	247	77	366	124	84	448	567	452	1,573	121	675	432	86	259		
Baccalaureate colleges	4,256	3,125	76	840	80	219	101	177	157	89	456	432	498	1,131	57	318	464	120	172		
Other ^b	428	262	2	53	13	42	11	52	7	5	6	39	32	166	14	58	52	22	20		
Historically Black college or university																					
Yes	575	342	9	71	16	30	0	61	6	15	25	48	61	233	18	131	29	2	53		
No	30,461	23,255	658	5,798	637	3,619	653	1,729	893	631	2,738	3,057	2,842	7,206	556	2,703	2,212	565	1,170		
Non-U.S. baccalaureate-origin institutions	17,616	15,008	465	1,927	1,368	5,300	339	554	914	561	1,761	272	1,547	2,608	647	592	610	154	605		
Top countries or economies	12,844	11,155	281	1,369	1,108	4,281	242	381	692	436	1,314	184	867	1,689	471	382	337	97	402		
China	5,541	4,984	127	594	511	1,752	126	136	447	162	725	64	340	557	212	143	57	20	125		
India	2,257	2,099	62	301	210	914	22	86	64	98	230	21	91	158	62	27	20	9	40		
Iran	1,306	1,196	9	79	136	709	18	16	26	62	106	3	32	110	45	18	9	8	30		
South Korea	967	656	12	50	47	209	13	35	41	29	58	25	137	311	83	59	69	14	86		
Canada	484	344	5	80	19	54	17	17	24	18	28	35	47	140	11	17	69	12	31		
Saudi Arabia	455	338	9	51	57	102	3	42	17	13	22	3	19	117	9	62	20	2	24		
Taiwan	441	393	8	69	28	130	10	21	14	10	58	5	40	48	10	11	13	7	7		
Bangladesh	429	407	9	38	57	197	9	13	10	20	36	1	17	22	6	1	1	0	14		
Turkey	402	316	9	25	16	135	1	4	17	10	22	16	61	86	19	32	13	2	20		
Brazil	281	243	28	44	12	60	12	6	15	11	12	3	40	38	7	5	10	7	9		
United Kingdom	281	179	3	38	15	19	11	5	17	3	17	8	43	102	7	7	56	16	16		

^a Includes other non-science and engineering fields not shown separately.

^b Includes special focus institutions, tribal colleges, and unclassified institutions.

Note(s):

Tied countries or economies 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent distribution)

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)	44,784	44,784	6,675	5,846	11,692	9,869	3,908	6,794
Highest level of parental education ^c	44,784	100.0	14.9	13.1	26.1	22.0	8.7	15.2
Sex								
Male	24,187	100.0	16.3	12.2	26.7	21.3	8.6	14.9
Female	20,595	100.0	13.2	14.1	25.4	22.9	8.9	15.5
Citizenship status								
U.S. citizen or permanent resident	29,021	100.0	11.8	13.9	23.4	24.0	10.9	16.0
Temporary visa holder	15,744	100.0	20.6	11.4	31.2	18.4	4.7	13.7
Ethnicity and race (U.S. citizens and permanent residents)								
Hispanic or Latino	2,595	100.0	23.6	17.7	21.5	17.3	7.9	12.0
Not Hispanic or Latino								
American Indian or Alaska Native	85	100.0	D	25.9	17.6	20.0	D	8.2
Asian	2,786	100.0	14.2	10.3	19.9	21.8	8.0	25.7
Black or African American	2,140	100.0	22.2	23.6	19.3	19.5	5.4	10.0
White	20,045	100.0	8.9	13.0	24.6	25.7	12.2	15.6
More than one race	1,028	100.0	9.0	13.6	21.9	24.0	13.0	18.4
Other race or race not reported	243	100.0	D	11.5	21.4	23.5	D	19.8
Ethnicity not reported	99	100.0	13.1	7.1	22.2	28.3	11.1	18.2
Field of doctorate								
Science and engineering	35,752	100.0	14.4	12.5	27.1	22.4	8.8	14.8
Agricultural sciences and natural resources	1,041	100.0	16.2	13.6	25.1	22.4	7.8	14.9
Biological and biomedical sciences	7,403	100.0	11.7	12.5	26.4	23.4	10.9	15.0
Computer and information sciences	1,819	100.0	14.8	10.2	31.6	21.9	5.8	15.7
Engineering	8,212	100.0	15.6	10.2	30.3	22.7	6.4	14.9
Geosciences, atmospheric, and ocean sciences	935	100.0	13.4	13.4	26.3	22.4	10.4	14.2
Health sciences	2,190	100.0	17.2	16.6	24.1	20.1	7.7	14.2
Mathematics and statistics	1,660	100.0	15.9	12.0	27.5	20.4	8.4	15.8
Multidisciplinary/interdisciplinary sciences	1,109	100.0	14.3	11.5	26.7	21.5	7.4	18.7
Physical sciences	4,255	100.0	15.2	12.8	29.1	21.8	7.7	13.4
Psychology	2,949	100.0	12.1	16.2	23.0	23.7	12.6	12.5
Social sciences	4,179	100.0	15.3	12.8	23.2	22.0	10.3	16.3
Non-science and engineering	9,032	100.0	16.9	15.3	22.1	20.6	8.6	16.5
Business	1,085	100.0	19.5	12.2	25.6	18.3	5.8	18.5
Education	3,073	100.0	19.8	19.6	21.5	19.0	5.8	14.4
Humanities	2,603	100.0	13.9	13.1	21.2	21.9	11.3	18.6
Visual and performing arts	651	100.0	8.9	9.4	24.1	27.2	15.2	15.2
Other ^d	1,620	100.0	17.8	15.2	21.4	20.8	8.6	16.2

D = suppressed to avoid disclosure of confidential information.

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

^b Includes professional doctorates such as MD, DDS, DVM, JD, PsyD, DDiv.

^c Total count excludes those who did not report either parent's education and those who reported "not applicable or unknown" for both parents' education. If a respondent provided data for one parent, that response is used; for respondents who provided data for two parents, the higher attainment is reported in this table.

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

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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	5,126	11.3	1,812	4.0	645	1.4	276	0.6	409	0.9	3,029	6.7
Field of doctorate												
Science and engineering	3,903	10.8	1,368	3.8	466	1.3	187	0.5	284	0.8	2,318	6.4
Agricultural sciences and natural resources	117	11.1	57	5.4	21	2.0	6	0.6	9	0.9	56	5.3
Biological and biomedical sciences	887	11.9	222	3.0	114	1.5	34	0.5	38	0.5	622	8.3
Computer and information sciences	184	9.9	89	4.8	19	1.0	11	0.6	19	1.0	81	4.3
Engineering	686	8.2	365	4.4	94	1.1	32	0.4	63	0.8	289	3.5
Geosciences, atmospheric, and ocean sciences	105	11.1	30	3.2	16	1.7	9	1.0	11	1.2	69	7.3
Health sciences	235	10.5	85	3.8	34	1.5	16	0.7	22	1.0	129	5.8
Mathematics and statistics	171	10.1	67	3.9	21	1.2	7	0.4	13	0.8	89	5.2
Multidisciplinary/interdisciplinary sciences	123	10.8	43	3.8	11	1.0	5	0.4	7	0.6	76	6.7
Physical sciences	444	10.3	144	3.3	46	1.1	11	0.3	18	0.4	277	6.4
Psychology	392	13.1	90	3.0	42	1.4	21	0.7	28	0.9	277	9.3
Social sciences	559	13.2	176	4.2	48	1.1	35	0.8	56	1.3	353	8.3
Non-science and engineering	1,223	13.3	444	4.8	179	1.9	89	1.0	125	1.4	711	7.7
Business	102	9.2	54	4.9	16	1.4	8	0.7	15	1.4	40	3.6
Education	379	12.2	171	5.5	74	2.4	35	1.1	39	1.3	167	5.4
Humanities	401	15.2	110	4.2	48	1.8	26	1.0	37	1.4	289	11.0
Visual and performing arts	99	15.1	33	5.0	7	1.1	6	0.9	7	1.1	63	9.6
Other ^a	242	14.6	76	4.6	34	2.0	14	0.8	27	1.6	152	9.1
Sex												
Male	2,465	10.0	980	4.0	353	1.4	129	0.5	148	0.6	1,359	5.5
Female	2,659	12.7	832	4.0	292	1.4	147	0.7	261	1.2	1,668	8.0
Citizenship status ^b												
U.S. citizen or permanent resident	3,749	12.8	920	3.1	512	1.7	212	0.7	253	0.9	2,566	8.8
Temporary visa holder	1,375	8.5	891	5.5	133	0.8	64	0.4	156	1.0	462	2.9

^a Includes other non-science and engineering fields not shown separately.^b Excludes doctorate recipients who did not report citizenship status.**Note(s):**

Individual doctorate recipients could report more than one functional limitation; thus, counts and percentages for the specific limitations will not add to the "One or more limitations" of any type column. 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. 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

Source(s):

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: 2021**

(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	52,250	33,170	29,759	12,355	6,241	7,521	3,642	3,380	31
Science and engineering	41,356	26,815	24,147	11,509	3,346	7,013	2,279	2,644	24
Agricultural sciences and natural resources	1,223	746	658	320	100	163	75	87	1
Agricultural, animal, plant, and veterinary sciences	807	510	450	212	70	140	28	59	1
Natural resources and conservation	416	236	208	108	30	23	47	28	0
Biological and biomedical sciences	8,259	5,337	4,997	3,324	375	1,030	268	336	4
Biochemistry, biophysics, and molecular biology	1,348	869	815	569	33	189	24	54	0
Bioinformatics, biostatistics, and computational biology	563	408	377	143	36	169	29	30	1
Cell/ cellular biology and anatomy	657	415	390	277	29	73	11	24	1
Ecology, evolutionary biology, and epidemiology	984	680	624	399	75	71	79	56	0
Genetics and genomics	398	245	229	149	18	57	5	15	1
Microbiology and immunology	974	670	638	442	40	126	30	31	1
Neurobiology and neurosciences	1,014	633	601	457	30	97	17	32	0
Pharmacology and toxicology	311	188	178	121	7	41	9	10	0
Physiology, oncology and cancer biology	713	440	420	283	42	81	14	20	0
Biological and biomedical sciences, other	1,297	789	725	484	65	126	50	64	0
Computer and information sciences	2,195	1,543	1,390	311	251	755	73	149	4
Computer science	1,545	1,082	984	223	158	559	44	96	2
Computer and information sciences, other	650	461	406	88	93	196	29	53	2
Engineering	9,563	5,919	5,355	2,077	395	2,463	420	557	7
Biological, biomedical, and biosystems engineering	1,071	628	597	327	36	213	21	30	1
Chemical and petroleum engineering	1,292	767	700	298	11	365	26	67	0
Civil, environmental, and transportation engineering	1,020	598	510	233	48	166	63	88	0
Electrical and computer engineering	2,047	1,354	1,236	288	95	773	80	116	2

Table 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Engineering technologies	452	284	239	101	15	109	14	45	0
Industrial engineering and operations research	604	428	379	79	72	185	43	48	1
Materials and mining engineering	672	379	347	171	9	147	20	31	1
Mechanical engineering	1,413	874	788	343	54	318	73	85	1
Engineering, other	992	607	559	237	55	187	80	47	1
Geosciences, atmospheric, and ocean sciences	1,044	723	643	421	60	81	81	80	0
Geological and earth sciences	613	407	358	214	37	64	43	49	0
Ocean/ marine sciences and atmospheric science	431	316	285	207	23	17	38	31	0
Health sciences	2,582	1,695	1,576	556	473	276	271	117	2
Nursing and nursing science	603	423	394	84	191	33	86	29	0
Pharmacy and pharmaceutical sciences	408	254	235	104	10	107	14	19	0
Public health	696	471	434	190	108	46	90	35	2
Health sciences, other	875	547	513	178	164	90	81	34	0
Mathematics and statistics	1,915	1,279	1,049	438	194	362	55	229	1
Applied mathematics	475	312	275	131	37	93	14	37	0
Mathematics	827	508	361	196	82	63	20	146	1
Statistics	613	459	413	111	75	206	21	46	0
Multidisciplinary/ interdisciplinary sciences	1,299	842	765	280	124	288	73	77	0
Interdisciplinary computer sciences	448	326	303	76	41	166	20	23	0
Multidisciplinary/ interdisciplinary sciences, other	851	516	462	204	83	122	53	54	0
Physical sciences	4,811	3,145	2,809	1,654	136	894	125	333	3
Astronomy and astrophysics	263	194	168	129	11	19	9	26	0
Chemistry	2,369	1,533	1,420	792	77	496	55	111	2
Materials sciences	429	270	239	129	8	88	14	31	0
Physics	1,750	1,148	982	604	40	291	47	165	1
Psychology	3,716	2,484	2,405	1,445	361	299	300	79	0
Clinical psychology	1,256	929	913	759	35	49	70	16	0
Counseling and applied psychology	1,338	889	867	387	173	141	166	22	0
Research and experimental psychology	651	446	415	207	95	77	36	31	0

Table 6-1

Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Psychology, other	471	220	210	92	58	32	28	10	0
Social sciences	4,749	3,102	2,500	683	877	402	538	600	2
Anthropology	388	204	178	84	61	17	16	26	0
Area, ethnic, cultural, gender, and group studies	383	211	188	64	88	10	26	22	1
Economics	1,317	1,009	701	160	194	201	146	307	1
Political science and government	581	364	297	103	106	40	48	67	0
Public policy analysis	399	255	231	41	73	30	87	24	0
Sociology, demography, and population studies	578	395	352	101	150	32	69	43	0
Social sciences, other	1,103	664	553	130	205	72	146	111	0
Non-science and engineering	10,894	6,355	5,612	846	2,895	508	1,363	736	7
Business	1,340	910	704	64	468	114	58	205	1
Business administration and management	456	279	223	17	134	46	26	56	0
Business, other	884	631	481	47	334	68	32	149	1
Education	3,711	2,313	2,172	175	1,068	158	771	140	1
Education leadership and administration	1,082	731	700	23	364	30	283	31	0
Education research	1,204	743	707	70	357	78	202	36	0
Teacher education	1,010	610	546	54	267	34	191	63	1
Education, other	415	229	219	28	80	16	95	10	0
Humanities	3,076	1,664	1,454	355	721	86	292	207	3
English language and literature, letters	933	495	466	91	294	27	54	29	0
Foreign languages, literatures, and linguistics	505	252	207	41	120	12	34	44	1
History	672	363	316	109	121	15	71	46	1
Philosophy and religious studies	592	341	289	90	127	19	53	51	1
Humanities, other	374	213	176	24	59	13	80	37	0
Visual and performing arts	771	352	301	60	144	34	63	51	0
Performing arts	491	210	184	24	90	28	42	26	0
Visual arts, media studies/ design	280	142	117	36	54	6	21	25	0
Other non-science and engineering	1,996	1,116	981	192	494	116	179	133	2
Communications and journalism	520	295	262	46	171	26	19	31	2
Multidisciplinary/ interdisciplinary studies	331	159	143	28	69	19	27	16	0
Public administration and social services	490	288	262	43	121	14	84	26	0

Table 6-1**Research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021**

(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		
Non-science and engineering, other	655	374	314	75	133	57	49	60	0

^a Includes doctorate recipients who indicated self-employment.^b Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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		
U.S. citizens and permanent residents reporting postgraduation plans	31,674	21,332	20,623	7,894	5,075	4,303	3,351	703	6
Science and engineering	23,906	16,430	15,866	7,293	2,666	3,866	2,041	562	2
Agricultural sciences and natural resources	695	460	446	162	91	122	71	14	0
Agricultural, animal, plant, and veterinary sciences	440	298	292	99	61	105	27	6	0
Natural resources and conservation	255	162	154	63	30	17	44	8	0
Biological and biomedical sciences	5,876	3,880	3,767	2,390	328	805	244	112	1
Biochemistry, biophysics, and molecular biology	882	582	572	373	26	153	20	10	0
Bioinformatics, biostatistics, and computational biology	296	201	195	67	26	80	22	6	0
Cell/ cellular biology and anatomy	455	290	D	189	D	60	10	D	0
Ecology, evolutionary biology, and epidemiology	793	569	536	329	69	62	76	33	0
Genetics and genomics	291	178	D	104	D	48	5	D	1
Microbiology and immunology	766	532	520	343	35	113	29	12	0
Neurobiology and neurosciences	795	510	494	365	25	88	16	16	0
Pharmacology and toxicology	222	139	D	90	D	34	8	D	0
Physiology, oncology and cancer biology	517	327	D	203	D	66	14	D	0
Biological and biomedical sciences, other	859	552	530	327	58	101	44	22	0
Computer and information sciences	703	539	515	114	124	224	53	24	0
Computer science	480	360	345	80	74	160	31	15	0
Computer and information sciences, other	223	179	170	34	50	64	22	9	0
Engineering	3,785	2,537	2,478	828	244	1,060	346	59	0
Biological, biomedical, and biosystems engineering	732	424	414	209	27	163	15	10	0
Chemical and petroleum engineering	540	349	343	132	5	186	20	6	0
Civil, environmental, and transportation engineering	325	216	207	69	32	63	43	9	0

Table 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Electrical and computer engineering	553	408	395	68	52	221	54	13	0
Engineering technologies	132	85	D	34	D	28	11	D	0
Industrial engineering and operations research	203	160	D	D	34	67	41	D	0
Materials and mining engineering	288	182	D	76	D	77	18	D	0
Mechanical engineering	571	392	382	123	40	152	67	10	0
Engineering, other	441	321	D	D	39	103	77	D	0
Geosciences, atmospheric, and ocean sciences	665	493	471	283	52	59	77	22	0
Geological and earth sciences	373	271	258	141	D	D	D	13	0
Ocean/ marine sciences and atmospheric science	292	222	213	142	D	D	D	9	0
Health sciences	1,886	1,339	1,316	415	444	202	255	22	1
Nursing and nursing science	510	381	D	76	D	D	84	D	0
Pharmacy and pharmaceutical sciences	196	128	D	56	D	57	6	D	0
Public health	527	380	D	146	100	D	87	D	1
Health sciences, other	653	450	442	137	149	78	78	8	0
Mathematics and statistics	847	568	518	219	129	129	41	50	0
Applied mathematics	228	154	147	72	29	34	12	7	0
Mathematics	428	271	233	107	67	39	20	38	0
Statistics	191	143	138	40	33	56	9	5	0
Multidisciplinary/ interdisciplinary sciences	674	449	434	154	84	134	62	15	0
Interdisciplinary computer sciences	175	136	D	29	24	66	D	D	0
Multidisciplinary/ interdisciplinary sciences, other	499	313	D	125	60	68	D	D	0
Physical sciences	2,712	1,843	1,745	925	115	588	117	98	0
Astronomy and astrophysics	183	141	129	D	11	D	9	12	0
Chemistry	1,390	941	915	453	68	343	51	26	0
Materials sciences	226	142	132	D	D	57	14	10	0
Physics	913	619	569	322	D	D	43	50	0
Psychology	3,070	2,267	2,237	1,331	334	283	289	30	0
Clinical psychology	1,090	878	D	723	D	49	69	D	0
Counseling and applied psychology	1,133	823	816	364	160	134	158	7	0

Table 6-2

U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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	530	378	363	171	D	D	36	15	0
Psychology, other	317	188	D	73	D	D	26	D	0
Social sciences	2,993	2,055	1,939	472	721	260	486	116	0
Anthropology	294	162	151	65	54	17	15	11	0
Area, ethnic, cultural, gender, and group studies	283	171	161	48	77	10	26	10	0
Economics	467	393	374	72	114	79	109	19	0
Political science and government	405	277	256	78	D	D	48	21	0
Public policy analysis	316	220	213	34	D	D	82	7	0
Sociology, demography, and population studies	469	336	317	84	D	D	68	19	0
Social sciences, other	759	496	467	91	178	60	138	29	0
Non-science and engineering	7,768	4,902	4,757	601	2,409	437	1,310	141	4
Business	590	410	384	22	235	78	49	26	0
Business administration and management	219	145	136	6	71	37	22	9	0
Business, other	371	265	248	16	164	41	27	17	0
Education	2,962	2,055	2,034	135	997	148	754	20	1
Education leadership and administration	937	690	683	D	357	D	281	7	0
Education research	924	645	D	52	323	D	194	D	0
Teacher education	778	517	509	D	244	D	188	7	1
Education, other	323	203	D	22	73	D	91	D	0
Humanities	2,339	1,345	1,278	274	642	86	276	65	2
English language and literature, letters	776	442	431	75	275	27	54	11	0
Foreign languages, literatures, and linguistics	305	164	153	31	85	12	25	11	0
History	524	290	278	83	110	15	70	11	1
Philosophy and religious studies	457	280	255	70	D	19	D	24	1
Humanities, other	277	169	161	15	D	13	D	8	0
Visual and performing arts	571	282	265	D	129	D	60	17	0
Performing arts	368	176	168	D	83	D	40	8	0
Visual arts, media studies/ design	203	106	97	D	46	D	20	9	0
Other non-science and engineering	1,306	810	796	D	406	D	171	13	1
Communications and journalism	358	223	D	D	142	26	15	D	1
Multidisciplinary/ interdisciplinary studies	233	127	D	21	62	D	26	D	0

Table 6-2**U.S. citizen and permanent resident research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021**

(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		
Public administration and social services	357	229	D	28	102	D	83	D	0
Non-science and engineering, other	358	231	225	39	100	39	47	6	0

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who indicated self-employment.^b Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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		
Temporary visa holder doctorate recipients reporting postgraduation commitments	17,638	11,656	8,977	4,399	1,134	3,176	268	2,660	19
Science and engineering	15,259	10,237	8,153	4,159	664	3,106	224	2,068	16
Agricultural sciences and natural resources	477	285	212	158	9	41	4	72	1
Agricultural, animal, plant, and veterinary sciences	340	211	158	113	9	35	1	52	1
Natural resources and conservation	137	74	54	45	0	6	3	20	0
Biological and biomedical sciences	2,067	1,435	1,210	923	46	218	23	223	2
Biochemistry, biophysics, and molecular biology	426	283	239	193	7	35	4	44	0
Bioinformatics, biostatistics, and computational biology	252	204	180	74	10	89	7	24	0
Cell/ cellular biology and anatomy	173	123	D	87	D	12	1	D	1
Ecology, evolutionary biology, and epidemiology	166	109	86	69	6	9	2	23	0
Genetics and genomics	93	66	D	45	D	9	0	D	0
Microbiology and immunology	179	135	115	97	5	12	1	19	1
Neurobiology and neurosciences	180	122	106	92	5	8	1	16	0
Pharmacology and toxicology	72	48	D	31	D	6	1	D	0
Physiology, oncology and cancer biology	165	112	D	80	D	14	0	D	0
Biological and biomedical sciences, other	361	233	192	155	7	24	6	41	0
Computer and information sciences	1,334	989	862	195	123	524	20	124	3
Computer science	953	716	634	142	83	396	13	81	1
Computer and information sciences, other	381	273	228	53	40	128	7	43	2
Engineering	5,266	3,342	2,841	1,239	147	1,389	66	495	6
Biological, biomedical, and biosystems engineering	306	201	181	117	9	49	6	20	0
Chemical and petroleum engineering	689	416	355	165	6	178	6	61	0
Civil, environmental, and transportation engineering	642	379	300	164	16	102	18	79	0
Electrical and computer engineering	1,384	936	831	219	42	548	22	103	2
Engineering technologies	310	199	D	67	D	81	3	D	0
Industrial engineering and operations research	376	263	216	61	37	116	2	46	1

Table 6-3**Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021**

(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		
Materials and mining engineering	336	193	D	93	D	69	1	D	1
Mechanical engineering	764	476	400	218	14	163	5	75	1
Engineering, other	459	279	235	135	14	83	3	43	1
Geosciences, atmospheric, and ocean sciences	336	227	169	137	6	22	4	58	0
Geological and earth sciences	211	134	98	73	D	D	D	36	0
Ocean/ marine sciences and atmospheric science	125	93	71	64	D	D	D	22	0
Health sciences	528	343	247	134	28	70	15	95	1
Nursing and nursing science	60	38	D	6	D	D	1	D	0
Pharmacy and pharmaceutical sciences	189	123	D	47	D	48	8	D	0
Public health	131	90	D	44	8	D	3	D	1
Health sciences, other	148	92	66	37	15	11	3	26	0
Mathematics and statistics	987	706	527	217	65	231	14	178	1
Applied mathematics	235	157	127	59	8	58	2	30	0
Mathematics	356	236	127	88	15	24	0	108	1
Statistics	396	313	273	70	42	149	12	40	0
Multidisciplinary/ interdisciplinary sciences	544	390	328	126	38	153	11	62	0
Interdisciplinary computer sciences	255	188	D	47	16	99	D	D	0
Multidisciplinary/ interdisciplinary sciences, other	289	202	D	79	22	54	D	D	0
Physical sciences	1,901	1,283	1,049	719	20	302	8	232	2
Astronomy and astrophysics	72	52	38	D	0	D	0	14	0
Chemistry	875	584	499	335	9	151	4	84	1
Materials sciences	195	126	105	D	D	31	0	21	0
Physics	759	521	407	278	D	D	4	113	1
Psychology	309	205	156	105	27	15	9	49	0
Clinical psychology	54	45	D	30	D	0	1	D	0
Counseling and applied psychology	105	60	45	20	13	6	6	15	0
Research and experimental psychology	102	68	52	36	D	D	0	16	0
Psychology, other	48	32	D	19	D	D	2	D	0
Social sciences	1,510	1,032	552	206	155	141	50	480	0
Anthropology	75	41	26	18	7	0	1	15	0
Area, ethnic, cultural, gender, and group studies	69	37	25	14	11	0	0	12	0
Economics	773	608	324	88	79	121	36	284	0
Political science and government	139	86	40	24	D	D	0	46	0
Public policy analysis	70	35	18	7	D	D	5	17	0
Sociology, demography, and population studies	91	59	35	17	D	D	1	24	0

Table 6-3**Temporary visa holder research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021**

(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		
Social sciences, other	293	166	84	38	27	12	7	82	0
Non-science and engineering	2,379	1,419	824	240	470	70	44	592	3
Business	644	489	311	42	226	36	7	177	1
Business administration and management	180	128	82	11	59	9	3	46	0
Business, other	464	361	229	31	167	27	4	131	1
Education	496	245	126	39	66	9	12	119	0
Education leadership and administration	64	38	15	D	7	D	1	23	0
Education research	209	94	D	18	32	D	7	D	0
Teacher education	181	89	33	D	21	D	1	56	0
Education, other	42	24	D	6	6	D	3	D	0
Humanities	547	316	173	80	77	0	16	142	1
English language and literature, letters	100	51	33	16	17	0	0	18	0
Foreign languages, literatures, and linguistics	167	88	54	10	35	0	9	33	1
History	117	73	38	26	11	0	1	35	0
Philosophy and religious studies	102	61	34	20	D	0	D	27	0
Humanities, other	61	43	14	8	D	0	D	29	0
Visual and performing arts	147	69	35	D	15	D	2	34	0
Performing arts	89	33	15	D	7	D	1	18	0
Visual arts, media studies/ design	58	36	20	D	8	D	1	16	0
Other non-science and engineering	545	300	179	D	86	D	7	120	1
Communications and journalism	138	71	D	D	28	0	4	D	1
Multidisciplinary/ interdisciplinary studies	57	31	D	6	7	D	1	D	0
Public administration and social services	98	57	D	15	18	D	0	D	0
Non-science and engineering, other	252	141	87	34	33	18	2	54	0

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who indicated self-employment.^b Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.**Note(s):**

Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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		
Female doctorate recipients reporting postgraduation commitments	24,156	15,140	13,894	5,706	3,526	2,719	1,943	1,238	8
Science and engineering	17,939	11,518	10,586	5,226	1,781	2,450	1,129	928	4
Agricultural sciences and natural resources	621	363	333	166	53	73	41	30	0
Agricultural, animal, plant, and veterinary sciences	403	243	223	109	36	62	16	20	0
Natural resources and conservation	218	120	110	57	17	11	25	10	0
Biological and biomedical sciences	4,312	2,776	2,614	1,709	199	542	164	161	1
Biochemistry, biophysics, and molecular biology	630	395	371	255	20	87	9	24	0
Bioinformatics, biostatistics, and computational biology	234	172	160	57	12	77	14	11	1
Cell/ cellular biology and anatomy	346	224	211	141	20	42	8	13	0
Ecology, evolutionary biology, and epidemiology	589	414	383	236	D	D	54	31	0
Genetics and genomics	209	127	121	84	6	29	2	6	0
Microbiology and immunology	549	377	365	251	24	69	21	12	0
Neurobiology and neurosciences	556	335	321	238	13	59	11	14	0
Pharmacology and toxicology	164	104	99	69	D	D	5	5	0
Physiology, oncology and cancer biology	341	204	192	126	15	41	10	12	0
Biological and biomedical sciences, other	694	424	391	252	40	69	30	33	0
Computer and information sciences	526	357	318	78	73	154	13	38	1
Computer science	336	229	205	50	44	104	7	24	0
Computer and information sciences, other	190	128	113	28	29	50	6	14	1
Engineering	2,511	1,481	1,357	548	116	587	106	123	1
Biological, biomedical, and biosystems engineering	434	260	246	135	12	90	9	14	0
Chemical and petroleum engineering	380	231	213	74	D	128	D	18	0
Civil, environmental, and transportation engineering	317	170	146	60	20	45	21	24	0
Electrical and computer engineering	366	222	206	59	18	120	9	16	0

Table 6-4

Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Engineering technologies	130	72	62	34	D	20	D	10	0
Industrial engineering and operations research	170	118	105	19	19	55	12	12	1
Materials and mining engineering	212	116	110	45	D	47	D	6	0
Mechanical engineering	259	153	138	63	17	46	12	15	0
Engineering, other	243	139	131	59	20	36	16	8	0
Geosciences, atmospheric, and ocean sciences	461	314	276	188	28	30	30	38	0
Geological and earth sciences	254	165	141	87	19	22	13	24	0
Ocean/ marine sciences and atmospheric science	207	149	135	101	9	8	17	14	0
Health sciences	1,776	1,164	1,087	343	369	165	210	76	1
Nursing and nursing science	537	380	356	71	180	D	D	24	0
Pharmacy and pharmaceutical sciences	214	129	119	50	5	54	10	10	0
Public health	474	316	296	125	77	31	63	19	1
Health sciences, other	551	339	316	97	107	D	D	23	0
Mathematics and statistics	534	371	320	107	76	121	16	51	0
Applied mathematics	143	91	81	37	12	28	4	10	0
Mathematics	186	126	101	43	33	20	5	25	0
Statistics	205	154	138	27	31	73	7	16	0
Multidisciplinary/ interdisciplinary sciences	536	350	319	134	67	84	34	31	0
Interdisciplinary computer sciences	99	76	69	17	14	35	3	7	0
Multidisciplinary/ interdisciplinary sciences, other	437	274	250	117	53	49	31	24	0
Physical sciences	1,563	1,027	919	497	65	318	39	108	0
Astronomy and astrophysics	101	78	62	D	D	7	5	16	0
Chemistry	1,000	636	589	299	48	220	22	47	0
Materials sciences	130	81	73	D	D	34	4	8	0
Physics	332	232	195	120	10	57	8	37	0
Psychology	2,711	1,804	1,753	1,088	257	195	213	51	0
Clinical psychology	939	686	676	575	23	34	44	10	0
Counseling and applied psychology	1,004	663	650	304	128	94	124	13	0
Research and experimental psychology	422	294	D	140	65	44	D	D	0
Psychology, other	346	161	D	69	41	23	D	D	0
Social sciences	2,388	1,511	1,290	368	478	181	263	221	0

Table 6-4**Female research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021**

(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		
Anthropology	271	141	125	56	45	12	12	16	0
Area, ethnic, cultural, gender, and group studies	247	127	119	41	D	D	15	8	0
Economics	446	336	250	53	79	73	45	86	0
Political science and government	242	153	124	38	D	D	20	29	0
Public policy analysis	230	148	137	31	44	14	48	11	0
Sociology, demography, and population studies	359	244	226	69	86	21	50	18	0
Social sciences, other	593	362	309	80	118	38	73	53	0
Non-science and engineering	6,217	3,622	3,308	480	1,745	269	814	310	4
Business	584	393	311	27	212	44	28	81	1
Business administration and management	197	118	100	8	56	20	16	18	0
Business, other	387	275	211	19	156	24	12	63	1
Education	2,599	1,605	1,526	120	756	120	530	79	0
Education leadership and administration	705	482	464	15	246	20	183	18	0
Education research	834	506	489	44	248	59	138	17	0
Teacher education	757	452	D	39	205	D	140	D	0
Education, other	303	165	D	22	57	D	69	D	0
Humanities	1,455	791	709	175	392	38	104	81	1
English language and literature, letters	568	302	288	D	191	D	34	14	0
Foreign languages, literatures, and linguistics	288	147	117	24	68	6	19	29	1
History	291	161	144	50	63	6	25	17	0
Philosophy and religious studies	213	132	119	43	50	8	18	13	0
Humanities, other	95	49	41	D	20	D	8	8	0
Visual and performing arts	422	199	174	41	81	12	40	25	0
Performing arts	228	97	87	13	D	D	22	10	0
Visual arts, media studies/ design	194	102	87	28	D	D	18	15	0
Other non-science and engineering	1,157	634	588	117	304	55	112	44	2
Communications and journalism	299	171	157	34	98	13	12	12	2
Multidisciplinary/ interdisciplinary studies	180	86	D	18	41	7	D	D	0
Public administration and social services	331	188	178	26	91	9	52	10	0
Non-science and engineering, other	347	189	D	39	74	26	D	D	0

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who indicated self-employment.

^b Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.

Note(s):

Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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		
Male doctorate recipients reporting postgraduation commitments	28,082	18,029	15,864	6,648	2,715	4,802	1,699	2,142	23
Science and engineering	23,408	15,296	13,560	6,282	1,565	4,563	1,150	1,716	20
Agricultural sciences and natural resources	602	383	325	154	47	90	34	57	1
Agricultural, animal, plant, and veterinary sciences	404	267	227	103	34	78	12	39	1
Natural resources and conservation	198	116	98	51	13	12	22	18	0
Biological and biomedical sciences	3,946	2,561	2,383	1,615	176	488	104	175	3
Biochemistry, biophysics, and molecular biology	718	474	444	314	13	102	15	30	0
Bioinformatics, biostatistics, and computational biology	329	236	217	86	24	92	15	19	0
Cell/ cellular biology and anatomy	311	191	179	136	9	31	3	11	1
Ecology, evolutionary biology, and epidemiology	395	266	241	163	D	D	25	25	0
Genetics and genomics	189	118	108	65	12	28	3	9	1
Microbiology and immunology	425	293	273	191	16	57	9	19	1
Neurobiology and neurosciences	458	298	280	219	17	38	6	18	0
Pharmacology and toxicology	147	84	79	52	D	D	4	5	0
Physiology, oncology and cancer biology	372	236	228	157	27	40	4	8	0
Biological and biomedical sciences, other	602	365	334	232	25	57	20	31	0
Computer and information sciences	1,669	1,186	1,072	233	178	601	60	111	3
Computer science	1,209	853	779	173	114	455	37	72	2
Computer and information sciences, other	460	333	293	60	64	146	23	39	1
Engineering	7,050	4,438	3,998	1,529	279	1,876	314	434	6
Biological, biomedical, and biosystems engineering	636	368	351	192	24	123	12	16	1
Chemical and petroleum engineering	912	536	487	224	D	237	D	49	0
Civil, environmental, and transportation engineering	703	428	364	173	28	121	42	64	0
Electrical and computer engineering	1,681	1,132	1,030	229	77	653	71	100	2

Table 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Engineering technologies	322	212	177	67	D	89	D	35	0
Industrial engineering and operations research	434	310	274	60	53	130	31	36	0
Materials and mining engineering	459	263	237	126	D	100	D	25	1
Mechanical engineering	1,154	721	650	280	37	272	61	70	1
Engineering, other	749	468	428	178	35	151	64	39	1
Geosciences, atmospheric, and ocean sciences	583	409	367	233	32	51	51	42	0
Geological and earth sciences	359	242	217	127	18	42	30	25	0
Ocean/ marine sciences and atmospheric science	224	167	150	106	14	9	21	17	0
Health sciences	806	531	489	213	104	111	61	41	1
Nursing and nursing science	66	43	38	13	11	D	D	5	0
Pharmacy and pharmaceutical sciences	194	125	116	54	5	53	4	9	0
Public health	222	155	138	65	31	15	27	16	1
Health sciences, other	324	208	197	81	57	D	D	11	0
Mathematics and statistics	1,381	908	729	331	118	241	39	178	1
Applied mathematics	332	221	194	94	25	65	10	27	0
Mathematics	641	382	260	153	49	43	15	121	1
Statistics	408	305	275	84	44	133	14	30	0
Multidisciplinary/ interdisciplinary sciences	762	492	446	146	57	204	39	46	0
Interdisciplinary computer sciences	349	250	234	59	27	131	17	16	0
Multidisciplinary/ interdisciplinary sciences, other	413	242	212	87	30	73	22	30	0
Physical sciences	3,246	2,117	1,889	1,156	71	576	86	225	3
Astronomy and astrophysics	162	116	106	D	D	12	4	10	0
Chemistry	1,369	897	831	493	29	276	33	64	2
Materials sciences	299	189	166	D	D	54	10	23	0
Physics	1,416	915	786	483	30	234	39	128	1
Psychology	1,005	680	652	357	104	104	87	28	0
Clinical psychology	317	243	237	184	12	15	26	6	0
Counseling and applied psychology	334	226	217	83	45	47	42	9	0
Research and experimental psychology	229	152	D	67	30	33	D	D	0
Psychology, other	125	59	D	23	17	9	D	D	0
Social sciences	2,358	1,591	1,210	315	399	221	275	379	2

Table 6-5

Male research doctorate recipients with definite postgraduation commitments, by major field of doctorate: 2021

(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		
Anthropology	117	63	53	28	16	5	4	10	0
Area, ethnic, cultural, gender, and group studies	135	84	69	23	D	D	11	14	1
Economics	870	673	451	107	115	128	101	221	1
Political science and government	339	211	173	65	D	D	28	38	0
Public policy analysis	169	107	94	10	29	16	39	13	0
Sociology, demography, and population studies	219	151	126	32	64	11	19	25	0
Social sciences, other	509	302	244	50	87	34	73	58	0
Non-science and engineering	4,674	2,733	2,304	366	1,150	239	549	426	3
Business	756	517	393	37	256	70	30	124	0
Business administration and management	259	161	123	9	78	26	10	38	0
Business, other	497	356	270	28	178	44	20	86	0
Education	1,111	708	646	55	312	38	241	61	1
Education leadership and administration	377	249	236	8	118	10	100	13	0
Education research	370	237	218	26	109	19	64	19	0
Teacher education	252	158	D	15	62	D	51	D	1
Education, other	112	64	D	6	23	D	26	D	0
Humanities	1,619	873	745	180	329	48	188	126	2
English language and literature, letters	363	193	178	D	103	D	20	15	0
Foreign languages, literatures, and linguistics	217	105	90	17	52	6	15	15	0
History	381	202	172	59	58	9	46	29	1
Philosophy and religious studies	379	209	170	47	77	11	35	38	1
Humanities, other	279	164	135	D	39	D	72	29	0
Visual and performing arts	349	153	127	19	63	22	23	26	0
Performing arts	263	113	97	11	D	D	20	16	0
Visual arts, media studies/ design	86	40	30	8	D	D	3	10	0
Other non-science and engineering	839	482	393	75	190	61	67	89	0
Communications and journalism	221	124	105	12	73	13	7	19	0
Multidisciplinary/ interdisciplinary studies	151	73	D	10	28	12	D	D	0
Public administration and social services	159	100	84	17	30	5	32	16	0
Non-science and engineering, other	308	185	D	36	59	31	D	D	0

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who indicated self-employment.

^b Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.

Note(s):

Definite postgraduate commitment includes doctorate recipients reporting definite postgraduation commitments for employment or postdoctoral study. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	65,000	70,000	62,000	90,000	100,000	80,000	53,460	54,000	53,000
Science and engineering	65,700	70,000	61,000	100,000	108,000	87,000	53,460	54,000	53,000
Agricultural sciences and natural resources	60,000	60,000	56,000	80,000	82,000	75,812	50,000	50,000	50,000
Biological and biomedical sciences	55,000	55,000	55,000	90,000	95,000	87,750	53,000	53,000	53,000
Computer and information sciences	125,000	130,000	102,500	145,000	149,000	130,000	65,000	65,000	70,000
Engineering	87,000	90,000	83,000	110,000	113,000	108,000	54,000	54,000	54,000
Geosciences, atmospheric, and ocean sciences	60,000	60,000	60,000	77,000	80,000	72,468	58,000	58,000	58,000
Health sciences	70,000	67,000	70,000	90,000	95,451	85,000	53,760	53,760	53,760
Mathematics and statistics	75,000	75,000	78,500	110,000	113,000	101,500	60,000	60,000	60,900
Multidisciplinary/ interdisciplinary sciences	81,500	94,000	68,000	113,000	125,000	95,000	55,000	60,000	53,000
Physical sciences	66,516	65,000	70,000	100,000	104,520	100,000	55,000	55,000	55,000
Psychology	53,138	55,000	53,000	70,000	73,000	70,000	51,500	51,000	52,000
Social sciences	70,000	75,000	66,250	80,000	88,000	75,000	56,000	60,000	55,000
Non-science and engineering	65,000	65,000	64,000	69,000	70,000	66,900	53,000	51,250	54,000
Business	120,000	123,000	115,000	125,000	125,000	120,000	60,000	60,000	60,000
Education	69,042	70,000	67,500	70,000	73,500	70,000	55,000	55,000	55,000
Humanities	53,000	53,000	53,000	55,000	55,000	54,000	50,000	49,000	52,000
Visual and performing arts	50,000	48,000	50,000	50,000	47,500	50,000	52,000	55,000	52,000
Other ^b	65,000	65,000	65,000	70,000	71,000	70,000	54,000	54,000	55,000

^a Includes doctorate recipients who reported having a postgraduation plan and salary, but did not report type of postgraduation plan.

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

Note(s):

Basic annual salary is based on the job or postdoctoral study expected to hold in the next year. Median salaries in this table are the exact salary values of respondents at the 50th percentile of their frequency distribution; salary values are rounded to the nearest dollar. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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 employment in the United States, by broad field of doctorate and employment sector: 2021**

(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	90,000	68,000	115,000	88,473	80,000	73,000
Science and engineering	100,000	70,000	117,000	88,000	90,000	66,400
Agricultural sciences and natural resources	80,000	68,000	90,000	74,000	67,000	60,500
Biological and biomedical sciences	90,000	60,000	105,250	80,000	80,000	50,000
Computer and information sciences	145,000	95,000	160,000	115,000	120,000	120,000
Engineering	110,000	87,000	118,000	95,000	100,104	102,500
Geosciences, atmospheric, and ocean sciences	77,000	55,000	105,000	75,000	75,000	55,500
Health sciences	90,000	80,000	108,000	91,000	100,000	74,000
Mathematics and statistics	110,000	65,000	133,000	103,803	109,000	50,000
Multidisciplinary/ interdisciplinary sciences	113,000	83,000	134,500	85,000	97,000	40,000
Physical sciences	100,000	60,000	110,000	87,000	90,500	61,634
Psychology	70,000	63,000	90,000	70,000	70,500	70,000
Social sciences	80,000	68,500	120,000	95,087	84,300	62,775
Non-science and engineering	69,000	64,000	85,000	90,000	70,000	75,000
Business	125,000	123,000	130,000	155,000	77,500	70,000
Education	70,000	65,000	82,500	89,000	79,000	80,000
Humanities	55,000	52,259	57,500	81,000	60,000	57,375
Visual and performing arts	50,000	50,000	42,500	49,950	45,000	56,750
Other non-science and engineering ^d	70,000	65,000	100,000	89,000	75,000	60,000

^a Includes doctorate recipients who did not report employment sector.^b Includes doctorate recipients who indicated self-employment.^c Other is mainly composed of elementary and secondary schools.^d Includes other non-science and engineering fields not shown separately.**Note(s):**

Basic annual salary is based on the job expected to hold in the next year. Median salaries in this table are the exact salary values of respondents at the 50th percentile of their frequency distribution; salary values are rounded to the nearest dollar. 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 were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 1973–2021**

(Number, mean, and median)

Year	Doctorate-granting institutions	Doctorate recipients		
		Total	Mean (per institution)	Median (per institution)
1973	282	33,755	119.7	43.5
1974	288	33,047	114.7	41.0
1975	289	32,952	114.0	45.0
1976	291	32,946	113.2	45.0
1977	299	31,716	106.1	44.0
1978	303	30,875	101.9	39.0
1979	305	31,238	102.4	42.0
1980	313	31,019	99.1	38.0
1981	316	31,355	99.2	41.0
1982	322	31,108	96.6	35.0
1983	326	31,280	96.0	37.0
1984	326	31,334	96.1	39.5
1985	331	31,295	94.5	37.0
1986	333	31,897	95.8	38.0
1987	343	32,365	94.4	40.0
1988	345	33,497	97.1	36.0
1989	350	34,325	98.1	36.5
1990	348	36,065	103.6	43.0
1991	357	37,530	105.1	39.0
1992	360	38,886	108.0	43.5
1993	366	39,800	108.7	42.5
1994	368	41,034	111.5	43.0
1995	376	41,747	111.0	43.0
1996	384	42,437	110.5	44.0
1997	379	42,539	112.2	45.0
1998	382	42,636	111.6	44.5
1999	389	41,101	105.7	43.0
2000	403	41,369	102.7	41.0
2001	411	40,744	99.1	37.0
2002	410	40,031	97.6	38.0
2003	418	40,762	97.5	36.5
2004	413	42,122	102.0	39.0
2005	413	43,385	105.0	42.0
2006	413	45,620	110.5	41.0
2007	408	48,132	118.0	46.0
2008	415	48,776	117.5	43.0
2009	416	49,552	119.1	46.0
2010	411	48,028	116.9	44.0
2011	405	48,909	120.8	44.0
2012	412	50,943	123.6	46.5
2013	417	52,703	126.4	44.0
2014	422	53,986	127.9	47.0
2015	426	54,886	128.8	46.0
2016	430	54,809	127.5	48.0
2017	425	54,552	128.4	50.0
2018	428	55,080	128.7	48.5
2019	447	55,609	124.4	40.0
2020	450	55,224	122.7	40.5
2021	448	52,250	116.6	40.5

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: 2021**

(Number)

Institution	Rank	Total ^a	Male	Female
Walden U.	1	846	273	573
Stanford U.	2	815	508	305
U. Michigan, Ann Arbor	3	797	431	366
U. California, Berkeley	4	787	484	303
Purdue U., West Lafayette	5	776	483	293
Texas A&M U., College Station and Health Science Center	6	766	470	295
Ohio State U., Columbus	7	713	388	325
U. Florida	8	711	376	335
U. Texas, Austin	9	667	379	288
U. Wisconsin-Madison	10	664	387	277
U. Illinois, Urbana-Champaign	11	662	394	268
U. California, Los Angeles	12	639	368	271
U. Washington, Seattle	13	632	355	277
Pennsylvania State U.	14	629	329	300
U. Minnesota, Twin Cities	15	626	362	264
Harvard U.	16	621	346	275
Columbia U. in the City of New York	17	585	325	260
Massachusetts Institute of Technology	18	568	401	167
Georgia Institute of Technology	19	563	400	163
Arizona State U.	20	508	307	201
North Carolina State U.	21	505	294	211
U. Maryland, College Park	22	502	260	241
U. California, San Diego	23	490	300	190
Michigan State U.	24	478	258	220
Cornell U.	25	472	267	205
U. California, Davis	26	465	236	229
Virginia Polytechnic Institute and State U.	26	465	285	180
U. Chicago	28	455	277	178
U. Pennsylvania	28	455	246	209
U. North Carolina, Chapel Hill	30	433	201	232
Northwestern U.	31	428	257	170
Johns Hopkins U.	32	423	220	203
Yale U.	33	410	239	170
U. Georgia	34	400	185	215
U. Southern California	35	397	223	174
U. Colorado Boulder	36	394	251	143
U. California, Irvine	37	393	217	176
New York U.	38	385	208	177
Duke U.	39	384	235	149
U. Arizona	40	380	205	174
Indiana U., Bloomington	41	375	188	187
Texas Tech U.	41	375	181	194
U. Pittsburgh, Pittsburgh	43	353	181	172
Rutgers, State U. New Jersey, New Brunswick	44	342	187	155
SUNY, U. Buffalo	45	340	190	150
U. Tennessee, Knoxville	45	340	189	151
U. Houston	47	338	182	156
CUNY, Graduate Center	48	337	142	195
Florida State U.	49	333	181	152
Iowa State U.	50	325	202	123

^a Includes respondents 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: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
Science and engineering	-	41,356	23,408	17,939
From top 20 institutions	-	11,238	6,796	4,440
Stanford U.	1	718	458	258
U. Michigan, Ann Arbor	2	693	394	299
Purdue U., West Lafayette	3	679	436	243
Texas A&M U., College Station and Health Science Center	4	668	432	236
U. California, Berkeley	5	664	423	241
U. Florida	6	595	330	265
U. Illinois, Urbana-Champaign	7	566	351	215
U. Washington, Seattle	8	558	327	231
U. Wisconsin-Madison	8	558	343	215
Ohio State U., Columbus	10	547	317	230
Georgia Institute of Technology	11	536	384	152
U. Minnesota, Twin Cities	12	530	319	211
Massachusetts Institute of Technology	13	526	377	149
Walden U.	14	519	169	350
U. Texas, Austin	15	509	313	196
Pennsylvania State U.	16	508	291	217
U. California, Los Angeles	17	503	309	194
Harvard U.	18	483	278	205
U. California, San Diego	19	445	280	165
North Carolina State U.	20	433	265	168
Agricultural sciences and natural resources	-	1,223	602	621
From top 20 institutions	-	701	348	353
Texas A&M U., College Station and Health Science Center	1	56	32	24
U. Florida	2	54	30	24
U. Georgia	3	49	21	28
U. California, Davis	4	40	15	25
U. Nebraska, Lincoln	5	37	23	14
Cornell U.	6	36	19	17
North Carolina State U.	7	34	12	22
Virginia Polytechnic Institute and State U.	7	34	21	13
Iowa State U.	9	33	22	11
U. Illinois, Urbana-Champaign	9	33	16	17
Kansas State U.	11	32	14	18
Ohio State U., Columbus	11	32	11	21
U. Wisconsin-Madison	13	28	16	12
Mississippi State U.	14	26	16	10
Purdue U., West Lafayette	14	26	7	19
U. Minnesota, Twin Cities	16	24	11	13
Michigan State U.	17	23	8	15
U. Missouri, Columbia	18	22	12	10
Washington State U.	18	22	8	14
Auburn U., Auburn	20	20	13	7
Oklahoma State U., Stillwater	20	20	12	8
Texas Tech U.	20	20	9	11
Biological and biomedical sciences	-	8,259	3,946	4,312
From top 20 institutions	-	2,367	1,128	1,238
Harvard U.	1	162	89	73
Johns Hopkins U.	2	155	68	87

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
Stanford U.	3	144	76	67
U. Michigan, Ann Arbor	4	143	52	91
U. Florida	5	140	69	71
U. Washington, Seattle	6	131	62	69
U. Pennsylvania	7	122	58	64
U. California, Davis	8	120	52	68
U. California, Berkeley	9	119	63	56
U. North Carolina, Chapel Hill	10	113	47	66
Yale U.	10	113	54	59
Texas A&M U., College Station and Health Science Center	12	109	56	53
U. Wisconsin-Madison	13	107	54	53
Ohio State U., Columbus	14	106	52	54
U. Georgia	14	106	47	59
U. Minnesota, Twin Cities	16	100	50	50
U. California, San Diego	17	98	44	54
Columbia U. in the City of New York	18	96	45	51
U. California, Los Angeles	19	95	45	50
Duke U.	20	88	45	43
Computer and information sciences	-	2,195	1,669	526
From top 20 institutions	-	774	586	188
Georgia Institute of Technology	1	62	50	12
U. Illinois, Urbana-Champaign	1	62	40	22
Massachusetts Institute of Technology	3	57	45	12
Carnegie Mellon U.	4	55	46	9
U. California, Berkeley	4	55	44	11
Stanford U.	6	42	36	6
U. Maryland, College Park	7	38	23	15
U. Central Florida	8	35	26	9
U. Texas, Austin	9	34	28	6
U. Michigan, Ann Arbor	10	33	28	5
Purdue U., West Lafayette	11	32	24	8
Rutgers, State U. New Jersey, New Brunswick	11	32	24	8
Cornell U.	13	31	22	9
SUNY, Stony Brook U.	13	31	27	4
U. California, Irvine	13	31	20	11
U. California, Los Angeles	13	31	26	5
Indiana U., Bloomington	17	30	21	9
U. Washington, Seattle	18	29	18	11
Virginia Polytechnic Institute and State U.	19	28	20	8
U. Minnesota, Twin Cities	20	26	18	8
Engineering	-	9,563	7,050	2,511
From top 20 institutions	-	3,604	2,680	924
Georgia Institute of Technology	1	348	258	90
Purdue U., West Lafayette	2	345	257	88
Stanford U.	3	241	161	80
Texas A&M U., College Station and Health Science Center	3	241	186	55
Massachusetts Institute of Technology	5	217	157	60
U. Michigan, Ann Arbor	5	217	168	49
U. Texas, Austin	7	192	142	50
U. Illinois, Urbana-Champaign	8	181	141	40

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
North Carolina State U.	9	171	126	45
Virginia Polytechnic Institute and State U.	10	168	124	44
Arizona State U.	11	148	108	40
U. California, San Diego	12	142	112	30
Ohio State U., Columbus	13	138	100	38
Pennsylvania State U.	14	135	102	33
U. Florida	14	135	104	31
U. California, Berkeley	16	126	92	34
U. Minnesota, Twin Cities	17	123	97	26
U. California, Los Angeles	18	120	95	25
Carnegie Mellon U.	19	108	76	32
U. Colorado Boulder	19	108	74	34
Geosciences, atmospheric, and ocean sciences	-	1,044	583	461
From top 20 institutions	-	419	234	185
U. California, San Diego	1	35	17	18
U. Houston	2	31	19	12
U. Colorado Boulder	3	29	16	13
U. Washington, Seattle	3	29	16	13
Texas A&M U., College Station and Health Science Center	5	28	16	12
Stanford U.	6	26	16	10
U. Oklahoma, Norman	7	22	17	5
Massachusetts Institute of Technology	8	21	11	10
U. Miami	9	20	14	6
Columbia U. in the City of New York	10	19	7	12
Ohio State U., Columbus	10	19	8	11
U. Texas, Austin	10	19	13	6
U. California, Berkeley	13	18	12	6
U. California, Irvine	14	17	8	9
U. Maryland, College Park	14	17	10	7
Colorado State U., Fort Collins	16	15	8	7
Pennsylvania State U.	16	15	7	8
U. Hawaii, Manoa	18	13	6	7
U. Illinois, Urbana-Champaign	18	13	9	4
U. South Florida, Tampa	18	13	4	9
Health sciences	-	2,582	806	1,776
From top 20 institutions	-	929	299	630
Walden U.	1	165	45	120
U. North Carolina, Chapel Hill	2	57	20	37
U. Florida	3	49	16	33
U. Washington, Seattle	3	49	19	30
Johns Hopkins U.	5	47	8	39
Harvard U.	6	43	16	27
U. Illinois, Chicago	7	40	15	25
U. Michigan, Ann Arbor	8	39	15	24
U. Minnesota, Twin Cities	9	38	17	21
U. Wisconsin-Madison	10	36	17	19
Texas Woman's U.	11	35	4	31
U. Pittsburgh, Pittsburgh	11	35	10	25
U. Texas Health Science Center, Houston	11	35	14	21
U. Kentucky	14	32	12	20

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
Virginia Commonwealth U.	14	32	8	24
U. California, Los Angeles	16	31	9	22
U. South Carolina, Columbia	17	30	11	19
U. Texas, Austin	17	30	12	18
U. Arizona	19	28	2	26
U. Colorado Denver	20	26	7	19
U. Southern California	20	26	13	13
U. Utah	20	26	9	17
Mathematics and statistics	-	1,915	1,381	534
From top 20 institutions	-	643	478	165
North Carolina State U.	1	44	23	21
U. California, Berkeley	2	41	32	9
Texas A&M U., College Station and Health Science Center	3	40	29	11
U. Wisconsin-Madison	3	40	26	14
Stanford U.	5	38	30	8
U. Michigan, Ann Arbor	6	36	24	12
U. Washington, Seattle	7	35	28	7
Purdue U., West Lafayette	8	34	27	7
Florida State U.	9	32	28	4
U. California, Davis	9	32	23	9
SUNY, Stony Brook U.	11	29	24	5
U. Illinois, Urbana-Champaign	11	29	18	11
Harvard U.	13	28	25	3
Columbia U. in the City of New York	14	27	20	7
Pennsylvania State U.	14	27	20	7
U. California, Los Angeles	14	27	23	4
Iowa State U.	17	26	16	10
Massachusetts Institute of Technology	17	26	24	2
U. California, Irvine	17	26	22	4
U. Minnesota, Twin Cities	17	26	16	10
Multidisciplinary/ interdisciplinary sciences (number)	-	1,299	762	536
From top 20 institutions	-	461	295	166
U. California, Berkeley	1	46	35	11
Massachusetts Institute of Technology	2	39	29	10
U. Washington, Seattle	3	32	24	8
Arizona State U.	4	28	14	14
Carnegie Mellon U.	5	24	17	7
Nova Southeastern U.	6	23	8	15
Ohio State U., Columbus	6	23	19	4
Pennsylvania State U.	6	23	13	10
U. Notre Dame	9	22	16	6
George Mason U.	10	21	10	11
Stanford U.	11	20	14	6
U. Tennessee, Knoxville	12	18	9	9
Georgia Institute of Technology	13	17	13	4
U. Minnesota, Twin Cities	13	17	9	8
U. California, San Diego	15	16	9	7
U. Maryland, College Park	15	16	10	6
U. Texas, Austin	15	16	10	6
Texas A&M U., College Station and Health Science Center	18	15	13	2

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Florida	18	15	7	8
U. Michigan, Ann Arbor	18	15	8	7
U. South Florida, Tampa	18	15	8	7
Physical sciences	-	4,811	3,246	1,563
From top 20 institutions	-	1,625	1,112	512
U. California, Berkeley	1	108	73	35
U. Michigan, Ann Arbor	2	96	54	42
U. Wisconsin-Madison	3	93	63	30
Stanford U.	4	91	67	24
U. Illinois, Urbana-Champaign	5	90	63	27
Harvard U.	6	83	56	27
U. Washington, Seattle	7	80	53	27
U. California, Los Angeles	8	78	53	25
Massachusetts Institute of Technology	9	75	54	21
Purdue U., West Lafayette	10	74	49	25
Northwestern U.	11	72	49	22
U. California, San Diego	12	71	52	19
Texas A&M U., College Station and Health Science Center	13	70	48	22
Cornell U.	14	69	46	23
Pennsylvania State U.	15	68	50	18
Michigan State U.	16	62	42	20
U. Chicago	16	62	51	11
U. Minnesota, Twin Cities	18	60	42	18
Yale U.	19	58	36	22
Ohio State U., Columbus	20	55	36	19
U. Arizona	20	55	45	10
U. California, Davis	20	55	30	25
Psychology	-	3,716	1,005	2,711
From top 20 institutions	-	1,050	272	778
Walden U.	1	195	44	151
Fielding Graduate U.	2	72	11	61
Palo Alto U.	3	61	12	49
CUNY, Graduate Center	4	56	18	38
Alliant International U., San Diego	5	55	18	37
U. Florida	6	53	15	38
Pennsylvania State U.	7	46	15	31
Pacifica Graduate Institute	8	42	10	32
U. Texas, Austin	9	39	8	31
Columbia U. in the City of New York	10	37	16	21
Texas A&M U., College Station and Health Science Center	11	36	11	25
Fordham U.	12	35	7	28
U. Georgia	12	35	13	22
U. Minnesota, Twin Cities	12	35	9	26
U. Wisconsin-Madison	12	35	13	22
U. Kansas	16	34	9	25
Texas Tech U.	17	32	6	26
U. Connecticut, Storrs	18	31	8	23
U. Houston	18	31	2	29
North Carolina State U.	20	30	9	21
Ohio State U., Columbus	20	30	12	18

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Maryland, College Park	20	30	6	24
Social sciences	-	4,749	2,358	2,388
From top 20 institutions	-	1,617	822	793
Walden U.	1	129	66	63
U. Chicago	2	114	58	56
U. California, Berkeley	3	110	60	50
Harvard U.	4	102	55	47
U. California, Los Angeles	5	86	44	42
U. Wisconsin-Madison	5	86	46	40
Stanford U.	7	82	39	42
Ohio State U., Columbus	8	81	38	43
U. Michigan, Ann Arbor	9	75	34	41
U. Minnesota, Twin Cities	9	75	47	28
CUNY, Graduate Center	11	73	35	38
Michigan State U.	12	72	33	39
Columbia U. in the City of New York	13	69	34	35
Indiana U., Bloomington	13	69	24	45
U. Maryland, College Park	13	69	37	32
Pennsylvania State U.	16	68	30	38
Yale U.	17	66	38	27
George Mason U.	18	64	34	30
U. Pennsylvania	18	64	40	24
U. Texas, Austin	20	63	30	33
Non-science and engineering	-	10,894	4,674	6,217
From top 20 institutions	-	2,887	1,193	1,693
Walden U.	1	327	104	223
Ohio State U., Columbus	2	166	71	95
Columbia U. in the City of New York	3	158	67	91
U. Texas, Austin	3	158	66	92
Texas Tech U.	5	151	56	95
Harvard U.	6	138	68	70
U. California, Los Angeles	7	136	59	77
Florida State U.	8	129	56	73
U. California, Berkeley	9	123	61	62
Pennsylvania State U.	10	121	38	83
Arizona State U.	11	116	59	57
U. Florida	11	116	46	70
U. Chicago	13	112	70	42
Indiana U., Bloomington	14	110	53	57
CUNY, Graduate Center	15	109	44	65
U. Georgia	16	107	39	68
Michigan State U.	17	106	42	64
U. Wisconsin-Madison	17	106	44	62
U. Michigan, Ann Arbor	19	104	37	67
Texas A&M U., College Station and Health Science Center	20	98	38	59
U. Pennsylvania	20	98	45	53
U. South Florida, Tampa	20	98	30	68
Business	-	1,340	756	584
From top 20 institutions	-	500	271	229
Walden U.	1	89	42	47

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
Stanford U.	2	25	15	10
Regent U.	3	24	14	10
U. Florida	4	21	10	11
Rutgers, State U. New Jersey, Newark	5	20	13	7
U. North Texas, Denton	5	20	15	5
Fielding Graduate U.	7	19	7	12
Oklahoma State U., Stillwater	7	19	9	10
Purdue U., West Lafayette	9	18	12	6
Temple U.	9	18	8	10
U. Minnesota, Twin Cities	9	18	12	6
Massachusetts Institute of Technology	12	17	12	5
Case Western Reserve U.	13	16	7	9
Pennsylvania State U.	13	16	6	10
U. Maryland, College Park	13	16	6	10
Arizona State U.	16	15	10	5
Benedictine U.	16	15	9	6
Columbia U. in the City of New York	16	15	7	8
Texas Tech U.	16	15	9	6
Cornell U.	20	14	8	6
Harvard U.	20	14	10	4
Northwestern U.	20	14	9	5
U. Arkansas, Fayetteville	20	14	7	7
U. Illinois, Urbana-Champaign	20	14	8	6
U. Texas, Arlington	20	14	6	8
Education	-	3,711	1,111	2,599
From top 20 institutions	-	1,053	307	746
Walden U.	1	116	20	96
Texas Tech U.	2	78	24	54
U. South Florida, Tampa	3	64	15	49
Columbia U., Teachers C.	4	63	20	43
Pennsylvania State U.	5	58	14	44
Michigan State U.	6	57	18	39
Ohio State U., Columbus	7	54	13	41
Old Dominion U.	8	52	13	39
George Washington U.	9	50	14	36
Auburn U., Auburn	10	49	16	33
U. Texas, Austin	11	48	17	31
U. Georgia	12	47	15	32
U. Kentucky	13	45	15	30
U. North Texas, Denton	13	45	14	31
Temple U.	15	42	19	23
Texas A&M U., College Station and Health Science Center	16	39	11	28
Florida State U.	17	37	13	24
Indiana U., Bloomington	17	37	13	24
SUNY, U. Buffalo	17	37	9	28
North Carolina State U.	20	35	14	21
Humanities	-	3,076	1,619	1,455
From top 20 institutions	-	1,025	559	466
Columbia U. in the City of New York	1	68	32	36
U. Chicago	2	66	42	24

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
Harvard U.	3	65	33	32
U. California, Berkeley	4	51	27	24
U. Texas, Austin	5	50	26	24
U. California, Los Angeles	6	49	23	26
Ohio State U., Columbus	7	48	26	22
Florida State U.	8	45	26	19
U. Notre Dame	9	44	22	22
CUNY, Graduate Center	10	42	20	22
Yale U.	10	42	25	17
Duke U.	12	41	27	14
Indiana U., Bloomington	13	40	25	15
New York U.	13	40	20	20
Rutgers, State U. New Jersey, New Brunswick	13	40	15	25
Stanford U.	16	39	16	23
Midwestern Baptist Theological Seminary	17	38	37	1
Southwestern Baptist Theological Seminary	18	37	34	3
Emory U.	19	36	16	20
Purdue U., West Lafayette	19	36	18	18
U. Michigan, Ann Arbor	19	36	13	23
U. Pennsylvania	19	36	20	16
U. Wisconsin-Madison	19	36	16	20
Visual and performing arts	-	771	349	422
From top 20 institutions	-	392	170	222
Arizona State U.	1	37	19	18
CUNY, Graduate Center	2	35	10	25
U. Miami	3	26	14	12
Columbia U. in the City of New York	4	25	13	12
U. California, Los Angeles	4	25	13	12
U. Colorado Boulder	6	22	15	7
New York U.	7	20	4	16
U. Chicago	8	19	10	9
U. California, Berkeley	9	18	8	10
U. Pittsburgh, Pittsburgh	9	18	6	12
Harvard U.	11	16	6	10
Ohio State U., Columbus	11	16	7	9
West Virginia U.	11	16	10	6
Florida State U.	14	15	1	14
U. Rochester	14	15	7	8
U. Texas, Austin	14	15	5	10
U. California, Santa Barbara	17	14	2	12
Yale U.	17	14	8	6
Texas Tech U.	19	13	4	9
U. Memphis	19	13	8	5
Other non-science and engineering	-	1,996	839	1,157
From top 20 institutions	-	720	293	427
Walden U.	1	116	39	77
Ohio State U., Columbus	2	39	17	22
U. Florida	2	39	16	23
Harvard U.	4	34	17	17
U. Georgia	4	34	10	24

Table 7-3**Top 20 doctorate-granting institutions ranked by total number of research doctorate recipients, by broad field of doctorate and sex: 2021**

(Number)

Field and institution	Rank	Total ^a	Male	Female
U. Texas, Austin	6	33	10	23
Columbia U. in the City of New York	7	32	11	21
U. Michigan, Ann Arbor	7	32	13	19
U. California, Berkeley	9	30	15	15
U. Southern California	9	30	12	18
Michigan State U.	11	28	15	13
U. Pennsylvania	11	28	11	17
Florida State U.	13	27	13	14
Texas A&M U., College Station and Health Science Center	13	27	11	16
Arizona State U.	15	26	13	13
North Carolina State U.	15	26	9	17
U. North Carolina, Chapel Hill	17	25	11	14
Texas Tech U.	18	24	11	13
U. Illinois, Urbana-Champaign	18	24	11	13
Pennsylvania State U.	20	22	11	11
U. California, Los Angeles	20	22	11	11
U. Kentucky	20	22	6	16

^a Includes respondents 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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, 2017–21**

(Number)

Institution	Rank	Doctorate recipients
Hispanic or Latino (390 institutions)	-	13,658
From top 20 institutions	-	3,906
U. California, Berkeley	1	283
U. California, Los Angeles	2	256
U. Texas, Austin	3	238
U. Michigan, Ann Arbor	4	232
Texas A&M U., College Station and Health Science Center	5	230
Walden U.	6	213
U. Wisconsin-Madison	7	212
U. Arizona	8	205
U. Florida	9	201
U. California, San Diego	10	185
U. California, Davis	11	177
U. California, Irvine	12	174
Florida International U.	13	173
U. Texas, El Paso	14	171
U. California, Riverside	15	167
U. Washington, Seattle	16	163
CUNY, Graduate Center	17	159
Columbia U. in the City of New York	18	158
U. Illinois, Urbana-Champaign	19	155
Harvard U.	20	154
Not Hispanic or Latino	-	-
American Indian or Alaska Native (171 institutions)	-	540
From top 20 institutions	-	260
U. Arizona	1	27
U. New Mexico, Albuquerque	2	22
Oklahoma State U., Stillwater	3	20
U. Oklahoma, Norman	4	19
Arizona State U.	5	18
Walden U.	6	17
U. Minnesota, Twin Cities	7	15
U. Montana, Missoula	7	15
U. Washington, Seattle	9	13
U. Kansas	10	11
Texas A&M U., College Station and Health Science Center	11	10
U. California, Berkeley	11	10
U. Alaska, Fairbanks	13	9
U. California, Davis	14	8
U. Michigan, Ann Arbor	14	8
SUNY, U. Buffalo	16	7
U. North Dakota	16	7
Harvard U.	18	6
Montana State U., Bozeman	18	6
Ohio State U., Columbus	18	6
U. Maryland, College Park	18	6
Asian (388 institutions)	-	16,458
From top 20 institutions	-	5,812
U. California, Los Angeles	1	506
U. California, Berkeley	2	467

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, 2017–21**

(Number)

Institution	Rank	Doctorate recipients
Harvard U.	3	413
Massachusetts Institute of Technology	4	354
Stanford U.	5	337
U. Michigan, Ann Arbor	6	322
Columbia U. in the City of New York	7	313
U. California, San Diego	8	290
U. Illinois, Urbana-Champaign	9	286
U. Washington, Seattle	10	283
U. California, Irvine	11	281
U. Southern California	12	256
U. Pennsylvania	13	244
U. California, Davis	14	227
Georgia Institute of Technology	15	223
Johns Hopkins U.	16	222
U. Maryland, College Park	17	209
Cornell U.	18	201
Purdue U., West Lafayette	19	189
U. Wisconsin-Madison	19	189
Black or African American (388 institutions)	-	12,245
From top 20 institutions	-	4,040
Walden U.	1	1,485
Howard U.	2	256
Jackson State U.	3	208
U. Georgia	4	158
U. Florida	5	148
Georgia State U.	6	145
U. North Carolina, Chapel Hill	7	137
U. Michigan, Ann Arbor	8	135
Louisiana State U., Baton Rouge	9	133
U. Maryland, College Park	10	127
Michigan State U.	11	120
Morgan State U.	12	119
George Washington U.	13	118
U. Memphis	14	117
Ohio State U., Columbus	15	113
North Carolina Agricultural and Technical State U.	16	107
Texas A&M U., College Station and Health Science Center	17	106
U. Illinois, Urbana-Champaign	18	104
Columbia U. in the City of New York	19	103
Florida State U.	20	101
More than one race (337 institutions)	-	5,459
From top 20 institutions	-	1,676
U. California, Berkeley	1	152
U. Washington, Seattle	2	114
Harvard U.	3	103
U. Michigan, Ann Arbor	3	103
Stanford U.	5	94
U. California, Davis	5	94
U. California, Los Angeles	5	94
Walden U.	8	91

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, 2017–21

(Number)

Institution	Rank	Doctorate recipients
U. Hawaii, Manoa	9	82
U. California, San Diego	10	78
U. Wisconsin-Madison	10	78
U. California, Irvine	12	76
U. Illinois, Urbana-Champaign	13	75
Massachusetts Institute of Technology	14	70
U. North Carolina, Chapel Hill	15	69
Columbia U. in the City of New York	16	67
U. Pennsylvania	17	63
Yale U.	18	59
Texas A&M U., College Station and Health Science Center	19	57
U. Florida	19	57

Note(s):

Tied institutions are listed alphabetically. Native Hawaiians and Other Pacific Islanders not included in this table due to small population sizes.

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: 2021**

(Number)

Institution	Rank	Doctorate recipients
All institutions (448 institutions)	-	17,638
From top 20 institutions	-	5,136
Purdue U., West Lafayette	1	443
Texas A&M U., College Station and Health Science Center	2	393
U. Illinois, Urbana-Champaign	3	313
Georgia Institute of Technology	4	311
U. Florida	5	293
Pennsylvania State U.	6	275
U. Michigan, Ann Arbor	7	269
Ohio State U., Columbus	8	265
U. California, Los Angeles	9	233
U. Minnesota, Twin Cities	10	229
U. California, Berkeley	11	227
Massachusetts Institute of Technology	12	226
Columbia U. in the City of New York	13	223
U. Wisconsin-Madison	13	223
U. Texas, Austin	15	219
U. Southern California	16	204
Cornell U.	17	201
North Carolina State U.	17	201
Arizona State U.	19	196
U. California, San Diego	20	192

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: 2021

(Number)

State or location	Rank	Total ^a	Male	Female	Science and engineering			Non-science and engineering		
					Total	Male	Female	Total	Male	Female
California	1	5,892	3,267	2,623	4,959	2,848	2,109	933	419	514
Texas	2	4,118	2,213	1,904	3,155	1,803	1,352	963	410	552
New York	3	3,871	2,030	1,840	2,975	1,653	1,321	896	377	519
Massachusetts	4	2,652	1,501	1,151	2,180	1,273	907	472	228	244
Pennsylvania	5	2,434	1,288	1,145	1,897	1,062	834	537	226	311
Florida	6	2,339	1,219	1,120	1,784	1,008	776	555	211	344
Illinois	7	2,310	1,304	1,005	1,847	1,056	790	463	248	215
Ohio	8	1,878	963	914	1,428	783	644	450	180	270
Michigan	9	1,790	971	819	1,446	838	608	344	133	211
North Carolina	10	1,724	917	807	1,407	784	623	317	133	184
Indiana	11	1,556	882	674	1,250	739	511	306	143	163
Virginia	12	1,518	802	716	1,147	660	487	371	142	229
Minnesota	13	1,499	648	851	1,075	500	575	424	148	276
Georgia	14	1,451	776	675	1,217	686	531	234	90	144
Maryland	15	1,173	586	586	1,004	527	477	169	59	109
Colorado	16	1,024	558	466	828	479	349	196	79	117
New Jersey	17	950	525	425	736	437	299	214	88	126
Wisconsin	18	940	521	419	759	449	310	181	72	109
Arizona	19	935	535	399	734	444	289	201	91	110
Washington	20	910	498	412	780	443	337	130	55	75
Missouri	21	905	538	367	697	413	284	208	125	83
Tennessee	22	880	454	426	669	370	299	211	84	127
Connecticut	23	731	413	317	603	340	262	128	73	55
Alabama	24	640	325	315	467	259	208	173	66	107
Iowa	25	618	362	256	517	318	199	101	44	57
Louisiana	26	586	313	273	436	248	188	150	65	85
Oregon	27	552	280	271	453	233	219	99	47	52
District of Columbia	28	535	252	283	376	173	203	159	79	80
Utah	29	502	295	207	402	251	151	100	44	56
Kentucky	30	484	265	219	336	193	143	148	72	76
Oklahoma	30	484	262	222	346	204	142	138	58	80
South Carolina	32	476	256	220	383	222	161	93	34	59
Kansas	33	466	258	208	361	206	155	105	52	53
Mississippi	34	409	194	215	276	140	136	133	54	79
Nebraska	35	329	165	164	264	141	123	65	24	41
New Mexico	36	280	151	129	214	127	87	66	24	42
Arkansas	37	275	146	129	198	117	81	77	29	48
Rhode Island	38	260	142	118	210	116	94	50	26	24
Nevada	39	240	119	120	187	99	88	53	20	32
West Virginia	40	215	122	93	164	97	67	51	25	26
Delaware	41	212	116	96	185	106	79	27	10	17
North Dakota	42	175	90	85	123	69	54	52	21	31
New Hampshire	43	159	90	69	144	86	58	15	4	11
Idaho	44	136	80	56	115	72	43	21	8	13
Hawaii	45	133	55	78	95	39	56	38	16	22
South Dakota	46	122	77	45	108	66	42	14	11	3
Montana	47	113	59	54	92	49	43	21	10	11
Puerto Rico	48	109	47	62	94	40	54	15	7	8
Wyoming	49	84	65	19	76	60	16	8	5	3
Maine	50	70	31	39	58	28	30	12	3	9

Table 7-6
State or location of doctorate institution ranked by total number of research doctorate recipients, by field of doctorate and sex: 2021
(Number)

State or location	Rank	Total ^a	Male	Female	Science and engineering			Non-science and engineering		
					Total	Male	Female	Total	Male	Female
Vermont	51	64	35	29	60	34	26	4	1	3
Alaska	52	42	21	21	39	20	19	3	1	2

^a Includes respondents 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: 2011–21**

(Number)

Country or economy and field	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
China ^a	3,988	4,222	4,796	4,982	5,374	5,527	5,553	6,188	6,316	6,336	6,148
Science and engineering	3,652	3,906	4,443	4,650	4,970	5,141	5,147	5,692	5,755	5,731	5,558
Non-science and engineering	336	316	353	332	404	386	406	496	561	605	590
India	2,165	2,248	2,204	2,316	2,229	2,195	1,970	2,045	2,056	2,250	2,291
Science and engineering	2,036	2,142	2,074	2,208	2,119	2,085	1,884	1,922	1,910	2,111	2,126
Non-science and engineering	129	106	130	108	110	110	86	123	146	139	165
South Korea	1,445	1,472	1,383	1,284	1,234	1,229	1,128	1,039	1,168	1,056	1,025
Science and engineering	1,085	1,132	1,012	928	920	891	815	729	824	757	729
Non-science and engineering	360	340	371	356	314	338	313	310	344	299	296
Iran	198	287	409	483	629	695	767	935	964	963	809
Science and engineering	193	278	380	463	608	664	728	869	882	896	735
Non-science and engineering	5	9	29	20	21	31	39	66	82	67	74
Taiwan	693	719	699	668	614	592	520	514	492	468	409
Science and engineering	570	581	571	558	514	499	435	445	426	417	373
Non-science and engineering	123	138	128	110	100	93	85	69	66	51	36
Turkey	493	439	478	426	469	472	496	454	406	371	330
Science and engineering	422	352	391	360	386	380	392	364	324	305	271
Non-science and engineering	71	87	87	66	83	92	104	90	82	66	59
Canada	455	423	485	488	454	408	409	431	427	398	367
Science and engineering	307	299	332	321	318	272	288	307	313	281	266
Non-science and engineering	148	124	153	167	136	136	121	124	114	117	101
Saudi Arabia	49	57	73	105	134	238	339	403	554	614	477
Science and engineering	34	41	53	76	98	175	232	294	431	471	362
Non-science and engineering	15	16	20	29	36	63	107	109	123	143	115
Bangladesh	77	86	107	139	154	185	236	280	292	392	397
Science and engineering	70	78	96	127	146	178	224	271	271	369	381
Non-science and engineering	7	8	11	12	8	7	12	9	21	23	16
Mexico	185	213	177	193	194	221	180	185	187	236	214
Science and engineering	159	185	146	161	155	191	145	156	162	196	175
Non-science and engineering	26	28	31	32	39	30	35	29	25	40	39

^a Includes Hong Kong.**Note(s):**

Rank is based on the total number of doctorate recipients from 2011 to 2021.

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: 2021**

(Number)

Country or economy	Rank	Doctorate recipients
All temporary visa holders (166 countries or economies) ^a	-	17,285
Top 40 countries or economies of origin	-	16,107
China ^b	1	6,148
India	2	2,291
South Korea	3	1,026
Iran	4	809
Saudi Arabia	5	477
Taiwan	6	409
Bangladesh	7	397
Canada	8	367
Turkey	9	330
Brazil	10	273
Nepal	11	251
Mexico	12	214
Nigeria	13	193
Colombia	14	190
Germany	15	187
Sri Lanka	16	180
United Kingdom	17	153
Iraq	18	151
Vietnam	19	150
Italy	20	145
Pakistan	21	135
Egypt	22	133
Spain	23	128
Thailand	24	124
Japan	25	122
Greece	26	112
Russian Federation (former USSR)	27	110
France	28	105
Ghana	29	88
Chile	30	85
Jordan	31	83
Indonesia	32	76
Singapore	33	70
Israel	34	65
Malaysia	35	61
Philippines	36	58
Libya	37	56
Ecuador	38	54
Kenya	39	53
Peru	40	48

^a Excludes cases with unknown country or economy of origin.^b 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 2018 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2021**

(Number)

2018 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
U.S. institutions by 2018 Carnegie Classification	-	30,852	23,490	7,362
R1: doctoral universities - very high research	-	15,934	12,897	3,037
U. California, Berkeley	1	511	434	77
U. Michigan, Ann Arbor	2	354	310	44
U. Florida	3	311	250	61
Cornell U.	4	305	262	43
U. Wisconsin-Madison	5	293	245	48
U. California, Los Angeles	6	289	241	48
U. Texas, Austin	6	289	233	56
Pennsylvania State U.	8	269	216	53
U. Illinois, Urbana-Champaign	9	268	229	39
Ohio State U., Columbus	10	242	194	48
U. Washington, Seattle	11	228	199	29
U. Maryland, College Park	12	225	194	31
U. California, San Diego	13	219	197	22
U. California, Davis	14	209	188	21
Massachusetts Institute of Technology	15	207	199	8
Purdue U., West Lafayette	16	204	180	24
Texas A&M U., College Station and Health Science Center	16	204	166	38
U. Minnesota, Twin Cities	18	203	183	20
U. North Carolina, Chapel Hill	19	201	164	37
Harvard U.	20	196	150	46
R2: doctoral universities - high research	-	4,143	3,021	1,122
Brigham Young U., Provo	1	257	180	77
C. of William and Mary	2	106	72	34
U. Maryland, Baltimore County	3	81	71	10
Miami U., Oxford	4	80	59	21
Rochester Institute of Technology	5	67	59	8
Baylor U.	6	65	47	18
San Diego State U., San Diego	7	64	43	21
U. Texas, San Antonio	8	61	43	18
U. Puerto Rico, Rio Piedras	9	57	42	15
U. Vermont	9	57	45	12
Ohio U., Athens	11	56	36	20
Wake Forest U.	11	56	37	19
Kent State U., Kent	13	54	37	17
Utah State U., Logan	14	53	36	17
New Mexico State U., Las Cruces	15	52	40	12
Central Michigan U.	16	51	30	21
Missouri U. of Science and Technology	16	51	49	2
Northern Arizona U.	16	51	39	12
Loyola U., Chicago	19	47	39	8
U. Toledo	19	47	28	19
Doctoral/ professional universities	-	1,340	930	410
U. North Florida	1	37	29	8
California State U., Fresno	2	36	29	7
Middle Tennessee State U.	2	36	26	10
Creighton U.	4	34	26	8
Indiana U. Pennsylvania	5	30	15	15
Gonzaga U.	6	28	22	6

Table 7-9**Top 20 baccalaureate-origin institutions ranked by 2018 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2021**

(Number)

2018 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
Santa Clara U.	7	27	23	4
U. Northern Colorado	8	26	12	14
U. Central Arkansas	9	25	17	8
Seattle U.	10	24	20	4
Western Kentucky U.	10	24	15	9
Missouri State U., Springfield	12	23	18	5
Adelphi U.	13	22	14	8
Texas Woman's U.	13	22	14	8
Towson U.	13	22	18	4
Valdosta State U.	13	22	13	9
Andrews U.	17	21	13	8
Elon U.	17	21	15	6
Pepperdine U.	17	21	7	14
Loyola U., New Orleans	20	19	14	5
U. Tennessee, Chattanooga	20	19	15	4
Master's colleges and universities	-	4,935	3,362	1,573
James Madison U.	1	84	60	24
SUNY, Geneseo	2	63	56	7
California Polytechnic State U., San Luis Obispo	3	59	53	6
Grand Valley State U.	4	58	42	16
San Francisco State U.	4	58	46	12
California State U., Long Beach	6	56	34	22
CUNY, Hunter C.	7	54	47	7
U. Puerto Rico, Mayaguez	8	51	47	4
C. New Jersey	9	49	35	14
California State U., Fullerton	10	46	31	15
Western Washington U.	11	45	32	13
Ithaca C.	12	42	23	19
C. Charleston	13	41	32	9
California State U., Northridge	13	41	31	10
Truman State U.	15	40	23	17
San Jose State U.	16	38	30	8
Calvin C.	17	37	28	9
California State Polytechnic U., Pomona	18	36	33	3
Trinity U.	19	35	26	9
Appalachian State U.	20	33	24	9
Baccalaureate colleges	-	4,256	3,125	1,131
Swarthmore C.	1	69	52	17
Oberlin C.	2	67	38	29
Williams C., Williamstown	2	67	54	13
St. Olaf C.	4	66	53	13
Carleton C.	5	65	52	13
Wesleyan U.	6	61	40	21
Amherst C.	7	56	44	12
Vassar C.	7	56	39	17
Wellesley C.	7	56	48	8
Barnard C.	10	55	40	15
Macalester C.	11	52	32	20
Smith C.	12	50	40	10
Grinnell C.	13	48	36	12

Table 7-9

Top 20 baccalaureate-origin institutions ranked by 2018 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2021

(Number)

2018 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
Reed C.	14	47	33	14
Mount Holyoke C.	15	45	33	12
Haverford C.	16	43	33	10
Bowdoin C.	17	42	37	5
Colgate U.	17	42	32	10
Middlebury C.	17	42	31	11
Bucknell U.	20	41	35	6
Colorado C.	20	41	34	7
Other ^b	-	244	155	89
Rose-Hulman Institute of Technology	1	25	25	0
U. of the Sciences Philadelphia	2	10	10	0
Franklin W. Olin C. of Engineering	3	9	8	1
Moody Bible Institute	4	7	1	6
U. Maryland, Baltimore	4	7	7	0
Berklee C. of Music	6	5	1	4
Franklin U.	6	5	3	2
South Dakota School of Mines and Technology	6	5	5	0
U. Oklahoma, Oklahoma City	6	5	4	1
U. Texas Health Science Center, San Antonio	6	5	5	0
Loma Linda U.	11	4	3	1
Multnomah U.	11	4	0	4
Polytechnic U. Puerto Rico, San Juan	11	4	4	0
U. of the Arts	11	4	1	3
Bethel C., Hampton	15	3	1	2
Juilliard School	15	3	0	3
Kent State U., Jackson Township	15	3	1	2
King's U.	15	3	1	2
Maryland Institute C. of Art	15	3	2	1
New England Conservatory	15	3	0	3
Oregon Health and Science U.	15	3	2	1
Rhode Island School of Design	15	3	1	2
School of the Art Institute of Chicago	15	3	1	2
Texas Tech U., Health Sciences Center	15	3	2	1
U. Nebraska, Medical Center	15	3	3	0
U. Texas Health Science Center, Houston	15	3	3	0
Non-U.S. institutions	-	17,616	15,008	2,608
Beijing U.	1	353	310	43
Tsinghua U.	2	270	251	19
U. of Science and Technology of China (USTC)	2	270	266	4
Sharif U. of Technology	4	260	246	14
Shanghai Jiaotong U.	5	195	188	7
Seoul National U.	6	194	130	64
Bangladesh U. of Engineering and Technology	7	181	175	6
Zhejiang U.	8	179	173	6
Huazhong U. of Science and Technology	9	174	166	8
National Taiwan U.	10	172	161	11
Tribhuvan U.	11	169	165	4
U. of Tehran	12	161	141	20
Fudan U.	13	155	145	10
Nanjing U.	13	155	148	7

Table 7-9

Top 20 baccalaureate-origin institutions ranked by 2018 Carnegie Classification category and total number of research doctorate recipients, by field of doctorate: 2021

(Number)

2018 Carnegie Classification and baccalaureate-origin institution	Rank ^a	All fields	Science and engineering	Non-science and engineering
Islamic Azad U.	15	128	109	19
Nankai U.	16	127	114	13
U. of Dhaka	17	121	110	11
King Saud U.	18	116	86	30
Shandong U.	19	114	106	8
Yonsei U.	20	111	70	41

^a Rank is based on total number of doctorate recipients among both U.S. and non-U.S. baccalaureate-origin institutions.
^b Other 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: 2021

(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 ^a		
United States ^b	52,250	41,356	1,223	8,259	2,195	9,563	1,044	2,582	1,915	1,299	4,811	3,716	4,749	10,894	1,340	3,711	3,076	771	1,996		
Alabama	640	467	25	119	11	117	8	30	22	16	45	57	17	173	24	105	14	1	29		
Alaska	42	39	5	3	0	2	11	0	0	2	2	10	4	3	0	2	0	0	1		
Arizona	935	734	21	112	31	198	23	41	25	35	86	58	104	201	25	61	43	40	32		
Arkansas	275	198	21	49	18	48	2	8	2	3	20	11	16	77	14	40	12	0	11		
California	5,892	4,959	81	979	285	1,082	146	177	236	191	668	486	628	933	126	192	333	120	162		
Colorado	1,024	828	23	166	39	217	56	46	46	13	107	59	56	196	7	92	33	32	32		
Connecticut	731	603	13	154	22	88	14	20	36	12	97	45	102	128	22	12	54	15	25		
Delaware	212	185	12	35	9	55	4	2	9	3	28	7	21	27	2	9	7	2	7		
District of Columbia	535	376	1	85	20	34	0	18	11	5	30	62	110	159	15	57	65	1	21		
Florida	2,339	1,784	66	305	139	408	67	137	69	81	185	169	158	555	58	218	105	47	127		
Georgia	1,451	1,217	50	286	94	360	17	58	35	36	107	71	103	234	37	67	63	10	57		
Hawaii	133	95	3	17	3	8	13	6	2	3	9	9	22	38	5	11	14	3	5		
Idaho	136	115	16	21	11	31	6	4	2	4	7	12	1	21	0	17	3	0	1		
Illinois	2,310	1,847	37	324	124	398	26	88	97	36	275	162	280	463	76	85	182	43	77		
Indiana	1,556	1,250	31	195	73	391	22	53	73	39	154	85	134	306	29	106	122	7	42		
Iowa	618	517	33	108	17	125	6	29	46	19	58	42	34	101	20	47	17	4	13		
Kansas	466	361	32	62	12	72	3	16	18	12	38	56	40	105	11	43	22	7	22		
Kentucky	484	336	8	83	8	62	2	39	15	10	34	26	49	148	4	58	50	8	28		
Louisiana	586	436	22	100	12	96	17	35	18	4	58	28	46	150	26	51	45	7	21		
Maine	70	58	11	10	0	13	6	1	0	0	7	5	5	12	0	4	3	1	4		
Maryland	1,173	1,004	18	258	87	200	23	97	39	33	86	50	113	169	24	42	57	11	35		
Massachusetts	2,652	2,180	20	458	135	500	39	132	89	79	297	116	315	472	65	104	171	33	99		
Michigan	1,790	1,446	32	271	78	379	23	82	81	35	192	104	169	344	18	161	72	7	86		
Minnesota	1,499	1,075	27	143	29	126	6	203	26	21	60	230	204	424	107	148	28	5	136		
Mississippi	409	276	31	39	6	47	6	28	8	12	33	40	26	133	16	83	14	0	20		
Missouri	905	697	22	142	28	205	12	55	28	15	61	72	57	208	18	56	103	5	26		
Montana	113	92	8	32	1	9	4	5	8	1	9	10	5	21	0	13	7	0	1		
Nebraska	329	264	37	67	5	44	2	27	12	11	20	24	15	65	9	29	13	1	13		
Nevada	240	187	2	31	2	30	13	16	4	8	17	41	23	53	9	33	7	0	4		
New Hampshire	159	144	10	39	9	34	7	5	9	1	19	3	8	15	2	5	8	0	0		
New Jersey	950	736	19	113	70	182	19	28	46	21	93	36	109	214	24	56	86	11	37		
New Mexico	280	214	12	37	8	58	14	6	10	2	34	11	22	66	4	45	8	0	9		
New York	3,871	2,975	49	664	195	532	55	139	145	87	355	333	421	896	76	218	325	135	142		
North Carolina	1,724	1,407	47	312	62	331	25	124	100	46	143	94	123	317	29	95	101	16	76		

Table 7-10

Research doctorate recipients, by state or location of doctorate institution and broad field of doctorate: 2021

(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 ^a
North Dakota	175	123	9	21	2	35	4	7	6	1	10	24	4	52	7	30	6	0	9
Ohio	1,878	1,428	36	298	36	381	28	86	58	53	177	132	143	450	40	185	110	33	82
Oklahoma	484	346	22	68	7	79	27	21	7	6	32	54	23	138	27	57	27	13	14
Oregon	552	453	21	90	16	98	18	24	19	9	50	47	61	99	15	34	14	9	27
Pennsylvania	2,434	1,897	19	396	124	448	32	127	85	80	234	131	221	537	79	149	164	37	108
Puerto Rico	109	94	0	15	0	9	1	3	2	3	9	48	4	15	1	1	8	0	5
Rhode Island	260	210	3	46	11	35	11	9	9	12	25	10	39	50	7	9	26	4	4
South Carolina	476	383	11	75	13	126	7	40	15	6	43	18	29	93	17	40	15	0	21
South Dakota	122	108	17	15	5	17	5	12	1	8	13	7	8	14	0	2	1	0	11
Tennessee	880	669	24	164	21	151	6	42	20	31	69	70	71	211	8	92	69	14	28
Texas	4,118	3,155	87	605	151	918	111	214	158	90	312	251	258	963	130	378	277	42	136
Utah	502	402	12	74	22	112	14	31	22	7	44	44	20	100	11	59	13	1	16
Vermont	64	60	8	21	3	9	0	0	1	1	8	7	2	4	0	4	0	0	0
Virginia	1,518	1,147	40	173	78	311	29	73	41	46	116	108	132	371	51	187	62	12	59
Washington	910	780	30	164	38	153	34	58	47	37	96	50	73	130	24	35	31	10	30
West Virginia	215	164	6	30	3	40	3	14	3	1	22	23	19	51	1	19	4	16	11
Wisconsin	940	759	28	168	21	133	9	66	52	11	108	63	100	181	20	57	62	8	34
Wyoming	84	76	5	17	1	26	8	0	2	1	9	5	2	8	0	8	0	0	0

^a Includes other non-science and engineering fields not shown separately.

^b 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	52,250	41,356	1,223	8,259	2,195	9,563	1,044	2,582	1,915	1,299	4,811	3,716	4,749
Sex (%)													
Male	53.7	56.6	49.2	47.8	76.0	73.7	55.8	31.2	72.1	58.7	67.5	27.0	49.7
Female	46.2	43.4	50.8	52.2	24.0	26.3	44.2	68.8	27.9	41.3	32.5	73.0	50.3
Unknown	*	*	0.0	*	0.0	*	0.0	0.0	0.0	0.1	*	0.0	0.1
Citizenship status (%)													
U.S. citizen or permanent resident	60.6	57.8	56.8	71.1	32.0	39.6	63.7	73.0	44.2	51.9	56.4	82.6	63.0
Temporary visa holder	33.8	36.9	39.0	25.0	60.8	55.1	32.2	20.4	51.5	41.9	39.5	8.3	31.8
Unknown	5.6	5.3	4.2	3.8	7.2	5.4	4.1	6.5	4.2	6.2	4.1	9.1	5.2
Marital status (%)													
Never married	35.2	38.4	30.8	39.1	38.8	43.8	38.4	26.1	49.4	37.7	46.6	27.7	30.6
Married	39.6	37.3	44.0	36.5	39.5	36.0	35.4	48.1	29.8	37.4	30.9	35.9	43.4
Marriage-like relationship	9.9	10.4	10.2	13.5	6.3	7.2	15.1	6.9	9.3	9.3	11.7	13.2	11.3
Separated, divorced, widowed	3.2	2.5	2.5	1.9	2.0	1.5	2.1	5.8	1.1	3.3	1.1	3.9	4.5
Unknown	12.2	11.5	12.5	9.0	13.4	11.5	8.9	13.1	10.3	12.2	9.7	19.3	10.1
Has dependent age 18 or younger (%)	21.3	18.0	24.2	15.6	21.0	16.5	15.0	32.9	11.5	20.6	10.8	18.6	24.1
Has one or more functional limitations (%)	11.3	10.8	11.1	11.9	9.9	8.2	11.1	10.5	10.1	10.8	10.3	13.1	13.2
Age at doctorate (median years)	31.4	30.8	31.7	30.4	31.3	30.2	30.7	34.5	29.4	31.6	29.2	31.2	33.1
Bachelor's in same field as doctorate (%) ^b	61.7	65.8	49.6	64.3	40.9	82.3	53.0	44.5	80.1	12.3	78.6	72.7	56.2
Master's earned (%)	75.1	70.1	78.3	45.0	77.6	76.6	69.9	80.3	72.4	78.9	52.7	91.0	90.0
Master's earned at same doctorate institution (%)	45.7	48.9	32.6	38.4	48.6	50.2	44.2	33.7	56.5	47.0	58.0	66.8	47.1
Time to doctorate (median years)													
Years since earning bachelor's degree	8.7	8.0	8.6	8.0	8.8	7.5	8.0	11.3	7.0	8.9	6.6	8.6	10.0
From graduate school start	7.3	6.8	7.3	6.3	7.3	6.7	6.8	8.9	6.1	7.6	5.9	6.9	8.4
From doctoral program start ^c	5.7	5.6	5.0	5.8	5.8	5.3	5.3	5.3	5.3	5.5	5.5	6.0	6.0
Received tuition remission (%)	84.5	86.2	85.4	89.2	85.1	85.7	88.4	70.9	93.5	84.5	90.7	80.8	87.3
Male doctorate recipients (number)	28,082	23,408	602	3,946	1,669	7,050	583	806	1,381	762	3,246	1,005	2,358
Citizenship status (%)													
U.S. citizen or permanent resident	54.2	51.6	52.3	70.0	30.7	37.6	59.2	65.5	44.0	46.2	55.4	84.2	57.9
Temporary visa holder	40.6	43.5	43.7	26.3	62.4	57.6	36.7	28.0	52.1	47.8	40.6	7.1	37.0
Unknown	5.2	4.8	4.0	3.6	6.9	4.8	4.1	6.5	3.9	6.0	4.0	8.8	5.0
Marital status (%)													
Never married	38.0	41.1	27.6	39.5	39.9	44.7	40.5	31.9	51.4	41.3	47.4	29.3	30.7
Married	39.5	37.2	49.0	37.3	38.9	36.6	37.2	45.8	28.4	37.9	30.9	38.4	44.8
Marriage-like relationship	9.0	9.2	9.5	12.5	6.4	6.5	12.0	6.7	8.5	7.7	11.2	12.2	10.9

Table 8-1
Science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2021

(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	2.0	1.7	1.5	1.6	1.7	1.3	1.5	2.4	1.2	2.5	0.8	2.2	3.5
Unknown	11.6	10.8	12.5	9.0	13.1	10.9	8.7	13.3	10.5	10.5	9.7	17.9	10.1
Has dependent age 18 or younger (%)	21.5	18.6	29.1	17.6	21.2	17.8	17.7	30.3	11.5	20.2	11.5	24.6	25.5
Has one or more functional limitations (%)	10.0	9.8	11.2	11.4	9.1	7.9	8.9	10.1	10.6	9.6	8.8	14.3	11.7
Age at doctorate (median years)	31.3	30.7	32.0	30.8	31.3	30.3	31.0	33.0	29.5	31.5	29.3	31.8	33.1
Bachelor's in same field as doctorate (%) ^b	64.5	67.7	52.9	62.7	41.7	83.8	55.0	36.0	79.7	12.8	78.6	69.6	58.4
Master's earned (%)	73.9	70.0	81.0	44.7	77.2	78.2	72.3	73.7	70.6	78.4	54.4	89.4	89.0
Master's earned at same doctorate institution (%)	45.9	48.6	29.7	38.4	48.8	50.1	43.0	35.1	54.3	47.1	57.8	65.9	45.6
Time to doctorate (median years)													
Years since earning bachelor's degree	8.3	8.0	8.6	8.0	8.6	7.6	8.0	10.0	7.0	8.4	6.7	8.6	9.8
From graduate school start	7.0	6.8	7.3	6.5	7.3	6.8	6.9	7.8	6.1	7.3	6.0	7.0	8.3
From doctoral program start ^c	5.7	5.5	4.9	5.8	5.8	5.3	5.3	5.3	5.3	5.7	5.8	5.9	5.8
Received tuition remission (%)	85.8	87.1	84.0	90.1	85.8	85.2	88.4	75.2	94.0	83.4	90.8	81.9	87.5
Female doctorate recipients (number)	24,156	17,939	621	4,312	526	2,511	461	1,776	534	536	1,563	2,711	2,388
Citizenship status (%)													
U.S. citizen or permanent resident	68.1	65.9	61.2	72.2	36.3	45.2	69.4	76.5	44.9	60.1	58.4	82.0	68.1
Temporary visa holder	25.8	28.3	34.5	23.9	55.5	48.0	26.5	17.0	50.0	33.6	37.2	8.8	26.7
Unknown	6.1	5.8	4.3	4.0	8.2	6.8	4.1	6.5	5.1	6.3	4.4	9.2	5.2
Marital status (%)													
Never married	31.9	34.9	34.0	38.8	35.2	41.2	35.8	23.5	44.2	32.6	45.0	27.2	30.6
Married	39.8	37.4	39.1	35.7	41.4	34.6	33.2	49.1	33.5	36.8	31.0	35.0	42.1
Marriage-like relationship	10.9	11.9	11.0	14.5	6.3	9.2	19.1	6.9	11.2	11.6	12.7	13.5	11.8
Separated, divorced, widowed	4.5	3.5	3.4	2.1	2.9	2.0	2.8	7.4	1.1	4.5	1.7	4.6	5.5
Unknown	12.9	12.2	12.6	9.0	14.3	13.0	9.1	13.1	9.9	14.6	9.5	19.8	10.1
Has dependent age 18 or younger (%)	21.1	17.3	19.4	13.8	20.6	12.8	11.5	34.1	11.6	21.1	9.5	16.3	22.8
Has one or more functional limitations (%)	12.7	12.0	10.9	12.3	12.4	9.0	13.9	10.8	8.6	12.6	13.3	12.7	14.6
Age at doctorate (median years)	31.7	30.8	31.4	30.2	31.4	29.8	30.2	35.5	29.3	31.6	28.8	31.0	33.1
Bachelor's in same field as doctorate (%) ^b	58.3	63.4	46.3	65.7	38.4	78.0	50.6	48.3	80.9	11.5	78.4	73.8	54.0
Master's earned (%)	76.4	70.4	75.6	45.3	78.9	71.8	67.0	83.3	77.1	79.8	49.1	91.6	91.1
Master's earned at same doctorate institution (%)	45.3	49.3	35.7	38.4	48.1	50.6	45.9	33.1	61.8	46.9	58.2	67.2	48.6
Time to doctorate (median years)													
Years since earning bachelor's degree	9.0	8.3	8.4	7.8	9.1	7.2	7.8	12.0	7.0	9.1	6.3	8.6	10.3
From graduate school start	7.6	6.9	7.0	6.3	7.4	6.3	6.7	9.6	6.2	7.8	5.8	6.9	8.7
From doctoral program start ^c	5.8	5.7	5.0	5.7	5.6	5.3	5.3	5.2	5.3	5.4	5.3	6.0	6.0
Received tuition remission (%)	83.0	85.0	86.8	88.3	82.8	87.1	88.5	68.9	92.2	86.1	90.4	80.4	87.0

* = value between 0.00% and 0.05%.

^a Includes respondents who did not report sex.

^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.

^c 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):

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other ^a
All doctorate recipients (number) ^b	52,250	10,894	1,340	3,711	3,076	771	1,996
Sex (%)							
Male	53.7	42.9	56.4	29.9	52.6	45.3	42.0
Female	46.2	57.1	43.6	70.0	47.3	54.7	58.0
Unknown	*	*	0.0	*	0.1	0.0	0.0
Citizenship status (%)							
U.S. citizen or permanent resident	60.6	71.3	44.0	79.8	76.0	74.1	65.4
Temporary visa holder	33.8	21.8	48.1	13.4	17.8	19.1	27.3
Unknown	5.6	6.9	7.9	6.8	6.2	6.9	7.3
Marital status (%)							
Never married	35.2	22.8	26.3	17.1	25.2	28.5	24.9
Married	39.6	48.4	46.8	54.6	45.5	42.2	44.7
Marriage-like relationship	9.9	8.1	5.2	5.3	11.3	12.3	8.3
Separated, divorced, widowed	3.2	5.8	5.1	7.7	4.3	3.8	6.1
Unknown	12.2	14.9	16.6	15.2	13.6	13.2	16.0
Has dependent age 18 or younger (%)	21.3	34.2	32.4	44.5	27.0	21.5	32.4
Has one or more functional limitations (%)	11.3	13.3	9.2	12.2	15.2	15.1	14.6
Age at doctorate (median years)	31.4	35.8	33.9	38.8	34.6	33.9	35.3
Bachelor's in same field as doctorate (%) ^c	61.7	45.4	36.5	25.4	73.4	69.1	35.9
Master's earned (%)	75.1	94.3	88.9	96.8	93.3	94.0	94.8
Master's earned at same doctorate institution (%)	45.7	36.2	26.6	34.0	41.5	38.1	37.4
Time to doctorate (median years)							
Years since earning bachelor's degree	8.7	12.3	10.8	15.0	11.3	11.0	11.7
From graduate school start	7.3	10.0	8.8	12.0	9.8	9.3	9.5
From doctoral program start ^d	5.7	5.9	5.0	5.7	6.8	6.7	5.8
Received tuition remission (%)	84.5	77.8	78.1	64.4	89.2	93.4	78.5
Male doctorate recipients (number)	28,082	4,674	756	1,111	1,619	349	839
Citizenship status (%)							
U.S. citizen or permanent resident	54.2	67.4	40.3	77.9	75.2	74.8	59.6
Temporary visa holder	40.6	25.9	51.2	15.2	18.8	19.8	33.4
Unknown	5.2	6.8	8.5	6.9	6.1	5.4	7.0
Marital status (%)							
Never married	38.0	22.3	23.4	16.9	22.9	27.5	25.1
Married	39.5	50.8	49.3	57.8	49.8	43.0	47.8
Marriage-like relationship	9.0	8.0	5.3	4.6	10.7	12.6	7.6
Separated, divorced, widowed	2.0	3.7	3.7	4.4	3.2	3.4	3.7
Unknown	11.6	15.3	18.3	16.3	13.3	13.5	15.7
Has dependent age 18 or younger (%)	21.5	36.7	36.9	49.6	31.6	24.1	34.9
Has one or more functional limitations (%)	10.0	11.4	8.0	10.5	13.1	10.8	12.2
Age at doctorate (median years)	31.3	35.7	34.2	38.5	35.1	33.8	35.8
Bachelor's in same field as doctorate (%) ^c	64.5	48.0	32.7	24.3	73.6	67.6	34.5
Master's earned (%)	73.9	94.5	90.7	97.1	94.3	95.0	94.8
Master's earned at same doctorate institution (%)	45.9	35.6	28.0	32.8	40.9	36.6	34.9
Time to doctorate (median years)							
Years since earning bachelor's degree	8.3	12.0	10.8	15.0	11.5	10.7	11.6
From graduate school start	7.0	9.8	8.8	11.8	9.8	8.8	9.3
From doctoral program start ^d	5.7	5.9	5.0	5.5	6.8	6.0	5.7
Received tuition remission (%)	85.8	78.8	77.4	63.8	87.2	92.5	77.5
Female doctorate recipients (number)	24,156	6,217	584	2,599	1,455	422	1,157

Table 8-2**Non-science and engineering research doctorate recipients, statistical profile by sex and broad field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other ^a
Citizenship status (%)							
U.S. citizen or permanent resident	68.1	74.3	48.8	80.7	77.1	73.5	69.7
Temporary visa holder	25.8	18.8	44.0	12.6	16.7	18.5	22.9
Unknown	6.1	6.9	7.2	6.7	6.2	8.1	7.4
Marital status (%)							
Never married	31.9	23.1	30.1	17.2	27.8	29.4	24.7
Married	39.8	46.7	43.5	53.3	40.8	41.5	42.5
Marriage-like relationship	10.9	8.1	5.1	5.7	12.0	12.1	8.8
Separated, divorced, widowed	4.5	7.5	6.8	9.1	5.6	4.0	7.8
Unknown	12.9	14.6	14.4	14.7	13.8	13.0	16.2
Has dependent age 18 or younger (%)	21.1	32.3	26.9	42.4	21.9	19.3	30.6
Has one or more functional limitations (%)	12.7	14.8	10.7	12.8	17.6	18.6	16.3
Age at doctorate (median years)	31.7	35.8	33.5	39.0	34.0	34.0	35.2
Bachelor's in same field as doctorate (%) ^c	58.3	43.4	41.2	25.8	73.2	70.3	37.0
Master's earned (%)	76.4	94.1	86.7	96.7	92.2	93.2	94.8
Master's earned at same doctorate institution (%)	45.3	36.7	24.8	34.5	42.2	39.3	39.2
Time to doctorate (median years)							
Years since earning bachelor's degree	9.0	12.7	10.8	15.3	11.2	11.4	11.8
From graduate school start	7.6	10.3	8.8	12.0	9.4	9.8	9.7
From doctoral program start ^d	5.8	5.9	5.0	5.7	6.8	6.8	5.8
Received tuition remission (%)	83.0	77.0	79.0	64.6	91.5	94.1	79.2

* = value between 0.00% and 0.05%.

^a Includes other non-science and engineering fields not shown separately.^b Includes respondents who did not report sex.^c A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^d 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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	1,223	807	416
Sex (%)			
Male	49.2	50.1	47.6
Female	50.8	49.9	52.4
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	56.8	54.5	61.3
Temporary visa holder	39.0	42.1	32.9
Unknown	4.2	3.3	5.8
Marital status (%)			
Never married	30.8	32.7	27.2
Married	44.0	43.7	44.5
Marriage-like relationship	10.2	8.7	13.2
Separated, divorced, widowed	2.5	1.7	3.8
Unknown	12.5	13.1	11.3
Has dependent age 18 or younger (%)	24.2	23.8	24.9
Has one or more functional limitations (%)	11.1	11.6	10.2
Age at doctorate (median years)	31.7	31.0	33.0
Bachelor's in same field as doctorate (%) ^b	49.6	61.2	27.0
Master's earned (%)	78.3	75.3	84.1
Master's earned at same doctorate institution (%)	32.6	34.5	29.4
Time to doctorate (median years)			
Years since earning bachelor's degree	8.6	8.0	10.0
From graduate school start	7.3	6.8	8.1
From doctoral program start ^c	5.0	4.8	5.3
Received tuition remission (%)	85.4	84.6	87.0
Male doctorate recipients (number)	602	404	198
Citizenship status (%)			
U.S. citizen or permanent resident	52.3	51.5	54.0
Temporary visa holder	43.7	46.0	38.9
Unknown	4.0	2.5	7.1
Marital status (%)			
Never married	27.6	29.0	24.7
Married	49.0	50.2	46.5
Marriage-like relationship	9.5	D	D
Separated, divorced, widowed	1.5	D	D
Unknown	12.5	12.1	13.1
Has dependent age 18 or younger (%)	29.1	30.2	26.7
Has one or more functional limitations (%)	11.2	12.9	7.7
Age at doctorate (median years)	32.0	31.3	33.8
Bachelor's in same field as doctorate (%) ^b	52.9	64.6	27.9

Table 8-3**Agricultural sciences and natural resources research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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 (%)	81.0	77.8	87.7
Master's earned at same doctorate institution (%)	29.7	33.9	21.8
Time to doctorate (median years)			
Years since earning bachelor's degree	8.6	8.0	10.5
From graduate school start	7.3	6.8	8.3
From doctoral program start ^c	4.9	4.9	5.3
Received tuition remission (%)	84.0	82.7	86.7
Female doctorate recipients (number)	621	403	218
Citizenship status (%)			
U.S. citizen or permanent resident	61.2	57.6	67.9
Temporary visa holder	34.5	38.2	27.5
Unknown	4.3	4.2	4.6
Marital status (%)			
Never married	34.0	36.5	29.4
Married	39.1	37.2	42.7
Marriage-like relationship	11.0	D	D
Separated, divorced, widowed	3.4	D	D
Unknown	12.6	14.1	9.6
Has dependent age 18 or younger (%)	19.4	17.2	23.4
Has one or more functional limitations (%)	10.9	10.2	12.3
Age at doctorate (median years)	31.4	30.8	32.1
Bachelor's in same field as doctorate (%) ^b	46.3	57.5	26.1
Master's earned (%)	75.6	72.6	80.9
Master's earned at same doctorate institution (%)	35.7	35.1	36.6
Time to doctorate (median years)			
Years since earning bachelor's degree	8.4	8.0	9.5
From graduate school start	7.0	6.7	8.0
From doctoral program start ^c	5.0	4.8	5.3
Received tuition remission (%)	86.8	86.4	87.3

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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	8,259	1,348	563	657	984	398	974	1,014	311	713	1,297
Sex (%)											
Male	47.8	53.3	58.4	47.3	40.1	47.5	43.6	45.2	47.3	52.2	46.4
Female	52.2	46.7	41.6	52.7	59.9	52.5	56.4	54.8	52.7	47.8	53.5
Unknown	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Citizenship status (%)											
U.S. citizen or permanent resident	71.1	65.4	52.6	69.3	80.6	73.1	78.6	78.4	71.4	72.5	66.2
Temporary visa holder	25.0	31.6	44.8	26.3	16.9	23.4	18.4	17.8	23.2	23.1	27.8
Unknown	3.8	3.0	2.7	4.4	2.5	3.5	3.0	3.8	5.5	4.3	5.9
Marital status (%)											
Never married	39.1	42.2	43.5	41.2	34.6	39.2	37.1	39.6	37.3	41.0	36.9
Married	36.5	36.2	36.4	36.2	40.2	33.7	38.0	34.1	34.1	37.0	35.8
Marriage-like relationship	13.5	12.9	9.9	13.5	15.8	15.1	15.7	16.6	13.5	10.9	11.0
Separated, divorced, widowed	1.9	1.6	1.8	1.2	2.5	1.5	2.7	0.7	1.6	2.0	2.5
Unknown	9.0	7.0	8.3	7.8	6.9	10.6	6.6	9.0	13.5	9.1	13.8
Has dependent age 18 or younger (%)	15.6	14.7	17.1	15.6	21.3	15.7	13.5	10.8	15.6	15.6	17.1
Has one or more functional limitations (%)	11.9	12.7	9.5	9.3	14.1	12.6	12.4	12.9	13.5	7.9	12.0
Age at doctorate (median years)	30.4	30.0	30.3	30.3	32.1	30.2	30.2	30.3	30.1	30.4	30.7
Bachelor's in same field as doctorate (%) ^b	64.3	62.2	35.3	80.3	58.4	75.3	82.2	58.9	56.2	55.8	69.4
Master's earned (%)	45.0	37.3	64.9	35.0	65.1	36.7	32.4	37.3	44.1	48.4	50.6
Master's earned at same doctorate institution (%)	38.4	45.1	52.6	35.0	32.8	41.6	33.1	49.3	36.3	36.3	28.4
Time to doctorate (median years)											
Years since earning bachelor's degree	8.0	7.3	7.6	7.6	9.3	7.6	7.7	8.0	7.3	8.0	8.0
From graduate school start	6.3	6.3	6.7	6.5	7.3	6.3	6.1	6.3	6.0	6.3	6.8
From doctoral program start ^c	5.8	5.8	5.3	5.9	5.6	5.8	5.5	5.8	5.3	5.3	5.4
Received tuition remission (%)	89.2	90.8	87.3	89.3	87.7	88.4	88.1	90.8	88.6	90.2	88.6
Male doctorate recipients (number)	3,946	718	329	311	395	189	425	458	147	372	602
Citizenship status (%)											
U.S. citizen or permanent resident	70.0	67.8	54.4	66.6	77.0	69.3	77.6	78.2	65.3	72.6	66.8
Temporary visa holder	26.3	29.1	43.8	29.6	20.8	25.9	19.3	18.1	28.6	23.4	27.9
Unknown	3.6	3.1	1.8	3.9	2.3	4.8	3.1	3.7	6.1	4.0	5.3
Marital status (%)											
Never married	39.5	44.0	41.3	38.9	34.7	36.0	41.4	40.0	31.3	41.9	36.7
Married	37.3	34.7	38.3	40.8	41.3	36.0	36.5	36.5	37.4	36.8	37.4
Marriage-like relationship	12.5	12.8	D	D	15.7	D	12.0	D	14.3	9.9	10.8
Separated, divorced, widowed	1.6	1.5	D	D	2.5	D	3.1	D	0.0	2.2	1.5

Table 8-4

Biological and biomedical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021

(Number, percent, and median years)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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	9.0	7.0	8.8	7.7	5.8	12.2	7.1	7.9	17.0	9.1	13.6
Has dependent age 18 or younger (%)	17.6	15.1	18.2	16.5	23.1	19.9	15.4	13.5	21.3	16.8	21.1
Has one or more functional limitations (%)	11.4	12.2	8.3	9.5	16.8	11.5	10.4	11.7	10.7	7.1	12.9
Age at doctorate (median years)	30.8	30.2	30.6	30.6	32.2	30.8	30.8	30.7	30.4	30.7	30.9
Bachelor's in same field as doctorate (%) ^b	62.7	60.3	34.1	81.4	63.3	70.1	81.4	57.2	56.6	53.8	67.2
Master's earned (%)	44.7	37.4	63.4	34.6	63.5	39.1	31.0	35.5	44.2	52.4	50.0
Master's earned at same doctorate institution (%)	38.4	44.6	49.7	32.0	33.3	45.6	31.5	47.7	28.1	39.9	28.0
Time to doctorate (median years)											
Years since earning bachelor's degree	8.0	7.4	7.9	7.7	9.0	8.0	8.0	8.2	7.6	8.0	8.0
From graduate school start	6.5	6.3	6.8	6.5	7.0	6.5	6.3	6.4	6.3	6.7	6.8
From doctoral program start ^c	5.8	5.8	5.4	5.9	5.7	6.0	5.6	5.8	5.3	5.3	5.4
Received tuition remission (%)	90.1	92.1	89.1	90.0	88.3	89.8	89.0	91.3	89.4	90.1	89.7
Female doctorate recipients (number)	4,312	630	234	346	589	209	549	556	164	341	694
Citizenship status (%)											
U.S. citizen or permanent resident	72.2	62.7	50.0	71.7	83.0	76.6	79.4	78.6	76.8	72.4	65.9
Temporary visa holder	23.9	34.4	46.2	23.4	14.3	21.1	17.7	17.4	18.3	22.9	27.8
Unknown	4.0	2.9	3.8	4.9	2.7	2.4	2.9	4.0	4.9	4.7	6.3
Marital status (%)											
Never married	38.8	40.2	46.6	43.4	34.5	42.1	33.7	39.4	42.7	39.9	37.2
Married	35.7	37.9	33.8	32.1	39.6	31.6	39.2	32.2	31.1	37.2	34.4
Marriage-like relationship	14.5	13.0	D	D	15.8	D	18.6	D	12.8	12.0	11.2
Separated, divorced, widowed	2.1	1.7	D	D	2.5	D	2.4	D	3.0	1.8	3.3
Unknown	9.0	7.1	7.7	7.8	7.6	9.1	6.2	9.9	10.4	9.1	13.8
Has dependent age 18 or younger (%)	13.8	14.2	15.4	14.7	20.1	12.1	12.0	8.6	10.9	14.2	13.6
Has one or more functional limitations (%)	12.3	13.2	11.2	9.2	12.3	13.5	13.9	13.9	15.8	8.8	11.1
Age at doctorate (median years)	30.2	29.8	29.6	30.0	32.1	29.7	29.8	30.0	29.8	30.2	30.3
Bachelor's in same field as doctorate (%) ^b	65.7	64.4	37.0	79.4	55.1	79.9	82.8	60.4	55.9	58.0	71.4
Master's earned (%)	45.3	37.2	67.0	35.4	66.1	34.7	33.6	38.9	44.1	44.0	51.2
Master's earned at same doctorate institution (%)	38.4	45.7	56.4	37.7	32.5	37.7	34.3	50.5	43.3	31.7	28.8
Time to doctorate (median years)											
Years since earning bachelor's degree	7.8	7.3	7.3	7.6	9.5	7.3	7.3	7.6	7.1	7.8	8.0
From graduate school start	6.3	6.3	6.3	6.3	7.7	6.3	6.0	6.2	5.9	6.2	6.8
From doctoral program start ^c	5.7	5.8	5.3	5.8	5.3	5.8	5.5	5.8	5.3	5.3	5.4
Received tuition remission (%)	88.3	89.3	84.8	88.5	87.3	87.1	87.5	90.4	87.9	90.3	87.7

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

^a Includes respondents who did not report sex.
^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.
^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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

Table 8-5**Computer and information sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
All doctorate recipients (number) ^a	2,195	1,545	650
Sex (%)			
Male	76.0	78.3	70.8
Female	24.0	21.7	29.2
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	32.0	31.1	34.3
Temporary visa holder	60.8	61.7	58.6
Unknown	7.2	7.2	7.1
Marital status (%)			
Never married	38.8	40.2	35.4
Married	39.5	37.7	43.8
Marriage-like relationship	6.3	6.3	6.3
Separated, divorced, widowed	2.0	1.3	3.5
Unknown	13.4	14.4	10.9
Has dependent age 18 or younger (%)	21.0	18.5	26.8
Has one or more functional limitations (%)	9.9	8.9	12.1
Age at doctorate (median years)	31.3	30.9	32.3
Bachelor's in same field as doctorate (%) ^b	40.9	45.7	29.9
Master's earned (%)	77.6	76.6	80.0
Master's earned at same doctorate institution (%)	48.6	49.5	46.7
Time to doctorate (median years)			
Years since earning bachelor's degree	8.8	8.4	9.5
From graduate school start	7.3	7.3	7.8
From doctoral program start ^c	5.8	5.8	5.6
Received tuition remission (%)	85.1	87.2	80.4
Male doctorate recipients (number)	1,669	1,209	460
Citizenship status (%)			
U.S. citizen or permanent resident	30.7	30.3	31.7
Temporary visa holder	62.4	62.9	61.3
Unknown	6.9	6.9	7.0
Marital status (%)			
Never married	39.9	41.4	35.9
Married	38.9	36.5	45.4
Marriage-like relationship	6.4	D	D
Separated, divorced, widowed	1.7	D	D
Unknown	13.1	14.2	10.2
Has dependent age 18 or younger (%)	21.2	19.0	26.6
Has one or more functional limitations (%)	9.1	8.5	10.4
Age at doctorate (median years)	31.3	31.0	32.1
Bachelor's in same field as doctorate (%) ^b	41.7	46.1	30.5
Master's earned (%)	77.2	76.4	79.3
Master's earned at same doctorate institution (%)	48.8	50.0	45.8
Time to doctorate (median years)			
Years since earning bachelor's degree	8.6	8.3	9.4
From graduate school start	7.3	7.3	7.7

Table 8-5**Computer and information sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
From doctoral program start ^c	5.8	5.8	5.5
Received tuition remission (%)	85.8	87.7	81.2
Female doctorate recipients (number)	526	336	190
Citizenship status (%)			
U.S. citizen or permanent resident	36.3	33.9	40.5
Temporary visa holder	55.5	57.4	52.1
Unknown	8.2	8.6	7.4
Marital status (%)			
Never married	35.2	35.7	34.2
Married	41.4	42.3	40.0
Marriage-like relationship	6.3	D	D
Separated, divorced, widowed	2.9	D	D
Unknown	14.3	15.2	12.6
Has dependent age 18 or younger (%)	20.6	16.7	27.3
Has one or more functional limitations (%)	12.4	10.0	16.5
Age at doctorate (median years)	31.4	30.8	32.9
Bachelor's in same field as doctorate (%) ^b	38.4	44.2	28.4
Master's earned (%)	78.9	77.3	81.8
Master's earned at same doctorate institution (%)	48.1	47.9	48.6
Time to doctorate (median years)			
Years since earning bachelor's degree	9.1	8.5	10.3
From graduate school start	7.4	7.0	8.3
From doctoral program start ^c	5.6	5.5	5.6
Received tuition remission (%)	82.8	85.3	78.4

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

Source(s):

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

Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021

[illegible][illegible]

Table 8-6**Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	Total	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
Years since earning bachelor's degree	7.5	7.0	6.6	8.4	8.0	8.0	8.3	6.8	7.4	7.2
From graduate school start	6.7	6.3	5.8	7.3	7.0	7.3	7.4	5.9	6.7	6.3
From doctoral program start ^c	5.3	5.3	5.0	5.0	5.6	5.3	5.0	5.0	5.3	5.3
Received tuition remission (%)	85.7	87.5	90.1	84.0	83.5	86.3	80.3	88.0	87.1	83.4
Male doctorate recipients (number)	7,050	636	912	703	1,681	322	434	459	1,154	749
Citizenship status (%)										
U.S. citizen or permanent resident	37.6	67.5	41.1	27.6	27.1	25.8	32.9	39.9	39.4	44.5
Temporary visa holder	57.6	28.9	54.4	68.0	68.2	72.0	62.9	53.6	55.5	48.6
Unknown	4.8	3.6	4.5	4.4	4.7	2.2	4.1	6.5	5.1	6.9
Marital status (%)										
Never married	44.7	45.4	51.2	39.8	44.4	44.7	37.3	47.1	44.4	44.9
Married	36.6	35.2	29.9	45.8	37.4	42.9	45.9	30.3	34.7	33.8
Marriage-like relationship	6.5	11.2	D	4.7	5.7	D	4.6	D	5.6	D
Separated, divorced, widowed	1.3	0.9	D	1.7	1.3	D	2.8	D	1.7	D
Unknown	10.9	7.2	10.0	8.0	11.1	5.9	9.4	14.2	13.6	13.9
Has dependent age 18 or younger (%)	17.8	13.2	12.1	26.6	19.0	22.4	24.8	16.5	16.3	14.6
Has one or more functional limitations (%)	7.9	8.5	7.2	8.5	6.9	12.0	7.5	9.6	7.3	8.3
Age at doctorate (median years)	30.3	29.8	29.4	31.6	30.8	31.0	31.2	29.8	30.2	29.9

Table 8-6**Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	Total	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
Bachelor's in same field as doctorate (%) ^b	83.8	74.6	89.0	89.7	85.1	75.6	69.9	71.4	92.7	82.7
Master's earned (%)	78.2	59.5	60.9	92.7	84.4	88.6	86.9	65.1	81.3	82.0
Master's earned at same doctorate institution (%)	50.1	53.7	50.2	38.1	49.6	43.0	47.6	52.4	53.1	61.9
Time to doctorate (median years)										
Years since earning bachelor's degree	7.6	7.1	6.6	8.7	8.0	8.2	8.3	6.9	7.4	7.3
From graduate school start	6.8	6.3	5.8	7.4	7.0	7.4	7.7	6.0	6.5	6.3
From doctoral program start ^c	5.3	5.4	5.0	4.9	5.6	5.2	5.0	5.0	5.3	5.3
Received tuition remission (%)	85.2	87.5	90.3	83.4	82.8	85.0	79.2	87.0	87.4	82.9
Female doctorate recipients (number)	2,511	434	380	317	366	130	170	212	259	243
Citizenship status (%)										
U.S. citizen or permanent resident	45.2	69.8	43.4	41.3	26.8	37.7	35.3	49.5	44.8	44.4
Temporary visa holder	48.0	28.1	50.8	51.7	64.8	60.0	60.6	42.5	47.9	39.1
Unknown	6.8	2.1	5.8	6.9	8.5	2.3	4.1	8.0	7.3	16.5
Marital status (%)										
Never married	41.2	46.1	48.2	40.4	37.7	37.7	42.4	42.5	40.2	29.2
Married	34.6	31.1	31.8	35.3	39.1	44.6	38.8	28.3	34.4	35.0
Marriage-like relationship	9.2	13.6	D	6.3	6.8	D	D	D	8.9	D

Table 8-6**Engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	Total	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
Separated, divorced, widowed	2.0	2.3	D	2.2	2.2	D	D	D	2.7	D
Unknown	13.0	6.9	10.8	15.8	14.2	4.6	9.4	15.6	13.9	25.9
Has dependent age 18 or younger (%)	12.8	6.0	10.0	16.7	16.8	19.4	15.8	10.6	11.7	17.0
Has one or more functional limitations (%)	9.0	8.5	9.3	11.0	7.1	13.1	8.0	8.4	8.3	9.9
Age at doctorate (median years)	29.8	28.8	28.8	30.4	30.5	30.3	31.2	29.0	30.0	29.8
Bachelor's in same field as doctorate (%) ^b	78.0	73.5	83.0	84.6	82.2	70.3	65.2	70.7	87.1	74.0
Master's earned (%)	71.8	53.0	56.5	89.8	86.7	79.7	80.1	60.8	81.1	75.6
Master's earned at same doctorate institution (%)	50.6	58.4	53.5	45.8	46.5	45.0	40.9	55.3	50.5	59.5
Time to doctorate (median years)										
Years since earning bachelor's degree	7.2	6.5	6.3	8.0	8.1	8.0	8.3	6.5	7.5	7.0
From graduate school start	6.3	6.0	5.8	7.0	7.3	6.8	7.0	5.8	7.0	6.3
From doctoral program start ^c	5.3	5.3	5.0	5.0	5.8	5.3	5.3	4.9	5.3	5.3
Received tuition remission (%)	87.1	87.4	89.5	85.5	86.8	89.6	82.9	90.3	86.0	84.9

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

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree

and doctoral degree are both in the same broad field category.

^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number, percent, and median years)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean/ marine sciences and atmospheric science
All doctorate recipients (number) ^a	1,044	613	431
Sex (%)			
Male	55.8	58.6	52.0
Female	44.2	41.4	48.0
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	63.7	60.8	67.7
Temporary visa holder	32.2	34.4	29.0
Unknown	4.1	4.7	3.2
Marital status (%)			
Never married	38.4	37.4	39.9
Married	35.4	35.1	36.0
Marriage-like relationship	15.1	14.7	15.8
Separated, divorced, widowed	2.1	2.6	1.4
Unknown	8.9	10.3	7.0
Has dependent age 18 or younger (%)	15.0	16.6	12.8
Has one or more functional limitations (%)	11.1	11.7	10.3
Age at doctorate (median years)	30.7	30.8	30.4
Bachelor's in same field as doctorate (%) ^b	53.0	60.1	43.1
Master's earned (%)	69.9	71.3	68.0
Master's earned at same doctorate institution (%)	44.2	40.7	49.3
Time to doctorate (median years)			
Years since earning bachelor's degree	8.0	8.0	7.6
From graduate school start	6.8	6.9	6.6
From doctoral program start ^c	5.3	5.3	5.5
Received tuition remission (%)	88.4	89.6	86.9
Male doctorate recipients (number)	583	359	224
Citizenship status (%)			
U.S. citizen or permanent resident	59.2	57.4	62.1
Temporary visa holder	36.7	38.4	33.9
Unknown	4.1	4.2	4.0
Marital status (%)			
Never married	40.5	39.8	41.5
Married	37.2	37.0	37.5
Marriage-like relationship	12.0	D	D
Separated, divorced, widowed	1.5	D	D
Unknown	8.7	8.9	8.5
Has dependent age 18 or younger (%)	17.7	19.9	14.1
Has one or more functional limitations (%)	8.9	8.6	9.4
Age at doctorate (median years)	31.0	31.2	30.8
Bachelor's in same field as doctorate (%) ^b	55.0	60.8	45.5

Table 8-7**Geosciences, atmospheric, and ocean sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean/ marine sciences and atmospheric science
Master's earned (%)	72.3	72.2	72.3
Master's earned at same doctorate institution (%)	43.0	38.5	50.0
Time to doctorate (median years)			
Years since earning bachelor's degree	8.0	8.0	7.9
From graduate school start	6.9	7.0	6.8
From doctoral program start ^c	5.3	5.3	5.6
Received tuition remission (%)	88.4	89.6	86.5
Female doctorate recipients (number)	461	254	207
Citizenship status (%)			
U.S. citizen or permanent resident	69.4	65.7	73.9
Temporary visa holder	26.5	28.7	23.7
Unknown	4.1	5.5	2.4
Marital status (%)			
Never married	35.8	33.9	38.2
Married	33.2	32.3	34.3
Marriage-like relationship	19.1	D	D
Separated, divorced, widowed	2.8	D	D
Unknown	9.1	12.2	5.3
Has dependent age 18 or younger (%)	11.5	11.7	11.3
Has one or more functional limitations (%)	13.9	16.3	11.2
Age at doctorate (median years)	30.2	30.2	30.0
Bachelor's in same field as doctorate (%) ^b	50.6	59.1	40.6
Master's earned (%)	67.0	70.0	63.5
Master's earned at same doctorate institution (%)	45.9	44.0	48.4
Time to doctorate (median years)			
Years since earning bachelor's degree	7.8	8.0	7.5
From graduate school start	6.7	6.7	6.5
From doctoral program start ^c	5.3	5.3	5.5
Received tuition remission (%)	88.5	89.5	87.3

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctorate institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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	2,582	603	408	696	875
Sex (%)					
Male	31.2	10.9	47.5	31.9	37.0
Female	68.8	89.1	52.5	68.1	63.0
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	73.0	84.6	48.0	75.7	74.6
Temporary visa holder	20.4	10.0	46.3	18.8	16.9
Unknown	6.5	5.5	5.6	5.5	8.5
Marital status (%)					
Never married	26.1	16.1	35.5	28.6	26.7
Married	48.1	58.5	40.9	46.6	45.4
Marriage-like relationship	6.9	2.7	5.4	9.9	8.0
Separated, divorced, widowed	5.8	11.4	2.9	5.0	3.9
Unknown	13.1	11.3	15.2	9.9	16.0
Has dependent age 18 or younger (%)	32.9	42.5	24.1	31.5	31.2
Has one or more functional limitations (%)	10.5	9.6	9.0	11.1	11.5
Age at doctorate (median years)	34.5	44.4	30.8	34.0	34.0
Bachelor's in same field as doctorate (%) ^b	44.5	87.5	41.5	24.4	32.0
Master's earned (%)	80.3	86.4	54.4	88.7	81.0
Master's earned at same doctorate institution (%)	33.7	28.5	34.7	36.8	34.3
Time to doctorate (median years)					
Years since earning bachelor's degree	11.3	17.0	8.0	11.0	11.0
From graduate school start	8.9	11.3	6.5	8.9	9.0
From doctoral program start ^c	5.3	5.3	5.3	5.0	5.3
Received tuition remission (%)	70.9	58.2	89.5	71.5	70.7
Male doctorate recipients (number)	806	66	194	222	324
Citizenship status (%)					
U.S. citizen or permanent resident	65.5	80.3	50.0	70.3	68.5
Temporary visa holder	28.0	15.2	45.4	25.2	22.2
Unknown	6.5	4.5	4.6	4.5	9.3
Marital status (%)					
Never married	31.9	24.2	37.1	31.1	30.9
Married	45.8	54.5	44.8	47.3	43.5
Marriage-like relationship	6.7	D	D	9.5	7.7
Separated, divorced, widowed	2.4	D	D	2.7	1.5
Unknown	13.3	9.1	13.9	9.5	16.4
Has dependent age 18 or younger (%)	30.3	40.7	25.1	31.5	30.4
Has one or more functional limitations (%)	10.1	6.7	9.6	9.5	11.5
Age at doctorate (median years)	33.0	39.0	31.1	34.1	33.3
Bachelor's in same field as doctorate (%) ^b	36.0	87.1	42.3	26.1	28.0
Master's earned (%)	73.7	82.3	54.3	82.6	77.4

Table 8-8**Health sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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 (%)	35.1	38.0	36.8	34.5	34.2
Time to doctorate (median years)					
Years since earning bachelor's degree	10.0	14.0	8.3	10.4	10.0
From graduate school start	7.8	9.4	6.8	8.0	8.3
From doctoral program start ^c	5.3	4.8	5.3	5.0	5.0
Received tuition remission (%)	75.2	68.3	88.8	70.9	71.5
Female doctorate recipients (number)	1,776	537	214	474	551
Citizenship status (%)					
U.S. citizen or permanent resident	76.5	85.1	46.3	78.3	78.2
Temporary visa holder	17.0	9.3	47.2	15.8	13.8
Unknown	6.5	5.6	6.5	5.9	8.0
Marital status (%)					
Never married	23.5	15.1	34.1	27.4	24.3
Married	49.1	59.0	37.4	46.2	46.5
Marriage-like relationship	6.9	D	D	10.1	8.2
Separated, divorced, widowed	7.4	D	D	6.1	5.3
Unknown	13.1	11.5	16.4	10.1	15.8
Has dependent age 18 or younger (%)	34.1	42.7	23.0	31.5	31.7
Has one or more functional limitations (%)	10.8	9.9	8.4	11.8	11.5
Age at doctorate (median years)	35.5	45.2	30.4	33.9	34.2
Bachelor's in same field as doctorate (%) ^b	48.3	87.5	40.7	23.7	34.2
Master's earned (%)	83.3	86.9	54.5	91.5	83.1
Master's earned at same doctorate institution (%)	33.1	27.4	32.7	37.8	34.4
Time to doctorate (median years)					
Years since earning bachelor's degree	12.0	17.3	7.9	11.2	11.5
From graduate school start	9.6	12.0	6.3	9.3	9.6
From doctoral program start ^c	5.2	5.3	5.0	5.0	5.3
Received tuition remission (%)	68.9	57.0	90.1	71.7	70.3

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number, percent, and median years)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
All doctorate recipients (number) ^a	1,915	475	827	613
Sex (%)				
Male	72.1	69.9	77.5	66.6
Female	27.9	30.1	22.5	33.4
Unknown	0.0	0.0	0.0	0.0
Citizenship status (%)				
U.S. citizen or permanent resident	44.2	48.0	51.8	31.2
Temporary visa holder	51.5	49.5	43.0	64.6
Unknown	4.2	2.5	5.2	4.2
Marital status (%)				
Never married	49.4	48.0	49.2	50.7
Married	29.8	33.7	26.8	30.8
Marriage-like relationship	9.3	D	9.9	D
Separated, divorced, widowed	1.1	D	1.3	D
Unknown	10.3	7.6	12.7	9.3
Has dependent age 18 or younger (%)	11.5	15.2	8.2	12.9
Has one or more functional limitations (%)	10.1	12.1	9.9	8.6
Age at doctorate (median years)	29.4	29.7	29.1	29.7
Bachelor's in same field as doctorate (%) ^b	80.1	73.0	88.6	74.5
Master's earned (%)	72.4	78.3	66.0	76.2
Master's earned at same doctorate institution (%)	56.5	60.2	55.1	55.1
Time to doctorate (median years)				
Years since earning bachelor's degree	7.0	7.3	6.8	7.3
From graduate school start	6.1	6.3	6.0	6.3
From doctoral program start ^c	5.3	5.0	5.8	5.0
Received tuition remission (%)	93.5	92.3	95.2	92.3
Male doctorate recipients (number)	1,381	332	641	408
Citizenship status (%)				
U.S. citizen or permanent resident	44.0	43.4	51.6	32.4
Temporary visa holder	52.1	53.3	44.1	63.7
Unknown	3.9	3.3	4.2	3.9
Marital status (%)				
Never married	51.4	48.8	52.4	52.0
Married	28.4	32.5	25.4	29.7
Marriage-like relationship	8.5	D	D	7.8
Separated, divorced, widowed	1.2	D	D	1.2
Unknown	10.5	8.4	12.3	9.3
Has dependent age 18 or younger (%)	11.5	16.0	7.6	13.5
Has one or more functional limitations (%)	10.6	12.6	10.0	9.8
Age at doctorate (median years)	29.5	29.9	29.1	29.8
Bachelor's in same field as doctorate (%) ^b	79.7	70.4	88.4	74.2
Master's earned (%)	70.6	76.7	63.5	76.4
Master's earned at same doctorate institution (%)	54.3	58.8	52.3	53.1
Time to doctorate (median years)				
Years since earning bachelor's degree	7.0	7.3	6.7	7.3
From graduate school start	6.1	6.3	6.0	6.6
From doctoral program start ^c	5.3	5.0	5.8	5.1
Received tuition remission (%)	94.0	93.5	95.5	92.3
Female doctorate recipients (number)	534	143	186	205
Citizenship status (%)				

Table 8-9**Mathematics and statistics research doctorate recipients, statistical profiles by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
U.S. citizen or permanent resident	44.9	58.7	52.2	28.8
Temporary visa holder	50.0	40.6	39.2	66.3
Unknown	5.1	0.7	8.6	4.9
Marital status (%)				
Never married	44.2	46.2	38.2	48.3
Married	33.5	36.4	31.7	33.2
Marriage-like relationship	11.2	11.9	D	D
Separated, divorced, widowed	1.1	0.0	D	D
Unknown	9.9	5.6	14.0	9.3
Has dependent age 18 or younger (%)	11.6	13.2	10.1	11.8
Has one or more functional limitations (%)	8.6	11.0	9.5	6.1
Age at doctorate (median years)	29.3	29.5	29.0	29.4
Bachelor's in same field as doctorate (%) ^b	80.9	79.0	89.2	75.3
Master's earned (%)	77.1	81.9	74.7	75.8
Master's earned at same doctorate institution (%)	61.8	63.4	63.4	59.2
Time to doctorate (median years)				
Years since earning bachelor's degree	7.0	7.0	7.0	7.1
From graduate school start	6.2	6.3	6.2	6.1
From doctoral program start ^c	5.3	5.2	5.8	5.0
Received tuition remission (%)	92.2	89.7	94.4	92.2

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number, percent, and median years)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
All doctorate recipients (number) ^a	1,299	448	851
Sex (%)			
Male	58.7	77.9	48.5
Female	41.3	22.1	51.4
Unknown	0.1	0.0	0.1
Citizenship status (%)			
U.S. citizen or permanent resident	51.9	39.1	58.6
Temporary visa holder	41.9	56.9	34.0
Unknown	6.2	4.0	7.4
Marital status (%)			
Never married	37.7	47.8	32.4
Married	37.4	34.6	38.9
Marriage-like relationship	9.3	8.0	10.0
Separated, divorced, widowed	3.3	1.6	4.2
Unknown	12.2	8.0	14.5
Has dependent age 18 or younger (%)	20.6	15.7	23.3
Has one or more functional limitations (%)	10.8	10.7	10.9
Age at doctorate (median years)	31.6	30.3	32.4
Bachelor's in same field as doctorate (%) ^b	12.3	16.9	9.7
Master's earned (%)	78.9	77.1	79.9
Master's earned at same doctorate institution (%)	47.0	50.2	45.3
Time to doctorate (median years)			
Years since earning bachelor's degree	8.9	7.8	9.6
From graduate school start	7.6	6.9	8.0
From doctoral program start ^c	5.5	5.7	5.4
Received tuition remission (%)	84.5	84.5	84.5
Male doctorate recipients (number)	762	349	413
Citizenship status (%)			
U.S. citizen or permanent resident	46.2	37.2	53.8
Temporary visa holder	47.8	58.2	39.0
Unknown	6.0	4.6	7.3
Marital status (%)			
Never married	41.3	50.4	33.7
Married	37.9	34.1	41.2
Marriage-like relationship	7.7	D	D
Separated, divorced, widowed	2.5	D	D
Unknown	10.5	7.2	13.3
Has dependent age 18 or younger (%)	20.2	15.9	24.1
Has one or more functional limitations (%)	9.6	10.6	8.8
Age at doctorate (median years)	31.5	30.6	32.5

Table 8-10**Multidisciplinary/ interdisciplinary sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Bachelor's in same field as doctorate (%) ^b	12.8	17.4	8.8
Master's earned (%)	78.4	76.5	80.2
Master's earned at same doctorate institution (%)	47.1	48.6	45.8
Time to doctorate (median years)			
Years since earning bachelor's degree	8.4	7.9	9.5
From graduate school start	7.3	7.1	7.8
From doctoral program start ^c	5.7	5.8	5.3
Received tuition remission (%)	83.4	83.1	83.7
Female doctorate recipients (number)	536	99	437
Citizenship status (%)			
U.S. citizen or permanent resident	60.1	45.5	63.4
Temporary visa holder	33.6	52.5	29.3
Unknown	6.3	2.0	7.3
Marital status (%)			
Never married	32.6	38.4	31.4
Married	36.8	36.4	36.8
Marriage-like relationship	11.6	D	D
Separated, divorced, widowed	4.5	D	D
Unknown	14.6	11.1	15.3
Has dependent age 18 or younger (%)	21.1	14.8	22.6
Has one or more functional limitations (%)	12.6	11.2	12.9
Age at doctorate (median years)	31.6	30.0	32.3
Bachelor's in same field as doctorate (%) ^b	11.5	15.1	10.7
Master's earned (%)	79.8	79.6	79.8
Master's earned at same doctorate institution (%)	46.9	55.4	44.9
Time to doctorate (median years)			
Years since earning bachelor's degree	9.1	7.6	9.6
From graduate school start	7.8	6.5	8.1
From doctoral program start ^c	5.4	5.3	5.7
Received tuition remission (%)	86.1	89.8	85.3

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
All doctorate recipients (number) ^a	4,811	263	2,369	429	1,750
Sex (%)					
Male	67.5	61.6	57.8	69.7	80.9
Female	32.5	38.4	42.2	30.3	19.0
Unknown	*	0.0	0.0	0.0	0.1
Citizenship status (%)					
U.S. citizen or permanent resident	56.4	69.6	58.7	52.7	52.2
Temporary visa holder	39.5	27.4	36.9	45.5	43.4
Unknown	4.1	3.0	4.4	1.9	4.5
Marital status (%)					
Never married	46.6	54.4	44.2	51.5	47.5
Married	30.9	27.0	30.7	32.6	31.4
Marriage-like relationship	11.7	13.3	12.6	10.3	10.5
Separated, divorced, widowed	1.1	0.0	1.3	D	D
Unknown	9.7	5.3	11.2	D	D
Has dependent age 18 or younger (%)	10.8	5.2	11.0	8.9	12.0
Has one or more functional limitations (%)	10.3	12.4	10.6	10.4	9.6
Age at doctorate (median years)	29.2	28.9	28.9	28.7	29.6
Bachelor's in same field as doctorate (%) ^b	78.6	83.4	79.3	60.9	81.4
Master's earned (%)	52.7	75.9	39.6	49.9	67.2
Master's earned at same doctorate institution (%)	58.0	78.0	47.7	54.1	63.2
Time to doctorate (median years)					
Years since earning bachelor's degree	6.6	6.4	6.3	6.2	7.1
From graduate school start	5.9	6.0	5.8	5.7	6.3
From doctoral program start ^c	5.5	5.8	5.3	5.1	6.0
Received tuition remission (%)	90.7	89.6	92.8	87.8	88.9
Male doctorate recipients (number)	3,246	162	1,369	299	1,416
Citizenship status (%)					
U.S. citizen or permanent resident	55.4	67.9	57.5	50.8	52.9
Temporary visa holder	40.6	29.0	38.1	47.8	42.9
Unknown	4.0	3.1	4.5	1.3	4.2
Marital status (%)					
Never married	47.4	63.6	44.1	50.5	48.1
Married	30.9	22.8	30.6	33.1	31.6
Marriage-like relationship	11.2	8.6	12.3	11.0	10.3
Separated, divorced, widowed	0.8	0.0	0.9	D	D
Unknown	9.7	4.9	12.0	D	D
Has dependent age 18 or younger (%)	11.5	4.5	11.5	11.0	12.3
Has one or more functional limitations (%)	8.8	8.5	8.9	8.9	8.8
Age at doctorate (median years)	29.3	28.8	29.0	28.8	29.8
Bachelor's in same field as doctorate (%) ^b	78.6	82.7	79.1	61.8	81.4
Master's earned (%)	54.4	73.1	40.4	51.7	66.0
Master's earned at same doctorate institution (%)	57.8	76.1	45.5	54.7	63.2
Time to doctorate (median years)					
Years since earning bachelor's degree	6.7	6.3	6.4	6.3	7.1
From graduate school start	6.0	6.0	5.8	5.8	6.3
From doctoral program start ^c	5.8	5.8	5.3	5.2	6.0
Received tuition remission (%)	90.8	92.3	92.9	87.7	89.4

Table 8-11**Physical sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Female doctorate recipients (number)	1,563	101	1,000	130	332
Citizenship status (%)					
U.S. citizen or permanent resident	58.4	72.3	60.3	56.9	49.1
Temporary visa holder	37.2	24.8	35.4	40.0	45.5
Unknown	4.4	3.0	4.3	3.1	5.4
Marital status (%)					
Never married	45.0	39.6	44.4	53.8	45.2
Married	31.0	33.7	30.9	31.5	30.4
Marriage-like relationship	12.7	20.8	12.9	8.5	11.4
Separated, divorced, widowed	1.7	0.0	1.7	0.0	2.7
Unknown	9.5	5.9	10.1	6.2	10.2
Has dependent age 18 or younger (%)	9.5	6.3	10.4	4.1	10.4
Has one or more functional limitations (%)	13.3	18.8	12.8	14.0	12.6
Age at doctorate (median years)	28.8	29.2	28.7	28.5	29.3
Bachelor's in same field as doctorate (%) ^b	78.4	84.5	79.5	58.9	81.2
Master's earned (%)	49.1	80.4	38.6	45.7	72.1
Master's earned at same doctorate institution (%)	58.2	80.8	51.0	52.5	63.4
Time to doctorate (median years)					
Years since earning bachelor's degree	6.3	6.4	6.1	6.0	7.0
From graduate school start	5.8	6.0	5.4	5.3	6.3
From doctoral program start ^c	5.3	5.8	5.3	5.0	5.8
Received tuition remission (%)	90.4	85.4	92.6	88.0	86.6

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

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctorate institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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	3,716	1,256	1,338	651	471
Sex (%)					
Male	27.0	25.2	25.0	35.2	26.5
Female	73.0	74.8	75.0	64.8	73.5
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	82.6	86.8	84.7	81.4	67.3
Temporary visa holder	8.3	4.3	7.8	15.7	10.2
Unknown	9.1	8.9	7.5	2.9	22.5
Marital status (%)					
Never married	27.7	27.5	27.1	36.3	18.5
Married	35.9	35.2	38.9	35.0	30.4
Marriage-like relationship	13.2	12.9	11.8	18.1	10.8
Separated, divorced, widowed	3.9	3.3	4.8	2.8	4.9
Unknown	19.3	21.1	17.4	7.8	35.5
Has dependent age 18 or younger (%)	18.6	15.6	22.9	13.0	23.8
Has one or more functional limitations (%)	13.1	12.1	13.6	15.3	10.1
Age at doctorate (median years)	31.2	31.2	31.7	30.3	31.8
Bachelor's in same field as doctorate (%) ^b	72.7	82.4	67.1	72.4	61.7
Master's earned (%)	91.0	93.1	93.3	83.8	89.4
Master's earned at same doctorate institution (%)	66.8	77.9	56.6	72.0	58.4
Time to doctorate (median years)					
Years since earning bachelor's degree	8.6	8.7	9.1	7.6	9.0
From graduate school start	6.9	6.9	7.3	6.0	6.8
From doctoral program start ^c	6.0	6.0	5.8	5.8	5.3
Received tuition remission (%)	80.8	80.9	75.5	91.0	79.5
Male doctorate recipients (number)	1,005	317	334	229	125
Citizenship status (%)					
U.S. citizen or permanent resident	84.2	89.6	85.0	83.4	69.6
Temporary visa holder	7.1	2.8	7.2	12.7	7.2
Unknown	8.8	7.6	7.8	3.9	23.2
Marital status (%)					
Never married	29.3	30.0	27.5	35.8	20.0
Married	38.4	39.1	42.2	34.9	32.8
Marriage-like relationship	12.2	10.1	11.7	17.9	8.8
Separated, divorced, widowed	2.2	1.9	2.4	D	D
Unknown	17.9	18.9	16.2	D	D
Has dependent age 18 or younger (%)	24.6	21.6	33.2	14.9	29.1
Has one or more functional limitations (%)	14.3	15.7	12.7	16.2	10.4
Age at doctorate (median years)	31.8	31.9	32.4	30.7	32.3

Table 8-12**Psychology research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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	69.6	78.6	62.7	73.9	54.5
Master's earned (%)	89.4	91.4	91.4	84.4	88.6
Master's earned at same doctorate institution (%)	65.9	78.0	53.6	70.9	58.4
Time to doctorate (median years)					
Years since earning bachelor's degree	8.6	9.0	9.3	7.5	9.0
From graduate school start	7.0	7.0	7.4	6.0	6.3
From doctoral program start ^c	5.9	6.0	5.8	5.7	5.0
Received tuition remission (%)	81.9	79.8	76.2	90.6	85.5
Female doctorate recipients (number)	2,711	939	1,004	422	346
Citizenship status (%)					
U.S. citizen or permanent resident	82.0	85.8	84.6	80.3	66.5
Temporary visa holder	8.8	4.8	8.1	17.3	11.3
Unknown	9.2	9.4	7.4	2.4	22.3
Marital status (%)					
Never married	27.2	26.7	26.9	36.5	17.9
Married	35.0	33.9	37.8	35.1	29.5
Marriage-like relationship	13.5	13.8	11.9	18.2	11.6
Separated, divorced, widowed	4.6	3.7	5.6	D	D
Unknown	19.8	21.8	17.8	D	D
Has dependent age 18 or younger (%)	16.3	13.5	19.4	12.0	21.9
Has one or more functional limitations (%)	12.7	10.9	14.0	14.8	10.0
Age at doctorate (median years)	31.0	31.1	31.4	30.1	31.6
Bachelor's in same field as doctorate (%) ^b	73.8	83.7	68.6	71.7	64.3
Master's earned (%)	91.6	93.7	94.0	83.5	89.7
Master's earned at same doctorate institution (%)	67.2	77.9	57.6	72.7	58.3
Time to doctorate (median years)					
Years since earning bachelor's degree	8.6	8.7	9.0	7.6	9.0
From graduate school start	6.9	6.9	7.3	6.0	7.0
From doctoral program start ^c	6.0	6.0	5.8	5.8	5.4
Received tuition remission (%)	80.4	81.3	75.3	91.2	77.3

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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
All doctorate recipients (number) ^a	4,749	388	383	1,317	581	399	578	1,103
Sex (%)								
Male	49.7	30.2	35.2	66.1	58.3	42.4	37.9	46.1
Female	50.3	69.8	64.5	33.9	41.7	57.6	62.1	53.8
Unknown	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.1
Citizenship status (%)								
U.S. citizen or permanent resident	63.0	75.8	73.9	35.5	69.7	79.2	81.1	68.8
Temporary visa holder	31.8	19.3	18.0	58.7	23.9	17.5	15.7	26.6
Unknown	5.2	4.9	8.1	5.8	6.4	3.3	3.1	4.6
Marital status (%)								
Never married	30.6	28.4	29.0	35.5	30.5	24.3	28.7	29.5
Married	43.4	41.8	39.2	40.6	40.8	50.4	45.5	46.6
Marriage-like relationship	11.3	14.7	11.0	10.8	12.7	9.5	11.9	10.5
Separated, divorced, widowed	4.5	7.0	7.3	1.7	2.6	7.0	5.9	5.4
Unknown	10.1	8.2	13.6	11.3	13.4	8.8	8.0	8.0
Has dependent age 18 or younger (%)	24.1	20.8	26.4	19.5	21.0	37.2	24.4	26.6
Has one or more functional limitations (%)	13.2	15.6	17.1	9.0	13.6	12.4	15.2	14.9
Age at doctorate (median years)	33.1	34.3	34.7	31.3	32.1	35.9	33.8	34.0
Bachelor's in same field as doctorate (%) ^b	56.2	61.2	27.8	65.6	72.0	39.5	64.2	46.8
Master's earned (%)	90.0	88.8	91.6	85.8	87.9	90.5	94.9	93.2
Master's earned at same doctorate institution (%)	47.1	57.7	44.3	45.3	56.2	29.0	58.6	42.4
Time to doctorate (median years)								
Years since earning bachelor's degree	10.0	11.3	11.5	8.7	9.3	13.0	10.4	10.6
From graduate school start	8.4	9.3	9.8	7.7	7.9	10.8	8.8	8.8
From doctoral program start ^c	6.0	7.3	6.8	5.8	6.0	5.7	6.7	6.0
Received tuition remission (%)	87.3	92.2	87.3	92.5	93.2	70.0	90.6	80.9
Male doctorate recipients (number)	2,358	117	135	870	339	169	219	509
Citizenship status (%)								

Table 8-13**Social sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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
U.S. citizen or permanent resident	57.9	66.7	68.1	35.3	71.1	76.3	77.6	68.6
Temporary visa holder	37.0	29.1	21.5	59.4	23.3	19.5	20.1	26.9
Unknown	5.0	4.3	10.4	5.3	5.6	4.1	2.3	4.5
Marital status (%)								
Never married	30.7	35.9	23.7	35.3	31.9	21.3	30.1	26.1
Married	44.8	41.0	42.2	42.4	41.6	56.2	45.2	48.5
Marriage-like relationship	10.9	11.1	11.9	10.6	10.6	7.7	14.2	11.0
Separated, divorced, widowed	3.5	6.0	6.7	1.4	2.7	6.5	3.2	5.5
Unknown	10.1	6.0	15.6	10.3	13.3	8.3	7.3	8.8
Has dependent age 18 or younger (%)	25.5	24.5	32.7	21.1	23.9	40.6	21.6	29.2
Has one or more functional limitations (%)	11.7	13.0	14.2	9.7	11.7	14.2	10.9	13.9
Age at doctorate (median years)	33.1	35.5	35.6	31.6	32.3	37.8	34.2	34.4
Bachelor's in same field as doctorate (%) ^b	58.4	55.7	27.9	64.3	70.8	45.7	66.3	49.7
Master's earned (%)	89.0	87.8	87.1	86.2	87.3	86.4	94.7	94.0
Master's earned at same doctorate institution (%)	45.6	59.4	36.8	44.0	55.1	26.4	56.6	42.6
Time to doctorate (median years)								
Years since earning bachelor's degree	9.8	11.0	11.3	8.8	9.4	13.3	10.5	10.7
From graduate school start	8.3	8.8	9.1	7.7	8.0	10.4	8.8	8.8
From doctoral program start ^c	5.8	7.3	6.6	5.8	6.0	5.8	6.8	5.9
Received tuition remission (%)	87.5	92.0	88.7	92.6	91.9	66.5	91.1	80.1
Female doctorate recipients (number)	2,388	271	247	446	242	230	359	593
Citizenship status (%)								
U.S. citizen or permanent resident	68.1	79.7	76.9	35.9	67.8	81.3	83.3	69.1
Temporary visa holder	26.7	15.1	16.2	57.4	24.8	16.1	13.1	26.3
Unknown	5.2	5.2	6.9	6.7	7.4	2.6	3.6	4.6
Marital status (%)								

Table 8-13**Social sciences research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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	30.6	25.1	32.0	36.1	28.5	26.5	27.9	32.4
Married	42.1	42.1	37.2	37.2	39.7	46.1	45.7	45.0
Marriage-like relationship	11.8	16.2	10.5	11.2	15.7	10.9	10.6	10.1
Separated, divorced, widowed	5.5	7.4	7.7	2.5	2.5	7.4	7.5	5.4
Unknown	10.1	9.2	12.6	13.0	13.6	9.1	8.4	7.1
Has dependent age 18 or younger (%)	22.8	19.2	23.1	16.5	16.9	34.6	26.1	24.4
Has one or more functional limitations (%)	14.6	16.8	18.3	7.8	16.3	11.1	17.9	15.7
Age at doctorate (median years)	33.1	34.1	34.7	30.7	31.8	35.4	33.7	33.5
Bachelor's in same field as doctorate (%) ^b	54.0	63.7	27.5	68.0	73.8	34.9	62.9	44.5
Master's earned (%)	91.1	89.2	93.9	85.1	88.7	93.6	95.0	92.6
Master's earned at same doctorate institution (%)	48.6	57.0	47.9	48.1	57.8	30.8	59.7	42.2
Time to doctorate (median years)								
Years since earning bachelor's degree	10.3	11.5	11.7	8.5	9.1	12.9	10.4	10.6
From graduate school start	8.7	9.8	9.8	7.3	7.8	10.8	8.7	8.9
From doctoral program start ^c	6.0	7.3	6.8	5.8	6.0	5.6	6.3	6.0
Received tuition remission (%)	87.0	92.3	86.5	92.2	94.9	72.6	90.3	81.6

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education	Education, other
All doctorate recipients (number) ^a	3,711	1,082	1,204	1,010	415
Sex (%)					
Male	29.9	34.8	30.7	25.0	27.0
Female	70.0	65.2	69.3	75.0	73.0
Unknown	*	0.0	0.0	0.1	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	79.8	86.6	76.7	77.0	77.8
Temporary visa holder	13.4	5.9	17.4	17.9	10.1
Unknown	6.8	7.5	5.9	5.0	12.0
Marital status (%)					
Never married	17.1	15.6	17.3	18.2	17.8
Married	54.6	55.4	54.6	56.6	48.2
Marriage-like relationship	5.3	5.3	5.6	5.1	5.1
Separated, divorced, widowed	7.7	6.7	7.9	8.9	6.7
Unknown	15.2	17.0	14.6	11.1	22.2
Has dependent age 18 or younger (%)	44.5	49.4	42.4	42.9	41.7
Has one or more functional limitations (%)	12.2	10.7	11.9	13.9	12.1
Age at doctorate (median years)	38.8	40.3	37.8	38.3	38.7
Bachelor's in same field as doctorate (%) ^b	25.4	20.7	23.7	34.2	19.7
Master's earned (%)	96.8	98.1	97.1	96.7	92.2
Master's earned at same doctorate institution (%)	34.0	32.6	35.8	33.4	34.0
Time to doctorate (median years)					
Years since earning bachelor's degree	15.0	16.7	14.3	14.7	15.0
From graduate school start	12.0	13.3	11.3	11.7	11.7
From doctoral program start ^c	5.7	5.8	5.8	5.3	5.4
Received tuition remission (%)	64.4	55.8	67.4	68.4	67.5
Male doctorate recipients (number)	1,111	377	370	252	112
Citizenship status (%)					
U.S. citizen or permanent resident	77.9	87.0	72.2	72.6	77.7
Temporary visa holder	15.2	5.3	21.1	24.2	8.9
Unknown	6.9	7.7	6.8	3.2	13.4
Marital status (%)					
Never married	16.9	14.9	17.0	18.3	20.5
Married	57.8	60.5	55.7	61.1	48.2
Marriage-like relationship	4.6	4.8	4.9	D	D
Separated, divorced, widowed	4.4	3.4	4.6	D	D
Unknown	16.3	16.4	17.8	10.7	23.2
Has dependent age 18 or younger (%)	49.6	53.8	48.2	47.6	44.2
Has one or more functional limitations (%)	10.5	10.3	10.6	10.3	11.6
Age at doctorate (median years)	38.5	39.7	37.8	37.7	39.3
Bachelor's in same field as doctorate (%) ^b	24.3	19.3	19.8	39.1	20.4
Master's earned (%)	97.1	98.2	96.3	97.4	95.7
Master's earned at same doctorate institution (%)	32.8	34.3	34.8	28.9	30.3

Table 8-14**Education research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education	Education, other
Time to doctorate (median years)					
Years since earning bachelor's degree	15.0	16.0	13.8	14.3	15.4
From graduate school start	11.8	12.8	11.3	10.9	11.8
From doctoral program start ^c	5.5	5.8	5.8	5.1	5.3
Received tuition remission (%)	63.8	56.9	67.5	67.8	65.5
Female doctorate recipients (number)	2,599	705	834	757	303
Citizenship status (%)					
U.S. citizen or permanent resident	80.7	86.4	78.8	78.6	77.9
Temporary visa holder	12.6	6.2	15.7	15.9	10.6
Unknown	6.7	7.4	5.5	5.5	11.6
Marital status (%)					
Never married	17.2	16.0	17.4	18.2	16.8
Married	53.3	52.6	54.1	55.2	48.2
Marriage-like relationship	5.7	5.5	6.0	D	D
Separated, divorced, widowed	9.1	8.5	9.4	D	D
Unknown	14.7	17.3	13.2	11.1	21.8
Has dependent age 18 or younger (%)	42.4	47.1	40.0	41.4	40.9
Has one or more functional limitations (%)	12.8	10.9	12.4	15.2	12.3
Age at doctorate (median years)	39.0	40.8	37.8	38.5	38.1
Bachelor's in same field as doctorate (%) ^b	25.8	21.4	25.4	32.7	19.4
Master's earned (%)	96.7	98.1	97.4	96.6	90.9
Master's earned at same doctorate institution (%)	34.5	31.8	36.2	34.9	35.4
Time to doctorate (median years)					
Years since earning bachelor's degree	15.3	17.3	14.4	14.9	14.6
From graduate school start	12.0	13.9	11.3	12.0	11.7
From doctoral program start ^c	5.7	5.8	5.8	5.4	5.6
Received tuition remission (%)	64.6	55.2	67.3	68.6	68.2

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

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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	3,076	933	505	672	592	374
Sex (%)						
Male	52.6	38.9	43.0	56.7	64.0	74.6
Female	47.3	60.9	57.0	43.3	36.0	25.4
Unknown	0.1	0.2	0.0	0.0	0.0	0.0
Citizenship status (%)						
U.S. citizen or permanent resident	76.0	83.2	60.4	78.0	77.2	74.1
Temporary visa holder	17.8	10.7	33.1	17.4	17.2	16.3
Unknown	6.2	6.1	6.5	4.6	5.6	9.6
Marital status (%)						
Never married	25.2	25.4	29.3	28.7	25.8	12.0
Married	45.5	43.5	41.2	43.2	44.8	62.0
Marriage-like relationship	11.3	13.9	9.9	11.8	12.5	4.0
Separated, divorced, widowed	4.3	3.9	5.7	4.5	4.1	3.5
Unknown	13.6	13.3	13.9	11.9	12.8	18.4
Has dependent age 18 or younger (%)	27.0	21.8	24.1	23.2	26.4	53.3
Has one or more functional limitations (%)	15.2	17.3	14.0	14.0	16.1	12.2
Age at doctorate (median years)	34.6	33.8	35.1	33.9	34.0	38.8
Bachelor's in same field as doctorate (%) ^b	73.4	82.8	71.4	72.1	70.1	59.6
Master's earned (%)	93.3	94.6	94.8	91.7	88.9	97.8
Master's earned at same doctorate institution (%)	41.5	35.2	46.0	46.2	45.6	36.8
Time to doctorate (median years)						
Years since earning bachelor's degree	11.3	11.0	11.7	11.0	11.0	15.0
From graduate school start	9.8	9.0	9.9	9.2	9.8	12.2
From doctoral program start ^c	6.8	6.1	6.8	6.9	6.9	6.8
Received tuition remission (%)	89.2	90.7	92.6	92.5	89.7	73.3
Male doctorate recipients (number)	1,619	363	217	381	379	279
Citizenship status (%)						
U.S. citizen or permanent resident	75.2	81.8	59.9	76.4	77.0	74.2
Temporary visa holder	18.8	12.7	33.6	19.7	17.4	15.8
Unknown	6.1	5.5	6.5	3.9	5.5	10.0
Marital status (%)						
Never married	22.9	26.2	29.0	D	25.1	D
Married	49.8	46.0	42.4	47.0	47.0	68.5
Marriage-like relationship	10.7	13.8	12.0	12.3	11.1	3.2
Separated, divorced, widowed	3.2	2.2	3.7	D	4.0	D
Unknown	13.3	11.8	12.9	11.3	12.9	19.0

Table 8-15

Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2021

(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 (%)	31.6	23.2	21.6	24.5	31.0	63.8
Has one or more functional limitations (%)	13.1	11.7	13.2	12.5	15.5	12.0
Age at doctorate (median years)	35.1	33.9	35.8	34.1	34.6	39.2
Bachelor's in same field as doctorate (%) ^b	73.6	84.8	71.4	73.5	72.3	61.9
Master's earned (%)	94.3	95.1	96.0	93.2	90.8	98.3
Master's earned at same doctorate institution (%)	40.9	33.7	47.1	44.6	43.3	37.3
Time to doctorate (median years)						
Years since earning bachelor's degree	11.5	10.8	12.0	10.9	11.0	15.6
From graduate school start	9.8	9.0	10.0	9.2	9.8	13.0
From doctoral program start ^c	6.8	6.1	7.0	6.8	6.9	6.8
Received tuition remission (%)	87.2	91.6	91.8	90.6	89.2	69.4
Female doctorate recipients (number)	1,455	568	288	291	213	95
Citizenship status (%)						
U.S. citizen or permanent resident	77.1	84.3	60.8	80.1	77.5	73.7
Temporary visa holder	16.7	9.5	32.6	14.4	16.9	17.9
Unknown	6.2	6.2	6.6	5.5	5.6	8.4
Marital status (%)						
Never married	27.8	25.0	29.5	D	27.2	D
Married	40.8	42.1	40.3	38.1	40.8	43.2
Marriage-like relationship	12.0	14.1	8.3	11.0	15.0	6.3
Separated, divorced, widowed	5.6	4.9	7.3	D	4.2	D
Unknown	13.8	13.9	14.6	12.7	12.7	16.8
Has dependent age 18 or younger (%)	21.9	20.9	26.1	21.6	18.3	23.8
Has one or more functional limitations (%)	17.6	20.9	14.5	15.9	17.2	12.8
Age at doctorate (median years)	34.0	33.6	34.4	33.8	33.3	37.9
Bachelor's in same field as doctorate (%) ^b	73.2	81.6	71.4	70.3	66.2	52.9
Master's earned (%)	92.2	94.3	93.8	89.8	85.6	96.5
Master's earned at same doctorate institution (%)	42.2	36.2	45.2	48.3	50.0	35.4
Time to doctorate (median years)						
Years since earning bachelor's degree	11.2	11.0	11.5	11.0	11.0	14.0
From graduate school start	9.4	9.0	9.9	9.3	9.3	10.6
From doctoral program start ^c	6.8	6.0	6.8	7.0	6.9	6.8

Table 8-15

Humanities research doctorate recipients, statistical profile by sex and major field of doctorate: 2021

(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 (%)	91.5	90.2	93.2	95.0	90.4	85.0

D = suppressed to avoid disclosure of confidential information.

- ^a Includes respondents who did not report sex.
- ^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.
- ^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number, percent, and median years)

Characteristic	All business fields	Business administration and management	Business, other
All doctorate recipients (number) ^a	1,340	456	884
Sex (%)			
Male	56.4	56.8	56.2
Female	43.6	43.2	43.8
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	44.0	48.0	42.0
Temporary visa holder	48.1	39.5	52.5
Unknown	7.9	12.5	5.5
Marital status (%)			
Never married	26.3	21.5	28.8
Married	46.8	43.6	48.4
Marriage-like relationship	5.2	5.0	5.3
Separated, divorced, widowed	5.1	5.0	5.1
Unknown	16.6	24.8	12.3
Has dependent age 18 or younger (%)	32.4	35.1	31.3
Has one or more functional limitations (%)	9.2	11.2	8.4
Age at doctorate (median years)	33.9	37.2	33.0
Bachelor's in same field as doctorate (%) ^b	36.5	27.1	40.7
Master's earned (%)	88.9	92.5	87.3
Master's earned at same doctorate institution (%)	26.6	26.9	26.4
Time to doctorate (median years)			
Years since earning bachelor's degree	10.8	12.6	10.1
From graduate school start	8.8	9.8	8.1
From doctoral program start ^c	5.0	5.3	5.0
Received tuition remission (%)	78.1	66.3	83.4
Male doctorate recipients (number)	756	259	497
Citizenship status (%)			
U.S. citizen or permanent resident	40.3	39.4	40.8
Temporary visa holder	51.2	47.9	52.9
Unknown	8.5	12.7	6.2
Marital status (%)			
Never married	23.4	18.9	25.8
Married	49.3	47.5	50.3
Marriage-like relationship	5.3	3.9	6.0
Separated, divorced, widowed	3.7	3.9	3.6
Unknown	18.3	25.9	14.3
Has dependent age 18 or younger (%)	36.9	38.4	36.2
Has one or more functional limitations (%)	8.0	8.5	7.9
Age at doctorate (median years)	34.2	36.8	33.4
Bachelor's in same field as doctorate (%) ^b	32.7	23.7	36.8
Master's earned (%)	90.7	93.3	89.5
Master's earned at same doctorate institution (%)	28.0	25.4	29.1
Time to doctorate (median years)			
Years since earning bachelor's degree	10.8	12.1	10.3
From graduate school start	8.8	9.3	8.1
From doctoral program start ^c	5.0	5.0	5.0
Received tuition remission (%)	77.4	67.0	82.0
Female doctorate recipients (number)	584	197	387
Citizenship status (%)			

Table 8-16**Business research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All business fields	Business administration and management	Business, other
U.S. citizen or permanent resident	48.8	59.4	43.4
Temporary visa holder	44.0	28.4	51.9
Unknown	7.2	12.2	4.7
Marital status (%)			
Never married	30.1	24.9	32.8
Married	43.5	38.6	46.0
Marriage-like relationship	5.1	6.6	4.4
Separated, divorced, widowed	6.8	6.6	7.0
Unknown	14.4	23.4	9.8
Has dependent age 18 or younger (%)	26.9	30.9	25.1
Has one or more functional limitations (%)	10.7	14.7	9.0
Age at doctorate (median years)	33.5	37.4	32.4
Bachelor's in same field as doctorate (%) ^b	41.2	31.3	45.7
Master's earned (%)	86.7	91.6	84.5
Master's earned at same doctorate institution (%)	24.8	28.9	22.8
Time to doctorate (median years)			
Years since earning bachelor's degree	10.8	13.1	9.9
From graduate school start	8.8	10.1	8.0
From doctoral program start ^c	5.0	5.5	5.0
Received tuition remission (%)	79.0	65.4	85.1

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies/ design
All doctorate recipients (number) ^a	771	491	280
Sex (%)			
Male	45.3	53.6	30.7
Female	54.7	46.4	69.3
Unknown	0.0	0.0	0.0
Citizenship status (%)			
U.S. citizen or permanent resident	74.1	74.9	72.5
Temporary visa holder	19.1	18.1	20.7
Unknown	6.9	6.9	6.8
Marital status (%)			
Never married	28.5	29.1	27.5
Married	42.2	43.2	40.4
Marriage-like relationship	12.3	11.8	13.2
Separated, divorced, widowed	3.8	2.4	6.1
Unknown	13.2	13.4	12.9
Has dependent age 18 or younger (%)	21.5	21.1	22.1
Has one or more functional limitations (%)	15.1	13.9	17.1
Age at doctorate (median years)	33.9	33.1	34.8
Bachelor's in same field as doctorate (%) ^b	69.1	75.9	57.1
Master's earned (%)	94.0	95.1	92.1
Master's earned at same doctorate institution (%)	38.1	35.6	42.5
Time to doctorate (median years)			
Years since earning bachelor's degree	11.0	10.3	12.0
From graduate school start	9.3	8.8	10.0
From doctoral program start ^c	6.7	6.0	7.3
Received tuition remission (%)	93.4	93.3	93.5
Male doctorate recipients (number)	349	263	86
Citizenship status (%)			
U.S. citizen or permanent resident	74.8	76.8	68.6
Temporary visa holder	19.8	17.9	25.6
Unknown	5.4	5.3	5.8
Marital status (%)			
Never married	27.5	28.9	23.3
Married	43.0	43.3	41.9
Marriage-like relationship	12.6	11.4	16.3
Separated, divorced, widowed	3.4	2.7	5.8
Unknown	13.5	13.7	12.8
Has dependent age 18 or younger (%)	24.1	24.1	24.0
Has one or more functional limitations (%)	10.8	10.3	12.3
Age at doctorate (median years)	33.8	33.2	35.1
Bachelor's in same field as doctorate (%) ^b	67.6	75.5	42.9
Master's earned (%)	95.0	95.9	92.2
Master's earned at same doctorate institution (%)	36.6	35.1	41.4
Time to doctorate (median years)			
Years since earning bachelor's degree	10.7	10.0	11.5
From graduate school start	8.8	8.8	8.9
From doctoral program start ^c	6.0	5.8	7.0
Received tuition remission (%)	92.5	91.4	96.1
Female doctorate recipients (number)	422	228	194
Citizenship status (%)			

Table 8-17**Visual and performing arts research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies/ design
U.S. citizen or permanent resident	73.5	72.8	74.2
Temporary visa holder	18.5	18.4	18.6
Unknown	8.1	8.8	7.2
Marital status (%)			
Never married	29.4	29.4	29.4
Married	41.5	43.0	39.7
Marriage-like relationship	12.1	12.3	11.9
Separated, divorced, widowed	4.0	2.2	6.2
Unknown	13.0	13.2	12.9
Has dependent age 18 or younger (%)	19.3	17.7	21.3
Has one or more functional limitations (%)	18.6	18.1	19.2
Age at doctorate (median years)	34.0	32.9	34.8
Bachelor's in same field as doctorate (%) ^b	70.3	76.3	63.3
Master's earned (%)	93.2	94.2	92.1
Master's earned at same doctorate institution (%)	39.3	36.2	42.9
Time to doctorate (median years)			
Years since earning bachelor's degree	11.4	10.6	12.1
From graduate school start	9.8	9.3	10.3
From doctoral program start ^c	6.8	6.5	7.7
Received tuition remission (%)	94.1	95.5	92.4

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the ["Technical Notes"](#) for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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	1,996	520	331	490	655
Sex (%)					
Male	42.0	42.5	45.6	32.4	47.0
Female	58.0	57.5	54.4	67.6	53.0
Unknown	0.0	0.0	0.0	0.0	0.0
Citizenship status (%)					
U.S. citizen or permanent resident	65.4	68.8	70.4	72.9	54.7
Temporary visa holder	27.3	26.5	17.2	20.0	38.5
Unknown	7.3	4.6	12.4	7.1	6.9
Marital status (%)					
Never married	24.9	28.8	23.6	20.2	26.0
Married	44.7	40.4	37.2	52.9	46.0
Marriage-like relationship	8.3	10.4	13.0	4.5	7.2
Separated, divorced, widowed	6.1	5.4	5.7	7.8	5.5
Unknown	16.0	15.0	20.5	14.7	15.4
Has dependent age 18 or younger (%)	32.4	26.0	24.4	44.0	32.6
Has one or more functional limitations (%)	14.6	18.3	16.9	13.5	11.3
Age at doctorate (median years)	35.3	33.4	34.4	38.2	35.1
Bachelor's in same field as doctorate (%) ^b	35.9	50.4	30.5	26.5	34.2
Master's earned (%)	94.8	96.3	89.6	98.2	93.6
Master's earned at same doctorate institution (%)	37.4	30.2	45.6	38.5	38.6
Time to doctorate (median years)					
Years since earning bachelor's degree	11.7	10.0	11.0	13.6	11.6
From graduate school start	9.5	8.3	9.5	11.3	9.3
From doctoral program start ^c	5.8	5.0	6.7	6.0	5.3
Received tuition remission (%)	78.5	89.0	80.2	65.2	79.5
Male doctorate recipients (number)	839	221	151	159	308
Citizenship status (%)					
U.S. citizen or permanent resident	59.6	68.3	66.2	65.4	47.1
Temporary visa holder	33.4	26.7	21.2	27.7	47.1
Unknown	7.0	5.0	12.6	6.9	5.8
Marital status (%)					
Never married	25.1	29.4	25.2	22.6	23.4

Table 8-18**Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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	47.8	41.6	37.7	61.0	50.3
Marriage-like relationship	7.6	6.8	13.9	3.8	7.1
Separated, divorced, widowed	3.7	5.0	D	D	4.5
Unknown	15.7	17.2	D	D	14.6
Has dependent age 18 or younger (%)	34.9	29.8	21.4	46.5	38.2
Has one or more functional limitations (%)	12.2	14.3	13.6	14.7	8.8
Age at doctorate (median years)	35.8	35.0	33.8	38.2	35.8
Bachelor's in same field as doctorate (%) ^b	34.5	49.0	34.1	20.4	31.9
Master's earned (%)	94.8	96.4	88.9	99.3	94.0
Master's earned at same doctorate institution (%)	34.9	28.6	50.9	34.5	33.0
Time to doctorate (median years)					
Years since earning bachelor's degree	11.6	11.0	10.5	13.0	11.7
From graduate school start	9.3	8.3	9.0	10.7	9.5
From doctoral program start ^c	5.7	5.1	6.8	5.9	5.3
Received tuition remission (%)	77.5	85.3	78.9	61.0	80.5
Female doctorate recipients (number)	1,157	299	180	331	347
Citizenship status (%)					
U.S. citizen or permanent resident	69.7	69.2	73.9	76.4	61.4
Temporary visa holder	22.9	26.4	13.9	16.3	30.8
Unknown	7.4	4.3	12.2	7.3	7.8
Marital status (%)					
Never married	24.7	28.4	22.2	19.0	28.2
Married	42.5	39.5	36.7	48.9	42.1
Marriage-like relationship	8.8	13.0	12.2	4.8	7.2
Separated, divorced, widowed	7.8	5.7	D	D	6.3
Unknown	16.2	13.4	D	D	16.1
Has dependent age 18 or younger (%)	30.6	23.3	26.9	42.7	27.6
Has one or more functional limitations (%)	16.3	21.1	19.6	12.8	13.6
Age at doctorate (median years)	35.2	32.6	35.6	38.2	34.8

Table 8-18**Other non-science and engineering research doctorate recipients, statistical profile by sex and major field of doctorate: 2021**

(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	37.0	51.5	27.5	29.5	36.2
Master's earned (%)	94.8	96.3	90.2	97.6	93.2
Master's earned at same doctorate institution (%)	39.2	31.3	41.3	40.5	44.0
Time to doctorate (median years)					
Years since earning bachelor's degree	11.8	9.8	11.4	14.1	11.4
From graduate school start	9.7	8.2	9.8	11.8	9.0
From doctoral program start ^c	5.8	5.0	6.7	6.0	5.5
Received tuition remission (%)	79.2	91.6	81.4	67.4	78.6

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.^c Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number, percent, and median years)

Characteristic	Total ^a	U.S. citizen	Non-U.S. citizen	Hispanic or Latino		Not Hispanic or Latino														Ethnicity not reported	
						American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported					
				U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen
All doctorate recipients (number)	52,250	31,674	17,638	2,856	1,148	100	D	3,022	11,551	2,431	593	21,333	3,341	1,088	D	376	500	468	386		
Primary source of support (%) ^b																					
Teaching assistantships	21.3	19.5	24.4	18.4	23.1	10.3	D	17.0	24.8	10.6	28.6	21.0	23.3	18.9	D	21.3	18.1	23.4	21.6		
Research or other assistantships or traineeships ^c	34.7	27.6	47.4	20.6	32.5	13.8	D	35.1	53.0	13.2	35.1	29.4	36.9	23.9	D	24.1	33.5	21.1	47.1		
Fellowships, scholarships, or dissertation grants	24.2	27.0	19.4	34.4	30.3	36.8	D	31.6	16.1	25.8	16.3	25.1	26.2	33.7	D	25.9	28.5	24.0	19.6		
Own resources	15.3	21.3	4.4	23.2	2.1	33.3	D	13.4	4.1	44.3	15.4	19.6	4.0	20.7	D	22.4	4.5	26.3	5.9		
Employer or other sources	4.5	4.6	4.5	3.4	12.1	5.7	D	2.9	2.0	6.0	4.5	4.8	9.6	2.8	D	6.3	15.4	5.3	5.9		
Bachelor's in same field as doctorate (%) ^d	61.7	61.4	64.0	61.1	65.5	47.3	D	60.6	64.3	46.2	54.7	63.7	64.5	58.2	D	56.7	58.7	51.5	56.8		
Master's earned (%)	75.1	73.0	80.3	71.7	84.1	90.2	D	69.0	76.7	86.5	86.9	72.0	89.5	70.8	D	79.5	88.2	84.1	80.3		
Master's earned at same doctorate institution (%)	45.7	51.3	36.5	52.7	42.7	48.8	D	50.4	38.0	39.2	33.8	52.7	30.8	56.1	D	48.6	30.8	52.7	35.5		
Marital status (%)																					
Not married ^e	38.3	36.0	48.7	36.3	44.2	36.0	D	39.2	52.7	46.6	41.3	34.8	47.0	39.4	D	27.9	18.6	11.5	9.1		
Married or in marriage-like relationship	49.5	56.9	44.2	55.7	51.8	51.0	D	55.0	43.5	44.4	52.8	59.9	49.1	56.0	D	44.4	22.2	17.7	14.2		
Unknown	12.2	7.1	7.1	7.9	4.0	13.0	D	5.8	3.8	9.0	5.9	5.4	3.9	4.6	D	27.7	59.2	70.7	76.7		
Has dependent age 18 or younger (%)	21.3	22.8	18.7	22.7	17.8	35.6	D	21.0	16.0	32.7	45.1	22.0	22.6	20.0	D	25.0	29.6	23.0	26.7		
Has one or more functional limitations (%)	11.3	12.8	8.5	17.0	11.3	19.5	D	10.2	8.4	12.2	6.0	12.5	8.4	15.3	D	17.4	7.0	10.5	9.4		
Age at doctorate (median years)	31.4	31.7	31.1	31.8	32.9	37.3	38.8	31.3	30.5	36.6	35.4	31.4	32.3	31.1	31.4	32.9	31.5	33.8	32.2		
Time to doctorate (median years)																					
Years since earning bachelor's degree	8.7	9.0	8.3	8.6	9.4	11.0	14.3	8.6	8.0	12.3	11.3	8.6	9.4	8.3	9.0	10.0	9.1	10.3	9.6		
From graduate school start	7.3	7.3	7.3	7.3	7.8	8.8	9.0	7.0	7.0	9.8	8.3	7.0	8.0	6.9	7.3	8.2	8.1	8.0	7.8		
From doctoral program start ^f	5.7	5.8	5.3	5.8	5.7	6.0	5.0	5.8	5.3	5.8	5.0	5.8	5.3	5.8	5.3	5.9	5.7	5.8	5.4		
Received tuition remission (%)	84.5	83.2	87.0	79.8	82.5	72.7	D	85.6	90.6	66.1	78.3	85.3	79.3	85.0	D	78.5	71.4	84.2	78.9		

D = suppressed to avoid disclosure of confidential information.

^a Includes doctorate recipients who did not report citizenship status.

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

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

^d A bachelor's degree is counted as in same field as doctorate if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same broad field category.

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

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

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: 2021

(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)	47,433	37,827	1,108	7,726	1,978	8,754	981	2,328	1,769	1,178	4,478	3,149	4,378
Definite postdoctoral training plans	28.9	33.6	31.0	45.5	17.7	26.0	48.5	25.1	33.9	27.0	42.3	47.1	19.6
Definite employment plans	41.0	37.3	36.3	23.5	60.3	41.6	25.2	47.7	38.4	44.5	27.9	31.8	51.2
Seeking employment or study	26.9	26.0	30.4	24.3	20.5	30.3	25.8	24.1	25.6	26.2	27.7	18.5	26.5
Other status ^a	3.1	3.0	2.3	6.4	1.5	2.0	0.5	3.1	2.1	2.2	1.9	2.4	2.6
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	94.7	94.6	96.8	94.4	95.1	95.8	99.2	88.9	98.0	95.3	98.4	85.2	97.2
Other training or unknown ^c	5.3	5.4	3.2	5.6	4.9	4.2	0.8	11.1	2.0	4.7	1.6	14.8	2.8
Definite employment plans (%) ^d													
Academe	38.4	29.4	33.1	24.4	26.9	15.6	30.0	47.7	33.7	27.5	13.2	38.2	51.7
In tenure track faculty position (%)	45.4	46.4	45.9	30.4	68.8	50.9	25.7	39.9	47.6	54.2	27.3	35.3	53.5
Not in tenure track position (%)	50.8	49.2	52.6	66.0	25.2	42.4	66.2	53.7	47.2	42.4	63.0	61.3	44.5
Government	7.9	9.1	14.7	8.5	3.5	7.3	26.7	8.7	4.0	7.1	5.2	11.1	16.0
Industry or business ^e	40.9	52.4	44.0	58.8	65.8	71.6	35.2	25.9	57.5	56.7	75.9	30.9	19.3
Nonprofit organization	6.5	6.0	4.7	5.8	2.5	3.5	4.9	14.5	2.9	5.7	3.2	9.7	9.1
Other or unknown ^f	6.2	3.1	3.5	2.5	1.3	2.0	3.2	3.2	1.9	3.1	2.5	10.1	3.9
Primary activity ^g													
Research and development	44.5	54.3	55.9	58.5	67.2	65.4	52.8	29.1	51.2	54.5	66.9	25.3	44.5
Teaching	25.5	17.5	17.6	13.7	15.9	7.7	16.5	32.5	26.8	17.6	9.9	21.9	29.4
Management or administration	9.4	5.1	7.4	4.2	1.9	2.5	4.8	13.5	0.8	4.9	2.9	7.1	9.2
Professional services and other	20.6	23.1	19.1	23.6	14.9	24.4	26.0	24.9	21.2	23.0	20.2	45.6	16.9
Secondary activity ^g													
Research and development	24.1	21.9	21.5	17.0	20.7	18.3	23.8	29.9	28.5	24.6	14.0	26.3	28.4
Teaching	13.6	10.6	12.5	5.0	11.8	6.9	8.2	16.5	6.7	11.7	2.4	13.9	21.7
Management or administration	12.1	12.7	17.0	19.1	7.5	11.5	10.0	15.7	7.8	9.6	15.0	13.0	10.9
Professional services and other	12.4	14.0	13.6	11.4	14.5	19.0	16.5	11.2	17.1	16.6	12.0	9.1	10.6
No secondary activity	37.8	40.8	35.4	47.6	45.5	44.3	41.6	26.7	39.9	37.5	56.6	37.6	28.4
Activity unknown	5.1	5.1	6.5	4.6	5.1	4.9	6.5	5.0	3.5	6.9	4.6	8.8	4.1
Postgraduation location (%) ^h													
United States ⁱ	89.7	90.1	88.2	93.6	90.1	90.5	88.9	93.0	82.0	90.9	89.3	96.8	80.6
Midwest	15.9	15.3	23.2	15.6	9.3	14.6	8.4	19.6	15.3	14.8	15.3	18.0	14.4
Northeast	20.1	20.6	8.6	26.0	20.7	16.5	16.2	19.4	21.8	19.7	22.9	24.4	18.4
South	27.4	25.7	32.2	26.4	18.2	25.3	27.5	34.7	19.9	22.3	20.0	29.1	28.0
West	25.8	27.9	23.6	25.2	41.4	33.5	36.0	18.8	24.6	33.4	30.8	24.8	19.1

Table 9-1
Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2021

(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	10.2	9.9	11.7	6.3	9.7	9.4	11.1	6.9	17.9	9.1	10.6	3.2	19.3
Location unknown	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	38.1	36.8	43.3	44.4	32.3	37.7	40.2	45.4	23.9	39.3	31.2	35.8	28.7
Male doctorate recipients reporting postgraduation status (number)	25,662	21,560	549	3,697	1,507	6,489	549	721	1,276	701	3,025	872	2,174
Definite postdoctoral training plans	29.3	32.7	31.0	46.2	17.4	25.9	47.5	30.7	36.5	24.0	43.8	42.7	19.2
Definite employment plans	41.0	38.3	38.8	23.1	61.3	42.5	27.0	43.0	34.6	46.2	26.2	35.3	54.0
Seeking employment or study	26.8	26.2	27.9	23.6	20.0	29.6	25.1	23.3	26.9	28.4	28.0	19.7	24.7
Other status ^a	2.8	2.7	2.4	7.0	1.3	1.9	0.4	2.9	2.0	1.4	1.8	2.2	2.0
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	95.2	95.2	97.6	93.1	94.7	95.9	99.2	84.2	98.3	97.6	98.6	83.6	97.8
Other training or unknown ^c	4.8	4.8	2.4	6.9	5.3	4.1	0.8	15.8	1.7	2.4	1.4	16.4	2.2
Definite employment plans (%) ^d													
Academe	33.0	25.3	31.0	25.2	24.6	15.3	25.0	41.9	31.9	21.9	10.4	35.7	49.7
In tenure track faculty position (%)	50.1	50.8	47.0	32.6	68.7	51.5	21.6	53.8	46.8	62.0	24.4	34.5	58.0
Not in tenure track position (%)	45.4	44.3	50.0	62.8	24.7	41.3	67.6	40.8	47.5	35.2	65.9	62.7	39.6
Government	8.3	9.1	15.0	8.3	4.0	7.5	27.7	7.4	3.8	6.2	5.8	13.3	18.3
Industry or business ^e	48.5	58.5	47.4	60.1	67.6	72.1	D	36.1	D	64.2	77.9	35.1	20.2
Nonprofit organization	5.7	4.7	4.7	4.2	2.4	3.2	D	11.9	D	4.9	3.7	10.1	7.8
Other or unknown ^f	4.5	2.4	1.9	2.2	1.4	1.9	4.1	2.6	1.6	2.8	2.3	5.8	3.9
Primary activity ^g													
Research and development	51.8	60.4	61.0	62.1	69.5	66.9	56.8	42.2	53.5	55.7	70.0	26.2	48.0
Teaching	21.0	14.0	14.0	13.4	13.5	7.5	13.7	22.3	25.1	15.7	7.1	19.0	26.8
Management or administration	7.1	4.0	8.0	3.5	D	2.4	D	10.8	1.2	3.6	2.5	8.6	8.5
Professional services and other	20.0	21.6	17.0	21.1	D	23.2	D	24.7	20.2	24.9	20.4	46.2	16.7
Secondary activity ^g													
Research and development	22.4	20.6	20.0	17.0	18.8	18.5	22.3	27.4	29.1	25.6	12.6	26.5	26.8
Teaching	13.0	10.2	14.0	6.1	11.9	6.5	7.2	17.2	6.6	9.5	2.1	13.6	24.1
Management or administration	12.1	12.4	17.5	20.1	7.6	11.6	D	16.6	8.7	8.5	16.6	14.0	D
Professional services and other	14.5	16.0	16.0	13.0	15.4	19.4	D	11.8	18.1	16.1	14.1	11.8	D
No secondary activity	38.1	40.9	32.5	43.9	46.3	44.0	37.4	27.0	37.6	40.3	54.5	34.1	26.8
Activity unknown	5.1	5.2	6.1	5.5	5.4	5.1	6.1	4.5	3.6	5.9	5.2	9.4	4.1
Postgraduation location (%) ^h													
United States ⁱ	88.0	88.7	84.9	93.0	90.4	90.1	89.7	92.1	80.3	90.7	89.2	95.9	76.1
Midwest	15.5	15.0	23.2	15.5	9.0	15.3	8.3	19.2	14.5	14.6	15.0	18.5	14.5

Table 9-1
Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2021

(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	19.3	19.6	7.3	26.9	20.0	15.5	13.9	17.7	22.5	17.3	22.9	24.1	17.4
South	25.4	24.3	32.4	25.0	17.6	25.3	31.1	32.6	19.5	20.9	20.4	28.5	25.9
West	27.4	29.4	21.4	25.5	43.4	33.5	35.5	22.2	23.5	37.2	30.8	24.3	17.9
Outside the United States	11.9	11.2	14.9	6.8	9.4	9.8	10.3	7.7	19.6	9.3	10.6	4.1	23.8
Location unknown	0.1	0.1	0.3	0.1	0.3	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	35.8	35.3	36.8	43.3	32.5	37.8	44.0	39.2	23.7	37.8	31.6	35.4	24.7
Female doctorate recipients reporting postgraduation status (number)	21,769	16,265	559	4,029	471	2,265	432	1,607	493	477	1,452	2,277	2,203
Definite postdoctoral training plans	28.5	34.8	31.1	45.0	18.7	26.5	49.8	22.7	27.0	31.4	39.3	48.8	20.1
Definite employment plans	41.1	36.0	33.8	23.9	57.1	38.9	22.9	49.8	48.3	41.9	31.5	30.4	48.5
Seeking employment or study	26.9	25.7	32.9	25.0	22.3	32.1	26.6	24.4	22.3	23.1	27.0	18.0	28.2
Other status ^a	3.5	3.4	2.1	5.8	1.9	2.5	0.7	3.2	2.4	3.4	2.1	2.5	3.1
Definite postdoctoral training plans (%) ^b													
Postdoc fellowship or research associateship	94.0	93.8	96.0	95.6	96.6	95.5	99.1	91.8	97.0	92.7	97.7	85.8	96.6
Other training or unknown ^c	6.0	6.2	4.0	4.4	3.4	4.5	0.9	8.2	3.0	7.3	2.3	14.2	3.4
Definite employment plans (%) ^d													
Academe	44.8	35.3	35.4	23.8	34.9	16.7	37.4	49.9	37.0	36.5	18.2	39.3	53.9
In tenure track faculty position (%)	41.4	41.9	44.8	28.4	69.1	49.0	29.7	35.3	48.9	46.6	30.1	35.7	49.0
Not in tenure track position (%)	55.5	54.2	55.2	69.0	26.6	45.6	64.9	57.9	46.6	49.3	60.2	60.7	49.5
Government	7.5	9.1	14.3	8.6	1.9	6.5	25.3	9.3	4.2	8.5	4.2	10.1	13.5
Industry or business ^e	31.9	43.7	40.2	57.7	59.5	70.1	D	21.9	D	44.5	72.4	29.0	18.2
Nonprofit organization	7.5	7.9	4.8	7.3	3.0	4.5	D	15.5	D	7.0	2.4	9.5	10.5
Other or unknown ^f	8.2	4.1	5.3	2.7	0.7	2.2	2.0	3.5	2.5	3.5	2.8	12.0	3.9
Primary activity ^g													
Research and development	35.9	45.7	50.0	55.3	59.7	60.7	46.7	24.0	47.0	52.5	61.6	25.0	40.6
Teaching	30.7	22.4	21.6	14.0	24.0	8.2	20.7	36.5	30.0	20.8	14.8	23.2	32.3
Management or administration	12.1	6.8	6.8	4.7	D	2.8	D	14.5	0.0	7.1	3.6	6.5	9.9
Professional services and other	21.3	25.2	21.6	25.9	D	28.2	D	24.9	23.0	19.7	20.0	45.3	17.2
Secondary activity ^g													
Research and development	26.2	23.9	23.3	16.9	27.1	17.8	26.1	30.9	27.4	23.0	16.4	26.2	30.1
Teaching	14.3	11.3	10.8	4.1	11.6	8.2	9.8	16.2	7.0	15.3	2.7	14.1	19.1
Management or administration	12.0	13.1	16.5	18.2	7.4	11.0	D	15.4	6.1	11.5	12.3	12.6	D
Professional services and other	10.0	11.2	10.8	9.9	11.2	17.8	D	10.9	15.2	17.5	8.4	7.9	D
No secondary activity	37.4	40.6	38.6	50.8	42.6	45.2	47.8	26.5	44.3	32.8	60.2	39.2	30.0
Activity unknown	5.1	5.0	6.9	3.8	4.1	4.3	7.1	5.3	3.4	8.5	3.7	8.5	4.0

Table 9-1

Science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2021

(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	91.8	91.9	91.7	94.2	89.1	91.6	87.9	93.4	86.3	91.1	89.5	97.2	85.4
Midwest	16.3	15.8	23.1	15.7	10.4	12.6	8.6	19.8	17.3	15.1	15.8	17.8	14.3
Northeast	21.0	22.0	9.9	25.2	23.2	19.6	19.1	20.1	20.2	23.1	23.1	24.5	19.5
South	29.8	27.5	32.0	27.6	20.2	25.3	22.9	35.7	21.0	24.3	19.4	29.4	30.2
West	23.9	26.0	25.9	25.0	34.7	33.2	36.6	17.2	27.5	28.0	30.8	24.9	20.3
Outside the United States	8.2	8.1	8.3	5.8	10.6	8.3	12.1	6.5	13.7	8.9	10.5	2.8	14.6
Location unknown	0.1	*	0.0	*	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	40.8	38.8	50.1	45.4	31.4	37.3	35.4	48.2	24.5	41.4	30.4	36.0	32.8

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

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

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

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

^e Includes doctorate recipients reporting self-employment.

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

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

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

ⁱ Includes cases 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):

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIPs code in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other ^a
Doctorate recipients reporting postgraduation status (number)	47,433	9,606	1,163	3,277	2,736	690	1,740
Definite postdoctoral training plans	28.9	10.5	6.7	5.8	16.0	11.2	12.9
Definite employment plans	41.0	55.7	71.5	64.8	44.8	39.9	51.3
Seeking employment or study	26.9	30.3	18.1	26.7	34.8	45.7	32.1
Other status ^b	3.1	3.5	3.5	2.7	4.3	3.3	3.7
Definite postdoctoral training plans (%) ^c							
Postdoc fellowship or research associateship	94.7	95.8	91.0	94.7	96.8	94.8	96.9
Other training or unknown ^d	5.3	4.2	9.0	5.3	3.2	5.2	3.1
Definite employment plans (%) ^e							
Academe	38.4	62.2	75.5	54.7	66.3	60.7	62.6
In tenure track faculty position (%)	45.4	44.2	80.6	28.3	35.1	35.3	52.3
Not in tenure track position (%)	50.8	52.8	17.4	68.0	62.0	62.3	44.8
Government	7.9	4.9	D	4.3	3.7	D	9.8
Industry or business ^f	40.9	10.7	16.0	7.8	7.8	14.9	15.1
Nonprofit organization	6.5	7.9	D	5.9	12.9	D	8.5
Other or unknown ^g	6.2	14.3	1.8	27.3	9.3	8.0	4.0
Primary activity ^h							
Research and development	44.5	18.8	47.4	11.3	9.6	12.0	24.5
Teaching	25.5	46.4	31.7	40.2	66.6	62.2	42.3
Management or administration	9.4	20.7	10.9	34.8	10.2	9.7	14.7
Professional services and other	20.6	14.0	9.9	13.6	13.6	16.2	18.5
Secondary activity ^h							
Research and development	24.1	29.9	32.1	24.7	34.2	30.9	34.1
Teaching	13.6	21.4	46.3	17.4	14.0	13.9	19.9
Management or administration	12.1	10.5	5.4	11.4	12.1	8.9	11.1
Professional services and other	12.4	8.3	5.9	9.1	7.5	11.2	9.1
No secondary activity	37.8	29.9	10.3	37.5	32.2	35.1	25.7
Activity unknown	5.1	5.1	4.4	5.9	4.5	5.8	4.4
Postgraduation location (%) ⁱ							
United States ^j	89.7	88.3	77.4	93.9	87.4	85.5	87.9
Midwest	15.9	18.2	15.8	19.7	17.5	17.3	18.5
Northeast	20.1	17.7	15.3	14.9	21.5	25.0	17.7
South	27.4	34.8	31.6	41.9	30.4	23.3	33.1
West	25.8	16.9	13.6	16.8	17.4	19.6	18.0
Outside the United States	10.2	11.6	22.5	6.1	12.4	14.5	11.9
Location unknown	0.1	0.1	0.1	*	0.2	0.0	0.2
Postgraduation location in same state as doctorate institution (%)	38.1	43.3	20.4	61.7	37.3	34.7	35.8
Male doctorate recipients reporting postgraduation status (number)	25,662	4,102	648	965	1,442	312	735
Definite postdoctoral training plans	29.3	11.3	6.9	6.2	16.1	8.7	13.6
Definite employment plans	41.0	55.3	72.8	67.2	44.5	40.4	52.0
Seeking employment or study	26.8	30.1	17.4	24.5	35.5	48.4	30.2
Other status ^b	2.8	3.2	2.8	2.2	3.9	2.6	4.1
Definite postdoctoral training plans (%) ^c							
Postdoc fellowship or research associateship	95.2	96.3	86.7	93.3	97.4	100.0	99.0

Table 9-2

Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2021

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other ^a
Other training or unknown ^d	4.8	3.7	13.3	6.7	2.6	0.0	1.0
Definite employment plans (%) ^e							
Academe	33.0	61.0	73.7	54.5	59.6	58.7	59.7
In tenure track faculty position (%)	50.1	49.0	79.6	34.3	35.1	37.8	52.2
Not in tenure track position (%)	45.4	47.1	17.5	60.9	61.3	59.5	43.4
Government	8.3	5.4	D	4.8	4.5	D	10.7
Industry or business ^f	48.5	12.2	18.0	6.2	8.1	22.2	18.6
Nonprofit organization	5.7	9.6	D	7.3	18.3	D	7.3
Other or unknown ^g	4.5	11.8	1.3	27.3	9.5	7.9	3.7
Primary activity ^h							
Research and development	51.8	20.9	48.4	12.4	9.1	8.3	25.2
Teaching	21.0	46.3	30.8	39.4	63.2	65.3	41.9
Management or administration	7.1	18.6	9.6	37.3	11.2	7.4	14.5
Professional services and other	20.0	14.3	11.2	10.9	16.4	19.0	18.4
Secondary activity ^h							
Research and development	22.4	29.1	30.1	24.0	30.9	28.9	33.2
Teaching	13.0	23.1	44.4	18.6	16.0	15.7	18.6
Management or administration	12.1	11.1	6.0	13.4	12.9	8.3	11.5
Professional services and other	14.5	8.9	7.1	8.5	7.8	15.7	11.2
No secondary activity	38.1	27.9	12.3	35.6	32.4	31.4	25.5
Activity unknown	5.1	4.8	5.1	5.4	4.2	4.0	4.5
Postgraduation location (%) ⁱ							
United States ^j	88.0	84.3	76.0	91.2	85.3	83.0	81.5
Midwest	15.5	18.6	15.9	21.0	18.8	18.3	17.8
Northeast	19.3	17.4	16.4	14.5	20.5	17.6	17.0
South	25.4	31.5	30.0	37.3	29.3	24.2	30.7
West	27.4	16.4	12.8	17.9	16.4	22.2	16.0
Outside the United States	11.9	15.6	24.0	8.6	14.4	17.0	18.5
Location unknown	0.1	0.1	0.0	0.1	0.2	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.8	38.5	19.5	58.6	35.5	34.0	36.3
Female doctorate recipients reporting postgraduation status (number)	21,769	5,504	515	2,312	1,294	378	1,005
Definite postdoctoral training plans	28.5	9.8	6.4	5.6	15.8	13.2	12.3
Definite employment plans	41.1	56.0	69.9	63.8	45.3	39.4	50.7
Seeking employment or study	26.9	30.5	19.0	27.6	34.1	43.4	33.5
Other status ^b	3.5	3.7	4.5	2.9	4.8	4.0	3.4
Definite postdoctoral training plans (%) ^c							
Postdoc fellowship or research associateship	94.0	95.4	97.0	95.3	96.1	92.0	95.2
Other training or unknown ^d	6.0	4.6	3.0	4.7	3.9	8.0	4.8
Definite employment plans (%) ^e							
Academe	44.8	63.1	77.8	54.7	73.7	62.4	64.7
In tenure track faculty position (%)	41.4	40.8	81.8	25.7	35.2	33.3	52.4
Not in tenure track position (%)	55.5	56.8	17.1	71.0	62.7	64.5	45.8
Government	7.5	4.6	D	4.1	2.7	D	9.0
Industry or business ^f	31.9	9.5	13.3	8.5	7.5	8.7	12.5
Nonprofit organization	7.5	6.6	D	5.4	7.0	D	9.4

Table 9-2**Non-science and engineering research doctorate recipients, postgraduation plans by sex and broad field of doctorate: 2021**

(Number and percent)

Characteristic	All fields	Non-science and engineering					
		Total	Business	Education	Humanities	Visual and performing arts	Other ^a
Other or unknown ^g	8.2	16.2	2.5	27.3	9.0	8.1	4.3
Primary activity ^h							
Research and development	35.9	17.3	46.1	10.8	10.2	15.2	24.0
Teaching	30.7	46.6	32.9	40.6	70.3	59.4	42.6
Management or administration	12.1	22.3	12.7	33.8	9.1	11.6	14.8
Professional services and other	21.3	13.8	8.4	14.8	10.4	13.8	18.6
Secondary activity ^h							
Research and development	26.2	30.6	34.6	25.0	37.8	32.6	34.8
Teaching	14.3	20.2	48.7	16.9	11.8	12.3	20.9
Management or administration	12.0	10.0	4.6	10.5	11.3	9.4	10.9
Professional services and other	10.0	7.9	4.3	9.3	7.2	7.2	7.6
No secondary activity	37.4	31.4	7.8	38.3	31.9	38.4	25.8
Activity unknown	5.1	5.3	3.6	6.1	4.8	7.4	4.3
Postgraduation location (%) ⁱ							
United States ^j	91.8	91.3	79.1	95.1	89.6	87.4	92.7
Midwest	16.3	17.9	15.8	19.1	16.1	16.6	18.9
Northeast	21.0	17.9	13.7	15.1	22.5	30.7	18.1
South	29.8	37.4	33.8	43.9	31.6	22.6	34.9
West	23.9	17.3	14.8	16.3	18.5	17.6	19.6
Outside the United States	8.2	8.6	20.6	4.9	10.2	12.6	6.9
Location unknown	0.1	0.1	0.3	0.0	0.1	0.0	0.3
Postgraduation location in same state as doctorate institution (%)	40.8	47.0	21.6	63.1	39.2	35.2	35.3

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

^a Includes other non-science and engineering fields not shown separately.^b 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^d Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^e Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^f Includes doctorate recipients reporting self-employment.^g Other is mainly composed of elementary and secondary schools.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.ⁱ Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.^j Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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)	1,108	732	376
Definite postdoctoral training plans	31.0	30.6	31.9
Definite employment plans	36.3	39.1	30.9
Seeking employment or study	30.4	27.9	35.4
Other status ^a	2.3	2.5	1.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	96.8	96.0	98.3
Other training or unknown ^c	3.2	4.0	1.7
Definite employment plans (%) ^d			
Academe	33.1	32.5	34.5
In tenure track faculty position (%)	45.9	47.3	42.5
Not in tenure track position (%)	52.6	50.5	57.5
Government	14.7	9.1	28.4
Industry or business ^e	44.0	52.8	22.4
Nonprofit organization	4.7	2.1	11.2
Other or unknown ^f	3.5	3.5	3.4
Primary activity ^g			
Research and development	55.9	62.2	40.4
Teaching	17.6	16.1	21.1
Management or administration	7.4	3.7	16.5
Professional services and other	19.1	18.0	22.0
Secondary activity ^g			
Research and development	21.5	19.9	25.7
Teaching	12.5	11.6	14.7
Management or administration	17.0	17.2	16.5
Professional services and other	13.6	15.0	10.1
No secondary activity	35.4	36.3	33.0
Activity unknown	6.5	6.6	6.0
Postgraduation location (%) ^h			
United States ⁱ	88.2	88.2	88.1
Midwest	23.2	28.2	12.3
Northeast	8.6	7.8	10.2
South	32.2	32.7	30.9
West	23.6	18.4	34.7
Outside the United States	11.7	11.6	11.9
Location unknown	0.1	0.2	0.0
Postgraduation location in same state as doctorate institution (%)	43.3	40.8	48.7
Male doctorate recipients reporting postgraduation status (number)	549	374	175
Definite postdoctoral training plans	31.0	29.4	34.3
Definite employment plans	38.8	42.0	32.0
Seeking employment or study	27.9	26.5	30.9
Other status ^a	2.4	2.1	2.9
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: 2021

(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	97.6	97.3	98.3
Other training or unknown ^c	2.4	2.7	1.7
Definite employment plans (%) ^d			
Academe	31.0	29.9	33.9
In tenure track faculty position (%)	47.0	44.7	52.6
Not in tenure track position (%)	50.0	51.1	47.4
Government	15.0	D	D
Industry or business ^e	47.4	56.1	23.2
Nonprofit organization	4.7	D	D
Other or unknown ^f	1.9	1.3	3.6
Primary activity ^g			
Research and development	61.0	66.7	45.3
Teaching	14.0	D	D
Management or administration	8.0	D	D
Professional services and other	17.0	15.6	20.8
Secondary activity ^g			
Research and development	20.0	17.7	26.4
Teaching	14.0	12.9	17.0
Management or administration	17.5	17.0	18.9
Professional services and other	16.0	17.7	11.3
No secondary activity	32.5	34.7	26.4
Activity unknown	6.1	6.4	5.4
Postgraduation location (%) ^h			
United States ⁱ	84.9	85.0	84.5
Midwest	23.2	28.5	11.2
Northeast	7.3	6.4	9.5
South	32.4	33.0	31.0
West	21.4	16.5	32.8
Outside the United States	14.9	14.6	15.5
Location unknown	0.3	0.4	0.0
Postgraduation location in same state as doctorate institution (%)	36.8	36.7	37.1
Female doctorate recipients reporting postgraduation status (number)	559	358	201
Definite postdoctoral training plans	31.1	31.8	29.9
Definite employment plans	33.8	36.0	29.9
Seeking employment or study	32.9	29.3	39.3
Other status ^a	2.1	2.8	1.0
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	96.0	94.7	98.3
Other training or unknown ^c	4.0	5.3	1.7
Definite employment plans (%) ^d			
Academe	35.4	35.7	35.0
In tenure track faculty position (%)	44.8	50.0	33.3
Not in tenure track position (%)	55.2	50.0	66.7
Government	14.3	D	D

Table 9-3**Agricultural sciences and natural resources research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	40.2	48.8	21.7
Nonprofit organization	4.8	D	D
Other or unknown ^f	5.3	6.2	3.3
Primary activity ^g			
Research and development	50.0	56.7	35.7
Teaching	21.6	D	D
Management or administration	6.8	D	D
Professional services and other	21.6	20.8	23.2
Secondary activity ^g			
Research and development	23.3	22.5	25.0
Teaching	10.8	10.0	12.5
Management or administration	16.5	17.5	14.3
Professional services and other	10.8	11.7	8.9
No secondary activity	38.6	38.3	39.3
Activity unknown	6.9	7.0	6.7
Postgraduation location (%) ^h			
United States ⁱ	91.7	91.8	91.7
Midwest	23.1	28.0	13.3
Northeast	9.9	9.5	10.8
South	32.0	32.5	30.8
West	25.9	20.6	36.7
Outside the United States	8.3	8.2	8.3
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	50.1	45.3	60.0

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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)	7,726	1,286	538	614	936	368	937	953	278	666	1,150
Definite postdoctoral training plans	45.5	46.2	29.2	46.6	47.2	42.4	48.9	50.6	44.2	44.1	45.8
Definite employment plans	23.5	21.4	46.7	21.0	25.4	24.2	22.6	15.8	23.4	21.9	22.8
Seeking employment or study	24.3	27.1	21.0	25.9	26.0	24.2	21.1	22.1	26.3	22.1	25.9
Other status ^a	6.4	5.1	3.0	6.4	1.4	9.2	7.0	11.2	5.8	11.9	5.0
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	94.4	96.0	94.9	94.4	96.8	92.3	93.9	92.9	95.9	91.2	94.3
Other training or unknown ^c	5.6	4.0	5.1	5.6	3.2	7.7	6.1	7.1	4.1	8.8	5.7
Definite employment plans (%) ^d											
Academe	24.4	17.5	15.5	31.0	34.5	23.6	24.1	21.2	18.5	32.2	27.5
In tenure track faculty position (%)	35.4	33.3	32.5	32.5	19.5	D	15.6	D	D	57.4	31.9
Not in tenure track position (%)	66.0	52.1	64.1	65.0	78.0	81.0	66.7	84.4	66.7	42.6	65.3
Government	8.5	4.4	6.8	D	21.4	D	7.5	4.6	D	D	10.3
Industry or business ^e	58.8	70.9	71.7	58.9	30.3	67.4	60.8	66.2	64.6	57.5	50.0
Nonprofit organization	5.8	4.4	4.8	D	10.5	D	5.2	6.6	D	D	9.2
Other or unknown ^f	2.5	2.9	1.2	3.1	3.4	2.2	2.4	1.3	3.1	2.1	3.1
Primary activity ^g											
Research and development	58.5	64.7	76.4	43.0	50.2	61.9	60.7	52.9	51.7	53.5	54.8
Teaching	13.7	11.6	4.5	21.9	19.2	13.1	10.9	5.7	10.0	23.9	17.6
Management or administration	4.2	3.1	D	D	8.7	D	D	6.4	10.0	D	5.2
Professional services and other	23.6	20.5	D	D	21.8	D	D	35.0	28.3	D	22.4
Secondary activity ^g											
Research and development	17.0	14.7	12.4	18.0	24.9	D	13.4	17.9	D	23.9	14.8
Teaching	5.0	3.9	5.8	4.7	5.7	D	3.0	4.3	D	6.3	6.8
Management or administration	19.1	19.0	9.1	16.4	23.6	9.5	25.4	18.6	28.3	18.3	22.8
Professional services and other	11.4	7.4	20.7	7.8	16.6	16.7	5.0	12.9	15.0	10.6	5.6
No secondary activity	47.6	55.0	52.1	53.1	29.3	59.5	53.2	46.4	28.3	40.8	50.0
Activity unknown	4.6	6.2	3.6	0.8	3.8	5.6	5.2	7.3	7.7	2.7	4.6
Postgraduation location (%) ^h											
United States ⁱ	93.6	93.8	92.4	94.0	91.8	93.5	95.2	94.9	94.7	95.5	91.9
Midwest	15.6	15.8	13.7	16.6	14.6	20.8	15.2	12.3	20.2	17.5	16.0
Northeast	26.0	26.5	31.6	30.4	21.2	24.1	25.2	32.9	19.7	23.0	23.4
South	26.4	25.1	21.1	19.8	25.0	25.3	28.5	24.2	33.5	32.3	30.4
West	25.2	25.9	25.7	27.0	30.9	23.3	25.7	25.0	20.7	22.3	21.5
Outside the United States	6.3	6.2	7.4	5.8	8.2	6.1	4.6	5.1	5.3	4.5	8.1

Table 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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	0.2	0.2	0.0	0.4	0.1	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	44.4	47.5	41.7	46.7	39.9	48.2	45.4	42.5	47.3	38.2	47.5
Male doctorate recipients reporting postgraduation status (number)	3,697	689	313	291	376	172	409	434	127	350	536
Definite postdoctoral training plans	46.2	48.0	29.7	49.1	47.6	39.5	48.4	53.7	41.7	45.7	46.5
Definite employment plans	23.1	20.8	45.7	16.5	23.1	29.1	23.2	15.0	24.4	21.7	21.6
Seeking employment or study	23.6	26.6	21.1	27.8	27.1	24.4	20.0	18.7	22.8	19.7	25.4
Other status ^a	7.0	4.5	3.5	6.5	2.1	7.0	8.1	12.4	11.0	12.9	6.2
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	93.1	94.6	94.6	93.0	96.6	97.1	91.4	89.3	96.2	90.6	93.2
Other training or unknown ^c	6.9	5.4	5.4	7.0	3.4	2.9	8.6	10.7	3.8	9.4	6.8
Definite employment plans (%) ^d											
Academe	25.2	D	17.5	D	39.1	D	26.3	26.2	D	D	25.0
In tenure track faculty position (%)	32.6	D	32.0	D	29.4	D	36.0	D	D	D	31.0
Not in tenure track position (%)	62.8	55.0	64.0	46.2	67.6	78.6	56.0	D	D	46.7	69.0
Government	8.3	D	7.7	D	19.5	D	D	D	D	D	14.7
Industry or business ^e	60.1	74.1	69.9	66.7	28.7	62.0	63.2	61.5	58.1	53.9	51.7
Nonprofit organization	4.2	3.5	4.2	D	8.0	D	D	D	D	0.0	6.0
Other or unknown ^f	2.2	2.8	0.7	0.0	4.6	4.0	2.1	0.0	3.2	2.6	2.6
Primary activity ^g											
Research and development	62.1	67.9	80.3	51.1	45.2	67.4	65.6	61.7	51.7	50.0	56.0
Teaching	13.4	D	3.6	14.9	25.0	D	13.3	D	D	29.7	16.5
Management or administration	3.5	D	D	D	9.5	D	D	D	D	D	D
Professional services and other	21.1	22.1	D	D	20.2	10.9	D	31.7	24.1	D	D
Secondary activity ^g											
Research and development	17.0	15.3	D	D	31.0	10.9	11.1	13.3	24.1	29.7	15.6
Teaching	6.1	D	D	D	7.1	D	D	D	D	D	8.3
Management or administration	20.1	19.8	8.0	21.3	28.6	17.4	26.7	11.7	37.9	20.3	23.9
Professional services and other	13.0	D	22.6	D	14.3	D	D	D	D	D	6.4
No secondary activity	43.9	50.4	48.9	51.1	19.0	43.5	53.3	53.3	17.2	35.1	45.9
Activity unknown	5.5	8.4	4.2	2.1	3.4	8.0	5.3	7.7	6.5	2.6	6.0
Postgraduation location (%) ^h											
United States ⁱ	93.0	93.7	91.9	93.7	90.6	91.5	93.2	94.0	94.0	96.6	91.5
Midwest	15.5	16.5	14.0	13.1	15.4	20.3	12.6	13.4	25.0	17.8	15.3
Northeast	26.9	25.3	30.1	35.1	21.1	24.6	29.4	31.9	22.6	24.6	24.1
South	25.0	24.1	20.8	15.2	23.7	28.0	24.6	24.5	22.6	32.2	30.7

Table 9-4
Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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	25.5	27.4	26.7	30.4	30.5	18.6	26.6	24.2	23.8	22.0	20.8
Outside the United States	6.8	6.3	8.1	5.8	9.4	7.6	6.5	6.0	6.0	3.4	8.5
Location unknown	0.1	0.0	0.0	0.5	0.0	0.8	0.3	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	43.3	44.7	40.7	45.5	36.8	51.7	43.0	44.0	40.5	39.4	47.1
Female doctorate recipients reporting postgraduation status (number)	4,029	597	225	323	560	196	528	519	151	316	614
Definite postdoctoral training plans	45.0	44.1	28.4	44.3	47.0	44.9	49.2	48.0	46.4	42.4	45.3
Definite employment plans	23.9	22.1	48.0	25.1	27.0	19.9	22.2	16.6	22.5	22.2	23.8
Seeking employment or study	25.0	27.8	20.9	24.1	25.2	24.0	22.0	25.0	29.1	24.7	26.4
Other status ^a	5.8	5.9	2.2	6.2	0.9	11.2	6.3	10.2	1.3	10.8	4.1
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	95.6	97.7	95.3	95.8	97.0	88.6	95.8	96.4	95.7	91.8	95.3
Other training or unknown ^c	4.4	2.3	4.7	4.2	3.0	11.4	4.2	3.6	4.3	8.2	4.7
Definite employment plans (%) ^d											
Academe	23.8	D	13.0	D	31.8	D	22.2	17.4	D	D	29.5
In tenure track faculty position (%)	28.4	D	35.7	D	12.5	D	23.1	D	D	D	32.6
Not in tenure track position (%)	69.0	50.0	64.3	74.1	85.4	85.7	76.9	D	D	35.3	62.8
Government	8.6	D	5.6	D	22.5	D	D	D	D	7.1	6.8
Industry or business ^e	57.7	67.4	74.1	54.3	31.1	74.4	59.0	69.8	70.6	61.4	48.6
Nonprofit organization	7.3	5.3	5.6	D	11.9	D	D	D	0.0	D	11.6
Other or unknown ^f	2.7	3.0	1.9	4.9	2.6	0.0	2.6	2.3	2.9	1.4	3.4
Primary activity ^g											
Research and development	55.3	61.4	71.4	38.3	53.1	55.3	56.8	46.3	51.6	57.4	53.9
Teaching	14.0	D	5.7	25.9	15.9	D	9.0	D	D	17.6	18.4
Management or administration	4.7	D	0.0	D	8.3	D	D	D	D	D	D
Professional services and other	25.9	18.9	22.9	D	22.8	D	D	37.5	32.3	D	D
Secondary activity ^g											
Research and development	16.9	14.2	D	D	21.4	D	15.3	21.3	D	17.6	14.2
Teaching	4.1	D	D	D	4.8	D	D	D	D	D	5.7
Management or administration	18.2	18.1	10.5	13.6	20.7	0.0	24.3	23.8	19.4	16.2	22.0
Professional services and other	9.9	D	18.1	D	17.9	D	D	D	D	D	5.0
No secondary activity	50.8	59.8	56.2	54.3	35.2	78.9	53.2	41.3	38.7	47.1	53.2
Activity unknown	3.8	3.8	2.8	0.0	4.0	2.6	5.1	7.0	8.8	2.9	3.4
Postgraduation location (%) ^h											
United States ⁱ	94.2	93.9	93.0	94.2	92.5	95.3	96.8	95.8	95.2	94.1	92.2
Midwest	15.7	14.9	13.4	19.6	14.0	21.3	17.2	11.3	16.3	17.2	16.5

Table 9-4

Biological and biomedical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All biological and biomedical sciences fields	Biochemistry, biophysics, and molecular biology	Bioinformatics, biostatistics, and computational biology	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	25.2	27.8	33.7	26.3	21.3	23.6	22.0	33.7	17.3	21.1	22.9
South	27.6	26.3	21.5	23.7	25.8	22.8	31.6	23.9	42.3	32.4	30.2
West	25.0	24.1	24.4	24.1	31.2	27.6	24.9	25.7	18.3	22.5	22.2
Outside the United States	5.8	6.1	6.4	5.8	7.5	4.7	3.2	4.2	4.8	5.9	7.8
Location unknown	*	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	45.4	50.9	43.0	47.8	41.8	44.9	47.2	41.2	52.9	36.8	47.9

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

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

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

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

^e Includes doctorate recipients reporting self-employment.

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

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

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

ⁱ Includes cases 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):
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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Doctorate recipients reporting postgraduation status (number)	1,978	1,384	594
Definite postdoctoral training plans	17.7	18.0	17.0
Definite employment plans	60.3	60.2	60.6
Seeking employment or study	20.5	20.5	20.5
Other status ^a	1.5	1.3	1.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.1	94.8	96.0
Other training or unknown ^c	4.9	5.2	4.0
Definite employment plans (%) ^d			
Academe	26.9	24.0	33.6
In tenure track faculty position (%)	68.8	73.0	62.0
Not in tenure track position (%)	25.2	22.0	30.6
Government	3.5	2.9	5.0
Industry or business ^e	65.8	69.6	56.9
Nonprofit organization	2.5	2.2	3.3
Other or unknown ^f	1.3	1.3	1.1
Primary activity ^g			
Research and development	67.2	69.1	63.0
Teaching	15.9	14.4	19.2
Management or administration	1.9	0.8	4.6
Professional services and other	14.9	15.7	13.2
Secondary activity ^g			
Research and development	20.7	20.3	21.5
Teaching	11.8	10.6	14.6
Management or administration	7.5	6.5	9.7
Professional services and other	14.5	13.4	16.9
No secondary activity	45.5	49.2	37.2
Activity unknown	5.1	6.0	3.1
Postgraduation location (%) ^h			
United States ⁱ	90.1	90.9	88.1
Midwest	9.3	9.1	10.0
Northeast	20.7	21.0	20.2
South	18.2	15.5	24.5
West	41.4	45.3	32.3
Outside the United States	9.7	8.9	11.5
Location unknown	0.3	0.2	0.4
Postgraduation location in same state as doctorate institution (%)	32.3	31.1	35.1
Male doctorate recipients reporting postgraduation status (number)	1,507	1,085	422
Definite postdoctoral training plans	17.4	17.6	16.8
Definite employment plans	61.3	61.0	62.1
Seeking employment or study	20.0	20.1	19.7
Other status ^a	1.3	1.3	1.4
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	94.7	94.8	94.4
Other training or unknown ^c	5.3	5.2	5.6
Definite employment plans (%) ^d			

Table 9-5**Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Academe	24.6	21.9	31.3
In tenure track faculty position (%)	68.7	71.7	63.4
Not in tenure track position (%)	24.7	22.1	29.3
Government	4.0	D	D
Industry or business ^e	67.6	71.1	58.8
Nonprofit organization	2.4	D	D
Other or unknown ^f	1.4	1.4	1.5
Primary activity ^g			
Research and development	69.5	71.0	65.7
Teaching	13.5	12.3	16.5
Management or administration	D	D	3.5
Professional services and other	D	D	14.2
Secondary activity ^g			
Research and development	18.8	18.1	20.5
Teaching	11.9	10.6	15.0
Management or administration	7.6	6.5	10.2
Professional services and other	15.4	14.2	18.5
No secondary activity	46.3	50.6	35.8
Activity unknown	5.4	6.3	3.1
Postgraduation location (%) ^h			
United States ⁱ	90.4	91.3	88.0
Midwest	9.0	8.4	10.5
Northeast	20.0	19.9	20.1
South	17.6	15.5	23.1
West	43.4	47.4	33.3
Outside the United States	9.4	8.4	11.7
Location unknown	0.3	0.2	0.3
Postgraduation location in same state as doctorate institution (%)	32.5	30.9	36.6
Female doctorate recipients reporting postgraduation status (number)	471	299	172
Definite postdoctoral training plans	18.7	19.4	17.4
Definite employment plans	57.1	57.2	57.0
Seeking employment or study	22.3	22.1	22.7
Other status ^a	1.9	1.3	2.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	96.6	94.8	100.0
Other training or unknown ^c	3.4	5.2	0.0
Definite employment plans (%) ^d			
Academe	34.9	32.2	39.8
In tenure track faculty position (%)	69.1	76.4	59.0
Not in tenure track position (%)	26.6	21.8	33.3
Government	1.9	D	D
Industry or business ^e	59.5	63.7	52.0
Nonprofit organization	3.0	D	D
Other or unknown ^f	0.7	1.2	0.0
Primary activity ^g			
Research and development	59.7	62.0	55.8
Teaching	24.0	22.7	26.3

Table 9-5**Computer and information sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All computer and information sciences fields	Computer science	Computer and information sciences, other
Management or administration	D	D	7.4
Professional services and other	D	D	10.5
Secondary activity ^g			
Research and development	27.1	28.8	24.2
Teaching	11.6	10.4	13.7
Management or administration	7.4	6.7	8.4
Professional services and other	11.2	10.4	12.6
No secondary activity	42.6	43.6	41.1
Activity unknown	4.1	4.7	3.1
Postgraduation location (%) ^h			
United States ⁱ	89.1	89.5	88.3
Midwest	10.4	11.4	8.6
Northeast	23.2	24.9	20.3
South	20.2	15.7	28.1
West	34.7	37.6	29.7
Outside the United States	10.6	10.5	10.9
Location unknown	0.3	0.0	0.8
Postgraduation location in same state as doctorate institution (%)	31.4	31.4	31.3

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All engineering fields	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)	8,754	1,015	1,197	939	1,866	438	563	601	1,274	861
Definite postdoctoral training plans	26.0	33.6	27.1	29.0	17.2	26.3	16.2	30.9	29.1	30.0
Definite employment plans	41.6	28.3	37.0	34.7	55.4	38.6	59.9	32.1	39.5	40.5
Seeking employment or study	30.3	32.5	34.5	34.6	25.7	33.1	22.7	35.6	30.1	27.1
Other status ^a	2.0	5.6	1.3	1.7	1.7	2.1	1.2	1.0	1.3	2.3
Definite postdoctoral training plans (%) ^b										
Postdoc fellowship or research associateship	95.8	94.7	96.9	95.6	94.1	93.9	95.6	97.8	97.0	95.7
Other training or unknown ^c	4.2	5.3	3.1	4.4	5.9	6.1	4.4	2.2	3.0	4.3
Definite employment plans (%) ^d										
Academe	15.6	15.3	5.6	24.8	13.6	14.8	29.1	8.3	14.5	18.9
In tenure track faculty position (%)	50.9	29.5	36.0	67.9	56.4	52.0	63.3	31.3	41.1	34.8
Not in tenure track position (%)	42.4	68.2	52.0	30.9	39.3	40.0	26.5	62.5	50.7	53.0
Government	7.3	4.2	3.2	13.5	D	D	6.8	6.7	10.5	16.0
Industry or business ^e	71.6	76.3	87.8	53.4	78.0	72.8	57.3	80.3	69.6	57.0
Nonprofit organization	3.5	2.4	2.0	3.4	D	D	5.0	3.1	4.0	7.2
Other or unknown ^f	2.0	1.7	1.4	4.9	1.8	3.6	1.8	1.6	1.4	0.9
Primary activity ^g										
Research and development	65.4	63.2	75.7	33.7	71.4	63.8	61.3	71.3	64.6	68.5
Teaching	7.7	6.1	3.1	14.1	6.6	8.0	12.7	3.9	7.9	8.6
Management or administration	2.5	5.1	D	4.2	0.9	D	5.9	D	2.1	4.8
Professional services and other	24.4	25.6	D	48.0	21.1	D	20.1	D	25.4	18.2
Secondary activity ^g										
Research and development	18.3	16.2	12.5	27.1	18.3	16.0	21.1	15.5	20.7	16.1
Teaching	6.9	3.6	2.2	11.4	6.3	10.4	15.5	3.3	6.0	6.8
Management or administration	11.5	22.4	13.0	14.1	6.9	11.7	7.4	14.9	11.9	13.1
Professional services and other	19.0	18.1	20.4	10.1	20.1	19.6	19.8	21.0	19.0	20.8
No secondary activity	44.3	39.7	51.9	37.6	48.5	42.3	36.2	45.3	42.4	43.2
Activity unknown	4.9	3.5	6.1	5.8	4.2	3.6	4.2	6.2	6.8	3.7
Postgraduation location (%) ^h										
United States ⁱ	90.5	95.1	91.3	85.3	91.3	84.2	88.6	91.6	90.2	92.1
Midwest	14.6	15.8	12.4	14.9	12.1	13.4	16.1	19.0	16.9	15.3
Northeast	16.5	27.7	22.8	11.4	12.6	14.4	19.4	11.6	15.7	14.0
South	25.3	24.0	24.9	34.3	21.6	21.5	27.8	20.3	27.0	27.7
West	33.5	26.9	30.6	23.9	44.7	34.9	24.5	40.6	30.3	33.8
Outside the United States	9.4	4.8	8.7	14.7	8.6	15.8	11.2	8.2	9.7	7.7

Table 9-6
Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All engineering fields	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	0.1	0.2	0.0	0.0	0.1	0.0	0.2	0.3	0.1	0.2
Postgraduation location in same state as doctorate institution (%)	37.7	47.3	30.4	45.5	34.6	37.3	29.0	34.8	43.1	36.4
Male doctorate recipients reporting postgraduation status (number)	6,489	602	845	657	1,542	311	405	415	1,043	669
Definite postdoctoral training plans	25.9	32.7	28.8	30.1	16.7	25.1	17.0	33.0	29.0	29.4
Definite employment plans	42.5	28.4	34.7	35.0	56.7	43.1	59.5	30.4	40.2	40.5
Seeking employment or study	29.6	32.9	34.9	33.0	25.2	29.9	22.5	35.2	29.9	27.4
Other status ^a	1.9	6.0	1.5	1.8	1.3	1.9	1.0	1.0	0.9	2.5
Definite postdoctoral training plans (%) ^b										
Postdoc fellowship or research associateship	95.9	93.4	96.3	97.0	94.2	92.3	95.7	97.8	97.7	96.4
Other training or unknown ^c	4.1	6.6	3.7	3.0	5.8	7.7	4.3	2.2	2.3	3.6
Definite employment plans (%) ^d										
Academe	15.3	17.5	6.8	23.9	13.3	D	29.9	D	12.9	16.2
In tenure track faculty position (%)	51.5	D	D	72.7	53.4	D	62.5	D	44.4	38.6
Not in tenure track position (%)	41.3	D	D	27.3	41.4	50.0	27.8	D	46.3	45.5
Government	7.5	D	D	13.9	3.9	6.7	7.5	5.6	10.5	16.6
Industry or business ^e	72.1	73.7	86.7	55.2	77.9	74.6	56.8	84.9	71.4	58.7
Nonprofit organization	3.2	D	D	2.6	3.1	D	4.6	D	3.6	7.4
Other or unknown ^f	1.9	2.9	1.4	4.3	1.8	3.0	1.2	0.0	1.7	1.1
Primary activity ^g										
Research and development	66.9	69.3	76.4	32.9	72.5	64.3	61.3	70.9	66.8	70.4
Teaching	7.5	5.5	D	13.9	6.3	D	13.5	D	7.4	7.3
Management or administration	2.4	4.9	0.0	D	D	D	6.1	0.0	D	D
Professional services and other	23.2	20.2	D	D	D	26.4	19.1	D	D	D
Secondary activity ^g										
Research and development	18.5	15.3	13.8	29.2	17.9	D	22.6	D	19.9	16.2
Teaching	6.5	D	D	10.6	D	D	D	D	5.1	6.2
Management or administration	11.6	24.5	13.0	14.8	D	D	D	17.1	10.7	12.7
Professional services and other	19.4	D	D	11.1	20.0	20.2	19.6	17.9	20.5	21.5
No secondary activity	44.0	37.4	50.0	34.7	48.6	39.5	34.3	49.6	43.7	43.5
Activity unknown	5.1	4.7	5.8	5.7	4.3	3.7	4.6	7.1	6.7	4.1
Postgraduation location (%) ^h										
United States ⁱ	90.1	95.4	90.9	85.0	91.0	83.5	88.4	90.1	90.2	91.5
Midwest	15.3	19.0	13.1	15.4	12.4	15.6	14.8	19.8	17.9	15.8
Northeast	15.5	24.7	22.6	10.7	11.8	14.6	20.3	10.6	15.4	13.0
South	25.3	23.1	24.4	34.6	21.6	21.7	29.0	20.5	26.5	29.1

Table 9-6
Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All engineering fields	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	33.5	27.7	30.2	23.8	44.9	31.6	23.5	39.2	30.1	32.9
Outside the United States	9.8	4.3	9.1	15.0	8.8	16.5	11.6	9.5	9.7	8.3
Location unknown	0.1	0.3	0.0	0.0	0.2	0.0	0.0	0.4	0.1	0.2
Postgraduation location in same state as doctorate institution (%)	37.8	46.5	30.8	47.7	33.6	40.1	30.0	36.1	43.6	36.8
Female doctorate recipients reporting postgraduation status (number)	2,265	413	352	282	324	127	158	186	231	192
Definite postdoctoral training plans	26.5	34.9	23.0	26.2	19.4	29.1	13.9	26.3	29.9	31.8
Definite employment plans	38.9	28.1	42.6	34.0	49.1	27.6	60.8	36.0	36.4	40.6
Seeking employment or study	32.1	32.0	33.5	38.3	28.1	40.9	23.4	36.6	30.7	26.0
Other status ^a	2.5	5.1	0.9	1.4	3.4	2.4	1.9	1.1	3.0	1.6
Definite postdoctoral training plans (%) ^b										
Postdoc fellowship or research associateship	95.5	96.5	98.8	91.9	93.7	97.3	95.5	98.0	94.2	93.4
Other training or unknown ^c	4.5	3.5	1.2	8.1	6.3	2.7	4.5	2.0	5.8	6.6
Definite employment plans (%) ^d										
Academe	16.7	12.1	3.3	27.1	15.1	D	27.1	D	22.6	28.2
In tenure track faculty position (%)	49.0	D	D	57.7	70.8	D	65.4	D	31.6	27.3
Not in tenure track position (%)	45.6	D	D	38.5	29.2	0.0	23.1	D	63.2	68.2
Government	6.5	D	D	12.5	D	D	5.2	9.0	10.7	14.1
Industry or business ^e	70.1	80.2	90.0	49.0	78.6	65.7	58.3	71.6	60.7	51.3
Nonprofit organization	4.5	D	D	5.2	D	D	6.3	D	6.0	6.4
Other or unknown ^f	2.2	0.0	1.3	6.3	1.9	5.7	3.1	4.5	0.0	0.0
Primary activity ^g										
Research and development	60.7	54.4	74.3	35.6	65.6	61.8	61.3	71.9	53.8	61.8
Teaching	8.2	7.0	D	14.4	7.8	D	10.8	D	10.3	13.2
Management or administration	2.8	5.3	D	D	D	0.0	5.4	D	D	D
Professional services and other	28.2	33.3	22.1	D	D	D	22.6	D	D	D
Secondary activity ^g										
Research and development	17.8	17.5	10.0	22.2	20.1	D	17.2	D	24.4	15.8
Teaching	8.2	D	D	13.3	D	D	D	D	10.3	9.2
Management or administration	11.0	19.3	12.9	12.2	D	D	D	10.9	17.9	14.5
Professional services and other	17.8	D	D	7.8	20.8	17.6	20.4	26.6	11.5	18.4
No secondary activity	45.2	43.0	55.7	44.4	48.1	52.9	40.9	37.5	35.9	42.1
Activity unknown	4.3	1.7	6.7	6.3	3.1	2.9	3.1	4.5	7.1	2.6
Postgraduation location (%) ^h										
United States ⁱ	91.6	94.6	92.2	85.9	92.8	86.1	89.0	94.8	90.2	94.2
Midwest	12.6	11.2	10.8	13.5	10.8	6.9	19.5	17.2	12.4	13.7

Table 9-6

Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All engineering fields	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	19.6	31.9	23.4	12.9	16.2	13.9	16.9	13.8	17.0	17.3
South	25.3	25.4	26.0	33.5	21.6	20.8	24.6	19.8	29.4	23.0
West	33.2	25.8	31.6	24.1	43.7	44.4	27.1	44.0	31.4	36.7
Outside the United States	8.3	5.4	7.8	14.1	7.2	13.9	10.2	5.2	9.8	5.8
Location unknown	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.3	48.5	29.4	40.0	40.1	29.2	26.3	31.9	41.2	35.3

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

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

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

^e Includes doctorate recipients reporting self-employment.

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

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

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

ⁱ Includes cases 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):

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, table A-4 for a summary of SED-CIP codes in the new SED field taxonomy, table A-5 for a full list of SED-CIP codes in the new field taxonomy, and table A-6 for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean/ marine sciences and atmospheric science
Doctorate recipients reporting postgraduation status (number)	981	570	411
Definite postdoctoral training plans	48.5	42.8	56.4
Definite employment plans	25.2	28.6	20.4
Seeking employment or study	25.8	28.1	22.6
Other status ^a	0.5	0.5	0.5
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	99.2	98.8	99.6
Other training or unknown ^c	0.8	1.2	0.4
Definite employment plans (%) ^d			
Academe	30.0	29.4	31.0
In tenure track faculty position (%)	25.7	D	D
Not in tenure track position (%)	66.2	60.4	76.9
Government	26.7	20.2	39.3
Industry or business ^e	35.2	42.3	21.4
Nonprofit organization	4.9	D	D
Other or unknown ^f	3.2	D	D
Primary activity ^g			
Research and development	52.8	47.1	64.1
Teaching	16.5	17.6	14.1
Management or administration	4.8	D	D
Professional services and other	26.0	D	D
Secondary activity ^g			
Research and development	23.8	28.8	14.1
Teaching	8.2	7.8	9.0
Management or administration	10.0	7.2	15.4
Professional services and other	16.5	17.6	14.1
No secondary activity	41.6	38.6	47.4
Activity unknown	6.5	6.1	7.1
Postgraduation location (%) ^h			
United States ⁱ	88.9	88.0	90.2
Midwest	8.4	10.8	5.4
Northeast	16.2	14.0	19.0
South	27.5	26.0	29.4
West	36.0	36.9	34.8
Outside the United States	11.1	12.0	9.8
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	40.2	39.6	41.1
Male doctorate recipients reporting postgraduation status (number)	549	338	211
Definite postdoctoral training plans	47.5	41.7	56.9
Definite employment plans	27.0	29.9	22.3
Seeking employment or study	25.1	27.8	20.9
Other status ^a	0.4	0.6	0.0
Definite postdoctoral training plans (%) ^b			

Table 9-7**Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean/ marine sciences and atmospheric science
Postdoc fellowship or research associateship	99.2	98.6	100.0
Other training or unknown ^c	0.8	1.4	0.0
Definite employment plans (%) ^d			
Academe	25.0	22.8	29.8
In tenure track faculty position (%)	21.6	34.8	0.0
Not in tenure track position (%)	67.6	52.2	92.9
Government	27.7	21.8	40.4
Industry or business ^e	D	45.5	D
Nonprofit organization	D	5.9	D
Other or unknown ^f	4.1	4.0	4.3
Primary activity ^g			
Research and development	56.8	50.5	70.5
Teaching	13.7	13.7	13.6
Management or administration	D	D	0.0
Professional services and other	D	D	15.9
Secondary activity ^g			
Research and development	22.3	26.3	13.6
Teaching	7.2	D	D
Management or administration	D	D	D
Professional services and other	D	D	D
No secondary activity	37.4	37.9	36.4
Activity unknown	6.1	5.9	6.4
Postgraduation location (%) ^h			
United States ⁱ	89.7	89.7	89.8
Midwest	8.3	9.9	6.0
Northeast	13.9	10.7	18.6
South	31.1	28.9	34.1
West	35.5	39.7	29.3
Outside the United States	10.3	10.3	10.2
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	44.0	44.2	43.7
Female doctorate recipients reporting postgraduation status (number)	432	232	200
Definite postdoctoral training plans	49.8	44.4	56.0
Definite employment plans	22.9	26.7	18.5
Seeking employment or study	26.6	28.4	24.5
Other status ^a	0.7	0.4	1.0
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	99.1	99.0	99.1
Other training or unknown ^c	0.9	1.0	0.9
Definite employment plans (%) ^d			
Academe	37.4	40.3	32.4
In tenure track faculty position (%)	29.7	D	D
Not in tenure track position (%)	64.9	68.0	58.3
Government	25.3	17.7	37.8

Table 9-7**Geosciences, atmospheric, and ocean sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All geosciences, atmospheric, and ocean sciences fields	Geological and earth sciences	Ocean/ marine sciences and atmospheric science
Industry or business ^e	D	37.1	D
Nonprofit organization	D	D	D
Other or unknown ^f	2.0	D	D
Primary activity ^g			
Research and development	46.7	41.4	55.9
Teaching	20.7	24.1	14.7
Management or administration	D	D	D
Professional services and other	D	D	D
Secondary activity ^g			
Research and development	26.1	32.8	14.7
Teaching	9.8	D	D
Management or administration	D	D	D
Professional services and other	D	D	D
No secondary activity	47.8	39.7	61.8
Activity unknown	7.1	6.5	8.1
Postgraduation location (%) ^h			
United States ⁱ	87.9	85.5	90.6
Midwest	8.6	12.1	4.7
Northeast	19.1	18.8	19.5
South	22.9	21.8	24.2
West	36.6	32.7	40.9
Outside the United States	12.1	14.5	9.4
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.4	32.7	38.3

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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)	2,328	554	361	645	768
Definite postdoctoral training plans	25.1	15.7	29.9	30.7	25.0
Definite employment plans	47.7	60.6	40.4	42.3	46.2
Seeking employment or study	24.1	21.5	29.1	24.0	23.6
Other status ^a	3.1	2.2	0.6	2.9	5.1
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	88.9	97.7	93.5	81.8	89.6
Other training or unknown ^c	11.1	2.3	6.5	18.2	10.4
Definite employment plans (%) ^d					
Academe	47.7	61.6	12.3	46.2	50.1
In tenure track faculty position (%)	39.9	32.4	D	D	52.2
Not in tenure track position (%)	53.7	57.0	D	D	44.9
Government	8.7	7.4	6.2	14.7	6.5
Industry or business ^e	25.9	10.4	75.3	18.3	25.9
Nonprofit organization	14.5	17.0	4.1	17.6	14.1
Other or unknown ^f	3.2	3.6	2.1	3.3	3.4
Primary activity ^g					
Research and development	29.1	6.9	76.6	37.8	24.2
Teaching	32.5	54.5	7.3	21.2	30.7
Management or administration	13.5	17.9	3.6	16.2	11.2
Professional services and other	24.9	20.7	12.4	24.7	33.9
Secondary activity ^g					
Research and development	29.9	35.7	13.1	30.5	30.7
Teaching	16.5	16.6	4.4	16.6	21.2
Management or administration	15.7	12.5	18.2	19.3	15.0
Professional services and other	11.2	11.0	9.5	10.4	12.7
No secondary activity	26.7	24.1	54.7	23.2	20.4
Activity unknown	5.0	5.1	6.2	5.1	4.5
Postgraduation location (%) ^h					
United States ⁱ	93.0	93.1	92.5	92.1	93.8
Midwest	19.6	17.7	18.9	16.6	23.9
Northeast	19.4	22.9	23.6	19.5	14.4
South	34.7	35.2	25.2	37.6	36.2
West	18.8	17.3	24.8	17.4	18.3
Outside the United States	6.9	6.9	7.5	7.4	6.2
Location unknown	0.1	0.0	0.0	0.4	0.0
Postgraduation location in same state as doctorate institution (%)	45.4	56.3	33.5	44.4	43.3
Male doctorate recipients reporting postgraduation status (number)	721	62	173	205	281
Definite postdoctoral training plans	30.7	24.2	32.4	32.7	29.5
Definite employment plans	43.0	45.2	39.9	42.9	44.5
Seeking employment or study	23.3	29.0	27.2	22.4	20.3
Other status ^a	2.9	1.6	0.6	2.0	5.3
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	84.2	100.0	94.6	67.2	88.0

Table 9-8**Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	15.8	0.0	5.4	32.8	12.0
Definite employment plans (%) ^d					
Academe	41.9	50.0	14.5	46.6	52.0
In tenure track faculty position (%)	53.8	42.9	D	D	61.5
Not in tenure track position (%)	40.8	42.9	D	D	33.8
Government	7.4	D	D	12.5	4.0
Industry or business ^e	36.1	D	D	17.0	32.0
Nonprofit organization	11.9	D	D	19.3	9.6
Other or unknown ^f	2.6	0.0	1.4	4.5	2.4
Primary activity ^g					
Research and development	42.2	D	D	45.1	31.1
Teaching	22.3	40.7	7.7	18.3	28.7
Management or administration	10.8	D	D	15.9	12.3
Professional services and other	24.7	44.4	15.4	20.7	27.9
Secondary activity ^g					
Research and development	27.4	37.0	15.4	29.3	30.3
Teaching	17.2	D	D	19.5	21.3
Management or administration	16.6	D	D	15.9	15.6
Professional services and other	11.8	D	D	17.1	10.7
No secondary activity	27.0	29.6	46.2	18.3	22.1
Activity unknown	4.5	3.6	5.8	6.8	2.4
Postgraduation location (%) ^h					
United States ⁱ	92.1	88.4	92.8	89.0	94.7
Midwest	19.2	16.3	16.0	16.8	23.6
Northeast	17.7	20.9	27.2	18.1	11.1
South	32.6	25.6	22.4	36.8	37.0
West	22.2	25.6	27.2	17.4	22.1
Outside the United States	7.7	11.6	7.2	10.3	5.3
Location unknown	0.2	0.0	0.0	0.6	0.0
Postgraduation location in same state as doctorate institution (%)	39.2	51.2	31.2	37.4	42.8
Female doctorate recipients reporting postgraduation status (number)	1,607	492	188	440	487
Definite postdoctoral training plans	22.7	14.6	27.7	29.8	22.4
Definite employment plans	49.8	62.6	41.0	42.0	47.2
Seeking employment or study	24.4	20.5	30.9	24.8	25.5
Other status ^a	3.2	2.2	0.5	3.4	4.9
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	91.8	97.2	92.3	89.3	90.8
Other training or unknown ^c	8.2	2.8	7.7	10.7	9.2
Definite employment plans (%) ^d					
Academe	49.9	62.7	10.4	45.9	49.1
In tenure track faculty position (%)	35.3	31.6	D	D	46.9
Not in tenure track position (%)	57.9	58.0	D	D	51.3
Government	9.3	D	D	15.7	7.8
Industry or business ^e	21.9	D	D	18.9	22.6
Nonprofit organization	15.5	D	D	16.8	16.5
Other or unknown ^f	3.5	3.9	2.6	2.7	3.9

Table 9-8**Health sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	24.0	D	D	34.5	20.3
Teaching	36.5	55.8	6.9	22.6	31.8
Management or administration	14.5	D	D	16.4	10.6
Professional services and other	24.9	18.5	9.7	26.6	37.3
Secondary activity ^g					
Research and development	30.9	35.6	11.1	31.1	30.9
Teaching	16.2	D	D	15.3	21.2
Management or administration	15.4	D	D	20.9	14.7
Professional services and other	10.9	D	D	7.3	13.8
No secondary activity	26.5	23.6	62.5	25.4	19.4
Activity unknown	5.3	5.2	6.5	4.3	5.7
Postgraduation location (%) ^h					
United States ⁱ	93.4	93.7	92.2	93.7	93.2
Midwest	19.8	17.9	21.7	16.5	24.2
Northeast	20.1	23.2	20.2	20.3	16.5
South	35.7	36.3	27.9	38.0	35.7
West	17.2	16.3	22.5	17.4	15.9
Outside the United States	6.5	6.3	7.8	6.0	6.8
Location unknown	0.1	0.0	0.0	0.3	0.0
Postgraduation location in same state as doctorate institution (%)	48.2	56.8	35.7	47.8	43.7

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Doctorate recipients reporting postgraduation status (number)	1,769	452	742	575
Definite postdoctoral training plans	33.9	34.5	41.9	23.0
Definite employment plans	38.4	34.5	26.5	56.9
Seeking employment or study	25.6	28.3	30.2	17.6
Other status ^a	2.1	2.7	1.3	2.6
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	98.0	96.8	98.7	97.7
Other training or unknown ^c	2.0	3.2	1.3	2.3
Definite employment plans (%) ^d				
Academe	33.7	28.8	49.7	26.3
In tenure track faculty position (%)	47.6	44.4	38.8	59.3
Not in tenure track position (%)	47.2	40.0	57.1	39.5
Government	4.0	D	4.1	D
Industry or business ^e	57.5	61.5	38.6	67.0
Nonprofit organization	2.9	D	3.6	D
Other or unknown ^f	1.9	1.3	4.1	0.9
Primary activity ^g				
Research and development	51.2	55.0	30.7	61.9
Teaching	26.8	18.8	52.1	15.2
Management or administration	0.8	D	D	D
Professional services and other	21.2	D	D	D
Secondary activity ^g				
Research and development	28.5	24.2	36.5	25.7
Teaching	6.7	D	D	10.5
Management or administration	7.8	D	D	6.3
Professional services and other	17.1	17.4	10.4	21.0
No secondary activity	39.9	45.6	41.1	36.5
Activity unknown	3.5	4.5	2.5	3.7
Postgraduation location (%) ^h				
United States ⁱ	82.0	88.1	71.1	90.0
Midwest	15.3	12.5	15.9	16.6
Northeast	21.8	23.1	22.6	20.0
South	19.9	23.4	16.3	21.6
West	24.6	28.5	16.1	31.4
Outside the United States	17.9	11.9	28.7	10.0
Location unknown	0.1	0.0	0.2	0.0
Postgraduation location in same state as doctorate institution (%)	23.9	29.5	16.9	27.9
Male doctorate recipients reporting postgraduation status (number)	1,276	315	579	382
Definite postdoctoral training plans	36.5	35.6	43.5	26.7
Definite employment plans	34.6	34.6	22.5	53.1
Seeking employment or study	26.9	27.6	32.8	17.3
Other status ^a	2.0	2.2	1.2	2.9
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	98.3	95.5	99.2	99.0
Other training or unknown ^c	1.7	4.5	0.8	1.0
Definite employment plans (%) ^d				

Table 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Academe	31.9	29.4	46.9	23.6
In tenure track faculty position (%)	46.8	46.9	36.1	60.4
Not in tenure track position (%)	47.5	37.5	59.0	39.6
Government	3.8	D	D	3.4
Industry or business ^e	D	D	D	69.5
Nonprofit organization	D	D	5.4	3.0
Other or unknown ^f	1.6	1.8	3.1	0.5
Primary activity ^g				
Research and development	53.5	60.2	32.5	63.5
Teaching	25.1	19.4	48.4	13.2
Management or administration	1.2	D	D	D
Professional services and other	20.2	D	D	D
Secondary activity ^g				
Research and development	29.1	24.3	38.1	25.9
Teaching	6.6	4.9	D	D
Management or administration	8.7	9.7	D	D
Professional services and other	18.1	20.4	9.5	22.3
No secondary activity	37.6	40.8	38.9	35.0
Activity unknown	3.6	5.5	3.1	3.0
Postgraduation location (%) ^h				
United States ⁱ	80.3	87.8	68.1	90.2
Midwest	14.5	11.8	14.4	16.7
Northeast	22.5	25.3	22.8	20.0
South	19.5	23.5	15.7	21.3
West	23.5	26.2	15.2	31.8
Outside the United States	19.6	12.2	31.7	9.8
Location unknown	0.1	0.0	0.3	0.0
Postgraduation location in same state as doctorate institution (%)	23.7	28.5	16.0	29.8
Female doctorate recipients reporting postgraduation status (number)	493	137	163	193
Definite postdoctoral training plans	27.0	32.1	36.2	15.5
Definite employment plans	48.3	34.3	41.1	64.2
Seeking employment or study	22.3	29.9	20.9	18.1
Other status ^a	2.4	3.6	1.8	2.1
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	97.0	100.0	96.6	93.3
Other training or unknown ^c	3.0	0.0	3.4	6.7
Definite employment plans (%) ^d				
Academe	37.0	27.7	55.2	30.6
In tenure track faculty position (%)	48.9	38.5	43.2	57.9
Not in tenure track position (%)	46.6	46.2	54.1	39.5
Government	4.2	D	D	D
Industry or business ^e	D	D	D	62.9
Nonprofit organization	D	D	0.0	D
Other or unknown ^f	2.5	0.0	6.0	1.6
Primary activity ^g				
Research and development	47.0	43.5	27.3	59.3
Teaching	30.0	17.4	59.1	18.6

Table 9-9**Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Management or administration	0.0	0.0	0.0	0.0
Professional services and other	23.0	39.1	13.6	22.0
Secondary activity ^g				
Research and development	27.4	23.9	33.3	25.4
Teaching	7.0	D	0.0	D
Management or administration	6.1	D	9.1	D
Professional services and other	15.2	10.9	12.1	18.6
No secondary activity	44.3	56.5	45.5	39.0
Activity unknown	3.4	2.1	1.5	4.8
Postgraduation location (%) ^h				
United States ⁱ	86.3	89.0	80.2	89.6
Midwest	17.3	14.3	20.6	16.2
Northeast	20.2	17.6	22.2	20.1
South	21.0	23.1	18.3	22.1
West	27.5	34.1	19.0	30.5
Outside the United States	13.7	11.0	19.8	10.4
Location unknown	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	24.5	31.9	19.8	24.0

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Doctorate recipients reporting postgraduation status (number)	1,178	423	755
Definite postdoctoral training plans	27.0	21.0	30.3
Definite employment plans	44.5	56.0	38.0
Seeking employment or study	26.2	21.5	28.9
Other status ^a	2.2	1.4	2.6
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	95.3	96.6	94.8
Other training or unknown ^c	4.7	3.4	5.2
Definite employment plans (%) ^d			
Academe	27.5	20.7	33.1
In tenure track faculty position (%)	54.2	73.5	44.2
Not in tenure track position (%)	42.4	24.5	51.6
Government	7.1	3.8	9.8
Industry or business ^e	56.7	70.5	45.3
Nonprofit organization	5.7	3.8	7.3
Other or unknown ^f	3.1	1.3	4.5
Primary activity ^g			
Research and development	54.5	64.9	45.4
Teaching	17.6	D	D
Management or administration	4.9	D	D
Professional services and other	23.0	24.6	21.5
Secondary activity ^g			
Research and development	24.6	22.8	26.2
Teaching	11.7	8.8	14.2
Management or administration	9.6	6.6	12.3
Professional services and other	16.6	17.1	16.2
No secondary activity	37.5	44.7	31.2
Activity unknown	6.9	3.8	9.4
Postgraduation location (%) ^h			
United States ⁱ	90.9	92.9	89.5
Midwest	14.8	16.0	14.1
Northeast	19.7	16.0	22.1
South	22.3	13.8	27.7
West	33.4	46.6	25.0
Outside the United States	9.1	7.1	10.5
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	39.3	38.7	39.7
Male doctorate recipients reporting postgraduation status (number)	701	331	370
Definite postdoctoral training plans	24.0	20.2	27.3
Definite employment plans	46.2	55.3	38.1
Seeking employment or study	28.4	23.0	33.2
Other status ^a	1.4	1.5	1.4
Definite postdoctoral training plans (%) ^b			

Table 9-10

Multidisciplinary/ interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Postdoc fellowship or research associateship	97.6	97.0	98.0
Other training or unknown ^c	2.4	3.0	2.0
Definite employment plans (%) ^d			
Academe	21.9	D	D
In tenure track faculty position (%)	62.0	69.7	55.3
Not in tenure track position (%)	35.2	D	D
Government	6.2	D	D
Industry or business ^e	64.2	72.1	53.9
Nonprofit organization	4.9	D	D
Other or unknown ^f	2.8	1.6	4.3
Primary activity ^g			
Research and development	55.7	62.3	46.9
Teaching	15.7	10.3	23.1
Management or administration	3.6	D	D
Professional services and other	24.9	D	D
Secondary activity ^g			
Research and development	25.6	24.0	27.7
Teaching	9.5	6.3	13.8
Management or administration	8.5	D	D
Professional services and other	16.1	17.7	13.8
No secondary activity	40.3	D	D
Activity unknown	5.9	4.4	7.8
Postgraduation location (%) ^h			
United States ⁱ	90.7	93.6	87.6
Midwest	14.6	16.4	12.8
Northeast	17.3	14.8	19.8
South	20.9	14.0	28.1
West	37.2	47.6	26.4
Outside the United States	9.3	6.4	12.4
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	37.8	39.2	36.4
Female doctorate recipients reporting postgraduation status (number)	477	92	385
Definite postdoctoral training plans	31.4	23.9	33.2
Definite employment plans	41.9	58.7	37.9
Seeking employment or study	23.1	16.3	24.7
Other status ^a	3.4	1.1	3.9
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	92.7	95.5	92.2
Other training or unknown ^c	7.3	4.5	7.8
Definite employment plans (%) ^d			
Academe	36.5	D	D
In tenure track faculty position (%)	46.6	81.3	36.8
Not in tenure track position (%)	49.3	D	D
Government	8.5	D	D

Table 9-10**Multidisciplinary/ interdisciplinary sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All multidisciplinary/ interdisciplinary sciences fields	Interdisciplinary computer sciences	Multidisciplinary/ interdisciplinary sciences, other
Industry or business ^e	44.5	64.8	37.0
Nonprofit organization	7.0	D	D
Other or unknown ^f	3.5	0.0	4.8
Primary activity ^g			
Research and development	52.5	73.6	43.8
Teaching	20.8	D	D
Management or administration	7.1	D	D
Professional services and other	19.7	D	D
Secondary activity ^g			
Research and development	23.0	18.9	24.6
Teaching	15.3	17.0	14.6
Management or administration	11.5	D	D
Professional services and other	17.5	15.1	18.5
No secondary activity	32.8	D	D
Activity unknown	8.5	1.9	11.0
Postgraduation location (%) ^h			
United States ⁱ	91.1	90.8	91.2
Midwest	15.1	14.5	15.3
Northeast	23.1	19.7	24.1
South	24.3	13.2	27.4
West	28.0	43.4	23.7
Outside the United States	8.9	9.2	8.8
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	41.4	36.8	42.7

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Doctorate recipients reporting postgraduation status (number)	4,478	251	2,176	418	1,633
Definite postdoctoral training plans	42.3	61.0	39.4	34.9	45.3
Definite employment plans	27.9	16.3	31.0	29.7	25.0
Seeking employment or study	27.7	20.3	27.5	33.3	27.6
Other status ^a	1.9	2.4	2.0	2.2	1.7
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	98.4	99.3	97.6	98.6	99.1
Other training or unknown ^c	1.6	0.7	2.4	1.4	0.9
Definite employment plans (%) ^d					
Academe	13.2	31.7	13.3	8.9	12.5
In tenure track faculty position (%)	27.3	D	28.9	D	25.5
Not in tenure track position (%)	63.0	76.9	65.6	54.5	56.9
Government	5.2	0.0	4.7	6.5	6.1
Industry or business ^e	75.9	46.3	77.5	79.0	75.3
Nonprofit organization	3.2	D	2.2	D	4.2
Other or unknown ^f	2.5	D	2.2	D	2.0
Primary activity ^g					
Research and development	66.9	35.0	69.4	64.9	66.7
Teaching	9.9	D	11.1	D	D
Management or administration	2.9	D	3.1	D	D
Professional services and other	20.2	37.5	16.5	26.3	23.0
Secondary activity ^g					
Research and development	14.0	30.0	10.8	19.3	16.3
Teaching	2.4	0.0	2.3	D	D
Management or administration	15.0	D	18.9	18.4	D
Professional services and other	12.0	D	8.6	D	17.3
No secondary activity	56.6	55.0	59.4	45.6	55.3
Activity unknown	4.6	2.4	3.7	8.1	5.4
Postgraduation location (%) ^h					
United States ⁱ	89.3	86.6	92.6	88.5	85.5
Midwest	15.3	13.4	17.3	14.1	13.2
Northeast	22.9	22.2	25.4	19.6	20.6
South	20.0	21.6	20.3	21.1	19.2
West	30.8	29.4	29.2	33.7	32.5
Outside the United States	10.6	13.4	7.2	11.5	14.4
Location unknown	0.1	0.0	0.1	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	31.2	30.9	32.8	37.0	27.6
Male doctorate recipients reporting postgraduation status (number)	3,025	154	1,257	291	1,323
Definite postdoctoral training plans	43.8	60.4	42.4	37.5	44.6
Definite employment plans	26.2	14.9	29.0	27.5	24.6
Seeking employment or study	28.0	21.4	26.7	33.3	28.9
Other status ^a	1.8	3.2	1.8	1.7	1.6
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	98.6	98.9	97.7	100.0	99.2
Other training or unknown ^c	1.4	1.1	2.3	0.0	0.8
Definite employment plans (%) ^d					

Table 9-11

Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Academe	10.4	D	9.3	D	10.5
In tenure track faculty position (%)	24.4	0.0	29.4	D	D
Not in tenure track position (%)	65.9	D	67.6	D	D
Government	5.8	0.0	D	D	D
Industry or business ^e	77.9	52.2	80.5	77.5	76.9
Nonprofit organization	3.7	D	D	D	D
Other or unknown ^f	2.3	D	2.2	D	1.5
Primary activity ^g					
Research and development	70.0	34.8	73.9	66.2	69.3
Teaching	7.1	D	7.5	D	D
Management or administration	2.5	0.0	2.9	D	D
Professional services and other	20.4	D	15.7	D	22.0
Secondary activity ^g					
Research and development	12.6	D	D	20.3	13.6
Teaching	2.1	0.0	D	D	2.3
Management or administration	16.6	D	D	21.6	D
Professional services and other	14.1	D	10.4	D	D
No secondary activity	54.5	65.2	56.2	39.2	55.3
Activity unknown	5.2	0.0	5.2	7.5	4.9
Postgraduation location (%) ^h					
United States ⁱ	89.2	91.4	92.6	87.8	85.9
Midwest	15.0	12.9	17.3	12.2	13.7
Northeast	22.9	22.4	25.9	18.5	20.9
South	20.4	25.0	19.6	24.3	19.7
West	30.8	31.0	29.5	32.8	31.6
Outside the United States	10.6	8.6	7.1	12.2	14.0
Location unknown	0.1	0.0	0.2	0.0	0.1
Postgraduation location in same state as doctorate institution (%)	31.6	33.6	34.2	35.4	27.9
Female doctorate recipients reporting postgraduation status (number)	1,452	97	919	127	309
Definite postdoctoral training plans	39.3	61.9	35.4	29.1	47.9
Definite employment plans	31.5	18.6	33.8	34.6	27.2
Seeking employment or study	27.0	18.6	28.6	33.1	22.3
Other status ^a	2.1	1.0	2.2	3.1	1.9
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	97.7	100.0	97.2	94.6	98.6
Other training or unknown ^c	2.3	0.0	2.8	5.4	1.4
Definite employment plans (%) ^d					
Academe	18.2	D	18.0	D	20.2
In tenure track faculty position (%)	30.1	D	28.6	0.0	D
Not in tenure track position (%)	60.2	D	64.3	D	D
Government	4.2	0.0	D	D	D
Industry or business ^e	72.4	38.9	74.0	81.8	69.0
Nonprofit organization	2.4	D	D	D	D
Other or unknown ^f	2.8	5.6	2.3	4.5	3.6
Primary activity ^g					
Research and development	61.6	35.3	64.3	62.5	56.4
Teaching	14.8	D	15.1	D	D

Table 9-11**Physical sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All physical sciences fields	Astronomy and astrophysics	Chemistry	Materials sciences	Physics
Management or administration	3.6	D	3.3	D	D
Professional services and other	20.0	D	17.4	D	26.9
Secondary activity ^g					
Research and development	16.4	D	D	17.5	26.9
Teaching	2.7	0.0	D	0.0	D
Management or administration	12.3	0.0	D	12.5	D
Professional services and other	8.4	D	6.6	12.5	D
No secondary activity	60.2	41.2	63.0	57.5	55.1
Activity unknown	3.7	5.6	1.9	9.1	7.1
Postgraduation location (%) ^h					
United States ⁱ	89.5	79.5	92.6	90.1	84.1
Midwest	15.8	14.1	17.3	18.5	11.2
Northeast	23.1	21.8	24.7	22.2	19.4
South	19.4	16.7	21.2	13.6	17.2
West	30.8	26.9	28.8	35.8	35.8
Outside the United States	10.5	20.5	7.4	9.9	15.9
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	30.4	26.9	30.8	40.7	26.7

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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)	3,149	1,055	1,158	613	323
Definite postdoctoral training plans	47.1	72.7	33.8	37.0	30.7
Definite employment plans	31.8	15.4	43.0	35.7	37.5
Seeking employment or study	18.5	9.6	20.6	25.6	26.3
Other status ^a	2.4	1.8	2.5	1.6	5.6
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	85.2	84.2	78.8	96.9	91.9
Other training or unknown ^c	14.8	15.8	21.2	3.1	8.1
Definite employment plans (%) ^d					
Academe	38.2	23.5	36.7	46.1	49.6
In tenure track faculty position (%)	35.3	31.6	31.7	43.6	35.0
Not in tenure track position (%)	61.3	63.2	65.6	54.5	58.3
Government	11.1	24.1	9.4	6.8	8.3
Industry or business ^e	30.9	31.5	28.9	37.4	26.4
Nonprofit organization	9.7	16.7	8.2	6.8	11.6
Other or unknown ^f	10.1	4.3	16.7	2.7	4.1
Primary activity ^g					
Research and development	25.3	D	19.9	45.9	D
Teaching	21.9	6.0	18.4	32.5	36.4
Management or administration	7.1	D	10.4	4.3	D
Professional services and other	45.6	83.5	51.4	17.2	29.0
Secondary activity ^g					
Research and development	26.3	19.5	23.5	35.9	28.0
Teaching	13.9	13.5	14.7	12.4	14.0
Management or administration	13.0	D	14.0	11.0	D
Professional services and other	9.1	D	11.2	10.5	D
No secondary activity	37.6	49.6	36.5	30.1	42.1
Activity unknown	8.8	17.9	7.0	4.6	11.6
Postgraduation location (%) ^h					
United States ⁱ	96.8	98.3	97.5	93.0	95.5
Midwest	18.0	15.5	22.3	14.1	19.5
Northeast	24.4	28.5	19.5	27.4	20.9
South	29.1	25.2	33.9	28.5	28.2
West	24.8	28.7	21.1	22.9	26.4
Outside the United States	3.2	1.7	2.5	7.0	4.5
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.8	29.7	41.3	36.3	38.6
Male doctorate recipients reporting postgraduation status (number)	872	277	297	214	84
Definite postdoctoral training plans	42.7	67.9	29.0	34.1	29.8
Definite employment plans	35.3	19.9	47.1	36.9	40.5
Seeking employment or study	19.7	9.7	21.5	27.6	26.2
Other status ^a	2.2	2.5	2.0	1.4	3.6
Definite postdoctoral training plans (%) ^b					

Table 9-12

Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Postdoc fellowship or research associateship	83.6	80.9	76.7	94.5	96.0
Other training or unknown ^c	16.4	19.1	23.3	5.5	4.0
Definite employment plans (%) ^d					
Academe	35.7	21.8	34.3	41.8	50.0
In tenure track faculty position (%)	34.5	D	37.5	D	41.2
Not in tenure track position (%)	62.7	D	58.3	D	52.9
Government	13.3	30.9	13.6	D	D
Industry or business ^e	35.1	29.1	34.3	44.3	26.5
Nonprofit organization	10.1	16.4	7.9	7.6	14.7
Other or unknown ^f	5.8	1.8	10.0	D	D
Primary activity ^g					
Research and development	26.2	D	22.7	D	29.0
Teaching	19.0	D	14.1	D	35.5
Management or administration	8.6	D	14.8	D	0.0
Professional services and other	46.2	80.4	48.4	25.7	35.5
Secondary activity ^g					
Research and development	26.5	19.6	20.3	37.8	35.5
Teaching	13.6	D	14.8	12.2	D
Management or administration	14.0	D	15.6	9.5	D
Professional services and other	11.8	D	17.2	8.1	D
No secondary activity	34.1	45.7	32.0	32.4	29.0
Activity unknown	9.4	16.4	8.6	6.3	8.8
Postgraduation location (%) ^h					
United States ⁱ	95.9	97.5	96.0	D	D
Midwest	18.5	17.7	20.8	13.8	25.4
Northeast	24.1	31.3	17.3	D	D
South	28.5	19.3	37.2	30.9	27.1
West	24.3	28.8	19.9	23.0	25.4
Outside the United States	4.1	2.5	4.0	D	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.4	30.0	40.3	36.2	37.3
Female doctorate recipients reporting postgraduation status (number)	2,277	778	861	399	239
Definite postdoctoral training plans	48.8	74.4	35.4	38.6	31.0
Definite employment plans	30.4	13.8	41.6	35.1	36.4
Seeking employment or study	18.0	9.5	20.3	24.6	26.4
Other status ^a	2.5	1.5	2.7	1.8	6.3
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	85.8	85.3	79.3	98.1	90.5
Other training or unknown ^c	14.2	14.7	20.7	1.9	9.5
Definite employment plans (%) ^d					
Academe	39.3	24.3	37.7	48.6	49.4
In tenure track faculty position (%)	35.7	D	29.6	D	32.6
Not in tenure track position (%)	60.7	D	68.1	D	60.5
Government	10.1	20.6	7.8	D	D

Table 9-12**Psychology research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number, percent, and median years)

Characteristic	All psychology fields	Clinical psychology	Counseling and applied psychology	Research and experimental psychology	Psychology, other
Industry or business ^e	29.0	32.7	26.8	33.6	26.4
Nonprofit organization	9.5	16.8	8.4	6.4	10.3
Other or unknown ^f	12.0	5.6	19.3	D	D
Primary activity ^g					
Research and development	25.0	D	18.8	D	D
Teaching	23.2	D	20.0	D	36.8
Management or administration	6.5	0.0	8.7	D	D
Professional services and other	45.3	85.1	52.5	12.6	26.3
Secondary activity ^g					
Research and development	26.2	19.5	24.8	34.8	25.0
Teaching	14.1	D	14.6	12.6	D
Management or administration	12.6	13.8	13.4	11.9	9.2
Professional services and other	7.9	D	9.0	11.9	D
No secondary activity	39.2	51.7	38.2	28.9	47.4
Activity unknown	8.5	18.7	6.4	3.6	12.6
Postgraduation location (%) ^h					
United States ⁱ	97.2	98.5	98.0	D	D
Midwest	17.8	14.7	22.8	14.3	17.4
Northeast	24.5	27.6	20.2	D	D
South	29.4	27.3	32.7	27.2	28.6
West	24.9	28.7	21.6	22.8	26.7
Outside the United States	2.8	1.5	2.0	D	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	36.0	29.6	41.6	36.4	39.1

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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)	4,378	360	345	1,204	517	375	544	1,033
Definite postdoctoral training plans	19.6	26.4	21.2	17.2	26.9	12.5	23.5	16.6
Definite employment plans	51.2	30.3	40.0	66.6	43.5	55.5	49.1	47.7
Seeking employment or study	26.5	39.7	34.5	15.0	26.3	27.7	25.4	32.9
Other status ^a	2.6	3.6	4.1	1.2	3.3	4.0	2.0	2.8
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	97.2	95.8	94.5	98.1	100.0	93.6	99.2	95.3
Other training or unknown ^c	2.8	4.2	5.5	1.9	0.0	6.4	0.8	4.7
Definite employment plans (%) ^d								
Academe	51.7	67.0	70.3	46.0	56.4	37.0	60.3	51.7
In tenure track faculty position (%)	53.5	27.4	30.9	75.9	45.7	32.5	51.6	48.6
Not in tenure track position (%)	44.5	71.2	68.0	22.2	54.3	63.6	47.8	47.5
Government	16.0	5.5	3.6	20.0	10.2	23.6	12.7	16.6
Industry or business ^e	19.3	15.6	8.0	27.1	18.2	15.9	12.0	16.4
Nonprofit organization	9.1	9.2	7.2	5.5	9.3	17.3	11.6	10.5
Other or unknown ^f	3.9	2.8	10.9	1.5	5.8	6.3	3.4	4.7
Primary activity ^g								
Research and development	44.5	25.0	9.8	62.1	31.4	41.7	45.5	36.1
Teaching	29.4	50.0	68.9	15.8	40.5	12.1	37.0	34.2
Management or administration	9.2	9.3	16.7	3.2	9.0	27.1	5.8	11.3
Professional services and other	16.9	15.7	4.5	18.9	19.0	19.1	11.7	18.5
Secondary activity ^g								
Research and development	28.4	35.2	44.7	23.1	33.3	18.6	31.9	31.0
Teaching	21.7	12.0	7.6	29.1	21.9	20.1	18.7	18.0
Management or administration	10.9	13.0	3.8	8.8	6.2	15.6	14.8	13.8
Professional services and other	10.6	6.5	7.6	13.0	8.1	12.6	9.3	9.6
No secondary activity	28.4	33.3	36.4	26.0	30.5	33.2	25.3	27.6
Activity unknown	4.1	0.9	4.3	3.5	6.7	4.3	3.7	4.5
Postgraduation location (%) ^h								
United States ⁱ	80.6	87.3	89.1	69.5	81.6	90.6	89.1	83.3
Midwest	14.4	17.6	18.5	12.3	15.7	14.1	14.7	14.6
Northeast	18.4	20.1	23.7	18.3	20.1	17.6	21.8	13.7

Table 9-13**Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	28.0	21.6	20.9	22.8	26.6	43.5	31.9	32.5
West	19.1	26.5	23.7	15.7	18.4	15.3	20.0	21.7
Outside the United States	19.3	12.7	10.4	30.4	18.4	9.4	10.9	16.7
Location unknown	0.1	0.0	0.5	0.1	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	28.7	33.8	41.7	15.7	28.8	40.4	35.9	33.7
Male doctorate recipients reporting postgraduation status (number)	2,174	111	119	801	302	159	207	475
Definite postdoctoral training plans	19.2	29.7	25.2	17.4	27.8	8.2	23.2	14.9
Definite employment plans	54.0	27.0	45.4	66.7	42.1	59.1	49.8	48.6
Seeking employment or study	24.7	41.4	28.6	14.6	26.8	27.7	26.1	34.1
Other status ^a	2.0	1.8	0.8	1.2	3.3	5.0	1.0	2.3
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	97.8	97.0	96.7	97.8	100.0	84.6	100.0	97.2
Other training or unknown ^c	2.2	3.0	3.3	2.2	0.0	15.4	0.0	2.8
Definite employment plans (%) ^d								
Academe	49.7	66.7	70.4	45.1	54.3	31.9	68.9	49.4
In tenure track faculty position (%)	58.0	35.0	28.9	76.8	42.0	36.7	46.5	54.4
Not in tenure track position (%)	39.6	65.0	71.1	21.2	58.0	56.7	53.5	39.5
Government	18.3	D	D	22.3	10.2	24.5	8.7	19.5
Industry or business ^e	20.2	D	D	25.7	19.7	20.2	D	16.5
Nonprofit organization	7.8	D	D	5.4	10.2	18.1	D	9.1
Other or unknown ^f	3.9	3.3	13.0	1.5	5.5	5.3	4.9	5.6
Primary activity ^g								
Research and development	48.0	23.3	13.5	65.1	26.9	39.6	46.0	34.9
Teaching	26.8	53.3	71.2	13.7	43.7	11.0	42.0	34.0
Management or administration	8.5	D	D	3.9	10.9	26.4	D	11.6
Professional services and other	16.7	D	D	17.4	18.5	23.1	D	19.5
Secondary activity ^g								
Research and development	26.8	40.0	42.3	20.8	37.8	18.7	30.0	31.6
Teaching	24.1	D	D	30.3	19.3	24.2	20.0	19.1
Management or administration	D	D	D	7.7	D	16.5	12.0	14.4
Professional services and other	D	D	9.6	13.7	D	15.4	12.0	10.2

Table 9-13**Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	26.8	23.3	34.6	27.4	27.7	25.3	26.0	24.7
Activity unknown	4.1	0.0	3.7	3.0	6.3	3.2	2.9	6.9
Postgraduation location (%) ^h								
United States ⁱ	76.1	84.1	82.1	67.0	82.0	87.9	83.4	80.8
Midwest	14.5	12.7	15.5	12.8	19.4	11.2	15.2	15.9
Northeast	17.4	20.6	25.0	16.2	19.4	17.8	23.2	12.9
South	25.9	20.6	14.3	21.8	26.1	47.7	25.8	31.5
West	17.9	30.2	26.2	15.9	16.1	11.2	19.2	20.2
Outside the United States	23.8	15.9	16.7	32.8	18.0	12.1	16.6	19.2
Location unknown	0.1	0.0	1.2	0.1	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	24.7	36.5	45.2	14.7	28.4	36.4	31.1	28.8
Female doctorate recipients reporting postgraduation status (number)	2,203	249	225	403	215	216	337	558
Definite postdoctoral training plans	20.1	24.9	19.1	16.9	25.6	15.7	23.7	17.9
Definite employment plans	48.5	31.7	37.3	66.5	45.6	52.8	48.7	47.0
Seeking employment or study	28.2	39.0	37.3	15.6	25.6	27.8	24.9	31.9
Other status ^a	3.1	4.4	5.8	1.0	3.3	3.2	2.7	3.2
Definite postdoctoral training plans (%) ^b								
Postdoc fellowship or research associateship	96.6	95.2	93.0	98.5	100.0	97.1	98.8	94.0
Other training or unknown ^c	3.4	4.8	7.0	1.5	0.0	2.9	1.3	6.0
Definite employment plans (%) ^d								
Academe	53.9	67.1	70.2	47.8	59.2	41.2	54.9	53.8
In tenure track faculty position (%)	49.0	24.5	32.2	74.2	50.0	29.8	55.6	44.0
Not in tenure track position (%)	49.5	73.6	66.1	24.2	50.0	68.1	43.3	53.9
Government	13.5	D	D	15.3	10.2	22.8	15.2	14.1
Industry or business ^e	18.2	D	D	29.9	16.3	12.3	D	16.4
Nonprofit organization	10.5	D	D	5.6	8.2	16.7	D	11.8
Other or unknown ^f	3.9	2.5	9.5	1.5	6.1	7.0	2.4	3.8
Primary activity ^g								
Research and development	40.6	25.6	7.5	56.3	37.4	43.5	45.2	37.1
Teaching	32.3	48.7	67.5	19.9	36.3	13.0	33.8	34.4
Management or administration	9.9	D	D	2.0	6.6	27.8	D	10.9
Professional services and other	17.2	D	D	21.9	19.8	15.7	D	17.6

Table 9-13**Social sciences research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	30.1	33.3	46.3	27.7	27.5	18.5	33.1	30.5
Teaching	19.1	D	D	26.6	25.3	16.7	17.8	17.2
Management or administration	D	D	D	10.9	D	14.8	16.6	13.3
Professional services and other	D	D	6.3	11.7	D	10.2	7.6	9.0
No secondary activity	30.0	37.2	37.5	23.0	34.1	39.8	24.8	30.1
Activity unknown	4.0	1.3	4.8	4.5	7.1	5.3	4.3	2.3
Postgraduation location (%) ^h								
United States ⁱ	85.4	88.7	93.7	74.4	81.0	92.6	92.6	85.4
Midwest	14.3	19.9	20.5	11.3	10.5	16.2	14.3	13.5
Northeast	19.5	19.9	22.8	22.6	20.9	17.6	20.9	14.4
South	30.2	22.0	25.2	24.7	27.5	40.5	35.7	33.4
West	20.3	24.8	22.0	15.2	21.6	18.2	20.5	22.9
Outside the United States	14.6	11.3	6.3	25.6	19.0	7.4	7.4	14.6
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	32.8	32.6	39.4	17.6	29.4	43.2	38.9	37.8

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education	Education, other
Doctorate recipients reporting postgraduation status (number)	3,277	947	1,068	924	338
Definite postdoctoral training plans	5.8	2.7	7.1	6.3	8.6
Definite employment plans	64.8	74.4	62.5	59.7	59.2
Seeking employment or study	26.7	20.3	27.8	31.5	28.1
Other status ^a	2.7	2.5	2.5	2.5	4.1
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	94.7	96.2	90.8	100.0	93.1
Other training or unknown ^c	5.3	3.8	9.2	0.0	6.9
Definite employment plans (%) ^d					
Academe	54.7	54.3	56.8	56.7	43.0
In tenure track faculty position (%)	28.3	10.2	31.4	45.4	33.7
Not in tenure track position (%)	68.0	86.4	63.9	51.1	65.1
Government	4.3	4.1	4.5	3.1	8.0
Industry or business ^e	7.8	4.3	12.0	6.9	8.5
Nonprofit organization	5.9	5.1	6.1	5.1	10.5
Other or unknown ^f	27.3	32.2	20.5	28.3	30.0
Primary activity ^g					
Research and development	11.3	8.0	12.9	12.7	13.7
Teaching	40.2	18.2	42.6	62.6	45.8
Management or administration	34.8	62.8	23.5	16.8	26.8
Professional services and other	13.6	11.1	21.0	7.9	13.7
Secondary activity ^g					
Research and development	24.7	12.6	27.3	34.8	28.9
Teaching	17.4	18.9	16.4	17.6	15.3
Management or administration	11.4	10.2	14.5	10.8	7.4
Professional services and other	9.1	10.8	9.5	6.8	7.9
No secondary activity	37.5	47.5	32.3	30.1	41.1
Activity unknown	5.9	7.8	5.7	4.2	4.5
Postgraduation location (%) ^h					
United States ⁱ	93.9	95.8	95.2	89.5	95.6
Midwest	19.7	20.5	21.3	18.2	16.2
Northeast	14.9	15.3	11.0	16.4	22.3
South	41.9	45.0	46.2	37.4	30.1
West	16.8	14.4	16.3	17.0	25.8
Outside the United States	6.1	4.2	4.8	10.3	4.4
Location unknown	*	0.0	0.0	0.2	0.0
Postgraduation location in same state as doctorate institution (%)	61.7	70.3	58.0	56.2	60.7
Male doctorate recipients reporting postgraduation status (number)	965	325	318	231	91
Definite postdoctoral training plans	6.2	2.8	9.1	6.5	7.7
Definite employment plans	67.2	73.8	65.4	61.9	62.6
Seeking employment or study	24.5	21.8	23.3	29.4	25.3
Other status ^a	2.2	1.5	2.2	2.2	4.4
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	93.3	100.0	89.7	100.0	85.7

Table 9-14

Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education	Education, other
Other training or unknown ^c	6.7	0.0	10.3	0.0	14.3
Definite employment plans (%) ^d					
Academe	54.5	51.3	58.7	57.3	45.6
In tenure track faculty position (%)	34.3	11.4	38.5	59.8	42.3
Not in tenure track position (%)	60.9	84.6	54.9	35.4	57.7
Government	4.8	5.0	5.3	D	D
Industry or business ^e	6.2	4.2	9.1	4.2	8.8
Nonprofit organization	7.3	7.5	9.1	D	D
Other or unknown ^f	27.3	32.1	17.8	30.8	33.3
Primary activity ^g					
Research and development	12.4	9.8	D	12.9	D
Teaching	39.4	16.1	45.2	65.5	48.1
Management or administration	37.3	64.3	D	16.5	D
Professional services and other	10.9	9.8	14.2	5.0	19.2
Secondary activity ^g					
Research and development	24.0	12.1	31.0	29.5	34.6
Teaching	18.6	20.1	16.2	20.9	15.4
Management or administration	13.4	11.2	13.7	17.3	11.5
Professional services and other	8.5	9.8	10.2	D	D
No secondary activity	35.6	46.9	28.9	D	D
Activity unknown	5.4	6.7	5.3	2.8	7.0
Postgraduation location (%) ^h					
United States ⁱ	91.2	94.8	92.0	D	D
Midwest	21.0	24.1	21.1	D	D
Northeast	14.5	16.5	9.7	17.7	17.2
South	37.3	37.3	42.6	34.2	25.0
West	17.9	16.5	18.1	12.7	35.9
Outside the United States	8.6	5.2	8.0	D	D
Location unknown	0.1	0.0	0.0	0.6	0.0
Postgraduation location in same state as doctorate institution (%)	58.6	69.5	51.1	48.7	68.8
Female doctorate recipients reporting postgraduation status (number)	2,312	622	750	693	247
Definite postdoctoral training plans	5.6	2.7	6.3	6.2	8.9
Definite employment plans	63.8	74.8	61.2	59.0	57.9
Seeking employment or study	27.6	19.5	29.7	32.2	29.1
Other status ^a	2.9	3.1	2.7	2.6	4.0
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	95.3	94.1	91.5	100.0	95.5
Other training or unknown ^c	4.7	5.9	8.5	0.0	4.5
Definite employment plans (%) ^d					
Academe	54.7	55.9	56.0	56.5	42.0
In tenure track faculty position (%)	25.7	9.6	28.0	40.3	30.0
Not in tenure track position (%)	71.0	87.3	68.1	56.7	68.3
Government	4.1	3.7	4.1	D	D
Industry or business ^e	8.5	4.3	13.3	7.8	8.4
Nonprofit organization	5.4	3.9	4.8	D	D
Other or unknown ^f	27.3	32.3	21.8	27.4	28.7

Table 9-14**Education research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All education fields	Education leadership and administration	Education research	Teacher education	Education, other
Primary activity ^g					
Research and development	10.8	7.0	D	12.6	D
Teaching	40.6	19.2	41.4	61.5	44.9
Management or administration	33.8	62.0	D	16.9	D
Professional services and other	14.8	11.7	24.1	9.0	11.6
Secondary activity ^g					
Research and development	25.0	12.9	25.7	36.7	26.8
Teaching	16.9	18.3	16.4	16.4	15.2
Management or administration	10.5	9.6	14.8	8.5	5.8
Professional services and other	9.3	11.3	9.3	D	D
No secondary activity	38.3	47.9	33.8	D	D
Activity unknown	6.1	8.4	5.9	4.6	3.5
Postgraduation location (%) ^h					
United States ⁱ	95.1	96.3	96.6	D	D
Midwest	19.1	18.7	21.3	D	D
Northeast	15.1	14.7	11.7	15.9	24.2
South	43.9	49.0	47.8	38.5	32.1
West	16.3	13.3	15.4	18.6	21.8
Outside the United States	4.9	3.7	3.4	D	D
Location unknown	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	63.1	70.7	61.3	58.8	57.6

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

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(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)	2,736	827	448	611	535	315
Definite postdoctoral training plans	16.0	11.5	12.1	22.7	22.4	9.2
Definite employment plans	44.8	48.4	44.2	36.7	41.3	58.4
Seeking employment or study	34.8	36.3	39.5	36.0	30.8	28.9
Other status ^a	4.3	3.7	4.2	4.6	5.4	3.5
Definite postdoctoral training plans (%) ^b						
Postdoc fellowship or research associateship	96.8	96.8	94.4	97.1	97.5	96.6
Other training or unknown ^c	3.2	3.2	5.6	2.9	2.5	3.4
Definite employment plans (%) ^d						
Academe	66.3	79.3	72.7	60.3	64.7	40.8
In tenure track faculty position (%)	35.1	36.0	27.8	39.3	35.0	38.7
Not in tenure track position (%)	62.0	62.8	68.8	58.5	60.8	54.7
Government	3.7	1.8	D	11.6	2.7	D
Industry or business ^e	7.8	7.0	D	7.1	10.4	D
Nonprofit organization	12.9	3.5	5.1	7.6	14.5	46.2
Other or unknown ^f	9.3	8.5	12.6	13.4	7.7	4.3
Primary activity ^g						
Research and development	9.6	5.9	9.9	13.8	16.2	5.1
Teaching	66.6	74.6	75.4	62.9	57.8	53.7
Management or administration	10.2	10.3	6.3	14.3	6.4	14.1
Professional services and other	13.6	9.2	8.4	9.0	19.6	27.1
Secondary activity ^g						
Research and development	34.2	32.8	44.5	35.2	32.4	27.1
Teaching	14.0	10.8	8.9	11.4	18.6	24.3
Management or administration	12.1	12.1	11.0	10.5	9.8	18.1
Professional services and other	7.5	6.9	5.2	8.1	7.4	10.7
No secondary activity	32.2	37.4	30.4	34.8	31.9	19.8
Activity unknown	4.5	2.5	3.5	6.3	7.7	3.8
Postgraduation location (%) ^h						
United States ⁱ	87.4	94.1	82.1	87.1	84.8	82.6
Midwest	17.5	18.8	12.7	14.3	21.4	19.2
Northeast	21.5	20.4	24.6	25.9	20.8	13.6
South	30.4	36.4	24.6	30.9	22.6	35.2
West	17.4	18.0	19.4	15.2	19.1	14.6
Outside the United States	12.4	5.9	17.5	12.7	15.0	17.4
Location unknown	0.2	0.0	0.4	0.3	0.3	0.0
Postgraduation location in same state as doctorate institution (%)	37.3	47.5	34.9	33.3	31.1	32.9
Male doctorate recipients reporting postgraduation status (number)	1,442	324	195	349	342	232
Definite postdoctoral training plans	16.1	13.6	11.8	22.3	20.8	6.9
Definite employment plans	44.5	46.0	42.1	35.5	40.4	63.8
Seeking employment or study	35.5	37.3	40.0	38.7	33.0	28.0
Other status ^a	3.9	2.8	6.2	3.4	5.8	1.3

Table 9-15

Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(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	97.4	95.5	95.7	98.7	97.2	100.0
Other training or unknown ^c	2.6	4.5	4.3	1.3	2.8	0.0
Definite employment plans (%) ^d						
Academe	59.6	77.2	73.2	54.0	64.5	34.5
In tenure track faculty position (%)	35.1	37.4	26.7	40.3	31.5	39.2
Not in tenure track position (%)	61.3	61.7	70.0	55.2	64.0	52.9
Government	4.5	D	D	14.5	D	D
Industry or business ^e	8.1	8.7	D	8.1	D	6.8
Nonprofit organization	18.3	D	D	8.1	13.0	D
Other or unknown ^f	9.5	7.4	13.4	15.3	9.4	4.7
Primary activity ^g						
Research and development	9.1	7.5	D	14.5	D	D
Teaching	63.2	70.7	75.9	61.5	60.9	51.7
Management or administration	11.2	8.8	D	18.8	D	D
Professional services and other	16.4	12.9	11.4	5.1	18.8	30.1
Secondary activity ^g						
Research and development	30.9	28.6	44.3	35.9	27.3	25.2
Teaching	16.0	13.6	D	10.3	15.6	D
Management or administration	12.9	11.6	13.9	7.7	11.7	18.9
Professional services and other	7.8	6.1	D	10.3	6.3	D
No secondary activity	32.4	40.1	31.6	35.9	39.1	16.1
Activity unknown	4.2	1.3	3.7	5.6	7.2	3.4
Postgraduation location (%) ^h						
United States ⁱ	85.3	92.2	85.7	85.1	81.3	82.3
Midwest	18.8	21.2	12.4	15.8	20.6	21.3
Northeast	20.5	23.3	28.6	24.3	17.7	11.0
South	29.3	33.2	25.7	27.7	22.5	37.8
West	16.4	14.0	19.0	17.3	19.6	12.2
Outside the United States	14.4	7.8	14.3	14.4	18.2	17.7
Location unknown	0.2	0.0	0.0	0.5	0.5	0.0
Postgraduation location in same state as doctorate institution (%)	35.5	48.2	36.2	31.7	31.1	30.5
Female doctorate recipients reporting postgraduation status (number)	1,294	503	253	262	193	83
Definite postdoctoral training plans	15.8	10.1	12.3	23.3	25.4	15.7
Definite employment plans	45.3	49.9	45.8	38.2	43.0	43.4
Seeking employment or study	34.1	35.6	39.1	32.4	26.9	31.3
Other status ^a	4.8	4.4	2.8	6.1	4.7	9.6
Definite postdoctoral training plans (%) ^b						
Postdoc fellowship or research associateship	96.1	98.0	93.5	95.1	98.0	92.3

Table 9-15**Humanities research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	3.9	2.0	6.5	4.9	2.0	7.7
Definite employment plans (%) ^d						
Academe	73.7	80.5	72.4	68.0	65.1	66.7
In tenure track faculty position (%)	35.2	35.1	28.6	38.2	40.7	37.5
Not in tenure track position (%)	62.7	63.4	67.9	61.8	55.6	58.3
Government	2.7	D	D	8.0	D	D
Industry or business ^e	7.5	6.0	8.6	6.0	D	D
Nonprofit organization	7.0	D	D	7.0	16.9	D
Other or unknown ^f	9.0	9.2	12.1	11.0	4.8	2.8
Primary activity ^g						
Research and development	10.2	4.9	D	12.9	D	D
Teaching	70.3	77.0	75.0	64.5	52.6	61.8
Management or administration	9.1	11.1	D	8.6	D	D
Professional services and other	10.4	7.0	6.3	14.0	21.1	14.7
Secondary activity ^g						
Research and development	37.8	35.4	44.6	34.4	40.8	35.3
Teaching	11.8	9.1	D	12.9	23.7	D
Management or administration	11.3	12.3	8.9	14.0	6.6	14.7
Professional services and other	7.2	7.4	D	5.4	9.2	D
No secondary activity	31.9	35.8	29.5	33.3	19.7	35.3
Activity unknown	4.8	3.2	3.4	7.0	8.4	5.6
Postgraduation location (%) ^h						
United States ⁱ	89.6	95.4	79.6	89.4	90.2	83.7
Midwest	16.1	17.2	12.9	12.4	22.7	12.2
Northeast	22.5	18.5	21.8	28.0	25.8	22.4
South	31.6	38.4	23.8	34.8	22.7	26.5
West	18.5	20.5	19.7	12.4	18.2	22.4
Outside the United States	10.2	4.6	19.7	10.6	9.8	16.3
Location unknown	0.1	0.0	0.7	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	39.2	47.0	34.0	35.4	31.1	40.8

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
Doctorate recipients reporting postgraduation status (number)	1,163	357	806
Definite postdoctoral training plans	6.7	5.9	7.1
Definite employment plans	71.5	72.3	71.2
Seeking employment or study	18.1	17.4	18.5
Other status ^a	3.5	4.5	3.1
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	91.0	90.5	91.2
Other training or unknown ^c	9.0	9.5	8.8
Definite employment plans (%) ^d			
Academe	75.5	66.3	79.6
In tenure track faculty position (%)	80.6	72.5	83.6
Not in tenure track position (%)	17.4	22.8	15.3
Government	D	D	3.8
Industry or business ^e	16.0	21.3	13.6
Nonprofit organization	D	D	1.6
Other or unknown ^f	1.8	2.7	1.4
Primary activity ^g			
Research and development	47.4	35.4	52.8
Teaching	31.7	30.9	32.1
Management or administration	10.9	19.9	6.9
Professional services and other	9.9	13.8	8.2
Secondary activity ^g			
Research and development	32.1	30.5	32.8
Teaching	46.3	41.1	48.6
Management or administration	5.4	8.5	4.0
Professional services and other	5.9	6.9	5.5
No secondary activity	10.3	13.0	9.1
Activity unknown	4.4	4.7	4.4
Postgraduation location (%) ^h			
United States ⁱ	77.4	79.9	76.2
Midwest	15.8	17.6	15.1
Northeast	15.3	14.3	15.7
South	31.6	31.5	31.7
West	13.6	15.1	13.0
Outside the United States	22.5	20.1	23.6
Location unknown	0.1	0.0	0.2
Postgraduation location in same state as doctorate institution (%)	20.4	24.0	18.9
Male doctorate recipients reporting postgraduation status (number)	648	199	449
Definite postdoctoral training plans	6.9	6.0	7.3
Definite employment plans	72.8	74.9	71.9
Seeking employment or study	17.4	16.1	18.0
Other status ^a	2.8	3.0	2.7
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	86.7	83.3	87.9
Other training or unknown ^c	13.3	16.7	12.1
Definite employment plans (%) ^d			

Table 9-16**Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
Academe	73.7	67.8	76.5
In tenure track faculty position (%)	79.6	72.3	82.6
Not in tenure track position (%)	17.5	22.8	15.4
Government	D	D	D
Industry or business ^e	18.0	22.1	16.1
Nonprofit organization	D	D	D
Other or unknown ^f	1.3	2.0	0.9
Primary activity ^g			
Research and development	48.4	36.2	54.1
Teaching	30.8	34.8	29.0
Management or administration	9.6	13.5	7.8
Professional services and other	11.2	15.6	9.1
Secondary activity ^g			
Research and development	30.1	33.3	28.7
Teaching	44.4	36.9	47.9
Management or administration	6.0	9.2	4.6
Professional services and other	7.1	7.1	7.2
No secondary activity	12.3	13.5	11.7
Activity unknown	5.1	5.4	5.0
Postgraduation location (%) ^h			
United States ⁱ	76.0	76.4	75.8
Midwest	15.9	14.9	16.3
Northeast	16.4	14.9	17.1
South	30.0	31.1	29.5
West	12.8	13.7	12.4
Outside the United States	24.0	23.6	24.2
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	19.5	21.7	18.5
Female doctorate recipients reporting postgraduation status (number)	515	158	357
Definite postdoctoral training plans	6.4	5.7	6.7
Definite employment plans	69.9	69.0	70.3
Seeking employment or study	19.0	19.0	19.0
Other status ^a	4.5	6.3	3.6
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	97.0	100.0	95.8
Other training or unknown ^c	3.0	0.0	4.2
Definite employment plans (%) ^d			
Academe	77.8	64.2	83.7
In tenure track faculty position (%)	81.8	72.9	84.8
Not in tenure track position (%)	17.1	22.9	15.2
Government	D	6.4	D
Industry or business ^e	13.3	20.2	10.4
Nonprofit organization	D	5.5	D
Other or unknown ^f	2.5	3.7	2.0
Primary activity ^g			
Research and development	46.1	34.3	51.2
Teaching	32.9	25.7	36.0

Table 9-16**Business research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All business fields	Business administration and management	Business, other
Management or administration	12.7	28.6	5.8
Professional services and other	8.4	11.4	7.0
Secondary activity ^g			
Research and development	34.6	26.7	38.0
Teaching	48.7	46.7	49.6
Management or administration	4.6	7.6	3.3
Professional services and other	4.3	6.7	3.3
No secondary activity	7.8	12.4	5.8
Activity unknown	3.6	3.7	3.6
Postgraduation location (%) ^h			
United States ⁱ	79.1	84.7	76.7
Midwest	15.8	21.2	13.5
Northeast	13.7	13.6	13.8
South	33.8	32.2	34.5
West	14.8	16.9	13.8
Outside the United States	20.6	15.3	22.9
Location unknown	0.3	0.0	0.4
Postgraduation location in same state as doctorate institution (%)	21.6	27.1	19.3

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies/ design
Doctorate recipients reporting postgraduation status (number)	690	442	248
Definite postdoctoral training plans	11.2	6.8	19.0
Definite employment plans	39.9	40.7	38.3
Seeking employment or study	45.7	48.2	41.1
Other status ^a	3.3	4.3	1.6
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	94.8	96.7	93.6
Other training or unknown ^c	5.2	3.3	6.4
Definite employment plans (%) ^d			
Academe	60.7	57.8	66.3
In tenure track faculty position (%)	35.3	31.7	41.3
Not in tenure track position (%)	62.3	65.4	57.1
Government	D	D	D
Industry or business ^e	14.9	18.3	8.4
Nonprofit organization	D	D	D
Other or unknown ^f	8.0	10.0	4.2
Primary activity ^g			
Research and development	12.0	5.3	25.0
Teaching	62.2	67.3	52.3
Management or administration	9.7	9.9	9.1
Professional services and other	16.2	17.5	13.6
Secondary activity ^g			
Research and development	30.9	25.7	40.9
Teaching	13.9	12.3	17.0
Management or administration	8.9	7.6	11.4
Professional services and other	11.2	14.0	5.7
No secondary activity	35.1	40.4	25.0
Activity unknown	5.8	5.0	7.4
Postgraduation location (%) ^h			
United States ⁱ	85.5	87.6	82.4
Midwest	17.3	18.6	15.5
Northeast	25.0	21.9	29.6
South	23.3	26.2	19.0
West	19.6	21.0	17.6
Outside the United States	14.5	12.4	17.6
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	34.7	37.6	30.3
Male doctorate recipients reporting postgraduation status (number)	312	237	75
Definite postdoctoral training plans	8.7	6.3	16.0
Definite employment plans	40.4	41.4	37.3
Seeking employment or study	48.4	49.4	45.3
Other status ^a	2.6	3.0	1.3
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	100.0	100.0	100.0
Other training or unknown ^c	0.0	0.0	0.0
Definite employment plans (%) ^d			

Table 9-17

Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies/ design
Academe	58.7	57.1	64.3
In tenure track faculty position (%)	37.8	35.7	44.4
Not in tenure track position (%)	59.5	60.7	55.6
Government	D	D	0.0
Industry or business ^e	22.2	D	D
Nonprofit organization	D	11.2	D
Other or unknown ^f	7.9	8.2	7.1
Primary activity ^g			
Research and development	8.3	D	D
Teaching	65.3	67.0	59.3
Management or administration	7.4	D	D
Professional services and other	19.0	D	D
Secondary activity ^g			
Research and development	28.9	24.5	44.4
Teaching	15.7	14.9	18.5
Management or administration	8.3	D	D
Professional services and other	15.7	D	D
No secondary activity	31.4	36.2	14.8
Activity unknown	4.0	4.1	3.6
Postgraduation location (%) ^h			
United States ⁱ	83.0	85.8	75.0
Midwest	18.3	18.6	17.5
Northeast	17.6	15.9	22.5
South	24.2	26.5	17.5
West	22.2	24.8	15.0
Outside the United States	17.0	14.2	25.0
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	34.0	36.3	27.5
Female doctorate recipients reporting postgraduation status (number)	378	205	173
Definite postdoctoral training plans	13.2	7.3	20.2
Definite employment plans	39.4	40.0	38.7
Seeking employment or study	43.4	46.8	39.3
Other status ^a	4.0	5.9	1.7
Definite postdoctoral training plans (%) ^b			
Postdoc fellowship or research associateship	92.0	93.3	91.4
Other training or unknown ^c	8.0	6.7	8.6
Definite employment plans (%) ^d			
Academe	62.4	58.5	67.2
In tenure track faculty position (%)	33.3	27.1	40.0
Not in tenure track position (%)	64.5	70.8	57.8
Government	D	D	D
Industry or business ^e	8.7	D	D
Nonprofit organization	D	D	23.9
Other or unknown ^f	8.1	12.2	3.0
Primary activity ^g			
Research and development	15.2	D	D
Teaching	59.4	67.5	49.2

Table 9-17**Visual and performing arts research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(Number and percent)

Characteristic	All visual and performing arts fields	Performing arts	Visual arts, media studies/design
Management or administration	11.6	D	D
Professional services and other	13.8	D	D
Secondary activity ^g			
Research and development	32.6	27.3	39.3
Teaching	12.3	9.1	16.4
Management or administration	9.4	D	D
Professional services and other	7.2	D	D
No secondary activity	38.4	45.5	29.5
Activity unknown	7.4	6.1	9.0
Postgraduation location (%) ^h			
United States ⁱ	87.4	89.7	85.3
Midwest	16.6	18.6	14.7
Northeast	30.7	28.9	32.4
South	22.6	25.8	19.6
West	17.6	16.5	18.6
Outside the United States	12.6	10.3	14.7
Location unknown	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.2	39.2	31.4

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.^e Includes doctorate recipients reporting self-employment.^f Other is mainly composed of elementary and secondary schools.^g Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.^h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.ⁱ Includes cases 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):**

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021**

(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)	1,740	456	274	433	577
Definite postdoctoral training plans	12.9	11.6	12.4	11.1	15.4
Definite employment plans	51.3	53.1	45.6	55.4	49.4
Seeking employment or study	32.1	32.0	38.3	29.6	31.2
Other status ^a	3.7	3.3	3.6	3.9	3.8
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	96.9	98.1	94.1	97.9	96.6
Other training or unknown ^c	3.1	1.9	5.9	2.1	3.4
Definite employment plans (%) ^d					
Academe	62.6	78.9	60.8	55.0	55.8
In tenure track faculty position (%)	52.3	55.5	30.3	58.3	54.1
Not in tenure track position (%)	44.8	42.4	63.2	37.9	44.7
Government	9.8	2.9	5.6	17.9	10.5
Industry or business ^e	15.1	11.6	16.0	7.1	24.6
Nonprofit organization	8.5	3.3	7.2	15.4	7.7
Other or unknown ^f	4.0	3.3	10.4	4.6	1.4
Primary activity ^g					
Research and development	24.5	22.5	10.1	29.9	27.9
Teaching	42.3	59.3	50.4	28.1	36.4
Management or administration	14.7	6.5	21.0	21.6	12.9
Professional services and other	18.5	11.7	18.5	20.3	22.8
Secondary activity ^g					
Research and development	34.1	42.4	28.6	28.6	34.2
Teaching	19.9	19.5	16.0	28.6	14.7
Management or administration	11.1	7.8	8.4	13.0	13.6
Professional services and other	9.1	3.9	14.3	9.5	11.0
No secondary activity	25.7	26.4	32.8	20.3	26.5
Activity unknown	4.4	4.5	4.8	3.8	4.6
Postgraduation location (%) ^h					
United States ⁱ	87.9	88.8	89.9	91.0	84.0
Midwest	18.5	15.9	14.5	22.9	18.7
Northeast	17.7	14.6	24.5	18.1	16.8
South	33.1	38.3	31.4	34.7	28.3
West	18.0	19.3	18.2	14.6	19.5
Outside the United States	11.9	10.5	10.1	9.0	16.0
Location unknown	0.2	0.7	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.8	30.5	44.0	35.4	36.6

Table 9-18

Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021

(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)	735	191	124	145	275
Definite postdoctoral training plans	13.6	9.9	12.9	15.2	15.6
Definite employment plans	52.0	55.0	46.0	53.8	51.6
Seeking employment or study	30.2	31.4	37.1	26.9	28.0
Other status ^a	4.1	3.7	4.0	4.1	4.4
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	99.0	100.0	100.0	100.0	97.7
Other training or unknown ^c	1.0	0.0	0.0	0.0	2.3
Definite employment plans (%) ^d					
Academe	59.7	D	56.1	44.9	D
In tenure track faculty position (%)	52.2	D	21.9	62.9	D
Not in tenure track position (%)	43.4	47.6	65.6	28.6	36.7
Government	10.7	D	D	30.8	D
Industry or business ^e	18.6	13.3	22.8	6.4	27.5
Nonprofit organization	7.3	D	D	11.5	7.7
Other or unknown ^f	3.7	3.8	7.0	6.4	0.7
Primary activity ^g					
Research and development	25.2	22.2	11.1	33.8	28.1
Teaching	41.9	58.6	46.3	26.0	37.0
Management or administration	14.5	7.1	20.4	23.4	12.6
Professional services and other	18.4	12.1	22.2	16.9	22.2
Secondary activity ^g					
Research and development	33.2	40.4	25.9	27.3	34.1
Teaching	18.6	20.2	18.5	26.0	13.3
Management or administration	11.5	D	D	15.6	14.1
Professional services and other	11.2	D	D	14.3	13.3
No secondary activity	25.5	27.3	35.2	16.9	25.2
Activity unknown	4.5	5.7	5.3	1.3	4.9
Postgraduation location (%) ^h					
United States ⁱ	81.5	84.7	D	84.0	D
Midwest	17.8	16.9	9.6	24.0	18.4
Northeast	17.0	11.3	28.8	17.0	16.2
South	30.7	42.7	24.7	33.0	23.8
West	16.0	13.7	D	10.0	D
Outside the United States	18.5	15.3	D	16.0	D
Location unknown	0.0	0.0	0.0	0.0	0.0

Table 9-18**Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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 (%)	36.3	32.3	46.6	38.0	34.1
Female doctorate recipients reporting postgraduation status (number)	1,005	265	150	288	302
Definite postdoctoral training plans	12.3	12.8	12.0	9.0	15.2
Definite employment plans	50.7	51.7	45.3	56.3	47.4
Seeking employment or study	33.5	32.5	39.3	30.9	34.1
Other status ^a	3.4	3.0	3.3	3.8	3.3
Definite postdoctoral training plans (%) ^b					
Postdoc fellowship or research associateship	95.2	97.1	88.9	96.2	95.7
Other training or unknown ^c	4.8	2.9	11.1	3.8	4.3
Definite employment plans (%) ^d					
Academe	64.7	D	64.7	59.9	D
In tenure track faculty position (%)	52.4	D	36.4	56.7	D
Not in tenure track position (%)	45.8	38.5	61.4	41.2	52.5
Government	9.0	D	D	11.7	D
Industry or business ^e	12.5	10.2	10.3	7.4	21.7
Nonprofit organization	9.4	D	D	17.3	7.7
Other or unknown ^f	4.3	2.9	13.2	3.7	2.1
Primary activity ^g					
Research and development	24.0	22.7	9.2	27.9	27.7
Teaching	42.6	59.8	53.8	29.2	35.8
Management or administration	14.8	6.1	21.5	20.8	13.1
Professional services and other	18.6	11.4	15.4	22.1	23.4
Secondary activity ^g					
Research and development	34.8	43.9	30.8	29.2	34.3
Teaching	20.9	18.9	13.8	29.9	16.1
Management or administration	10.9	D	D	11.7	13.1
Professional services and other	7.6	D	D	7.1	8.8
No secondary activity	25.8	25.8	30.8	22.1	27.7
Activity unknown	4.3	3.6	4.4	4.9	4.2
Postgraduation location (%) ^h					
United States ⁱ	92.7	91.8	D	94.7	D
Midwest	18.9	15.2	18.6	22.3	19.0
Northeast	18.1	17.0	20.9	18.6	17.5
South	34.9	35.1	37.2	35.6	32.8
West	19.6	23.4	D	17.0	D

Table 9-18**Other non-science and engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2021**

(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	6.9	7.0	D	5.3	D
Location unknown	0.3	1.2	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	35.3	29.2	41.9	34.0	39.2

D = suppressed to avoid disclosure of confidential information.

^a 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 Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

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

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

^e Includes doctorate recipients reporting self-employment.

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

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

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

ⁱ Includes cases 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):

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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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: 2021

(Number and percent)

Characteristic	Total ^a	U.S. citizen	Non-U.S. citizen	Hispanic or Latino		Not Hispanic or Latino														Ethnicity not reported	
						American Indian or Alaska Native		Asian		Black or African American		White		More than one race		Other race or race not reported					
				U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen	U.S. citizen	Non-U.S. citizen
All doctorate recipients (number)	47,433	30,374	16,814	2,729	1,127	91	D	2,937	11,352	2,328	576	20,717	3,290	1,074	D	306	240	192	113		
Definite postdoctoral training plans	28.9	27.5	31.6	28.9	34.6	25.3	D	28.4	31.7	17.1	21.4	28.3	31.9	30.6	D	20.9	27.9	19.3	33.6		
Definite employment plans	41.0	42.8	37.8	40.9	36.1	51.6	D	39.9	37.9	50.3	37.2	42.6	37.5	40.9	D	46.4	43.3	44.3	37.2		
Seeking employment or study	26.9	26.0	28.6	26.5	27.1	20.9	D	26.3	28.8	28.8	39.2	25.7	27.9	24.2	D	26.8	20.8	24.5	19.5		
Other status ^b	3.1	3.7	2.0	3.6	2.2	2.2	0.0	5.4	1.6	3.7	2.1	3.3	2.5	4.3	1.8	5.6	7.5	11.5	6.2		
Definite employment plans (%) ^c																					
Academe	38.4	40.1	35.0	42.1	46.7	61.7	D	31.1	30.4	42.7	37.4	40.9	45.1	38.3	57.4	35.9	D	35.3	28.6		
In tenure track faculty position (%)	45.4	35.5	68.5	39.4	66.8	31.0	D	38.7	71.1	37.8	47.5	34.3	65.5	33.3	74.1	43.1	D	33.3	66.7		
Not in tenure track position (%)	50.8	61.6	26.0	58.7	27.4	62.1	D	57.1	24.3	58.0	40.0	63.0	28.2	62.5	25.9	52.9	D	63.3	16.7		
Government	7.9	10.0	3.9	10.0	8.4	10.6	D	7.6	2.8	12.5	9.8	9.8	5.0	9.8	D	14.1	D	16.5	7.1		
Industry or business ^d	40.9	33.7	55.8	30.0	38.6	D	D	49.8	62.5	21.7	41.1	33.8	43.8	34.4	29.8	D	D	30.6	50.0		
Nonprofit organization	6.5	8.2	3.2	8.3	4.7	D	D	7.7	2.8	9.7	8.9	7.8	2.8	9.1	D	D	D	9.4	2.4		
Other or unknown ^e	6.2	8.1	2.2	9.6	1.7	10.6	0.0	3.8	1.5	13.4	2.8	7.7	3.3	8.4	8.5	8.5	9.6	8.2	11.9		
Postgraduation location (%) ^f																					
United States	89.5	98.0	72.1	98.7	67.8	D	D	97.5	77.4	98.8	60.7	97.9	59.3	98.2	53.2	D	D	95.3	85.7		
Outside the United States	10.5	2.0	27.8	1.2	32.2	D	D	2.5	22.5	1.1	39.3	2.1	40.6	1.8	D	D	D	3.5	14.3		
Location unknown	0.1	*	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	*	0.1	0.0	0.0	0.0	1.0	1.2	0.0		
Postgraduation location in same state as doctorate institution (%)	22.9	29.3	11.1	29.8	10.3	40.0	D	27.5	11.2	34.3	11.3	28.9	11.8	27.5	7.1	34.0	D	30.3	10.0		

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

^a Includes doctorate recipients who did not report citizenship status.

^b Includes doctorate recipients reporting: no plans to work or study, another type of postgraduation plan, or definite plans for another full-time degree program.

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

^d 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 plan for employment and the location of employment.

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

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

Technical Notes

Data presented in *Doctorate Recipients from U.S. Universities: 2021* were collected by the Survey of Earned Doctorates (SED). The survey is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) and by three other federal agencies: the National Institutes of Health (NIH), Department of Education (ED), and National Endowment for the Humanities (NEH). This report presents the summary of these survey data.

Survey Overview (2021 survey cycle)

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

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

Survey contractor. RTI International.

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

Key Survey Information

Frequency. Annual.

Initial survey year. Academic year 1957–58.

Reference period. Academic year 2020–21 (1 July 2020 to 30 June 2021).

Response unit. Individuals.

Sample or census. Census.

Population size. 52,250.

Sample size. Not applicable.

Survey Design

Target population. The population for the 2021 SED consists of all individuals receiving a research doctorate from a U.S. academic institution in the 12-month period beginning 1 July 2020 and ending 30 June 2021. 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 2021 ([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 52,250 new research doctorates granted in 2021, 98.4% 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 2021. No other type of doctoral degree accounted for more than 0.3% of the new research doctorates in 2021.

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 2021. The list of institutions is based principally on the institutions in the prior survey cycles 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 2021, 456 research doctorate granting institutions were identified; however, 8 of these institutions reported zero graduates, and 12 institutions refused to provide lists of graduates. For 11 of the 12 refusing institutions, the survey contractor was able to construct graduate lists using secondary data sources. Thus, the total universe consisted of 52,250 persons in 448 institutions that conferred research doctorates in 2021.

Sample design. The SED is a census.

Data Collection and Processing Methods

Data collection. SED collects data using two modes: self-administered Web survey and computer-assisted telephone interviewing (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 each year since it was introduced in 2001, and it reached 97.6% in 2021.

Nonrespondents are contacted by e-mail and mail to complete the Web survey. If the series of follow-up e-mails and mailings is unsuccessful, the survey contractor attempts to reach nonrespondents to complete an abbreviated survey by CATI. Approximately 2.4% of SED completions were from CATI in 2021. At the end of data collection phase, institutional coordinators are contacted to obtain information on a small number of critical SED data items for nonrespondents from their institution.

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

The survey collects a complete college education history. To code U.S. postsecondary degree-granting institutions, survey staff use the IPEDS institution codes. To code the degree-granting institutions of respondents from foreign countries, survey staff maintain a database of foreign institutions, updating it annually to include new entries for foreign institutions reported by SED respondents. About one-third of 2021 U.S. research doctorate recipients received undergraduate degrees from foreign institutions.

Mode. In 2021, 97.6% of survey responses were obtained via the Web survey and 2.4% via CATI.

Response rate. Of the 52,250 individuals who received a research doctorate in 2021, 91.5% completed the survey ([table A-2](#)). Additional information on response rate can be found below, under “Nonresponse error.”

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

Imputation. No imputation was used in producing the 2021 SED Doctorate Records File (DRF) except for the following variables:

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

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

For variables with item nonresponse that are not imputed, responses with missing data are omitted from the estimates published in the data tables and figures. Although most variables in the published data have relatively low nonresponse rates, their nonresponse rates vary (see "Nonresponse error," below); use caution when interpreting estimates derived from unimputed variables.

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 cell 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 cell values from primary suppressions. Beginning in 2021, the detailed fields in the data tables are based on the aggregation of SED-CIP fields such that each detailed field contain 47 or more in the data cell. 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 and the institutions' high levels of participation in the survey, coverage error of institutions is minimal. Because the graduate schools collect the survey data from degree recipients at the time of doctorate completion, coverage error for the universe of doctorate recipients is also minimal. Comparisons of the institutions and the number of research doctorate recipients covered by the SED with the total number of doctorate recipients (including non-research doctoral degree recipients) reported by institutions to the [National Center for Education Statistics](#) confirm that there is minimal coverage error of doctorate recipients. Institutions that begin to confer research doctorates are invited to join the SED. If a university that confers research doctorates does not wish to participate in the SED, slight undercounts may result. In 2021, 12 doctorate-granting universities declined to fully enumerate their doctorate recipients for academic year 2021. Information on the graduates for all of these institutions were found from other sources, such as ProQuest.

Nonresponse error.

- *Unit nonresponse.* Of the 52,250 individuals who received a research doctorate in 2021, 91.5% 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. These nonresponding cases are included in the reported total of 52,250 doctorate recipients for 2021.

Nonresponse was concentrated in a small number of institutions: 7 of the 448 doctorate-granting institutions accounted for nearly 25% of the total nonrespondents, and 22 institutions accounted for 50% of the total nonrespondents.

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

- *Item nonresponse.* Among the 52,250 individuals who received a research doctorate in 2021, item nonresponse rates for the five key SED demographic variables—sex, citizenship, country of citizenship, race and ethnicity, and location after graduation—range from 0.0% for sex to 7.9% for location after graduation. [Table A-3](#) shows item response rates for 2011–21 for all variables, by variable name (see clarifying notes in the table).

Measurement error. The most likely source of measurement error in the SED is attributable to incomplete or vague information for degree or dissertation field of study provided by respondents or degree-granting institutions, and for educational history provided by respondents. For field of degree, some respondents (or institutions) fail to provide a degree code and instead provide a text string that must be manually coded by the survey contractor. Similarly, some aspects of the educational history timeline—including the field of study for earned associate's, bachelor's, or master's degrees—require manual coding. When manual coding is required, a pair of trained reviewers independently code each text entry, and any discrepancies between the two coders are resolved by a third, more expert reviewer. All manual coding is subject to a final review by NCSES. Generally, the percentage of responses in these data requiring manual coding is low. In 2021, 1.6% of doctorate fields of study were manually coded, as well as 1.8% of associate's degree fields, 0.7% of bachelor's degree fields, and 1.3% of master's degree fields.

Data Comparability

Changes in survey coverage and population. For the 2021 cycle, one institution was added to and one institution was removed from the SED universe.

Changes in questionnaire. The following changes were made to the questionnaire in 2021:

New questions.

- *Coronavirus Disease 2019 (COVID-19) module.* A special COVID-19 module was added in 2021 to capture the COVID-19 pandemic's impact on the respondents' graduate experiences and career plans.

The respondents were first asked whether they experienced one of six impact areas as a result of the pandemic: delay in their doctoral degree completion timeline; disruption in their research; reduction or suspension of their doctoral studies; change in their immediate postgraduate employment or education plans; change in longer-term career plans or goals; or change in their plans about where to live in the year after graduation. Respondents were also asked to report any other changes to their graduate experience or career plans.

For each affirmative response, an open-ended follow-up question asked the respondents to elaborate on how they were affected. The open-ended verbatims were coded and this data is available to the restricted-use file licensees as a special analysis file.

Questions dropped.

- *Joint degree questions.* Questions that asked whether any of the respondent’s postsecondary degrees was part of a joint degree program.
- *Same position with the same employer.* Questions that asked the respondents who worked during their doctoral studies whether they plan to seek a new employment after receiving their doctoral degree.

Questions changed.

- *Educational history.* Prior to 2021, respondents’ educational history was asked chronologically, starting with an associate’s degree, bachelor’s degree, master’s degree, and then professional doctoral degree.

In 2021, the education history section was changed to a table format in which respondents can select all the postsecondary degrees received, up to nine degrees. Based on the degrees reported, follow-up questions asked about each type of degree, including any professional doctorate being earned.
- *Faculty position.* Beginning in 2021, faculty position is asked only when respondents reported their employer is a college or university. Previously, faculty position was asked of all respondents who reported their employer as an education institution, including pre-collegiate institutions.

Question response options changed.

- *Type of employer.* The first response option was changed to “for-profit company or organization” from “industry (for profit).” The second option was changed to “nonprofit organization (including tax-exempt, charitable organization and private foundation)” from “nonprofit organization (including private foundation).”

Changes in reporting procedures or classification.

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

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

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

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

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

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

- *Debt.* Since 2001, respondents have been asked to indicate the amount of education-related debt they owe, with separate response categories for graduate and undergraduate education. To estimate overall debt, the midpoint of the chosen range for undergraduate and for graduate debt was selected and summed to yield a total debt amount. Where 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 2020 (\$90,001 or more) were assigned a value of \$95,000 for the computation of median debt levels. In 2020, 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.
- *Field of study.* Beginning in 2021, field of study and doctorate dissertation field data are 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” to the associated CIP code that ends with “a.”
 - The exclusion of CIP fields that are not eligible for the SED, which are CIP 12 (Culinary, entertainment, and personal services), 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 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.

With the new SED-CIP codes introduced in 2021, the survey now collects over 1,600 fields for the field of study reporting, compared to the 334 field codes collected in the previous years. The SED-CIP codes are aggregated into 300 detailed fields, 66 major fields, and 16 broad fields, which are used for reporting in the data tables ([table A-4](#)). This new SED-CIP taxonomy includes multidisciplinary/interdisciplinary sciences and multidisciplinary/interdisciplinary studies to capture and track emerging fields. The complete SED-CIP fields with corresponding detailed, major, and broad fields are in [table A-5](#). For more details on the effect of the new taxonomy, see the NCSES Working Paper [Survey of Earned Doctorates Field of Study Taxonomy Changes in 2021 and Impact on Trend Data](#).

To facilitate the trend data comparison with prior years, a crosswalk was created of the SED-CIP codes to the SED historical field of study, which were aggregated into the SED historical broad and major fields (see [table A-6](#)). This results in generally comparable historical broad and major fields with some limitations. Specifically, each SED-CIP code mapped to an SED historical field of study code might not be the code the respondent would have chosen from the previously used SED historical field of study list. For example, it is not known how respondents who reported the new SED-CIP field of “electrical engineering and computer science” in 2021 would have chosen their field under the SED historical field of study list that includes two separate fields “electrical engineering” and “computer science.”

Beginning in 2015, the broad field of study of “physical sciences” was broken out into two separate broad fields: “physical sciences and earth sciences” and “mathematics and computer sciences.” Also beginning in 2015, the major fields of “mathematics and statistics” and “computer and information sciences” are listed under the new broad field of “mathematics and computer science.” Prior to 2015, these major fields were listed under physical sciences.

- *Functional limitations (previously, disability).* Beginning in 2012, the functional limitations items assess both the presence and severity of functional limitations in each of several domains, which do not precisely overlap with the domains in prior surveys.
- *Median computation.* Since 1994, medians have been computed as outlined below. When months are included, they are converted to the number of days corresponding to the first day of the month. In 2017, the method for accounting for leap days changed to reflect the actual number leap days during the time period specified, rather than the prior method of adding 0.25 days to each year.
 - *Median age.* Months (of birth and doctorate award) are included in the calculation of median age whenever available. Beginning in 2015, if birth month is missing, the month value is randomly imputed. Prior to 2015, the missing month value was assigned to the month the doctorate was received.
 - *Time to degree from bachelor's completion.* Months are included in the calculation of total time to degree. If months are missing, month values are assigned to the modal value for doctorate recipients who provide month of bachelor's completion and converted to the number of days corresponding to that month.
 - *Time to degree from graduate school entry.* Months are included in the calculation of graduate school time to degree. If months are missing in the calculation of graduate school time to degree, month values are assigned to the modal value for doctorate recipients who provided month of graduate entry. Reports published before 2004 reported a different time-to-degree measure: registered time to degree. Comparisons of graduate school time-to-degree data with pre-2004 registered time-to-degree data should be interpreted cautiously. For an explanation of registered time to degree, see the technical notes of any Doctorate Recipients from United States Universities: Summary Report published before 2004.
 - *Time to degree from doctoral program entry.* This variable was first included in 2015. Doctoral program entry is based on master's degree program entry if the master's degree was at the doctoral institution in the same fine field of study or if it was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry. Months are included in the calculation of doctoral program time to degree. If the month of entry used in the calculation

(master's degree program entry or doctoral program entry) was not reported, the entry month is assigned to the modal value for all cases that did report the entry month in the academic year the case was added to the doctoral records file (typically the academic year matching the graduation date of the case).

- *Race and Hispanic ethnicity.* Since 2001, respondents have been asked to first indicate whether they are Hispanic or Latino and then to check one or more racial group categories (i.e., American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African American, or White).

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

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

After a multiyear review of doctoral programs offering the EdD degree, most were determined to have a professional orientation and were dropped from the SED in 2010 and 2011, and graduates earning EdD degrees from those programs are no longer included in the SED. As a result, the proportion of EdD degrees among the total number of research doctorate recipients fell from 5.5% in 2009 to 0.9% in 2021. [Table A-1](#) lists the doctoral degrees that were eligible for inclusion in the SED in 2021.

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

Definitions

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

- *Definite postgraduation plans.* The status of postgraduation plans is coded using the values from item B2 of the survey questionnaire, which indicate whether the doctorate recipient's postgraduation plans for employment or a postdoc position were definite at the time the survey was completed.
- *Field of study.* The SED collects data on over 1,600 fields of study which are grouped into 300 detailed fields, 66 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 2021. See [table A-6](#) for the SED-CIP to SED historical field of study 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").

- *Median age at doctorate.* One-half of the respondents received the doctorate at or before this age. A recipient's age is obtained by subtracting the month and year of birth from the month and year of doctorate.
- *Percentage with master's.* This variable is the percentage of doctorate recipients in a field who received a master's degree in any field before earning the doctorate.
- *Research doctorate.* A research doctoral degree is oriented toward preparing students to make original intellectual contributions in a field of study and is not primarily intended for the practice of a profession. Research doctorates require the completion of a dissertation or equivalent project.
- *Time to doctorate.* The time it takes to complete a doctoral degree is measured in three ways: (1) the time elapsed from completion of the baccalaureate to completion of the doctorate (total time to degree), (2) the time elapsed from the start of any graduate school program to completion of the doctorate (graduate school time to degree), and (3) the time elapsed from the start of the doctoral program. Time-to-doctorate measures herein are reported as medians. In 2017, the method for accounting for leap days changed to reflect the actual number leap days during the time period specified, rather than the prior method of adding 0.25 days to each year.
 - *Total time to degree.* This variable is the total elapsed time between the baccalaureate and the doctorate, including time not enrolled in school. It can be computed only for individuals whose baccalaureate year is known. Baccalaureate year is often obtained from commencement programs or doctorate institutions when not reported by the recipient.
 - *Graduate school time to degree.* This variable is the elapsed time from the initiation of graduate study, in any program or capacity at any university, and the award of the doctorate. This variable can be computed only for individuals who provided the year they started graduate school. If an individual did not respond to this question, which asks for the month and year of first entry into any graduate school, then values for graduate school month and year of entry are imputed from the month and year of entry into the most recent master's degree program or, if that is missing, the month and year of entry into the doctoral degree program. Months are included in the computation.
 - *Doctoral program time to degree.* This variable is either (1) the elapsed time from the master's degree program entry, if the master's degree was awarded at the doctoral institution and was in the same fine field as the doctorate or if the master's degree was a prerequisite to the doctoral program until doctorate completion; otherwise, it is (2) the elapsed time from the doctoral program entry until doctorate completion. This variable is only computed for academic year 2015 and later doctorates.
- *U.S. regions of employment.* This variable is used to classify the location of U.S. employment after award of the doctorate.

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: 2017–21
A-2	Survey response rates: 1970–2021
A-3	Item response rates: 2012–21
A-4	SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021
A-5	SED-CIP codes in new broad, major, and detailed fields: 2021
A-6	SED-CIP code crosswalk to historical broad, major, and fine fields: 2021
B-1	SED data tables list: 2020 and 2021

Table A-1**Research doctoral degrees included in the Survey of Earned Doctorates: 2017–21**

(Number and percent)

Degree	Degree title	2017		2018		2019		2020		2021	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All research doctorates		54,552	100.0	55,080	100.0	55,609	100.0	55,224	100.0	52,250	100.0
PhD	Doctor of Philosophy	53,471	98.0	54,131	98.3	54,707	98.4	54,268	98.3	51,435	98.4
EdD	Doctor of Education	589	1.1	571	1.0	473	0.9	487	0.9	475	0.9
DSc, ScD	Doctor of Science	109	0.2	92	0.2	92	0.2	68	0.1	29	0.1
DEng, DESc, DES	Doctor of Engineering or Engineering Science	28	0.1	21	*	43	0.1	55	0.1	21	*
DA	Doctor of Arts	4	*	5	*	1	*	1	*	0	0.0
DBA	Doctor of Business Administration	32	0.1	24	*	17	*	22	*	13	*
DMA	Doctor of Musical Arts	139	0.3	116	0.2	115	0.2	170	0.3	156	0.3
DDes	Doctor of Design	7	*	9	*	8	*	8	*	13	*
DPH	Doctor of Public Health	53	0.1	41	0.1	37	0.1	38	0.1	34	0.1
DHL	Doctor of Hebrew Letters	0	0.0	0	0.0	1	*	1	*	0	0.0
DME	Doctor of Music Education	3	*	0	0.0	1	*	2	*	2	*
DML	Doctor of Modern Languages	6	*	4	*	6	*	5	*	1	*
DNSc	Doctor of Nursing Science	10	*	0	0.0	2	*	5	*	0	0.0
ThD	Doctor of Theology	23	*	11	*	11	*	3	*	7	*
DFA	Doctor of Fine Arts	4	*	3	*	2	*	1	*	5	*
JSD, SJD	Doctor of Juridical Science	67	0.1	50	0.1	91	0.2	84	0.2	55	0.1
STD	Doctor of Sacred Theology	1	*	0	0.0	1	*	2	*	2	*
JCD	Doctor of Canon Law	6	*	2	*	1	*	4	*	2	*

* = value < 0.05%.

Note(s):

Due to rounding, percentages may not sum to 100.

Source(s):

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

Table A-2**Survey response rates: 1970–2021**

(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: 1970–2021

(Percent)

Year	Response rate
2021	91.5

Note(s):
Rates for 1970–2020 include late responses. Rate for 2021 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

Item response rates: 2012–21

(Percent)

Variable name	Variable description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AADEGRN	Number of associate's degrees received	na	na	na	na	na	90.3	93.5	93.6	93.7	93.6
AAEMONTH	First associate's degree start month	na	na	na	na	na	96.9	96.2	95.2	96.0	97.1
AAEYEAR	First associate's degree start year	na	na	na	na	na	97.6	96.3	95.8	96.5	98.2
AAFIELDCIP	First associate's degree field - SED historical FOS code	na	na	na	na	na	85.0	94.4	95.1	95.0	98.7
AAINST	First associate's degree institution (IPEDS code)	na	na	na	na	na	93.4	92.0	97.6	98.4	95.7
AAMONTH	First associate's degree month	na	na	na	na	na	97.6	96.7	95.9	96.5	96.9
AANID	First associate's degree institution (NCSES institution code)	na	na	na	na	na	93.3	92.0	97.6	98.4	95.7
AAYEAR	First associate's degree year	na	na	na	na	na	98.3	97.0	96.7	97.1	99.5
AGEDOC	Age at doctorate	na	na	na	92.1	94.1	94.6	95.1	94.8	94.4	92.6
AMERIND	American Indian or Alaska Native race indicator	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.2	91.5
ASIAN	Asian race indicator	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.2	91.5
BA2EMONTH	Most recent baccalaureate start month	na	na	na	na	na	89.9	92.3	94.4	94.4	98.6
BA2EYEAR	Most recent baccalaureate start year	na	na	na	na	na	90.2	92.3	94.6	94.4	99.1
BA2FIELD	Most recent baccalaureate degree field - SED historical FOS code	na	na	na	na	na	89.7	91.6	94.4	94.2	98.2
BA2FIELDCIP	Most recent baccalaureate field - SED CIP code	na	na	na	na	na	na	na	na	na	98.2
BA2INST	Most recent baccalaureate institution (IPEDS code)	na	na	na	na	na	88.5	90.5	94.5	95.0	96.9
BA2MONTH	Most recent baccalaureate month	na	na	na	na	na	90.0	92.4	94.4	94.5	98.6
BA2NID	Most recent baccalaureate institution (NCSES institution code)	na	na	na	na	na	88.5	90.5	94.5	95.0	96.9
BA2YEAR	Most recent baccalaureate year	na	na	na	na	na	90.4	92.6	94.7	94.6	99.7
BADBLFIELD	First baccalaureate double major field - SED historical FOS code	na	na	na	na	na	96.4	98.4	98.7	98.6	99.6
BADBLFIELDCIP	First baccalaureate double major field - SED CIP code	na	na	na	na	na	na	na	na	na	99.6
BADBLMAJ	First baccalaureate double major indicator	na	na	na	na	na	89.5	91.0	91.1	91.1	89.9
BADEGRN	Number of bachelor's degrees received	na	na	na	na	na	91.1	98.4	99.0	98.6	98.5
BAEMONTH	First baccalaureate start month	na	na	87.0	87.0	89.0	89.6	90.7	90.7	90.8	89.6
BAEYEAR ^a	First baccalaureate start year	88.2	88.8	87.3	87.3	89.4	89.7	90.7	90.7	90.7	90.0
BAFIELD	First baccalaureate field - SED historical FOS code	88.5	89.5	87.9	87.9	89.7	90.4	90.7	90.9	90.9	90.4
BAFIELDCIP	First baccalaureate field - SED CIP code	na	na	na	na	na	na	na	na	na	90.4
BAINST	First baccalaureate institution (IPEDS code)	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6	93.2
BAMONTH	First baccalaureate month	88.9	89.2	87.7	87.6	89.4	89.7	90.8	90.8	90.9	89.6
BANID	First baccalaureate institution (NCSES institution code)	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6	93.2
BANONE ^b	No bachelor's and/ or master's degree indicator	18.2	20.4	21.4	21.7	22.4	85.5	91.7	91.8	91.8	92.2
BAPLACE	First baccalaureate institution location	91.5	92.2	90.2	91.0	92.9	93.6	94.4	95.5	94.6	93.2
BAYEAR	First baccalaureate year	92.0	92.3	90.3	90.8	93.1	94.4	94.9	95.4	94.9	94.4
BIRTHMO	Month of birth	92.1	92.5	90.7	91.6	93.2	93.9	94.6	94.4	93.9	92.0
BIRTHPL	Place of birth	94.2	93.5	91.9	92.1	94.5	95.1	96.0	96.5	96.7	94.4
BIRTHYR	Year of birth	92.8	93.1	91.3	92.1	94.1	94.5	95.1	94.8	94.4	92.6
BLACK	Black race indicator	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.2	91.5
CITIZ	Type of citizenship	93.8	94.2	92.3	93.3	95.2	95.4	96.1	96.3	95.9	94.4
CNTRYCIT ^c	Country of citizenship	93.6	93.8	92.1	93.1	94.8	95.0	95.2	95.2	95.2	93.6
DDSEGRN	Earned a professional dental degree	88.9	88.8	87.6	87.9	88.3	88.6	89.7	89.4	89.2	88.7
DDSTUDY	Earning a professional dental degree	88.9	88.8	87.6	87.9	88.3	88.6	89.7	89.4	89.2	88.7
DEPEND18	Number of dependents-ages 6–18	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.8	89.7

Table A-3

Item response rates: 2012–21

(Percent)

Variable name	Variable description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
DEPEND19	Number of dependents-ages 19 and older	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.8	89.7
DEPEND5	Number of dependents-ages 5 or younger	89.9	89.5	88.4	88.3	89.7	90.1	90.8	90.7	90.8	89.7
DIFAGE	Earliest age experienced difficulties	90.4	90.8	89.4	89.4	90.9	89.9	90.4	90.5	90.3	88.7
DIFCOGN	Degree of difficulty concentrating, remembering, or making decisions	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DIFHEAR	Degree of difficulty hearing	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DIFLIFT	Degree of difficulty lifting	90.5	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DIFSEE	Degree of difficulty seeing	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DIFWALK	Degree of difficulty walking	90.5	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DISABILITY2	Moderate or greater degree of difficulty in any domain	91.1	91.0	89.6	89.6	91.1	90.1	90.6	90.7	90.5	89.0
DOCCODE	Type of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EDFATHER	Father/ male guardian's education	90.7	90.0	88.6	88.4	89.9	89.9	89.4	88.7	88.5	87.1
EDMOTHER	Mother/ female guardian's education	90.8	90.1	88.6	88.5	89.9	90.0	89.8	89.3	89.1	87.6
GDEBTLVL	Graduate debt level	92.9	89.7	88.2	90.1	93.1	92.3	92.7	93.4	93.5	92.6
GEMONTH	Month of graduate program entry	88.4	88.5	90.1	89.7	90.7	90.3	92.0	92.0	92.0	91.8
GEYEAR	Year of graduate program entry	88.6	88.7	90.3	89.9	90.9	90.4	92.0	92.0	92.1	91.8
HAWAIIAN	Native Hawaiian or Other Pacific Islander race indicator	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.2	91.5
HISPANIC	Hispanic origin indicator	92.0	92.1	90.3	91.5	93.0	93.7	94.7	94.7	94.6	93.0
HSPLACE	Place of high school	91.7	91.2	89.7	89.5	91.6	90.1	90.5	90.7	97.3	95.4
JRCOLL	Junior college indicator	93.0	92.6	91.1	90.8	93.4	93.2	93.8	94.1	94.3	93.0
MA1CRED	Credits from first master's degree counted toward doctoral degree	na	na	na	na	na	97.6	99.5	99.4	99.9	99.7
MA1EMONTH	First master's degree start month	na	na	na	na	na	99.6	98.9	98.5	98.3	98.5
MA1EYEAR	First master's degree start year	na	na	na	na	na	99.7	99.0	98.7	98.3	99.2
MA1FIELD	First master's degree field - SED historical FOS code	na	na	na	na	na	99.4	98.8	98.8	98.5	99.5
MA1FIELD CIP	First master's degree field – SED CIP code	na	na	na	na	na	na	na	na	na	99.5
MA1INST	First master's degree institution (IPEDS code)	na	na	na	na	na	97.9	97.8	98.8	98.4	94.1
MA1MONTH	First master's degree month	na	na	na	na	na	99.8	98.9	98.7	98.4	98.2
MA1NID	First master's degree institution (NCSES institution code)	na	na	na	na	na	97.9	97.8	98.8	98.4	94.1
MA1PART	First master's degree was required for doctoral program	na	na	na	na	na	98.4	99.4	99.1	98.6	99.4
MA1YEAR	First master's degree year	na	na	na	na	na	99.9	99.0	98.9	98.4	99.9
MACRED	Credits from most recent master's degree counted toward doctoral degree	na	na	na	na	na	99.2	99.8	99.9	99.9	99.9
MADEGRN	Number of master's degrees received	na	na	na	na	na	99.3	93.8	94.0	94.1	94.3
MAEMONTH	Most recent master's degree start month	na	na	67.8	67.5	68.7	87.8	88.6	88.8	88.8	88.6
MAEYEAR ^b	Most recent master's degree start year	na	na	68.0	67.7	68.9	87.9	88.7	88.8	88.8	89.1
MAFIELD	Most recent master's degree field - SED historical FOS code	70.5	70.1	68.6	68.3	69.3	87.9	88.7	88.8	89.0	89.3
MAFIELD CIP	Most recent master's degree field – SED CIP code	na	na	na	na	na	na	na	na	na	89.3
MAINST	Most recent master's degree institution (IPEDS code)	70.8	70.0	68.5	68.0	69.2	88.2	88.3	88.9	89.0	88.8
MAMONTH	Most recent master's degree month	70.2	69.9	68.3	68.0	69.1	87.9	88.7	88.9	88.9	88.4
MANID ^b	Most recent master's degree institution (NCSES institution code)	70.8	70.0	68.5	68.0	69.2	88.2	88.3	88.9	89.0	88.8
MAPART	Most recent master's degree was required for doctoral program	na	na	na	na	na	87.6	88.5	88.8	88.9	88.9
MARITAL	Marital status	91.0	90.4	89.0	88.9	90.5	90.3	90.9	90.8	90.8	89.8

Table A-3

Item response rates: 2012–21

(Percent)

Variable name	Variable description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MAYEAR	Most recent master's degree year	70.9	70.3	68.7	68.2	69.4	88.8	88.8	89.1	89.0	89.8
MDDEG	Earned a professional medical degree	88.9	88.8	87.6	87.9	88.3	83.7	89.6	89.4	89.2	88.7
MDSTUDY	Earning a professional medical degree	88.9	88.8	87.6	87.9	88.3	83.7	89.6	89.4	89.2	88.7
MEDDENT	Additional professional medical or dental degree	90.5	90.4	89.1	89.2	90.5	90.6	91.5	91.5	91.5	90.7
MSPREREQ	Prerequisite master's degree for doctoral program	91.1	90.7	89.2	89.1	90.8	88.0	89.0	89.0	89.0	89.0
PDEMPLOY	Postgraduation employer type	98.5	99.0	99.5	99.3	98.1	99.7	98.8	98.8	98.8	99.0
PDFACULTY	Employment in faculty position	na	na	na	na	na	na	61.2	63.9	63.3	57.7
PDFORGN ^b	Postgraduation affiliation with a non-U.S. college or university	3.5	3.7	3.4	3.1	3.2	89.0	90.5	90.6	90.6	90.1
PDLOC	Postgraduation location	92.5	91.6	90.0	90.0	92.2	92.4	93.1	93.2	92.8	92.1
PDOCCODE ^b	Postgraduation institution affiliation in the U.S. (IPEDS code)	30.6	28.4	26.7	26.1	26.4	78.9	87.1	89.2	90.2	89.3
PDOCNID ^b	Postgraduation institution affiliation in the U.S. (NCSES institution identification code)	30.6	28.4	26.7	26.1	26.4	78.9	87.1	89.2	90.2	89.3
PDOCPLAN	Postgraduation plans	93.9	92.5	91.7	91.5	95.2	97.6	99.8	99.9	99.9	99.9
PDOCSTAT	Postgraduation status	91.4	90.8	89.3	89.3	90.9	90.8	91.4	91.4	91.4	90.8
PDSAMEEMP ^b	Postgraduation employer was employer before or during doctoral studies	na	na	na	na	na	6.9	51.3	55.4	55.2	52.7
PDSAMEPOSEMP	Employment in same position with same employer worked during doctoral studies	na	na	na	na	na	na	95.4	99.8	99.7	na
PDSEEKNEWEMP	Postgraduation plan to seek new employment	na	na	na	na	na	na	99.5	99.1	99.5	na
PDSTDSUP	Postdoctoral study support	95.8	96.7	97.5	97.8	95.5	96.9	97.0	96.5	96.8	96.8
PDUSFOR	Postgraduation location: U.S. or foreign	92.5	91.6	90.0	90.0	92.2	92.4	93.1	93.2	92.8	92.1
PDWK1ED	Edited primary work activity	91.5	90.7	90.8	90.5	91.3	97.7	98.6	98.8	98.7	98.8
PDWK2ED	Edited secondary work activity	50.8	50.2	49.8	49.4	50.6	93.2	96.5	96.8	96.9	97.5
PDWKPRIM	Primary work activity	91.5	90.7	90.8	90.5	91.3	97.7	98.6	98.8	98.7	98.8
PDWKSEC	Secondary work activity	50.8	50.2	49.8	49.4	50.6	93.2	96.5	96.8	96.9	97.5
PHDCY	Calendar year of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDDISS	Dissertation field - SED historical FOS code	91.8	91.6	90.2	90.0	91.6	91.1	91.6	91.4	91.5	91.5
PHDDISS2 ^b	Secondary dissertation field - SED historical FOS code	34.7	36.2	35.0	35.0	41.0	86.7	89.9	90.1	90.2	90.6
PHDDISS2CIP	Secondary dissertation field - SED CIP code	na	na	na	na	na	na	na	na	na	90.6
PHDDISSCIP	Dissertation field – SED CIP code	na	na	na	na	na	na	na	na	na	91.5
PHDEMONTH	Doctoral program start month	na	na	89.6	89.6	91.2	91.3	91.7	91.8	91.7	91.6
PHDEYEAR ^d	Doctoral program start year	90.8	90.9	89.9	89.7	91.4	91.3	91.7	91.8	91.8	91.5
PHDFIELD	Doctoral field - SED historical FOS code	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDFIELDCIP	Doctoral field – SED CIP code	na	na	na	na	na	na	na	na	na	100.0
PHDFY	Fiscal year of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDINST	Doctoral institution (IPEDS code)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDMONTH	Month of doctorate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PHDNID	Doctoral institution (NCSES institution code)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
POSTDOC	Intention to take postdoc position	91.6	91.1	89.6	89.6	91.5	na	na	na	na	na
PROFDEG ^b	Type of professional doctorate	0.8	0.8	0.9	1.0	1.0	96.0	100.0	100.0	100.0	100.0
PROFEARN	Earned or earning a professional doctoral degree	na	na	na	na	na	90.7	91.5	91.5	91.5	90.7
PROFEMONTH	Professional doctorate start month	na	na	na	na	na	99.7	99.3	99.4	99.6	90.1
PROFEYEAR	Professional doctorate start year	na	na	na	na	na	99.8	99.1	99.4	99.7	90.2
PROFINST	Professional doctorate institution (IPEDS code)	na	na	na	na	na	98.0	98.2	98.5	99.6	94.8
PROFMONTH	Professional doctorate month	na	na	na	na	na	99.8	99.2	99.4	99.5	98.5

Table A-3

Item response rates: 2012–21

(Percent)

Variable name	Variable description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
PROFNID	Professional doctorate institution (NCSES institution code)	na	na	na	na	na	99.2	98.2	98.5	99.6	94.8
PROFYEAR ^b	Professional doctorate year	0.7	0.8	0.9	0.9	1.0	99.7	99.0	99.4	99.6	99.6
QUESTMON	Month of survey completion	na	na	na	90.0	92.0	93.2	92.2	92.2	92.2	91.5
QUESTYR	Year of survey completion	92.4	92.0	90.6	90.3	92.0	93.4	92.2	92.2	92.2	91.5
RACE	Edited race or ethnicity code	93.0	93.2	91.4	92.4	94.3	94.6	95.5	95.7	95.5	94.3
RACE2	Edited ethnicity or race code (NSF-revised)	93.0	93.2	91.4	92.4	94.3	94.9	95.5	95.7	95.5	94.3
SALARYR	Range of expected basic annual salary	89.0	87.6	88.7	88.7	89.3	97.3	96.3	96.3	96.1	96.1
SALARYV	Expected basic annual salary	41.2	36.8	76.9	83.9	85.5	94.2	93.2	93.1	93.5	92.7
SALMONTH	Number of months expected basic annual salary covers	89.5	88.7	89.0	88.9	89.1	95.2	96.5	96.4	96.3	96.9
SEEKEMPBUS	Seeking or negotiating position in business or industry	na	na	na	na	na	na	98.8	98.9	98.8	98.8
SEEKEMPCHOICE	Top choice of employer seeking or negotiating	na	na	na	na	na	na	97.7	97.7	97.5	97.6
SEEKEMPEDU	Seeking or negotiating position at an educational institution	na	na	na	na	na	na	98.8	98.9	98.8	98.8
SEEKEMPGOV	Seeking or negotiating position in government	na	na	na	na	na	na	98.8	98.9	98.8	98.8
SEEKEMPNPO	Seeking or negotiating position in nonprofit organization	na	na	na	na	na	na	98.8	98.9	98.8	98.8
SEEKEMPOTHR	Seeking or negotiating position in other sector	na	na	na	na	na	na	98.8	98.9	98.8	98.8
SEEKEMPSTAT	Employment status while seeking or negotiating employment	na	na	na	na	na	na	98.9	98.9	98.9	98.8
SEEKPOSEMP	Seeking or negotiating an employment position other than a postdoc	na	na	na	na	na	na	99.0	99.0	99.0	98.9
SEEKPOSOTHR	Seeking or negotiating other position	na	na	na	na	na	na	99.0	99.0	99.0	98.9
SEEKPOSPDOC	Seeking or negotiating a postdoc position	na	na	na	na	na	na	99.0	99.0	99.0	98.9
SEX	Sex of doctorate recipient	99.9	100.0	99.7	100.0	100.0	100.0	99.9	100.0	100.0	100.0
SRCE1ED	Edited primary source of support	91.1	90.7	89.7	89.5	91.2	90.0	90.7	90.6	90.7	90.1
SRCEPRIM	Primary source of support	91.1	90.7	89.7	89.5	91.2	90.0	90.7	90.6	90.7	90.1
SRCESEC	Secondary source of support	80.3	79.6	79.2	78.8	83.0	78.5	80.1	80.4	86.1	88.5
TICEPHD	Time in from college entry to doctorate	88.2	88.8	87.3	87.3	89.4	89.7	90.7	90.7	90.7	90.0
TOBAGE	Time out between baccalaureate to graduate school entry	86.9	87.2	87.2	87.2	88.5	87.4	88.5	88.6	88.5	87.2
TTDBAPHD	Total time elapsed from baccalaureate to doctorate	92.0	92.3	90.3	90.8	93.1	94.4	94.9	95.4	94.8	94.4
TTDDOC	Total elapsed time in doctorate	na	na	89.9	89.8	91.5	91.3	91.6	91.7	91.7	91.5
TTDGEPHD	Total time elapsed from graduate entry to doctorate	88.6	88.7	90.3	89.9	90.9	90.3	92.0	92.0	92.1	91.8
TUITREMS	Tuition remission-full or partial	91.5	91.2	90.0	89.8	91.4	91.0	91.7	91.6	91.6	91.2
UDEBTLVL	Undergraduate debt level	93.3	86.1	84.7	90.9	93.7	92.6	93.1	93.4	93.5	92.6
WHITE	White race indicator	91.5	91.9	90.2	91.0	93.0	92.8	93.2	93.3	93.2	91.5
YRSCOURS	Years of doctoral coursework	90.9	90.4	89.0	89.0	90.5	89.8	na	na	na	na
YRSDISST	Years preparing doctorate dissertation	91.0	90.5	89.0	89.0	90.5	89.7	na	na	na	na
YRSNOTWRK	Years not working on doctoral degree	91.0	90.8	89.2	89.2	90.8	90.9	na	na	na	na

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

CIP = Classification of Instructional Programs; FOS = field of study; IPEDS = Integrated Postsecondary Education Data System; NCSES = National Center for Science and Engineering Statistics; SED = Survey of Earned Doctorates.

^a Methodology reports prior to 2014 reported BAEYEAR as CEYEAR.^b Logical skip edits to correct the universe of eligible respondents led to higher item response rates in the year it was implemented.

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

^d Methodology reports prior to 2014 reported PHDEYEAR as PHDENTRY.

Note(s):

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

Source(s):

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

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(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	all 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
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
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
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
Human/ medical genetics	Detailed	26.0806
Molecular genetics	Detailed	26.0802
Genetics nec	Detailed	all other 26.08

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
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 and anatomy	Detailed	26.1503
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
Biology/ biological sciences, general	Detailed	26.0101
Biomedical sciences, general	Detailed	26.0102
Botany and plant biology	Detailed	26.0301
Entomology	Detailed	26.0702
Plant pathology and phytopathology	Detailed	26.0305
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 except 11.06
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 science/ studies	Detailed	11.04
Computer and information sciences nec	Detailed	11.0199, 11.02, 11.03, 11.05, 11.08, 11.99
Engineering	Broad	14, most 15 (see below)
Biological, biomedical, and biosystems engineering	Major	14.05, 14.45, 15.0401
Bioengineering and biomedical engineering	Detailed	14.05
Biological and biosystems engineering and biomedical technology	Detailed	14.45, 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	14.25

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Chemical and petroleum engineering nec	Detailed	14.0799, 14.32, 14.40–14.44
Civil, environmental, and transportation engineering	Major	14.08, 14.14, 14.33, 14.38, 14.39
Civil engineering	Detailed	14.0801, 14.0899
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	14.04, 14.0805, 14.33, 14.38
Electrical and computer engineering	Major	14.09, 14.10, 14.47
Computer engineering	Detailed	14.09
Electrical and computer engineering	Detailed	14.47
Electrical and electronics engineering	Detailed	14.1001
Electrical and computer engineering nec	Detailed	14.1003, 14.1004, 14.1099
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	14.35
Operations research	Detailed	14.37
Systems and manufacturing engineering	Detailed	14.27, 14.36
Materials and mining engineering	Major	14.06, 14.18, 14.20, 14.21, 14.28
Materials engineering	Detailed	14.1801a
Materials science and engineering	Detailed	14.1801b
Materials and mining engineering nec	Detailed	14.06, 14.20, 14.21, 14.28
Mechanical engineering	Major	14.19
Mechanical engineering, general	Detailed	14.1901
Engineering, other	Major	all other 14, 15.0801, 15.15, 15.16
Aerospace, aeronautical, astronautical, and space engineering	Detailed	14.02, 15.0801
Engineering mechanics, physics, and science	Detailed	14.11, 14.12, 14.13
Nanotechnology	Detailed	15.16
Nuclear engineering	Detailed	14.23
Engineering nec	Detailed	14.01, 14.03, 14.22, 14.24, 14.34, 14.48, 14.99, 15.15
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, 30.41
Geochemistry	Detailed	40.0602, 40.0606
Geology	Detailed	40.0601c
Geology/ earth science, general	Detailed	40.0601a/b
Geophysics and seismology	Detailed	40.0603
Hydrology and water resources science	Detailed	40.0605
Geological and earth sciences nec	Detailed	40.0604, 40.0699, 15.1102, 30.38, 30.41
Ocean/ marine sciences 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 and physics	Detailed	40.0402, 40.0403
Marine biology and biological oceanography	Detailed	26.1302

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Marine sciences	Detailed	30.32
Oceanography, chemical and physical	Detailed	40.0607
Atmospheric sciences and meteorology nec	Detailed	40.0404, 40.0499, 30.35
Health sciences	Broad	51
Nursing and nursing science	Major	51.32, 51.38, 51.39
Nursing education	Detailed	51.3203
Nursing science	Detailed	51.3808
Nursing specialties and practice	Detailed	all other 51.32, 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 science	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, 27.99
Algebra and number theory	Detailed	27.0102
Mathematics, general	Detailed	27.0101
Mathematics nec	Detailed	all other 27.01, 27.99
Statistics	Major	27.05, 27.06
Applied statistics, general	Detailed	27.06
Mathematics and statistics	Detailed	27.0503
Statistics	Detailed	27.0501
Statistics nec	Detailed	27.0502, 27.0599
Multidisciplinary/ interdisciplinary sciences	Broad	30.01, 30.05–30.11, 30.15–30.21, 30.23–30.27, 30.30, 30.31, 30.33, 30.34, 30.37, 30.39, 30.40, 30.42–30.44, 30.46, 30.48–30.51, 30.53, 30.70, 30.71, 30.9999b/c/d, 54.0104
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

Table A-4

SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Interdisciplinary computer sciences nec	Detailed	30.08, 30.16, 30.31, 30.39, 30.48
Multidisciplinary/ interdisciplinary sciences, other	Major	30.01, 30.05, 30.06, 30.10, 30.11, 30.15, 30.17–30.21, 30.23–30.27, 30.30, 30.33, 30.34, 30.37, 30.40, 30.42–30.44, 30.46, 30.49–30.51, 30.53, 30.70, 30.71, 30.9999c, 54.0104
Behavioral and cognitive sciences	Detailed	30.17, 30.25
Computational science and engineering	Detailed	30.30
Data science and data analytics	Detailed	30.70, 30.71
History/ philosophy of science, technology and society	Detailed	30.15, 54.0104
Nanoscience/ nanoscale science	Detailed	30.9999c
Nutrition sciences	Detailed	30.19
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
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
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 chemistry	Detailed	40.0511
Chemistry nec	Detailed	all other 40.05
Materials sciences	Major	40.10
Materials science	Detailed	40.1001
Materials chemistry and materials science nec	Detailed	40.1002, 40.1099
Physics	Major	40.08, 40.11
Applied physics	Detailed	40.0899b
Atomic/ molecular physics	Detailed	40.0802
Condensed matter and materials physics	Detailed	40.0808a
Elementary particle physics	Detailed	40.0804
Nuclear physics	Detailed	40.0806
Optics/ optical sciences	Detailed	40.0807
Physics and astronomy	Detailed	40.11
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, 40.9999
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
Applied behavior analysis	Detailed	42.2814
Counseling psychology	Detailed	42.2803
Educational psychology	Detailed	42.2806

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Industrial and organizational psychology	Detailed	42.2804
School psychology	Detailed	42.2805
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	42.01
Psychology nec	Detailed	42.99
Social sciences	Broad	45, 03.0204, 05, 16, 30.47, 43.01, 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	05.0207–05.0299, 05.9999
Economics	Major	45.06, 01.0103, 03.0204
Agricultural economics	Detailed	01.0103
Applied economics	Detailed	45.0602a
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, 30.47, 43.01, 43.0402, 43.0403, 43.0406
Applied linguistics	Detailed	16.0105, 16.0199
Archeology	Detailed	45.03
Criminal justice and corrections	Detailed	43.01, 43.0402, 43.0403, 43.0406

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Criminology	Detailed	45.04
Geography and cartography	Detailed	45.07
International relations and national security studies	Detailed	45.09
Linguistics	Detailed	16.0102
Social sciences nec	Detailed	45.0101–45.0103, 45.0199, 45.12, 45.13, 45.15, 45.99, 30.11, 30.47
Non-science and engineering	Area	see below
Business	Broad	52
Business administration and management	Major	52.02
Business management and administration	Detailed	52.0201
Organizational leadership	Detailed	52.0213
Business administration and management nec	Detailed	all other 52.02
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	52.06, 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, 13.09, 13.11
Curriculum and instruction	Detailed	13.03
Educational assessment, evaluation, and research methods	Detailed	13.0601, 13.0603, 13.0604, 13.0607, 13.0699a
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	Major	13.02, 13.12, 13.10, 13.13, 13.14
Adult, continuing, and workforce education and development	Detailed	13.1201
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, 13.1307, 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, 13.1213
Teacher education, specific subject areas	Detailed	all other 13.13, 13.14
Education, other	Major	13.0101, 13.15, 13.99
Education, general	Detailed	13.0101

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Education nec	Detailed	13.15, 13.99
Humanities	Broad	23, 24, 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
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
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, 54.0199a
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	24.01, 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
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, 50.0906–50.0911, 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
Art history, criticism and conservation	Detailed	50.0703
Film, cinema, and media studies	Detailed	50.06
Visual arts, media studies/ design, and arts management 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	09.0100a
Mass communication/ media studies	Detailed	09.0102
Communications and journalism nec	Detailed	09.0100b/c, 09.04, 09.07, 09.10, 09.99, 10

Table A-4**SED field of doctorate taxonomy, by SED-CIP series/ codes: 2021**

(Field)

Field of doctorate	Field level ^a	SED-CIP series/ codes
Multidisciplinary/ interdisciplinary studies	Major	30.00, 30.12–30.14, 30.22, 30.28, 30.29, 30.36, 30.45, 30.52, 30.99, 16.12, 24.01
Classical and ancient studies	Detailed	30.22, 16.12
Multidisciplinary/ interdisciplinary studies nec	Detailed	30.00, 30.12–30.14, 30.28, 30.29, 30.36, 30.45, 30.52, 30.9999a, 24.01
Public administration and social services	Major	all 44 except 44.05
Public administration	Detailed	44.0201, 44.04, 44.99
Social work and human services	Detailed	44.00, 44.07
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 43.01, 43.0402, 43.0403, 43.0406
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, 46, 47, 48, 49

CIP = Classification of Instructional Programs; nec = not elsewhere classified; SED = Survey of Earned Doctorates; STEM = science, technology, engineering, and mathematics.

^a The code level provides information about the 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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

Source(s):

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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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
01.1203a	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**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
26.0203a	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
26.0406	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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 nec
26.0804	Animal Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics nec
26.0805	Plant Genetics	Biological and biomedical sciences	Genetics and genomics	Genetics nec
26.0899	Genetics, Other	Biological and biomedical sciences	Genetics and genomics	Genetics 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
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 and anatomy
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
26.1504	Neurobiology and Behavior	Biological and biomedical sciences	Neurobiology and neurosciences	Neurobiology and neurosciences nec
26.1599a	Neurobiology and Neurosciences, Other	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
26.0999	Physiology, Pathology, and Related Sciences, Other	Biological and biomedical sciences	Physiology, oncology and cancer biology	Physiology, oncology and cancer biology nec
26.0101	Biology/ Biological Sciences, General	Biological and biomedical sciences	Biological and biomedical sciences, other	Biology/ biological sciences, general
26.0102	Biomedical Sciences, General	Biological and biomedical sciences	Biological and biomedical sciences, other	Biomedical sciences, general
26.0301	Botany/ Plant Biology	Biological and biomedical sciences	Biological and biomedical sciences, other	Botany and plant biology
26.0702a	Entomology	Biological and biomedical sciences	Biological and biomedical sciences, other	Entomology

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
26.0702b	Nematology	Biological and biomedical sciences	Biological and biomedical sciences, other	Entomology
26.0305a	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
11.0701a	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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 science/ 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
11.0801	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
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
14.0501	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
14.4101	Electromechanical Engineering	Engineering	Chemical and petroleum engineering	Chemical and petroleum engineering nec
14.4201	Mechatronics, Robotics, and Automation 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
14.1401	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
14.1099a	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
14.3701a	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
14.1801a	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
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
14.0201	Aerospace, Aeronautical, and Astronautical/ Space Engineering, General	Engineering	Engineering, other	Aerospace, aeronautical, astronautical, and space engineering
14.0202	Astronautical Engineering	Engineering	Engineering, other	Aerospace, aeronautical, astronautical, and space engineering
14.0299	Aerospace, Aeronautical, and Astronautical/ Space Engineering, Other	Engineering	Engineering, other	Aerospace, aeronautical, astronautical, and space engineering
15.0801	Aeronautical/ Aerospace Engineering Technology	Engineering	Engineering, other	Aerospace, aeronautical, astronautical, and space engineering
14.1101	Engineering 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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
14.9999a	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
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
40.0601a	Geology/ Earth Science, General	Geosciences, atmospheric, and ocean sciences	Geological and earth sciences	Geology/ earth science, general
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
30.4101	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
40.0699a	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
40.0401	Atmospheric Sciences and Meteorology, General	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Atmospheric sciences and meteorology, general
40.0402	Atmospheric Chemistry and Climatology	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Climatology, atmospheric chemistry and physics
40.0403	Atmospheric Physics and Dynamics	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Climatology, atmospheric chemistry and physics
26.1302	Marine Biology and Biological Oceanography	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Marine biology and biological oceanography
30.3201a	Marine Sciences	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Marine sciences
30.3201b	Ocean/ Marine Science, Other	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Marine sciences
40.0607	Oceanography, Chemical and Physical	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Oceanography, chemical and physical
30.3501	Climate Science	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Atmospheric sciences and meteorology nec
40.0404	Meteorology	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Atmospheric sciences and meteorology nec
40.0499	Atmospheric Sciences and Meteorology, Other	Geosciences, atmospheric, and ocean sciences	Ocean/ marine sciences and atmospheric science	Atmospheric sciences and meteorology nec
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
51.2211a	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
51.0000a	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 science
51.1402	Clinical and Translational Science	Health sciences	Health sciences, other	Medical clinical science
51.1403	Pain Management	Health sciences	Health sciences, other	Medical clinical science
51.1404	Temporomandibular Disorders and Orofacial Pain	Health sciences	Health sciences, other	Medical clinical science
51.1405	Tropical Medicine	Health sciences	Health sciences, other	Medical clinical science
51.1499	Medical Clinical Sciences/ Graduate Medical Studies, Other	Health sciences	Health sciences, other	Medical clinical science

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
51.2703	Medical Illustration/ Medical Illustrator	Health sciences	Health sciences, other	Medical, biomedical, and health informatics
51.2706a	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
51.9999a	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
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
27.0102a	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
27.0103	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
27.0199a	Mathematics, Other	Mathematics and statistics	Mathematics	Mathematics nec
27.0199c	Logic (MATHEMATICS)	Mathematics and statistics	Mathematics	Mathematics nec
27.9999	Mathematics and Statistics, Other	Mathematics and statistics	Mathematics	Mathematics nec
27.0601	Applied Statistics, General	Mathematics and statistics	Statistics	Applied statistics, general
27.0503	Mathematics and Statistics	Mathematics and statistics	Statistics	Mathematics and statistics
27.0501	Statistics (MATHEMATICS)	Mathematics and statistics	Statistics	Statistics
27.0502	Mathematical Statistics and Probability	Mathematics and statistics	Statistics	Statistics nec
27.0599a	Statistics, Other	Mathematics and statistics	Statistics	Statistics nec

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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
30.3001a	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
30.7001	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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
30.0601	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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
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
40.0502	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 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
40.0599a	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 science nec
40.1099	Materials Sciences, Other	Physical sciences	Materials sciences	Materials chemistry and materials science nec
40.0899b	Applied Physics	Physical sciences	Physics	Applied physics

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
40.0802	Atomic/ Molecular Physics	Physical sciences	Physics	Atomic/ molecular physics
40.0808a	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
40.0899a	Physics, Other	Physical sciences	Physics	Physics and physical sciences nec
40.9999	Physical Sciences, Other	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
42.2806a	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
42.2805a	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
42.2815	Performance and Sport Psychology	Psychology	Counseling and applied psychology	Counseling and applied psychology nec

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
42.2799a	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
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
45.0602a	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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
45.0301a	Archaeology/ Archeology (SOCIAL SCIENCES)	Social sciences	Social sciences, other	Archeology
45.0301b	Archaeology/ Archeology (HUMANITIES)	Social sciences	Social sciences, other	Archeology
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
43.0402	Criminalistics and Criminal Science	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
43.0406	Forensic Science and Technology	Social sciences	Social sciences, other	Criminal justice and corrections
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
30.1101a	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
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
52.0201a	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
13.0499a	Educational Administration and Supervision, Other	Education	Education leadership and administration	Education leadership and administration nec
13.0499b	Education and Human Resource Studies/ Development	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
13.0699a	Educational Assessment, Evaluation, and Research, Other	Education	Education research	Educational assessment, evaluation, and research methods
13.0501a	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
13.0608	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
13.1201a	Adult and Continuing Education and Teaching	Education	Teacher education	Adult, continuing, and workforce education and development
13.1201b	Workforce Education and Development	Education	Teacher education	Adult, continuing, and workforce education and development
13.0201	Bilingual and Multilingual Education	Education	Teacher education	Bilingual, multilingual, and multicultural education
13.0202	Multicultural Education	Education	Teacher education	Bilingual, multilingual, and multicultural education
13.0203	Indian/ Native American Education	Education	Teacher education	Bilingual, multilingual, and multicultural education
13.0299	Bilingual, Multilingual, and Multicultural Education, Other	Education	Teacher education	Bilingual, multilingual, and multicultural education
13.1311	Mathematics Teacher Education	Education	Teacher education	Mathematics teacher education
13.1312	Music Teacher Education	Education	Teacher education	Music teacher education
13.1001	Special Education and Teaching, General	Education	Teacher education	Special education and teaching
13.1003	Education/ Teaching of Individuals with Hearing Impairments Including Deafness	Education	Teacher education	Special education and teaching
13.1004	Education/ Teaching of the Gifted and Talented	Education	Teacher education	Special education and teaching
13.1005	Education/ Teaching of Individuals with Emotional Disturbances	Education	Teacher education	Special education and teaching
13.1006	Education/ Teaching of Individuals with Intellectual Disabilities	Education	Teacher education	Special education and teaching
13.1007	Education/ Teaching of Individuals with Multiple Disabilities	Education	Teacher education	Special education and teaching
13.1008	Education/ Teaching of Individuals with Orthopedic and Other Physical Health Impairments	Education	Teacher education	Special education and teaching
13.1009	Education/ Teaching of Individuals with Vision Impairments Including Blindness	Education	Teacher education	Special education and teaching
13.1011	Education/ Teaching of Individuals with Specific Learning Disabilities	Education	Teacher education	Special education and teaching
13.1012	Education/ Teaching of Individuals with Speech or Language Impairments	Education	Teacher education	Special education and teaching
13.1013	Education/ Teaching of Individuals with Autism	Education	Teacher education	Special education and teaching
13.1014	Education/ Teaching of Individuals Who are Developmentally Delayed	Education	Teacher education	Special education and teaching
13.1015	Education/ Teaching of Individuals in Early Childhood Special Education Programs	Education	Teacher education	Special education and teaching
13.1016	Education/ Teaching of Individuals with Traumatic Brain Injuries	Education	Teacher education	Special education and teaching

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
13.1017	Education/ Teaching of Individuals in Elementary Special Education Programs	Education	Teacher education	Special education and teaching
13.1018	Education/ Teaching of Individuals in Junior High/ Middle School Special Education Programs	Education	Teacher education	Special education and teaching
13.1019	Education/ Teaching of Individuals in Secondary Special Education Programs	Education	Teacher education	Special education and teaching
13.1099	Special Education and Teaching, Other	Education	Teacher education	Special education and teaching
13.1213	STEM Educational Methods	Education	Teacher education	STEM educational methods
13.1301	Agricultural Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1307	Health Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1316	Science Teacher Education/ General Science Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1317	Social Science Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1321	Computer Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1322	Biology Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1323	Chemistry Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1329	Physics Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1332	Geography Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1335	Psychology Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1337	Earth Science Teacher Education	Education	Teacher education	Teacher education, science and engineering
13.1338	Environmental Education	Education	Teacher education	Teacher education, science and engineering
13.1202	Elementary Education and Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1203	Junior High/ Intermediate/ Middle School Education and Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1205	Secondary Education and Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1206	Teacher Education, Multiple Levels	Education	Teacher education	Teacher education, specific levels and methods
13.1207	Montessori Teacher Education	Education	Teacher education	Teacher education, specific levels and methods
13.1208	Waldorf/ Steiner Teacher Education	Education	Teacher education	Teacher education, specific levels and methods
13.1209	Kindergarten/ Preschool Education and Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1210	Early Childhood Education and Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1211	Online Educator/ Online Teaching	Education	Teacher education	Teacher education, specific levels and methods
13.1212	International Teaching and Learning	Education	Teacher education	Teacher education, specific levels and methods
13.1214	College/ Postsecondary/ University Teaching	Education	Teacher education	Teacher education, specific levels and methods

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	Education	Teacher education	Teacher education, specific levels and methods
13.1302	Art Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1303	Business and Innovation/ Entrepreneurship Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1304	Driver and Safety Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1305	English/ Language Arts Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1306	Foreign Language Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1308	Family and Consumer Sciences/ Home Economics Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1309	Technology Teacher Education/ Industrial Arts Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1310	Sales and Marketing Operations/ Marketing and Distribution Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1314	Physical Education Teaching and Coaching	Education	Teacher education	Teacher education, specific subject areas
13.1315	Reading Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1318	Social Studies Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1319	Technical Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1320	Trade and Industrial Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1324	Drama and Dance Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1325	French Language Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1326	German Language Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1327	Health Occupations Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1328	History Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1330	Spanish Language Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1331	Speech Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1333	Latin Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1334	School Librarian/ School Library Media Specialist	Education	Teacher education	Teacher education, specific subject areas
13.1339	Communication Arts and Literature Teacher Education	Education	Teacher education	Teacher education, specific subject areas
13.1399	Teacher Education and Professional Development, Specific Subject Areas, Other	Education	Teacher education	Teacher education, specific subject areas
13.1401	Teaching English as a Second or Foreign Language/ ESL Language Instructor	Education	Teacher education	Teacher education, specific subject areas

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
13.1402	Teaching French as a Second or Foreign Language	Education	Teacher education	Teacher education, specific subject areas
13.1499	Teaching English or French as a Second or Foreign Language, Other	Education	Teacher education	Teacher education, specific subject areas
13.0101	Education, General	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
23.1402a	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
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 and composition, and writing studies
23.1303	Professional, Technical, Business, and Scientific Writing	Humanities	English language and literature, letters	Rhetoric and composition, and writing studies
23.1304	Rhetoric and Composition	Humanities	English language and literature, letters	Rhetoric and composition, and writing studies
23.1399	Rhetoric and Composition/ Writing Studies, Other	Humanities	English language and literature, letters	Rhetoric and 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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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
54.0102a	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
54.0199a	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
38.0102	Logic (PHIOLOSPHY)	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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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/ design, and arts management nec
50.0102	Digital Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0201	Crafts/ Craft Design, Folk Art and Artisanry	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
50.0401	Design and Visual Communications, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0402	Commercial and Advertising Art	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0404	Industrial and Product Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0406	Commercial Photography	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0407	Fashion/ Apparel Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0408	Interior Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0409	Graphic Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0410	Illustration	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0411	Game and Interactive Media Design	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0499	Design and Applied Arts, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0701	Art/ Art Studies, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0702	Fine/ Studio Arts, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0705	Drawing	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0706	Intermedia/ Multimedia	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0708	Painting	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0709	Sculpture	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0710	Printmaking	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0711	Ceramic Arts and Ceramics	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0712	Fiber, Textile and Weaving Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
50.0713	Jewelry Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0714	Metal Arts	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.0799	Fine Arts and Art Studies, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1001	Arts, Entertainment, and Media Management, General	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1002	Fine and Studio Arts Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1003	Music Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1004	Theatre/ Theatre Arts Management	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1099	Arts, Entertainment, and Media Management, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.1101	Community/ Environmental/ Socially-Engaged Art	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management nec
50.9999	Visual and Performing Arts, Other	Visual and performing arts	Visual arts, media studies, and design	Visual arts, media studies/ design, and arts management 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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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
09.0100a	Communication, General	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 and 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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New 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
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
30.4501a	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
30.9999a	Multi-/ Interdisciplinary Studies, Other	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
44.9999	Public Administration and Social Service Professions, Other	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
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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 sciences, and human sciences
19.0201	Business Family and Consumer Sciences/ Human Sciences	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0202	Family and Consumer Sciences/ Human Sciences Communication	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0203	Consumer Merchandising/ Retailing Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, 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 sciences, and human sciences
19.0401	Family Resource Management Studies, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0402	Consumer Economics	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0403	Consumer Services and Advocacy	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, 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 sciences, and human sciences
19.0501	Foods, Nutrition, and Wellness Studies, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0504	Human Nutrition	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0505	Foodservice Systems Administration/ Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0599	Foods, Nutrition, and Related Services, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0601	Housing and Human Environments, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
19.0604	Facilities Planning and Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0605	Home Furnishings and Equipment Installers	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0699	Housing and Human Environments, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0704	Family Systems	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0707	Family and Community Services	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0708	Child Care and Support Services Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0709	Child Care Provider/ Assistant	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0710	Developmental Services Worker	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0711	Early Childhood and Family Studies	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0712	Parent Education Services	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, 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 sciences, and human sciences
19.0901	Apparel and Textiles, General	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0902	Apparel and Textile Manufacture	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0904	Textile Science	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0905	Apparel and Textile Marketing Management	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0906	Fashion and Fabric Consultant	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.0999	Apparel and Textiles, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.1001	Work and Family Studies	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
19.9999	Family and Consumer Sciences/ Human Sciences, Other	Other non-science and engineering	Non-science and engineering, other	Family, consumer sciences, and human sciences
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
43.0404	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
43.0407	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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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
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	Agricultural sciences and natural resources	Agricultural, animal, plant, and veterinary sciences	Agricultural, animal, plant, and veterinary sciences 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

Table A-5**SED-CIP codes in new broad, major, and detailed fields: 2021**

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
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, C4I) 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
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, C4I) 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
49.0101	Aeronautics/ Aviation/ Aerospace Science and Technology, General	Other non-science and engineering	Non-science and engineering, other	Other non-science and engineering nec

Table A-5
SED-CIP codes in new broad, major, and detailed fields: 2021

(Field)

SED-CIP code	SED-CIP title	New broad field	New major field	New detailed field
49.0104	Aviation/ Airway Management and Operations	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 the new broad, major, and detailed fields were used in tables reporting only the most recent data year. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "Technical Notes" for more information, [table A-4](#) for a summary of SED-CIP codes in the new field taxonomy, and [table A-6](#) for the SED-CIP code crosswalk to the historical field taxonomy.

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

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
01.0103	Agricultural Economics	Life sciences	Agricultural sciences and natural resources	Agricultural economics
01.1104	Agricultural and Horticultural Plant Breeding	Life sciences	Agricultural sciences and natural resources	Agricultural and horticultural plant breeding
01.0304	Crop Production	Life sciences	Agricultural sciences and natural resources	Agronomy and crop science
01.1102	Agronomy and Crop Science	Life sciences	Agricultural sciences and natural resources	Agronomy and crop science
01.0904	Animal Nutrition	Life sciences	Agricultural sciences and natural resources	Animal nutrition
01.0907	Poultry Science	Life sciences	Agricultural sciences and natural resources	Animal science, poultry or avian
01.0302	Animal/ Livestock Husbandry and Production	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0306	Dairy Husbandry and Production	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0307	Horse Husbandry/ Equine Science and Management	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0505	Animal Training	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0507	Equestrian/ Equine Studies	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0509	Farrier Science	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0599	Agricultural and Domestic Animal Services, Other	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0901	Animal Sciences, General	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0902	Agricultural Animal Breeding	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0903	Animal Health	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0905	Dairy Science	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0906	Livestock Management	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.0999	Animal Sciences, Other	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
26.0708	Animal Behavior and Ethology	Life sciences	Agricultural sciences and natural resources	Animal sciences, other
01.1001	Food Science	Life sciences	Agricultural sciences and natural resources	Food science
01.1003	Brewing Science	Life sciences	Agricultural sciences and natural resources	Food science and technology, other
01.0401	Agricultural and Food Products Processing	Life sciences	Agricultural sciences and natural resources	Food science and technology, other
01.1002	Food Technology and Processing	Life sciences	Agricultural sciences and natural resources	Food science and technology, other
01.1004	Viticulture and Enology	Life sciences	Agricultural sciences and natural resources	Food science and technology, other
01.1005	Zymology/ Fermentation Science	Life sciences	Agricultural sciences and natural resources	Food science and technology, other
01.1099	Food Science and Technology, Other	Life sciences	Agricultural sciences and natural resources	Food science and technology, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
01.0601	Applied Horticulture/ Horticulture Operations, General	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0603	Ornamental Horticulture	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0604	Greenhouse Operations and Management	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0605	Landscaping and Groundskeeping	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0606	Plant Nursery Operations and Management	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0607	Turf and Turfgrass Management	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0608	Floriculture/ Floristry Operations and Management	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0609	Public Horticulture	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0610	Urban and Community Horticulture	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.0699	Applied Horticulture/ Horticultural Business Services, Other	Life sciences	Agricultural sciences and natural resources	Horticulture science
01.1103	Horticultural Science	Life sciences	Agricultural sciences and natural resources	Horticulture science
26.0305b	Plant Pathology/ Phytopathology (AGRICULTURAL SCIENCES)	Life sciences	Agricultural sciences and natural resources	Plant pathology/ phytopathology (agricultural sciences)
01.1101	Plant Sciences, General	Life sciences	Agricultural sciences and natural resources	Plant sciences, other
01.1105	Plant Protection and Integrated Pest Management	Life sciences	Agricultural sciences and natural resources	Plant sciences, other
01.1199	Plant Sciences, Other	Life sciences	Agricultural sciences and natural resources	Plant sciences, other
01.1202	Soil Chemistry and Physics	Life sciences	Agricultural sciences and natural resources	Soil chemistry/ microbiology
01.1203a	Soil Microbiology	Life sciences	Agricultural sciences and natural resources	Soil chemistry/ microbiology
01.1203b	Soil Chemistry and Microbiology	Life sciences	Agricultural sciences and natural resources	Soil chemistry/ microbiology
01.1201	Soil Science and Agronomy, General	Life sciences	Agricultural sciences and natural resources	Soil sciences, other
01.1299	Soil Sciences, Other	Life sciences	Agricultural sciences and natural resources	Soil sciences, other
03.0103	Environmental Studies	Life sciences	Agricultural sciences and natural resources	Environmental science
03.0104	Environmental Science	Life sciences	Agricultural sciences and natural resources	Environmental science
01.0303	Aquaculture	Life sciences	Agricultural sciences and natural resources	Fishing and fisheries sciences/ management
03.0301	Fishing and Fisheries Sciences and Management	Life sciences	Agricultural sciences and natural resources	Fishing and fisheries sciences/ management
03.0506	Forest Management/ Forest Resources Management	Life sciences	Agricultural sciences and natural resources	Forest/ forest resources management
03.0510	Forest Resources Production and Management	Life sciences	Agricultural sciences and natural resources	Forest/ forest resources management
03.0502	Forest Sciences and Biology	Life sciences	Agricultural sciences and natural resources	Forest sciences and biology

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
03.0501	Forestry, General	Life sciences	Agricultural sciences and natural resources	Forestry, other
03.0508	Urban Forestry	Life sciences	Agricultural sciences and natural resources	Forestry, other
03.0509	Wood Science and Wood Products/ Pulp and Paper Technology	Life sciences	Agricultural sciences and natural resources	Forestry, other
03.0511	Forest Technology	Life sciences	Agricultural sciences and natural resources	Forestry, other
03.0599	Forestry, Other	Life sciences	Agricultural sciences and natural resources	Forestry, other
03.0201	Environmental/ Natural Resources Management and Policy, General	Life sciences	Agricultural sciences and natural resources	Natural resource/ environmental policy
03.0209	Energy and Environmental Policy	Life sciences	Agricultural sciences and natural resources	Natural resource/ environmental policy
03.0299	Environmental/ Natural Resources Management and Policy, Other	Life sciences	Agricultural sciences and natural resources	Natural resource/ environmental policy
03.0101	Natural Resources/ Conservation, General	Life sciences	Agricultural sciences and natural resources	Natural resources and conservation
03.0199	Natural Resources Conservation and Research, Other	Life sciences	Agricultural sciences and natural resources	Natural resources and conservation
03.9999	Natural Resources and Conservation, Other	Life sciences	Agricultural sciences and natural resources	Natural resources and conservation
30.3301	Sustainability Studies	Life sciences	Agricultural sciences and natural resources	Natural resources and conservation
03.0204	Environmental/ Natural Resource Economics (NATURAL RESOURCES/ CONSERVATION SCIENCES)	Life sciences	Agricultural sciences and natural resources	Natural resources/ environmental economics (agricultural sciences)
01.1106	Range Science and Management	Life sciences	Agricultural sciences and natural resources	Wildlife/ range management
03.0601	Wildlife, Fish and Wildlands Science and Management	Life sciences	Agricultural sciences and natural resources	Wildlife/ range management
01.0000	Agriculture, General	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, general
01.0701	International Agriculture	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, general
01.0201	Agricultural Mechanization, General	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0204	Agricultural Power Machinery Operation	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0205	Agricultural Mechanics and Equipment/ Machine Technology	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0207	Irrigation Management Technology	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0299	Agricultural Mechanization, Other	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0308	Agroecology and Sustainable Agriculture	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.0399	Agricultural Production Operations, Other	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.1399	Agriculture/ Veterinary Preparatory Programs, Other	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
01.9999	Agricultural/ Animal/ Plant/ Veterinary Science and Related Fields, Other	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
03.0210	Bioenergy	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
30.1801	Natural Sciences	Life sciences	Agricultural sciences and natural resources	Agricultural sciences/ natural resources, other
26.0403	Anatomy	Life sciences	Biological and biomedical sciences	Anatomy
26.0503	Medical Microbiology and Bacteriology	Life sciences	Biological and biomedical sciences	Bacteriology
26.0202	Biochemistry	Life sciences	Biological and biomedical sciences	Biochemistry (biological sciences)
26.0205	Molecular Biochemistry	Life sciences	Biological and biomedical sciences	Biochemistry (biological sciences)
26.0210	Biochemistry and Molecular Biology	Life sciences	Biological and biomedical sciences	Biochemistry (biological sciences)
26.1103	Bioinformatics	Life sciences	Biological and biomedical sciences	Bioinformatics
26.1199	Biomathematics, Bioinformatics, and Computational Biology, Other	Life sciences	Biological and biomedical sciences	Bioinformatics
51.2706a	Medical Informatics	Life sciences	Biological and biomedical sciences	Bioinformatics
51.2706b	Biomedical and Health Informatics	Life sciences	Biological and biomedical sciences	Bioinformatics
26.0102	Biomedical Sciences, General	Life sciences	Biological and biomedical sciences	Biomedical sciences
26.0907	Cardiovascular Science	Life sciences	Biological and biomedical sciences	Biomedical sciences
26.1101	Biometry/ Biometrics	Life sciences	Biological and biomedical sciences	Biometrics and biostatistics
26.1102	Biostatistics	Life sciences	Biological and biomedical sciences	Biometrics and biostatistics
26.0203a	Biophysics (BIOLOGY)	Life sciences	Biological and biomedical sciences	Biophysics (biological sciences)
26.0206	Molecular Biophysics	Life sciences	Biological and biomedical sciences	Biophysics (biological sciences)
26.1201	Biotechnology	Life sciences	Biological and biomedical sciences	Biotechnology
26.0301	Botany/ Plant Biology	Life sciences	Biological and biomedical sciences	Botany and plant biology
26.0308	Plant Molecular Biology	Life sciences	Biological and biomedical sciences	Botany and plant biology
26.0399	Botany/ Plant Biology, Other	Life sciences	Biological and biomedical sciences	Botany and plant biology
26.0911	Oncology and Cancer Biology	Life sciences	Biological and biomedical sciences	Cancer biology
26.0401	Cell/ Cellular Biology and Histology	Life sciences	Biological and biomedical sciences	Cell/ cellular biology and histology
26.0407	Cell Biology and Anatomy	Life sciences	Biological and biomedical sciences	Cell/ cellular biology and histology
26.0499	Cell/ Cellular Biology and Anatomical Sciences, Other	Life sciences	Biological and biomedical sciences	Cell/ cellular biology and histology
26.1104	Computational Biology	Life sciences	Biological and biomedical sciences	Computational biology
26.0404	Developmental Biology and Embryology	Life sciences	Biological and biomedical sciences	Developmental biology and embryology
26.1301	Ecology	Life sciences	Biological and biomedical sciences	Ecology

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
26.1310	Ecology and Evolutionary Biology	Life sciences	Biological and biomedical sciences	Ecology
26.0904	Endocrinology	Life sciences	Biological and biomedical sciences	Endocrinology
01.0310	Apiculture	Life sciences	Biological and biomedical sciences	Entomology
26.0702a	Entomology	Life sciences	Biological and biomedical sciences	Entomology
26.1006	Environmental Toxicology	Life sciences	Biological and biomedical sciences	Environmental toxicology
26.1309	Epidemiology	Life sciences	Biological and biomedical sciences	Epidemiology
26.1311	Epidemiology and Biostatistics	Life sciences	Biological and biomedical sciences	Epidemiology
26.1303	Evolutionary Biology	Life sciences	Biological and biomedical sciences	Evolutionary biology
26.1306	Population Biology	Life sciences	Biological and biomedical sciences	Evolutionary biology
26.1307	Conservation Biology	Life sciences	Biological and biomedical sciences	Evolutionary biology
26.1308	Systematic Biology/ Biological Systematics	Life sciences	Biological and biomedical sciences	Evolutionary biology
26.1399	Ecology, Evolution, Systematics and Population Biology, Other	Life sciences	Biological and biomedical sciences	Evolutionary biology
26.0801	Genetics, General	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0802	Molecular Genetics	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0803	Microbial and Eukaryotic Genetics	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0804	Animal Genetics	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0806	Human/ Medical Genetics	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0807	Genome Sciences/ Genomics	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0899	Genetics, Other	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
51.0914	Gene/ Genetic Therapy	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
51.1010	Cytogenetics/ Genetics/ Clinical Genetics Technology/ Technologist	Life sciences	Biological and biomedical sciences	Genetics/ genomics, human and animal
26.0506	Mycology	Life sciences	Biological and biomedical sciences	Immunology
26.0507	Immunology	Life sciences	Biological and biomedical sciences	Immunology
26.0509	Infectious Disease and Global Health	Life sciences	Biological and biomedical sciences	Immunology
26.0599	Microbiological Sciences and Immunology, Other	Life sciences	Biological and biomedical sciences	Immunology
26.0502	Microbiology, General	Life sciences	Biological and biomedical sciences	Microbiology
26.0508	Microbiology and Immunology	Life sciences	Biological and biomedical sciences	Microbiology

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
26.0204	Molecular Biology	Life sciences	Biological and biomedical sciences	Molecular biology
26.0406	Cell/ Cellular and Molecular Biology	Life sciences	Biological and biomedical sciences	Molecular biology
26.1401	Molecular Medicine	Life sciences	Biological and biomedical sciences	Molecular medicine
26.1501	Neuroscience	Life sciences	Biological and biomedical sciences	Neurosciences and neurobiology
26.1502	Neuroanatomy	Life sciences	Biological and biomedical sciences	Neurosciences and neurobiology
26.1503	Neurobiology and Anatomy	Life sciences	Biological and biomedical sciences	Neurosciences and neurobiology
26.1504	Neurobiology and Behavior	Life sciences	Biological and biomedical sciences	Neurosciences and neurobiology
26.1599a	Neurobiology and Neurosciences, Other	Life sciences	Biological and biomedical sciences	Neurosciences and neurobiology
19.0504	Human Nutrition	Life sciences	Biological and biomedical sciences	Nutrition sciences
30.1901	Nutrition Sciences	Life sciences	Biological and biomedical sciences	Nutrition sciences
51.3101	Dietetics/ Dietitian	Life sciences	Biological and biomedical sciences	Nutrition sciences
51.3102	Clinical Nutrition/ Nutritionist	Life sciences	Biological and biomedical sciences	Nutrition sciences
51.3103	Dietetic Technician	Life sciences	Biological and biomedical sciences	Nutrition sciences
51.3104	Dietitian Assistant	Life sciences	Biological and biomedical sciences	Nutrition sciences
51.3199	Dietetics and Clinical Nutrition Services, Other	Life sciences	Biological and biomedical sciences	Nutrition sciences
26.0505	Parasitology	Life sciences	Biological and biomedical sciences	Parasitology
51.0811	Pathology/ Pathologist Assistant	Life sciences	Biological and biomedical sciences	Pathology, human and animal
26.0910	Pathology/ Experimental Pathology	Life sciences	Biological and biomedical sciences	Pathology, human and animal
26.1001	Pharmacology	Life sciences	Biological and biomedical sciences	Pharmacology, human and animal
26.1002	Molecular Pharmacology	Life sciences	Biological and biomedical sciences	Pharmacology, human and animal
26.1003	Neuropharmacology	Life sciences	Biological and biomedical sciences	Pharmacology, human and animal
26.1007	Pharmacology and Toxicology	Life sciences	Biological and biomedical sciences	Pharmacology, human and animal
26.0999	Physiology, Pathology, and Related Sciences, Other	Life sciences	Biological and biomedical sciences	Physiology, human and animal
26.0707	Animal Physiology	Life sciences	Biological and biomedical sciences	Physiology, human and animal
26.0901	Physiology, General	Life sciences	Biological and biomedical sciences	Physiology, human and animal
26.0902	Molecular Physiology	Life sciences	Biological and biomedical sciences	Physiology, human and animal
26.0903	Cell Physiology	Life sciences	Biological and biomedical sciences	Physiology, human and animal

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
26.0805	Plant Genetics	Life sciences	Biological and biomedical sciences	Plant genetics
26.0305a	Plant Pathology/ Phytopathology (BIOLOGY)	Life sciences	Biological and biomedical sciences	Plant pathology/ phytopathology (biological sciences)
26.0307	Plant Physiology	Life sciences	Biological and biomedical sciences	Plant physiology
26.0207	Structural Biology	Life sciences	Biological and biomedical sciences	Structural biology
26.1004	Toxicology	Life sciences	Biological and biomedical sciences	Toxicology
26.1005	Molecular Toxicology	Life sciences	Biological and biomedical sciences	Toxicology
26.1099	Pharmacology and Toxicology, Other	Life sciences	Biological and biomedical sciences	Toxicology
26.0504	Virology	Life sciences	Biological and biomedical sciences	Virology
26.0709	Wildlife Biology	Life sciences	Biological and biomedical sciences	Wildlife biology
26.0701	Zoology/ Animal Biology	Life sciences	Biological and biomedical sciences	Zoology
26.0799	Zoology/ Animal Biology, Other	Life sciences	Biological and biomedical sciences	Zoology
26.0101	Biology/ Biological Sciences, General	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.0208	Photobiology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.0209	Radiation Biology/ Radiobiology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.0299	Biochemistry, Biophysics and Molecular Biology, Other	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.0905	Reproductive Biology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.1304	Aquatic Biology/ Limnology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.1305	Environmental Biology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
26.9999	Biological and Biomedical Sciences, Other	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, general
30.2701	Human Biology	Life sciences	Biological and biomedical sciences	Biology and biomedical sciences, general
51.1405	Tropical Medicine	Life sciences	Biological and biomedical sciences	Biology and biomedical sciences, general
15.0401	Biomedical Technology	Life sciences	Biological and biomedical sciences	Biology and biomedical sciences, other
26.0702b	Nematology	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, other
26.0909	Vision Science/ Physiological Optics	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, other
26.0912	Aerospace Physiology and Medicine	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, other
26.0913	Biomechanics	Life sciences	Biological and biomedical sciences	Biological and biomedical sciences, other
30.0101	Biological and Physical Sciences	Life sciences	Biological and biomedical sciences	Biology and biomedical sciences, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
30.5301	Thanatology	Life sciences	Biological and biomedical sciences	Biology and biomedical sciences, other
51.2202	Environmental Health	Life sciences	Health sciences	Environmental health
30.1101b	Gerontology (HEALTH SCIENCES)	Life sciences	Health sciences	Gerontology (health sciences)
51.1512	Hospice and Palliative Care	Life sciences	Health sciences	Gerontology (health sciences)
51.2212	Behavioral Aspects of Health	Life sciences	Health sciences	Health and behavior
51.0707	Health Information/ Medical Records Technology	Life sciences	Health sciences	Health services research
51.0719	Clinical Research Coordinator	Life sciences	Health sciences	Health services research
51.0720	Regulatory Science/ Affairs	Life sciences	Health sciences	Health services research
51.0722	Healthcare Innovation	Life sciences	Health sciences	Health services research
51.2211b	Health Services Research	Life sciences	Health sciences	Health services research
51.2213	Patient Safety and Healthcare Quality	Life sciences	Health sciences	Health services research
51.0701	Health/ Health Care Administration/ Management	Life sciences	Health sciences	Health systems administration
51.0702	Hospital and Health Care Facilities Administration/ Management	Life sciences	Health sciences	Health systems administration
51.0703	Health Unit Coordinator/ Ward Clerk	Life sciences	Health sciences	Health systems administration
51.0704	Health Unit Manager/ Ward Supervisor	Life sciences	Health sciences	Health systems administration
51.0705	Medical Office Management/ Administration	Life sciences	Health sciences	Health systems administration
51.0706	Health Information/ Medical Records Administration/ Administrator	Life sciences	Health sciences	Health systems administration
51.0708	Medical Transcription/ Transcriptionist	Life sciences	Health sciences	Health systems administration
51.0709	Medical Office Computer Specialist/ Assistant	Life sciences	Health sciences	Health systems administration
51.0710	Medical Office Assistant/ Specialist	Life sciences	Health sciences	Health systems administration
51.0711	Medical/ Health Management and Clinical Assistant/ Specialist	Life sciences	Health sciences	Health systems administration
51.0712	Medical Reception/ Receptionist	Life sciences	Health sciences	Health systems administration
51.0713	Medical Insurance Coding Specialist/ Coder	Life sciences	Health sciences	Health systems administration
51.0714	Medical Insurance Specialist/ Medical Biller	Life sciences	Health sciences	Health systems administration
51.0715	Health/ Medical Claims Examiner	Life sciences	Health sciences	Health systems administration
51.0716	Medical Administrative/ Executive Assistant and Medical Secretary	Life sciences	Health sciences	Health systems administration
51.0717	Medical Staff Services Technology	Life sciences	Health sciences	Health systems administration
51.0718	Long Term Care Administration/ Management	Life sciences	Health sciences	Health systems administration
51.0721	Disease Registry Data Management	Life sciences	Health sciences	Health systems administration
51.0723	Healthcare Information Privacy Assurance and Security	Life sciences	Health sciences	Health systems administration
51.0799	Health and Medical Administrative Services, Other	Life sciences	Health sciences	Health systems administration
51.0801	Medical/ Clinical Assistant	Life sciences	Health sciences	Health systems administration
51.0802	Clinical/ Medical Laboratory Assistant	Life sciences	Health sciences	Health systems administration
51.0899	Allied Health and Medical Assisting Services, Other	Life sciences	Health sciences	Health systems administration
51.0910	Diagnostic Medical Sonography/ Sonographer and Ultrasound Technician	Life sciences	Health sciences	Health systems administration
51.1504	Community Health Services/ Liaison/ Counseling	Life sciences	Health sciences	Health systems administration
51.2211a	Health Services Administration	Life sciences	Health sciences	Health systems administration
26.0908	Exercise Physiology and Kinesiology	Life sciences	Health sciences	Kinesiology and exercise science
31.0501	Sports, Kinesiology, and Physical Education/ Fitness, General	Life sciences	Health sciences	Kinesiology and exercise science

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
31.0505	Exercise Science and Kinesiology	Life sciences	Health sciences	Kinesiology and exercise science
31.0599	Sports, Kinesiology, and Physical Education/ Fitness, Other	Life sciences	Health sciences	Kinesiology and exercise science
31.9999	Parks, Recreation, Leisure, Fitness, and Kinesiology, Other	Life sciences	Health sciences	Kinesiology and exercise science
51.0913	Athletic Training/ Trainer	Life sciences	Health sciences	Kinesiology and exercise science
51.3601	Movement Therapy and Movement Education	Life sciences	Health sciences	Kinesiology and exercise science
51.3602	Yoga Teacher Training/ Yoga Therapy	Life sciences	Health sciences	Kinesiology and exercise science
51.3699	Movement and Mind-Body Therapies and Education, Other	Life sciences	Health sciences	Kinesiology and exercise science
51.0814	Radiologist Assistant	Life sciences	Health sciences	Medical physics/ radiological science
51.0905	Nuclear Medical Technology/ Technologist	Life sciences	Health sciences	Medical physics/ radiological science
51.0906	Perfusion Technology/ Perfusionist	Life sciences	Health sciences	Medical physics/ radiological science
51.0907	Medical Radiologic Technology/ Science - Radiation Therapist	Life sciences	Health sciences	Medical physics/ radiological science
51.0911	Radiologic Technology/ Science - Radiographer	Life sciences	Health sciences	Medical physics/ radiological science
51.0916	Radiation Protection/ Health Physics Technician	Life sciences	Health sciences	Medical physics/ radiological science
51.0919	Mammography Technology	Life sciences	Health sciences	Medical physics/ radiological science
51.0920	Magnetic Resonance Imaging (MRI) Technology	Life sciences	Health sciences	Medical physics/ radiological science
51.2205	Health/ Medical Physics	Life sciences	Health sciences	Medical physics/ radiological science
51.1105	Pre-Nursing Studies	Life sciences	Health sciences	Nursing science
51.3801	Registered Nursing/ Registered Nurse	Life sciences	Health sciences	Nursing science
51.3802	Nursing Administration	Life sciences	Health sciences	Nursing science
51.3803	Adult Health Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3804	Nurse Anesthetist	Life sciences	Health sciences	Nursing science
51.3805	Family Practice Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3806	Maternal/ Child Health and Neonatal Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3807	Nurse Midwife/ Nursing Midwifery	Life sciences	Health sciences	Nursing science
51.3808	Nursing Science	Life sciences	Health sciences	Nursing science
51.3809	Pediatric Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3810	Psychiatric/ Mental Health Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3811	Public Health/ Community Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3812	Perioperative/ Operating Room and Surgical Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3813	Clinical Nurse Specialist	Life sciences	Health sciences	Nursing science
51.3814	Critical Care Nursing	Life sciences	Health sciences	Nursing science
51.3815	Occupational and Environmental Health Nursing	Life sciences	Health sciences	Nursing science
51.3816	Emergency Room/ Trauma Nursing	Life sciences	Health sciences	Nursing science
51.3818	Nursing Practice	Life sciences	Health sciences	Nursing science
51.3819	Palliative Care Nursing	Life sciences	Health sciences	Nursing science
51.3820	Clinical Nurse Leader	Life sciences	Health sciences	Nursing science
51.3821	Geriatric Nurse/ Nursing	Life sciences	Health sciences	Nursing science
51.3822	Women's Health Nurse/ Nursing	Life sciences	Health sciences	Nursing science

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.3824	Forensic Nursing	Life sciences	Health sciences	Nursing science
51.3899	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	Life sciences	Health sciences	Nursing science
51.3901	Licensed Practical/ Vocational Nurse Training	Life sciences	Health sciences	Nursing science
51.3902	Nursing Assistant/ Aide and Patient Care Assistant/ Aide	Life sciences	Health sciences	Nursing science
51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other	Life sciences	Health sciences	Nursing science
51.0401	Dentistry	Life sciences	Health sciences	Oral biology/ oral pathology
51.0501	Dental Clinical Sciences, General	Life sciences	Health sciences	Oral biology/ oral pathology
51.0502	Advanced General Dentistry	Life sciences	Health sciences	Oral biology/ oral pathology
51.0503	Oral Biology and Oral and Maxillofacial Pathology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0504	Dental Public Health and Education	Life sciences	Health sciences	Oral biology/ oral pathology
51.0505	Dental Materials	Life sciences	Health sciences	Oral biology/ oral pathology
51.0506	Endodontics/ Endodontology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0507	Oral/ Maxillofacial Surgery	Life sciences	Health sciences	Oral biology/ oral pathology
51.0508	Orthodontics/ Orthodontology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0509	Pediatric Dentistry/ Pedodontics	Life sciences	Health sciences	Oral biology/ oral pathology
51.0510	Periodontics/ Periodontology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0511	Prosthodontics/ Prosthodontology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0512	Digital Dentistry	Life sciences	Health sciences	Oral biology/ oral pathology
51.0513	Geriatric Dentistry	Life sciences	Health sciences	Oral biology/ oral pathology
51.0514	Implantology/ Implant Dentistry	Life sciences	Health sciences	Oral biology/ oral pathology
51.0599	Advanced/ Graduate Dentistry and Oral Sciences, Other	Life sciences	Health sciences	Oral biology/ oral pathology
51.0601	Dental Assisting/ Assistant	Life sciences	Health sciences	Oral biology/ oral pathology
51.0602	Dental Hygiene/ Hygienist	Life sciences	Health sciences	Oral biology/ oral pathology
51.0603	Dental Laboratory Technology	Life sciences	Health sciences	Oral biology/ oral pathology
51.0699	Dental Services and Allied Professions, Other	Life sciences	Health sciences	Oral biology/ oral pathology
51.1101	Pre-Dentistry Studies	Life sciences	Health sciences	Oral biology/ oral pathology
51.1404	Temporomandibular Disorders and Orofacial Pain	Life sciences	Health sciences	Oral biology/ oral pathology
51.0805	Pharmacy Technician/ Assistant	Life sciences	Health sciences	Pharmaceutical sciences
51.1103	Pre-Pharmacy Studies	Life sciences	Health sciences	Pharmaceutical sciences
51.2001	Pharmacy	Life sciences	Health sciences	Pharmaceutical sciences
51.2002	Pharmacy Administration and Pharmacy Policy and Regulatory Affairs	Life sciences	Health sciences	Pharmaceutical sciences
51.2003	Pharmaceutics and Drug Design	Life sciences	Health sciences	Pharmaceutical sciences
51.2006	Clinical and Industrial Drug Development	Life sciences	Health sciences	Pharmaceutical sciences
51.2007	Pharmacoeconomics/ Pharmaceutical Economics	Life sciences	Health sciences	Pharmaceutical sciences
51.2008	Clinical, Hospital, and Managed Care Pharmacy	Life sciences	Health sciences	Pharmaceutical sciences
51.2009	Industrial and Physical Pharmacy and Cosmetic Sciences	Life sciences	Health sciences	Pharmaceutical sciences
51.2010	Pharmaceutical Sciences	Life sciences	Health sciences	Pharmaceutical sciences
51.2011	Pharmaceutical Marketing and Management	Life sciences	Health sciences	Pharmaceutical sciences
51.2099	Pharmacy, Pharmaceutical Sciences, and Administration, Other	Life sciences	Health sciences	Pharmaceutical sciences
51.2201	Public Health, General	Life sciences	Health sciences	Public health
51.2206	Occupational Health and Industrial Hygiene	Life sciences	Health sciences	Public health

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.2207	Public Health Education and Promotion	Life sciences	Health sciences	Public health
51.2208	Community Health and Preventive Medicine	Life sciences	Health sciences	Public health
51.2209	Maternal and Child Health	Life sciences	Health sciences	Public health
51.2210	International Public Health/ International Health	Life sciences	Health sciences	Public health
51.2214	Public Health Genetics	Life sciences	Health sciences	Public health
51.2299	Public Health, Other	Life sciences	Health sciences	Public health
51.0803	Occupational Therapist Assistant	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.0806	Physical Therapy Assistant	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.1107	Pre-Occupational Therapy Studies	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.1109	Pre-Physical Therapy Studies	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.1501	Substance Abuse/ Addiction Counseling	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2300	Rehabilitation and Therapeutic Professions, General	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2302	Dance Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2306	Occupational Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2307	Orthotist/ Prosthetist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2308	Physical Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2309	Therapeutic Recreation/ Recreational Therapy	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2310	Vocational Rehabilitation Counseling/ Counselor	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2311	Kinesiotherapy/ Kinesiotherapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2312	Assistive/ Augmentative Technology and Rehabilitation Engineering	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2313	Animal-Assisted Therapy	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2314	Rehabilitation Science	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2315	Drama Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2316	Horticulture Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2317	Play Therapy/ Therapist	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2399	Rehabilitation and Therapeutic Professions, Other	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2604	Rehabilitation Aide	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.2605	Physical Therapy Technician/ Aide	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.3501	Massage Therapy/ Therapeutic Massage	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.3502	Asian Bodywork Therapy	Life sciences	Health sciences	Rehabilitation/ therapeutic services

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.3503	Somatic Bodywork	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.3599	Somatic Bodywork and Related Therapeutic Services, Other	Life sciences	Health sciences	Rehabilitation/ therapeutic services
51.0816	Speech-Language Pathology Assistant	Life sciences	Health sciences	Speech-language pathology and audiology
51.0918	Hearing Instrument Specialist	Life sciences	Health sciences	Speech-language pathology and audiology
51.0201	Communication Sciences and Disorders, General	Life sciences	Health sciences	Speech-language pathology and audiology
51.0202	Audiology/ Audiologist	Life sciences	Health sciences	Speech-language pathology and audiology
51.0203	Speech-Language Pathology/ Pathologist	Life sciences	Health sciences	Speech-language pathology and audiology
51.0204	Audiology/ Audiologist and Speech-Language Pathology/ Pathologist	Life sciences	Health sciences	Speech-language pathology and audiology
51.0299	Communication Disorders Sciences and Services, Other	Life sciences	Health sciences	Speech-language pathology and audiology
01.1302	Pre-Veterinary Studies	Life sciences	Health sciences	Veterinary sciences
01.8001	Veterinary Medicine	Life sciences	Health sciences	Veterinary sciences
01.8101	Veterinary Sciences/ Veterinary Clinical Sciences, General	Life sciences	Health sciences	Veterinary sciences
01.8102	Comparative and Laboratory Animal Medicine	Life sciences	Health sciences	Veterinary sciences
01.8103	Large Animal/ Food Animal and Equine Surgery and Medicine	Life sciences	Health sciences	Veterinary sciences
01.8104	Small/ Companion Animal Surgery and Medicine	Life sciences	Health sciences	Veterinary sciences
01.8105	Veterinary Anatomy	Life sciences	Health sciences	Veterinary sciences
01.8106	Veterinary Infectious Diseases	Life sciences	Health sciences	Veterinary sciences
01.8107	Veterinary Microbiology and Immunobiology	Life sciences	Health sciences	Veterinary sciences
01.8108	Veterinary Pathology and Pathobiology	Life sciences	Health sciences	Veterinary sciences
01.8109	Veterinary Physiology	Life sciences	Health sciences	Veterinary sciences
01.8110	Veterinary Preventive Medicine, Epidemiology, and Public Health	Life sciences	Health sciences	Veterinary sciences
01.8111	Veterinary Toxicology and Pharmacology	Life sciences	Health sciences	Veterinary sciences
01.8199	Veterinary Biomedical and Clinical Sciences, Other	Life sciences	Health sciences	Veterinary sciences
01.8201	Veterinary Administrative Services, General	Life sciences	Health sciences	Veterinary sciences
01.8202	Veterinary Office Management/ Administration	Life sciences	Health sciences	Veterinary sciences
01.8203	Veterinary Reception/ Receptionist	Life sciences	Health sciences	Veterinary sciences
01.8204	Veterinary Administrative/ Executive Assistant and Veterinary Secretary	Life sciences	Health sciences	Veterinary sciences
01.8299	Veterinary Administrative Services, Other	Life sciences	Health sciences	Veterinary sciences
01.8301	Veterinary/ Animal Health Technology and Veterinary Assistant	Life sciences	Health sciences	Veterinary sciences
01.8399	Veterinary/ Animal Health Technologies, Other	Life sciences	Health sciences	Veterinary sciences
51.0000a	Health Services/ Allied Health/ Health Sciences, General	Life sciences	Health sciences	Health sciences, general
51.0000b	Health sciences, general	Life sciences	Health sciences	Health sciences, general
51.0001	Health and Wellness, General	Life sciences	Health sciences	Health sciences, general
51.0912	Physician Assistant	Life sciences	Health sciences	Health sciences, general
30.3701	Design for Human Health	Life sciences	Health sciences	Health sciences, other

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SED-CIP code crosswalk to historical broad, major, and fine fields: 2021

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.0101	Chiropractic	Life sciences	Health sciences	Health sciences, other
51.0809	Anesthesiologist Assistant	Life sciences	Health sciences	Health sciences, other
51.0810	Emergency Care Attendant (EMT Ambulance)	Life sciences	Health sciences	Health sciences, other
51.0812	Respiratory Therapy Technician/ Assistant	Life sciences	Health sciences	Health sciences, other
51.0813	Chiropractic Technician/ Assistant	Life sciences	Health sciences	Health sciences, other
51.0815	Lactation Consultant	Life sciences	Health sciences	Health sciences, other
51.0901	Cardiovascular Technology/ Technologist	Life sciences	Health sciences	Health sciences, other
51.0902	Electrocardiograph Technology	Life sciences	Health sciences	Health sciences, other
51.0903	Electroneurodiagnostic/ Electroencephalographic Technology/ Technologist	Life sciences	Health sciences	Health sciences, other
51.0904	Emergency Medical Technology (EMT Paramedic)	Life sciences	Health sciences	Health sciences, other
51.0908	Respiratory Care Therapy/ Therapist	Life sciences	Health sciences	Health sciences, other
51.0909	Surgical Technology/ Technologist	Life sciences	Health sciences	Health sciences, other
51.0915	Cardiopulmonary Technology/ Technologist	Life sciences	Health sciences	Health sciences, other
51.0917	Polysomnography	Life sciences	Health sciences	Health sciences, other
51.0921	Hyperbaric Medicine Technology	Life sciences	Health sciences	Health sciences, other
51.0922	Intraoperative Neuromonitoring Technology	Life sciences	Health sciences	Health sciences, other
51.0923	Orthopedic Technology	Life sciences	Health sciences	Health sciences, other
51.0999	Allied Health Diagnostic, Intervention, and Treatment Professions, Other	Life sciences	Health sciences	Health sciences, other
51.1001	Blood Bank Technology Specialist	Life sciences	Health sciences	Health sciences, other
51.1002	Cytotechnology/ Cytotechnologist	Life sciences	Health sciences	Health sciences, other
51.1003	Hematology Technology	Life sciences	Health sciences	Health sciences, other
51.1004	Clinical/ Medical Laboratory Technician	Life sciences	Health sciences	Health sciences, other
51.1005	Clinical Laboratory Science/ Medical Technology/ Technologist	Life sciences	Health sciences	Health sciences, other
51.1006	Ophthalmic Laboratory Technology	Life sciences	Health sciences	Health sciences, other
51.1007	Histologic Technology/ Histotechnologist	Life sciences	Health sciences	Health sciences, other
51.1008	Histologic Technician	Life sciences	Health sciences	Health sciences, other
51.1009	Phlebotomy Technician/ Phlebotomist	Life sciences	Health sciences	Health sciences, other
51.1011	Renal/ Dialysis Technologist/ Technician	Life sciences	Health sciences	Health sciences, other
51.1012	Sterile Processing Technology	Life sciences	Health sciences	Health sciences, other
51.1099	Clinical/ Medical Laboratory Science and Allied Professions, Other	Life sciences	Health sciences	Health sciences, other
51.1102	Pre-Medicine/ Pre-Medical Studies	Life sciences	Health sciences	Health sciences, other
51.1106	Pre-Chiropractic Studies	Life sciences	Health sciences	Health sciences, other
51.1108	Pre-Optometry Studies	Life sciences	Health sciences	Health sciences, other
51.1110	Pre-Art Therapy	Life sciences	Health sciences	Health sciences, other
51.1111	Pre-Physician Assistant	Life sciences	Health sciences	Health sciences, other
51.1199	Health/ Medical Preparatory Programs, Other	Life sciences	Health sciences	Health sciences, other
51.1201	Medicine	Life sciences	Health sciences	Health sciences, other
51.1202	Osteopathic Medicine/ Osteopathy	Life sciences	Health sciences	Health sciences, other
51.1203	Podiatric Medicine/ Podiatry	Life sciences	Health sciences	Health sciences, other
51.1299	Medicine, Other	Life sciences	Health sciences	Health sciences, other
51.1401	Medical Science/ Scientist	Life sciences	Health sciences	Health sciences, other
51.1402	Clinical and Translational Science	Life sciences	Health sciences	Health sciences, other
51.1403	Pain Management	Life sciences	Health sciences	Health sciences, other
51.1499	Medical Clinical Sciences/ Graduate Medical Studies, Other	Life sciences	Health sciences	Health sciences, other

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SED-CIP code crosswalk to historical broad, major, and fine fields: 2021

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.1701	Optometry	Life sciences	Health sciences	Health sciences, other
51.1801	Opticianry/ Ophthalmic Dispensing Optician	Life sciences	Health sciences	Health sciences, other
51.1802	Optometric Technician/ Assistant	Life sciences	Health sciences	Health sciences, other
51.1803	Ophthalmic Technician/ Technologist	Life sciences	Health sciences	Health sciences, other
51.1804	Orthoptics/ Orthoptist	Life sciences	Health sciences	Health sciences, other
51.1899	Ophthalmic and Optometric Support Services and Allied Professions, Other	Life sciences	Health sciences	Health sciences, other
51.2601	Health Aide	Life sciences	Health sciences	Health sciences, other
51.2602	Home Health Aide/ Home Attendant	Life sciences	Health sciences	Health sciences, other
51.2603	Medication Aide	Life sciences	Health sciences	Health sciences, other
51.2699	Health Aides/ Attendants/ Orderlies, Other	Life sciences	Health sciences	Health sciences, other
51.2799	Medical Illustration and Informatics, Other	Life sciences	Health sciences	Health sciences, other
51.3204	Medical/ Health Humanities	Life sciences	Health sciences	Health sciences, other
51.3300	Alternative and Complementary Medicine and Medical Systems, General	Life sciences	Health sciences	Health sciences, other
51.3301	Acupuncture and Oriental Medicine	Life sciences	Health sciences	Health sciences, other
51.3302	Traditional Chinese Medicine and Chinese Herbology	Life sciences	Health sciences	Health sciences, other
51.3303	Naturopathic Medicine/ Naturopathy	Life sciences	Health sciences	Health sciences, other
51.3304	Homeopathic Medicine/ Homeopathy	Life sciences	Health sciences	Health sciences, other
51.3305	Ayurvedic Medicine/ Ayurveda	Life sciences	Health sciences	Health sciences, other
51.3306	Holistic/ Integrative Health	Life sciences	Health sciences	Health sciences, other
51.3399	Alternative and Complementary Medicine and Medical Systems, Other	Life sciences	Health sciences	Health sciences, other
51.3401	Direct Entry Midwifery	Life sciences	Health sciences	Health sciences, other
51.3499	Alternative and Complementary Medical Support Services, Other	Life sciences	Health sciences	Health sciences, other
51.3701	Aromatherapy	Life sciences	Health sciences	Health sciences, other
51.3702	Herbalism/ Herbalist	Life sciences	Health sciences	Health sciences, other
51.3703	Polarity Therapy	Life sciences	Health sciences	Health sciences, other
51.3704	Reiki	Life sciences	Health sciences	Health sciences, other
51.3799	Energy and Biologically Based Therapies, Other	Life sciences	Health sciences	Health sciences, other
51.9999a	Health Professions and Related Clinical Sciences, Other	Life sciences	Health sciences	Health sciences, other
51.9999b	Health Sciences, Other	Life sciences	Health sciences	Health sciences, other
40.0502	Analytical Chemistry	Physical sciences and earth sciences	Chemistry	Analytical chemistry
40.0599b	Chemical Biology	Physical sciences and earth sciences	Chemistry	Chemical biology
40.0503	Inorganic Chemistry	Physical sciences and earth sciences	Chemistry	Inorganic chemistry
51.2004	Medicinal and Pharmaceutical Chemistry	Physical sciences and earth sciences	Chemistry	Medicinal chemistry
51.2005	Natural Products Chemistry and Pharmacognosy	Physical sciences and earth sciences	Chemistry	Medicinal chemistry
40.0504	Organic Chemistry	Physical sciences and earth sciences	Chemistry	Organic chemistry
40.0506	Physical Chemistry	Physical sciences and earth sciences	Chemistry	Physical chemistry
40.0507	Polymer Chemistry	Physical sciences and earth sciences	Chemistry	Polymer chemistry

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
40.0511	Theoretical Chemistry	Physical sciences and earth sciences	Chemistry	Theoretical chemistry
40.0501	Chemistry, General	Physical sciences and earth sciences	Chemistry	Chemistry, general
40.0509	Environmental Chemistry	Physical sciences and earth sciences	Chemistry	Chemistry, other
40.0510	Forensic Chemistry	Physical sciences and earth sciences	Chemistry	Chemistry, other
40.0512	Cheminformatics/ Chemistry Informatics	Physical sciences and earth sciences	Chemistry	Chemistry, other
40.0599a	Chemistry, Other	Physical sciences and earth sciences	Chemistry	Chemistry, other
40.1002	Materials Chemistry	Physical sciences and earth sciences	Chemistry	Chemistry, other
30.3501	Climate Science	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric chemistry and climatology
40.0402	Atmospheric Chemistry and Climatology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric chemistry and climatology
40.0403	Atmospheric Physics and Dynamics	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric physics and dynamics
40.0404	Meteorology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Meteorology
40.0401	Atmospheric Sciences and Meteorology, General	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric sciences and meteorology, general
30.5001	Mathematics and Atmospheric/ Oceanic Science	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric sciences and meteorology, other
40.0499	Atmospheric Sciences and Meteorology, Other	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Atmospheric sciences and meteorology, other
40.0602	Geochemistry	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geochemistry
40.0601c	Geology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geology
40.0699b	Geomorphology and Glacial Geology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geomorphology and glacial geology
40.0603	Geophysics and Seismology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geophysics and seismology
40.0606	Geochemistry and Petrology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Mineralogy and petrology
40.0604	Paleontology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Paleontology
40.0699c	Stratigraphy and Sedimentation	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Stratigraphy and sedimentation

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
30.3801	Earth Systems Science	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
30.4101	Environmental Geosciences	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
30.4201	Geoarchaeology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
30.4301	Geobiology	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
40.0601a	Geology/ Earth Science, General	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
40.0601b	Earth Science	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, general
40.0699a	Geological and Earth Sciences/ Geosciences, Other	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Geological and earth sciences, other
03.0205	Water, Wetlands, and Marine Resources Management	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Hydrology and water resources
40.0605	Hydrology and Water Resources Science	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Hydrology and water resources
26.1302	Marine Biology and Biological Oceanography	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Marine biology and biological oceanography
30.2901	Maritime Studies	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Marine sciences
30.3201a	Marine Sciences	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Marine sciences
29.0306	Operational Oceanography (MILITARY)	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Oceanography, chemical and physical
40.0607	Oceanography, Chemical and Physical	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Oceanography, chemical and physical
30.3201b	Ocean/ Marine Science, Other	Physical sciences and earth sciences	Geosciences, atmospheric sciences, and ocean sciences	Ocean/ marine sciences, other
40.0201	Astronomy	Physical sciences and earth sciences	Physics and astronomy	Astronomy
40.0203	Planetary Astronomy and Science	Physical sciences and earth sciences	Physics and astronomy	Astronomy
40.0202	Astrophysics	Physical sciences and earth sciences	Physics and astronomy	Astrophysics
40.1101	Physics and Astronomy	Physical sciences and earth sciences	Physics and astronomy	Astrophysics
40.0299	Astronomy and Astrophysics, Other	Physical sciences and earth sciences	Physics and astronomy	Astronomy and astrophysics, other
40.0809	Acoustics	Physical sciences and earth sciences	Physics and astronomy	Acoustics

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
40.0899b	Applied Physics	Physical sciences and earth sciences	Physics and astronomy	Applied physics
40.0508	Chemical Physics	Physical sciences and earth sciences	Physics and astronomy	Atomic/ molecular/ chemical physics
40.0802	Atomic/ Molecular Physics	Physical sciences and earth sciences	Physics and astronomy	Atomic/ molecular/ chemical physics
26.0203b	Biophysics (PHYSICS)	Physical sciences and earth sciences	Physics and astronomy	Biophysics (physics)
40.0808a	Condensed Matter and Materials Physics	Physical sciences and earth sciences	Physics and astronomy	Condensed matter/ low-temperature physics
40.0804	Elementary Particle Physics	Physical sciences and earth sciences	Physics and astronomy	Elementary particle physics
40.0806	Nuclear Physics	Physical sciences and earth sciences	Physics and astronomy	Nuclear physics
40.0807	Optics/ Optical Sciences	Physical sciences and earth sciences	Physics and astronomy	Optics/ photonics
40.0805	Plasma and High-Temperature Physics	Physical sciences and earth sciences	Physics and astronomy	Plasma/ high-temperature physics
40.0808b	Polymer Physics	Physical sciences and earth sciences	Physics and astronomy	Polymer physics
40.0801	Physics, General	Physical sciences and earth sciences	Physics and astronomy	Physics, general
40.0810	Theoretical and Mathematical Physics	Physical sciences and earth sciences	Physics and astronomy	Physics, other
40.0899a	Physics, Other	Physical sciences and earth sciences	Physics and astronomy	Physics, other
11.0102	Artificial Intelligence	Mathematics and computer sciences	Computer and information sciences	Computer science
11.0104	Informatics	Mathematics and computer sciences	Computer and information sciences	Computer science
11.0701a	Computer Science	Mathematics and computer sciences	Computer and information sciences	Computer science
11.0701b	Computing Theory and Practice (COMPUTER SCIENCE)	Mathematics and computer sciences	Computer and information sciences	Computer science
30.3101	Human Computer Interaction	Mathematics and computer sciences	Computer and information sciences	Computer science
29.0406	Military Information Systems Technology	Mathematics and computer sciences	Computer and information sciences	Information science and systems
11.0103	Information Technology	Mathematics and computer sciences	Computer and information sciences	Information science and systems
11.0301	Data Processing and Data Processing Technology	Mathematics and computer sciences	Computer and information sciences	Information science and systems
11.0401	Information Science/ Studies	Mathematics and computer sciences	Computer and information sciences	Information science and systems
11.0101	Computer and Information Sciences, General	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
11.0201	Computer Programming/ Programmer, General	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0202	Computer Programming, Specific Applications	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0203	Computer Programming, Vendor/ Product Certification	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0204	Computer Game Programming	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0205	Computer Programming, Specific Platforms	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0901	Computer Systems Networking and Telecommunications	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0902	Cloud Computing	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.0999	Computer Systems Networking and Telecommunications, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
11.1006	Computer Support Specialist	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, general
10.0308	Computer Typography and Composition Equipment Operator	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0105	Human-Centered Technology Design	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0199	Computer and Information Sciences, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0299	Computer Programming, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0501	Computer Systems Analysis/ Analyst	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0801	Web Page, Digital/ Multimedia and Information Resources Design	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0802	Data Modeling/ Warehousing and Database Administration	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0803	Computer Graphics	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0804	Modeling, Virtual Environments and Simulation	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.0899	Computer Software and Media Applications, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
11.1001	Network and System Administration/ Administrator	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.1002	System, Networking, and LAN/ WAN Management/ Manager	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.1003	Computer and Information Systems Security/ Auditing/ Information Assurance	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.1004	Web/ Multimedia Management and Webmaster	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.1005	Information Technology Project Management	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.1099	Computer/ Information Technology Services Administration and Management, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
11.9999	Computer and Information Sciences and Support Services, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
29.0207	Cyber/ Electronic Operations and Warfare (MILITARY)	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
29.0299	Intelligence, Command Control and Information Operations, Other (MILITARY)	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
30.7001	Data Science, General	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
30.7099	Data Science, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
30.7101	Data Analytics, General	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
30.7199	Data Analytics, Other	Mathematics and computer sciences	Computer and information sciences	Computer and information sciences, other
27.0102a	Algebra and Number Theory	Mathematics and computer sciences	Mathematics and statistics	Algebra
27.0102b	Algebra	Mathematics and computer sciences	Mathematics and statistics	Algebra
27.0103	Analysis and Functional Analysis	Mathematics and computer sciences	Mathematics and statistics	Analysis and functional analysis
27.0301	Applied Mathematics, General	Mathematics and computer sciences	Mathematics and statistics	Applied mathematics
27.0304	Computational and Applied Mathematics	Mathematics and computer sciences	Mathematics and statistics	Applied mathematics
27.0399	Applied Mathematics, Other	Mathematics and computer sciences	Mathematics and statistics	Applied mathematics

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
30.0801	Mathematics and Computer Science	Mathematics and computer sciences	Mathematics and statistics	Applied mathematics
30.7103	Data Visualization	Mathematics and computer sciences	Mathematics and statistics	Applied mathematics
27.0303	Computational Mathematics	Mathematics and computer sciences	Mathematics and statistics	Computational mathematics
30.3001a	Computational Science	Mathematics and computer sciences	Mathematics and statistics	Computational mathematics
11.0701c	Computing Theory and Practice (MATHEMATICS)	Mathematics and computer sciences	Mathematics and statistics	Computing theory and practice
27.0104	Geometry/ Geometric Analysis	Mathematics and computer sciences	Mathematics and statistics	Geometry/ geometric analysis
27.0199c	Logic (MATHEMATICS)	Mathematics and computer sciences	Mathematics and statistics	Logic
38.0102	Logic (PHILOSOPHY)	Mathematics and computer sciences	Mathematics and statistics	Logic
27.0102c	Number Theory	Mathematics and computer sciences	Mathematics and statistics	Number theory
14.3701b	Operations Research (MATHEMATICS)	Mathematics and computer sciences	Mathematics and statistics	Operations research (mathematics)
27.0501	Statistics (MATHEMATICS)	Mathematics and computer sciences	Mathematics and statistics	Statistics (mathematics)
27.0502	Mathematical Statistics and Probability	Mathematics and computer sciences	Mathematics and statistics	Statistics (mathematics)
27.0601	Applied Statistics, General	Mathematics and computer sciences	Mathematics and statistics	Statistics (mathematics)
27.0105	Topology and Foundations	Mathematics and computer sciences	Mathematics and statistics	Topology/ foundations
27.0101	Mathematics, General	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, general
27.0503	Mathematics and Statistics	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, general
27.0199a	Mathematics, Other	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, other
27.0305	Financial Mathematics	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, other
27.0306	Mathematical Biology	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
27.0599a	Statistics, Other	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, other
27.9999	Mathematics and Statistics, Other	Mathematics and computer sciences	Mathematics and statistics	Mathematics/ statistics, other
42.2814	Applied Behavior Analysis	Psychology and social sciences	Psychology	Behavioral analysis
42.2801	Clinical Psychology	Psychology and social sciences	Psychology	Clinical psychology
42.2899	Clinical, Counseling and Applied Psychology, Other	Psychology and social sciences	Psychology	Clinical psychology
51.1502	Psychiatric/ Mental Health Services Technician	Psychology and social sciences	Psychology	Clinical psychology
51.1506	Clinical Pastoral Counseling/ Patient Counseling	Psychology and social sciences	Psychology	Clinical psychology
51.1507	Psychoanalysis and Psychotherapy	Psychology and social sciences	Psychology	Clinical psychology
26.1599b	Cognitive Neuroscience	Psychology and social sciences	Psychology	Cognitive neuroscience
30.1701	Behavioral Sciences	Psychology and social sciences	Psychology	Cognitive neuroscience
30.2501	Cognitive Science, General	Psychology and social sciences	Psychology	Cognitive neuroscience
30.2599	Cognitive Science, Other	Psychology and social sciences	Psychology	Cognitive neuroscience
42.2706	Behavioral Neuroscience	Psychology and social sciences	Psychology	Cognitive neuroscience
42.2701	Cognitive Psychology and Psycholinguistics	Psychology and social sciences	Psychology	Cognitive psychology and psycholinguistics
42.2802	Community Psychology	Psychology and social sciences	Psychology	Community psychology
42.2803	Counseling Psychology	Psychology and social sciences	Psychology	Counseling
51.1509	Genetic Counseling/ Counselor	Psychology and social sciences	Psychology	Counseling
51.1513	Trauma Counseling	Psychology and social sciences	Psychology	Counseling
51.1599	Mental and Social Health Services and Allied Professions, Other	Psychology and social sciences	Psychology	Counseling
42.2703	Developmental and Child Psychology	Psychology and social sciences	Psychology	Developmental and child psychology
42.2710	Developmental and Adolescent Psychology	Psychology and social sciences	Psychology	Developmental and child psychology
42.2807	Clinical Child Psychology	Psychology and social sciences	Psychology	Developmental and child psychology
42.2806a	Educational Psychology (PSYCHOLOGY)	Psychology and social sciences	Psychology	Educational psychology (psychology)
42.2704	Experimental Psychology	Psychology and social sciences	Psychology	Experimental psychology
42.2811	Family Psychology	Psychology and social sciences	Psychology	Family psychology
42.2810	Health/ Medical Psychology	Psychology and social sciences	Psychology	Health and medical psychology

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
51.1508	Mental Health Counseling/ Counselor	Psychology and social sciences	Psychology	Health and medical psychology
19.0701	Human Development and Family Studies, General	Psychology and social sciences	Psychology	Human development and family studies
19.0702	Adult Development and Aging	Psychology and social sciences	Psychology	Human development and family studies
19.0704	Family Systems	Psychology and social sciences	Psychology	Human development and family studies
19.0706	Child Development	Psychology and social sciences	Psychology	Human development and family studies
19.0711	Early Childhood and Family Studies	Psychology and social sciences	Psychology	Human development and family studies
19.1001	Work and Family Studies	Psychology and social sciences	Psychology	Human development and family studies
42.2804	Industrial and Organizational Psychology	Psychology and social sciences	Psychology	Industrial and organizational psychology
30.2801	Dispute Resolution	Psychology and social sciences	Psychology	Marriage and family therapy/ counseling
51.1505	Marriage and Family Therapy/ Counseling	Psychology and social sciences	Psychology	Marriage and family therapy/ counseling
51.1510	Infant/ Toddler Mental Health Services	Psychology and social sciences	Psychology	Marriage and family therapy/ counseling
51.1511	Medical Family Therapy/ Therapist	Psychology and social sciences	Psychology	Marriage and family therapy/ counseling
30.1001	Biopsychology	Psychology and social sciences	Psychology	Neuropsychology/ physiological psychology
42.2799b	Physiological/ Psychobiology Psychology	Psychology and social sciences	Psychology	Neuropsychology/ physiological psychology
42.2705	Personality Psychology	Psychology and social sciences	Psychology	Personality psychology
42.2708	Psychometrics and Quantitative Psychology	Psychology and social sciences	Psychology	Psychometrics and quantitative psychology
42.2805a	School Psychology (PSYCHOLOGY)	Psychology and social sciences	Psychology	School psychology (psychology)
42.2707	Social Psychology	Psychology and social sciences	Psychology	Social psychology
42.0101	Psychology, General	Psychology and social sciences	Psychology	Psychology, general
42.2702	Comparative Psychology	Psychology and social sciences	Psychology	Psychology, general
29.0206	Information/ Psychological Warfare and Military Media Relations	Psychology and social sciences	Psychology	Psychology, other
30.2502	Contemplative Studies/ Inquiry	Psychology and social sciences	Psychology	Psychology, other
42.2709	Psychopharmacology	Psychology and social sciences	Psychology	Psychology, other
42.2799a	Research and Experimental Psychology, Other	Psychology and social sciences	Psychology	Psychology, other
42.2808	Environmental Psychology	Psychology and social sciences	Psychology	Psychology, other
42.2809	Geropsychology	Psychology and social sciences	Psychology	Psychology, other
42.2812	Forensic Psychology	Psychology and social sciences	Psychology	Psychology, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
42.2813	Applied Psychology	Psychology and social sciences	Psychology	Psychology, other
42.2815	Performance and Sport Psychology	Psychology and social sciences	Psychology	Psychology, other
42.2816	Somatic Psychology	Psychology and social sciences	Psychology	Psychology, other
42.2817	Transpersonal/ Spiritual Psychology	Psychology and social sciences	Psychology	Psychology, other
42.9999	Psychology, Other	Psychology and social sciences	Psychology	Psychology, other
51.3603	Hypnotherapy/ Hypnotherapist	Psychology and social sciences	Psychology	Psychology, other
45.0204	Cultural Anthropology	Psychology and social sciences	Anthropology	Anthropology, cultural
30.3401	Anthrozoology	Psychology and social sciences	Anthropology	Anthropology, general
45.0201	Anthropology, General	Psychology and social sciences	Anthropology	Anthropology, general
45.0205	Forensic Anthropology	Psychology and social sciences	Anthropology	Anthropology, general
45.0299	Anthropology, Other	Psychology and social sciences	Anthropology	Anthropology, general
45.1301	Sociology and Anthropology	Psychology and social sciences	Anthropology	Anthropology, general
45.0202	Physical and Biological Anthropology	Psychology and social sciences	Anthropology	Anthropology, physical and biological
45.0203	Medical Anthropology	Psychology and social sciences	Anthropology	Anthropology, physical and biological
45.0603	Econometrics and Quantitative Economics	Psychology and social sciences	Economics	Econometrics
45.0602b	Environmental/ Natural Resource Economics (SOCIAL SCIENCES)	Psychology and social sciences	Economics	Natural resource/ environmental economics (social sciences)
30.3901	Economics and Computer Science	Psychology and social sciences	Economics	Other economics
30.4001	Economics and Foreign Language/ Literature	Psychology and social sciences	Economics	Other economics
30.4901	Mathematical Economics	Psychology and social sciences	Economics	Other economics
45.0601	Economics, General	Psychology and social sciences	Economics	Other economics
45.0602a	Applied Economics	Psychology and social sciences	Economics	Other economics
45.0604	Development Economics and International Development	Psychology and social sciences	Economics	Other economics
45.0605	International Economics	Psychology and social sciences	Economics	Other economics
45.0699	Economics, Other	Psychology and social sciences	Economics	Other economics
45.1003	Canadian Government and Politics	Psychology and social sciences	Political science and government	Political science and government
45.1001	Political Science and Government, General	Psychology and social sciences	Political science and government	Political science and government
45.1002	American Government and Politics (United States)	Psychology and social sciences	Political science and government	Political science and government

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
45.1004	Political Economy	Psychology and social sciences	Political science and government	Political science and government
45.1099	Political Science and Government, Other	Psychology and social sciences	Political science and government	Political science and government
45.1101	Sociology, General	Psychology and social sciences	Sociology	Sociology
45.1102	Applied/ Public Sociology	Psychology and social sciences	Sociology	Sociology
45.1103	Rural Sociology	Psychology and social sciences	Sociology	Sociology
45.1199	Sociology, Other	Psychology and social sciences	Sociology	Sociology
05.0102	American/ United States Studies/ Civilization	Psychology and social sciences	Other social sciences	American/ U.S. studies
16.0105	Applied Linguistics	Psychology and social sciences	Other social sciences	Applied linguistics
45.0301a	Archaeology/ Archeology (SOCIAL SCIENCES)	Psychology and social sciences	Other social sciences	Archaeology (social sciences)
05.0101	African Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0103	Asian Studies/ Civilization	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0104	East Asian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0105	Russian, Central European, East European and Eurasian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0106	European Studies/ Civilization	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0107	Latin American Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0109	Pacific Area/ Pacific Rim Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0110	Russian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0111	Scandinavian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0112	South Asian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0113	Southeast Asian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0114	Western European Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0115	Canadian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0116	Balkans Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0117	Baltic Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0118	Slavic Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0119	Caribbean Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0120	Ural-Altaic and Central Asian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
05.0121	Commonwealth Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0122	Regional Studies (US, Canadian, Foreign)	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0123	Chinese Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0124	French Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0125	German Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0126	Italian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0127	Japanese Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0128	Korean Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0129	Polish Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0130	Spanish and Iberian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0131	Tibetan Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0132	Ukraine Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0133	Irish Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0134	Latin American and Caribbean Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0135	Appalachian Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0136	Arctic Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0199	Area Studies, Other	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0200	Ethnic Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0202	American Indian/ Native American Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0203	Hispanic-American, Puerto Rican, Latinx, and Mexican-American/ Chicano Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0206	Asian-American Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0209	Folklore Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0210	Disability Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0211	Deaf Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0212	Comparative Group Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.0299	Ethnic, Cultural Minority, Gender, and Group Studies, Other	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
05.9999	Area, Ethnic, Cultural, Gender, and Group Studies, Other	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
30.2301	Intercultural/ Multicultural and Diversity Studies	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
30.2601	Cultural Studies/ Critical Theory and Analysis	Psychology and social sciences	Other social sciences	Area/ ethnic/ cultural studies
03.0208	Environmental/ Natural Resources Law Enforcement and Protective Services	Psychology and social sciences	Other social sciences	Criminal justice and corrections
29.0201	Intelligence, General (MILITARY)	Psychology and social sciences	Other social sciences	Criminal justice and corrections
29.0202	Strategic Intelligence (MILITARY)	Psychology and social sciences	Other social sciences	Criminal justice and corrections
29.0205	Information Operations/ Joint Information Operations (MILITARY)	Psychology and social sciences	Other social sciences	Criminal justice and corrections
29.0404	Explosive Ordinance/ Bomb Disposal (MILITARY)	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0102	Corrections	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0109	Security and Loss Prevention Services	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0112	Securities Services Administration/ Management	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0113	Corrections Administration	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0114	Law Enforcement Investigation and Interviewing	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0119	Critical Incident Response/ Special Police Operations	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0120	Protective Services Operations	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0121	Suspension and Debarment Investigation	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0122	Maritime Law Enforcement	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0123	Cultural/ Archaeological Resources Protection	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0201	Fire Prevention and Safety Technology	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0203	Fire Science/ Fire-fighting	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0204	Fire Systems Technology	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0205	Fire/ Arson Investigation and Prevention	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0206	Wildland/ Forest Firefighting and Investigation	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0301	Homeland Security	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0399	Homeland Security, Other	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0405	Financial Forensics and Fraud Investigation	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0408	Law Enforcement Intelligence Analysis	Psychology and social sciences	Other social sciences	Criminal justice and corrections
29.0203	Signal/ Geospatial Intelligence (MILITARY)	Psychology and social sciences	Other social sciences	Criminal justice and corrections

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
43.0100	Criminal Justice and Corrections, General	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0103	Criminal Justice/ Law Enforcement Administration	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0104	Criminal Justice/ Safety Studies	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0107	Criminal Justice/ Police Science	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0110	Juvenile Corrections	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0115	Law Enforcement Record-Keeping and Evidence Management	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0199	Corrections and Criminal Justice, Other	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0299	Fire Protection, Other	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0302	Crisis/ Emergency/ Disaster Management	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0303	Critical Infrastructure Protection	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0304	Terrorism and Counterterrorism Operations	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0401	Security Science and Technology, General	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0403	Cyber/ Computer Forensics and Counterterrorism	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0404	Cybersecurity Defense Strategy/ Policy	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0406	Forensic Science and Technology	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0407	Geospatial Intelligence	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0499	Security Science and Technology, Other	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	Psychology and social sciences	Other social sciences	Criminal justice and corrections
43.0402	Criminalistics and Criminal Science	Psychology and social sciences	Other social sciences	Criminology
45.0401	Criminology	Psychology and social sciences	Other social sciences	Criminology
45.0501	Demography and Population Studies	Psychology and social sciences	Other social sciences	Demography/ population studies
45.0502	Applied Demography	Psychology and social sciences	Other social sciences	Demography/ population studies
45.0599	Demography, Other	Psychology and social sciences	Other social sciences	Demography/ population studies
05.0207	Women's Studies	Psychology and social sciences	Other social sciences	Gender and women's studies
05.0208	Gay/ Lesbian Studies	Psychology and social sciences	Other social sciences	Gender and women's studies
30.4401	Geography and Environmental Studies	Psychology and social sciences	Other social sciences	Geography
45.0701	Geography	Psychology and social sciences	Other social sciences	Geography

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
45.0702	Geographic Information Science and Cartography	Psychology and social sciences	Other social sciences	Geography
45.0799	Geography, Other	Psychology and social sciences	Other social sciences	Geography
45.1501	Geography and Anthropology	Psychology and social sciences	Other social sciences	Geography
30.1101a	Gerontology (MULTIDISCIPLINARY STUDIES)	Psychology and social sciences	Other social sciences	Gerontology (social sciences)
30.1101c	Gerontology (SOCIAL SCIENCES)	Psychology and social sciences	Other social sciences	Gerontology (social sciences)
44.0503	Health Policy Analysis	Psychology and social sciences	Other social sciences	Health policy analysis
30.1501	Science, Technology and Society	Psychology and social sciences	Other social sciences	History, science and technology and society
51.3205	History of Medicine	Psychology and social sciences	Other social sciences	History, science and technology and society
54.0104	History and Philosophy of Science and Technology	Psychology and social sciences	Other social sciences	History, science and technology and society
30.2001	International/ Globalization Studies	Psychology and social sciences	Other social sciences	International relations/ affairs
45.0901	International Relations and Affairs	Psychology and social sciences	Other social sciences	International relations/ affairs
45.0902	National Security Policy Studies	Psychology and social sciences	Other social sciences	International relations/ affairs
45.0999	International Relations and National Security Studies, Other	Psychology and social sciences	Other social sciences	International relations/ affairs
16.0102	Linguistics	Psychology and social sciences	Other social sciences	Linguistics
16.0199	Linguistic, Comparative, and Related Language Studies and Services, Other	Psychology and social sciences	Other social sciences	Linguistics
30.4701	Linguistics and Anthropology	Psychology and social sciences	Other social sciences	Linguistics
30.4801	Linguistics and Computer Science	Psychology and social sciences	Other social sciences	Linguistics
30.1202	Cultural Resource Management and Policy Analysis	Psychology and social sciences	Other social sciences	Public policy analysis
44.0501	Public Policy Analysis, General	Psychology and social sciences	Other social sciences	Public policy analysis
44.0504	International Policy Analysis	Psychology and social sciences	Other social sciences	Public policy analysis
44.0599	Public Policy Analysis, Other	Psychology and social sciences	Other social sciences	Public policy analysis
27.0599b	Statistics (SOCIAL SCIENCES)	Psychology and social sciences	Other social sciences	Statistics (social sciences)
45.0102	Research Methodology and Quantitative Methods	Psychology and social sciences	Other social sciences	Statistics (social sciences)
45.0103	Survey Research/ Methodology	Psychology and social sciences	Other social sciences	Statistics (social sciences)
03.0206	Land Use Planning and Management/ Development	Psychology and social sciences	Other social sciences	Urban, city, community and regional planning
04.1001	Real Estate Development	Psychology and social sciences	Other social sciences	Urban, city, community and regional planning
04.0301	City/ Urban, Community, and Regional Planning	Psychology and social sciences	Other social sciences	Urban, city, community and regional planning

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
45.1201	Urban Studies/ Affairs	Psychology and social sciences	Other social sciences	Urban studies/ affairs
45.0101	Social Sciences, General	Psychology and social sciences	Other social sciences	Social sciences, general
30.0501	Peace Studies and Conflict Resolution	Psychology and social sciences	Other social sciences	Social sciences, other
45.0199	Social Sciences, Other	Psychology and social sciences	Other social sciences	Social sciences, other
45.9999	Social Sciences, Other	Psychology and social sciences	Other social sciences	Social sciences, other
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
14.0201	Aerospace, Aeronautical, and Astronautical/ Space Engineering, General	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
15.0801	Aeronautical/ Aerospace Engineering 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
14.0202	Astronautical Engineering	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 engineering	Chemical engineering
14.0702	Chemical and Biomolecular Engineering	Engineering	Chemical engineering	Chemical engineering
14.0799	Chemical Engineering, Other	Engineering	Chemical engineering	Chemical engineering
14.4301	Biochemical Engineering	Engineering	Chemical engineering	Chemical engineering
15.0615	Chemical Engineering Technology	Engineering	Chemical engineering	Chemical engineering
14.0401	Architectural Engineering	Engineering	Civil engineering	Civil engineering
14.0801	Civil Engineering, General	Engineering	Civil engineering	Civil engineering
14.0899	Civil Engineering, Other	Engineering	Civil engineering	Civil engineering
14.3301	Construction Engineering	Engineering	Civil engineering	Civil engineering
14.3801	Surveying Engineering	Engineering	Civil engineering	Civil engineering
15.0201	Civil Engineering Technologies	Engineering	Civil engineering	Civil engineering

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
15.1001	Construction Engineering Technology	Engineering	Civil engineering	Civil engineering
15.1102	Surveying Technology/ Surveying	Engineering	Civil engineering	Civil engineering
15.1103	Hydraulics and Fluid Power Technology	Engineering	Civil engineering	Civil engineering
15.1304	Civil Drafting and Civil Engineering CAD/ CADD	Engineering	Civil engineering	Civil engineering
14.1001	Electrical and Electronics Engineering	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
14.1003	Laser and Optical Engineering	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
14.1004	Telecommunications Engineering	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
14.1099a	Electrical, Electronics, and Communications Engineering, Other	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
14.4701	Electrical and Computer Engineering	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0303	Electrical, Electronic, and Communications Engineering Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0304	Laser and Optical Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0305	Telecommunications Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0306	Integrated Circuit Design Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0307	Audio Engineering Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0399	Electrical/ Electronic Engineering Technologies, Other	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0403	Electromechanical/ Electromechanical Engineering Technology	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
29.0409	Radar Communications and Systems Technology (MILITARY)	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
30.9999b	Electrical Engineering and Computer Science	Engineering	Electrical, electronics, and communications engineering	Electrical, electronics and communications engineering
15.0703	Industrial Safety Technology	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
15.0704	Hazardous Materials Information Systems Technology	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
14.3501	Industrial Engineering	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
14.3601	Manufacturing Engineering	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
15.0612	Industrial Technology	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
15.0613	Manufacturing Engineering Technology	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
15.0616	Semiconductor Manufacturing Technology	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
15.0699	Industrial Production Technologies, Other	Engineering	Industrial and manufacturing engineering	Industrial and manufacturing engineering
14.0601	Ceramic Sciences and Engineering	Engineering	Materials science engineering	Materials science engineering
14.1801a	Materials Engineering	Engineering	Materials science engineering	Materials science engineering
14.1801b	Materials Science and Engineering	Engineering	Materials science engineering	Materials science engineering
14.2801	Textile Sciences and Engineering	Engineering	Materials science engineering	Materials science engineering
14.4001	Paper Science and Engineering	Engineering	Materials science engineering	Materials science engineering
15.0617	Composite Materials Technology	Engineering	Materials science engineering	Materials science engineering
40.1001	Materials Science	Engineering	Materials science engineering	Materials science engineering
40.1099	Materials Sciences, Other	Engineering	Materials science engineering	Materials science 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
14.0301	Agricultural Engineering	Engineering	Other engineering	Agricultural engineering
14.1099b	Communications Engineering	Engineering	Other engineering	Communications engineering
14.0901	Computer Engineering, General	Engineering	Other engineering	Computer engineering
14.0902	Computer Hardware Engineering	Engineering	Other engineering	Computer engineering
14.0903	Computer Software Engineering	Engineering	Other engineering	Computer engineering
14.0999	Computer Engineering, Other	Engineering	Other engineering	Computer engineering
15.1201	Computer Engineering Technology	Engineering	Other engineering	Computer engineering
15.1202	Computer/ Computer Systems Technology	Engineering	Other engineering	Computer engineering
15.1203	Computer Hardware Technology	Engineering	Other engineering	Computer engineering
15.1204	Computer Software Technology	Engineering	Other engineering	Computer engineering
15.1299	Computer Engineering Technologies, Other	Engineering	Other engineering	Computer engineering
30.9999d	Computer Science and Engineering	Engineering	Other engineering	Computer engineering
14.9999c	Engineering Management and Administration	Engineering	Other engineering	Engineering management and administration
15.0702	Quality Control Technology	Engineering	Other engineering	Engineering management and administration
15.0705	Process Safety Technology	Engineering	Other engineering	Engineering management and administration
15.0799	Quality Control and Safety Technologies, Other	Engineering	Other engineering	Engineering management and administration
15.1501	Engineering/ Industrial Management	Engineering	Other engineering	Engineering management and administration
14.1101	Engineering Mechanics	Engineering	Other engineering	Engineering mechanics

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
14.1201	Engineering Physics	Engineering	Other engineering	Engineering physics
29.0303	Engineering Acoustics (MILITARY)	Engineering	Other engineering	Engineering physics
29.0304	Low-Observables and Stealth Technology (MILITARY)	Engineering	Other engineering	Engineering physics
14.1301	Engineering Science	Engineering	Other engineering	Engineering science
14.4401	Engineering Chemistry	Engineering	Other engineering	Engineering science
15.0404	Instrumentation Technology	Engineering	Other engineering	Engineering science
14.0805	Water Resources Engineering	Engineering	Other engineering	Environmental/ environmental health engineering
14.1401	Environmental/ Environmental Health Engineering	Engineering	Other engineering	Environmental/ environmental health engineering
14.3401	Forest Engineering	Engineering	Other engineering	Environmental/ environmental health engineering
15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology	Engineering	Other engineering	Environmental/ environmental health engineering
15.0507	Environmental/ Environmental Engineering Technology	Engineering	Other engineering	Environmental/ environmental health engineering
15.0508	Hazardous Materials Management and Waste Technology	Engineering	Other engineering	Environmental/ environmental health engineering
15.0599	Environmental Control Technologies, Other	Engineering	Other engineering	Environmental/ environmental health engineering
14.0802	Geotechnical and Geoenvironmental Engineering	Engineering	Other engineering	Geotechnical and geoenvironmental engineering
14.3901	Geological/ Geophysical Engineering	Engineering	Other engineering	Geotechnical and geoenvironmental engineering
14.2001	Metallurgical Engineering	Engineering	Other engineering	Metallurgical engineering
15.0611	Metallurgical Technology	Engineering	Other engineering	Metallurgical engineering
15.0614	Welding Engineering Technology	Engineering	Other engineering	Metallurgical engineering
14.2301	Nuclear Engineering	Engineering	Other engineering	Nuclear engineering
15.1401	Nuclear Engineering Technology	Engineering	Other engineering	Nuclear engineering
14.2201	Naval Architecture and Marine Engineering	Engineering	Other engineering	Ocean engineering
14.2401	Ocean Engineering	Engineering	Other engineering	Ocean engineering
14.3701a	Operations Research (ENGINEERING)	Engineering	Other engineering	Operations research (engineering)
14.2501	Petroleum Engineering	Engineering	Other engineering	Petroleum engineering
15.0903	Petroleum Technology	Engineering	Other engineering	Petroleum engineering
15.0999	Mining and Petroleum Technologies, Other	Engineering	Other engineering	Petroleum engineering
14.3201	Polymer/ Plastics Engineering	Engineering	Other engineering	Polymer and plastics engineering
15.0607	Plastics and Polymer Engineering Technology	Engineering	Other engineering	Polymer and plastics engineering
14.4201	Mechatronics, Robotics, and Automation Engineering	Engineering	Other engineering	Robotics
15.0405	Robotics Technology	Engineering	Other engineering	Robotics
15.0407	Mechatronics, Robotics, and Automation Engineering Technology	Engineering	Other engineering	Robotics
14.0803	Structural Engineering	Engineering	Other engineering	Structural engineering
14.2701	Systems Engineering	Engineering	Other engineering	Systems engineering
29.0301	Combat Systems Engineering (MILITARY)	Engineering	Other engineering	Systems engineering
14.0804	Transportation and Highway Engineering	Engineering	Other engineering	Transportation and highway engineering
14.0101	Engineering, General	Engineering	Other engineering	Engineering, general
14.0102	Pre-Engineering	Engineering	Other engineering	Engineering, general

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
14.0103	Applied Engineering	Engineering	Other engineering	Engineering, general
15.0000	Engineering Technologies, General	Engineering	Other engineering	Engineering, general
15.0001	Applied Engineering Technologies	Engineering	Other engineering	Engineering, general
15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology	Engineering	Other engineering	Engineering, general
15.1301	Drafting and Design Technology, General	Engineering	Other engineering	Engineering, general
15.1302	CAD/ CADD Drafting and/ or Design Technology	Engineering	Other engineering	Engineering, general
15.1303	Architectural Drafting and Architectural CAD/ CADD	Engineering	Other engineering	Engineering, general
15.1305	Electrical/ Electronics Drafting and Electrical/ Electronics CAD/ CADD	Engineering	Other engineering	Engineering, general
15.1306	Mechanical Drafting and Mechanical Drafting CAD/ CADD	Engineering	Other engineering	Engineering, general
15.1307	3-D Modeling and Design Technology	Engineering	Other engineering	Engineering, general
15.1502	Engineering Design	Engineering	Other engineering	Engineering, general
14.2101	Mining and Mineral Engineering	Engineering	Other engineering	Engineering, other
14.4801	Energy Systems Engineering, General	Engineering	Other engineering	Engineering, other
14.4802	Power Plant Engineering	Engineering	Other engineering	Engineering, other
14.4899	Energy Systems Engineering, Other	Engineering	Other engineering	Engineering, other
14.9999a	Engineering, Other	Engineering	Other engineering	Engineering, other
15.0101	Architectural Engineering Technologies	Engineering	Other engineering	Engineering, other
15.0701	Occupational Safety and Health Technology	Engineering	Other engineering	Engineering, other
15.0803	Automotive Engineering Technology	Engineering	Other engineering	Engineering, other
15.0806	Marine Engineering Technology	Engineering	Other engineering	Engineering, other
15.0807	Motorsports Engineering Technology	Engineering	Other engineering	Engineering, other
15.0901	Mining Technology	Engineering	Other engineering	Engineering, other
15.1199	Engineering-Related Technologies, Other	Engineering	Other engineering	Engineering, other
15.1399	Drafting/ Design Engineering Technologies, Other	Engineering	Other engineering	Engineering, other
15.1503	Packaging Science	Engineering	Other engineering	Engineering, other
15.1599	Engineering-Related Fields, Other	Engineering	Other engineering	Engineering, other
15.1601	Nanotechnology	Engineering	Other engineering	Engineering, other
15.1701	Energy Systems Technology	Engineering	Other engineering	Engineering, other
15.1702	Power Plant Technology	Engineering	Other engineering	Engineering, other
15.1703	Solar Energy Technology	Engineering	Other engineering	Engineering, other
15.1704	Wind Energy Technology	Engineering	Other engineering	Engineering, other
15.1705	Hydroelectric Energy Technology	Engineering	Other engineering	Engineering, other
15.1706	Geothermal Energy Technology	Engineering	Other engineering	Engineering, other
15.1799	Energy Systems Technologies, Other	Engineering	Other engineering	Engineering, other
15.9999	Engineering/ Engineering-Related Technologies, Other	Engineering	Other engineering	Engineering, other
29.0302	Directed Energy Systems (MILITARY)	Engineering	Other engineering	Engineering, other
29.0408	Munitions Systems/ Ordinance Technology (MILITARY)	Engineering	Other engineering	Engineering, other
30.3001b	Computational Science and Engineering	Engineering	Other engineering	Engineering, other
30.9999c	Nanosciences/ Nanoscale Sciences	Engineering	Other engineering	Engineering, other
13.0413	Education Entrepreneurship	Education	Education administration	Educational administration and supervision
13.0402	Administration of Special Education	Education	Education administration	Educational administration and supervision

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
13.0403	Adult and Continuing Education Administration	Education	Education administration	Educational administration and supervision
13.0404	Educational, Instructional, and Curriculum Supervision	Education	Education administration	Educational administration and supervision
13.0407	Community College Administration	Education	Education administration	Educational administration and supervision
13.0408	Elementary and Middle School Administration/Principalship	Education	Education administration	Educational administration and supervision
13.0409	Secondary School Administration/Principalship	Education	Education administration	Educational administration and supervision
13.0411	Superintendency and Educational System Administration	Education	Education administration	Educational administration and supervision
13.0414	Early Childhood Program Administration	Education	Education administration	Educational administration and supervision
13.0499a	Educational Administration and Supervision, Other	Education	Education administration	Educational administration and supervision
13.0499b	Education and Human Resource Studies/Development	Education	Education administration	Educational and human resource studies/ development
13.0401	Educational Leadership and Administration, General	Education	Education administration	Educational leadership
13.0412	International School Administration/Leadership	Education	Education administration	Educational leadership
13.0410	Urban Education and Leadership	Education	Education administration	Urban education and leadership
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
13.0301	Curriculum and Instruction	Education	Education research	Curriculum and instruction
13.0501b	Educational/ Instructional Media Design	Education	Education research	Educational/ instructional media design
13.0501a	Educational/ Instructional Technology	Education	Education research	Educational/ instructional technology
13.0604	Educational Assessment, Testing, and Measurement	Education	Education research	Educational assessment/ testing/ measurement
13.0699a	Educational Assessment, Evaluation, and Research, Other	Education	Education research	Educational assessment/ testing/ measurement
44.0502	Education Policy Analysis	Education	Education research	Educational policy analysis
42.2806b	Educational Psychology (EDUCATION)	Education	Education research	Educational psychology (education)
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
13.0608	Institutional Research	Education	Education research	Higher education evaluation and research
13.0406	Higher Education/ Higher Education Administration	Education	Education research	Higher education evaluation and research
13.0699b	Higher Education Evaluation and Research	Education	Education research	Higher education evaluation and research
13.0701	International and Comparative Education	Education	Education research	International education
13.1212	International Teaching and Learning	Education	Education research	International education
13.0607	Learning Sciences	Education	Education research	Learning sciences

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
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
13.1001	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
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
13.1201a	Adult and Continuing Education and Teaching	Education	Teacher education	Adult and continuing teacher education
13.1502	Adult Literacy Tutor/ Instructor	Education	Teacher education	Adult and continuing teacher education
13.1202	Elementary Education and Teaching	Education	Teacher education	Elementary teacher education
13.1207	Montessori Teacher Education	Education	Teacher education	Pre-elementary/ early childhood teacher education
13.1208	Waldorf/ Steiner Teacher Education	Education	Teacher education	Pre-elementary/ early childhood teacher education
13.1209	Kindergarten/ Preschool Education and Teaching	Education	Teacher education	Pre-elementary/ early childhood teacher education
13.1210	Early Childhood Education and Teaching	Education	Teacher education	Pre-elementary/ early childhood teacher education
13.1203	Junior High/ Intermediate/ Middle School Education and Teaching	Education	Teacher education	Secondary teacher education
13.1205	Secondary Education and Teaching	Education	Teacher education	Secondary teacher education

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
01.0801	Agricultural and Extension Education Services	Education	Teaching fields	Agricultural education
13.1301	Agricultural Teacher Education	Education	Teaching fields	Agricultural education
13.1302	Art Teacher Education	Education	Teaching fields	Art education
13.0201	Bilingual and Multilingual Education	Education	Teaching fields	Bilingual and multilingual education
13.0299	Bilingual, Multilingual, and Multicultural Education, Other	Education	Teaching fields	Bilingual and multilingual education
13.1401	Teaching English as a Second or Foreign Language/ ESL Language Instructor	Education	Teaching fields	English as a second or foreign language
13.1499	Teaching English or French as a Second or Foreign Language, Other	Education	Teaching fields	English as a second or foreign language
16.1701	English as a Second Language	Education	Teaching fields	English as a second or foreign language
13.1305	English/ Language Arts Teacher Education	Education	Teaching fields	English education
13.1308	Family and Consumer Sciences/ Home Economics Teacher Education	Education	Teaching fields	Family and consumer/ human science education
13.1306	Foreign Language Teacher Education	Education	Teaching fields	Foreign languages education
13.1325	French Language Teacher Education	Education	Teaching fields	Foreign languages education
13.1326	German Language Teacher Education	Education	Teaching fields	Foreign languages education
13.1330	Spanish Language Teacher Education	Education	Teaching fields	Foreign languages education
13.1333	Latin Teacher Education	Education	Teaching fields	Foreign languages education
13.1402	Teaching French as a Second or Foreign Language	Education	Teaching fields	Foreign languages education
13.1307	Health Teacher Education	Education	Teaching fields	Health education
13.1327	Health Occupations Teacher Education	Education	Teaching fields	Health education
51.3202	Health Professions Education	Education	Teaching fields	Health education
51.3299	Health Professions Education, Ethics, and Humanities, Other	Education	Teaching fields	Health education
13.1315	Reading Teacher Education	Education	Teaching fields	Literacy and reading education
13.1331	Speech Teacher Education	Education	Teaching fields	Literacy and reading education
13.1339	Communication Arts and Literature Teacher Education	Education	Teaching fields	Literacy and reading education
13.1311	Mathematics Teacher Education	Education	Teaching fields	Mathematics education
13.1312	Music Teacher Education	Education	Teaching fields	Music education
51.3203	Nursing Education	Education	Teaching fields	Nursing education
13.1314	Physical Education Teaching and Coaching	Education	Teaching fields	Physical education and coaching
13.1213	STEM Educational Methods	Education	Teaching fields	Science education
13.1316	Science Teacher Education/ General Science Teacher Education	Education	Teaching fields	Science education
13.1321	Computer Teacher Education	Education	Teaching fields	Science education
13.1322	Biology Teacher Education	Education	Teaching fields	Science education
13.1323	Chemistry Teacher Education	Education	Teaching fields	Science education
13.1329	Physics Teacher Education	Education	Teaching fields	Science education
13.1332	Geography Teacher Education	Education	Teaching fields	Science education
13.1335	Psychology Teacher Education	Education	Teaching fields	Science education
13.1337	Earth Science Teacher Education	Education	Teaching fields	Science education
13.1338	Environmental Education	Education	Teaching fields	Science education
14.9999b	Engineering Education	Education	Teaching fields	Science education
13.1317	Social Science Teacher Education	Education	Teaching fields	Social science education
13.1318	Social Studies Teacher Education	Education	Teaching fields	Social science education
13.1328	History Teacher Education	Education	Teaching fields	Social science education

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
13.1303	Business and Innovation/ Entrepreneurship Teacher Education	Education	Teaching fields	Teacher education and professional development, other
13.1304	Driver and Safety Teacher Education	Education	Teaching fields	Teacher education and professional development, other
13.1310	Sales and Marketing Operations/ Marketing and Distribution Teacher Education	Education	Teaching fields	Teacher education and professional development, other
13.1324	Drama and Dance Teacher Education	Education	Teaching fields	Teacher education and professional development, other
13.1334	School Librarian/ School Library Media Specialist	Education	Teaching fields	Teacher education and professional development, other
13.0202	Multicultural Education	Education	Teaching fields	Teacher education and professional development, other
13.0203	Indian/ Native American Education	Education	Teaching fields	Teacher education and professional development, other
13.1206	Teacher Education, Multiple Levels	Education	Teaching fields	Teacher education and professional development, other
13.1211	Online Educator/ Online Teaching	Education	Teaching fields	Teacher education and professional development, other
13.1214	College/ Postsecondary/ University Teaching	Education	Teaching fields	Teacher education and professional development, other
13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	Education	Teaching fields	Teacher education and professional development, other
13.1309	Technology Teacher Education/ Industrial Arts Teacher Education	Education	Teaching fields	Teacher education and professional development, other
13.1399	Teacher Education and Professional Development, Specific Subject Areas, Other	Education	Teaching fields	Teacher education and professional development, other
13.1320	Trade and Industrial Teacher Education	Education	Other education	Workforce education and development
13.1201b	Workforce Education and Development	Education	Other education	Workforce education and development
13.1319	Technical Teacher Education	Education	Other education	Workforce education and development
13.0101	Education, General	Education	Other education	Education, general
13.1501	Teacher Assistant/ Aide	Education	Other education	Education, general
13.1599	Teaching Assistants/ Aides, Other	Education	Other education	Education, general
13.9999	Education, Other	Education	Other education	Education, other
16.1101	Arabic Language and Literature	Humanities and arts	Foreign languages and literature	Arabic language and literature
16.0301	Chinese Language and Literature	Humanities and arts	Foreign languages and literature	Chinese language and literature
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
16.0302	Japanese Language and Literature	Humanities and arts	Foreign languages and literature	Japanese 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

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
16.0402	Russian Language and Literature	Humanities and arts	Foreign languages and literature	Russian language and literature
16.0905	Spanish Language and Literature	Humanities and arts	Foreign languages and literature	Spanish language and literature
16.0101	Foreign Languages and Literatures, 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
16.0401	Baltic Languages, Literatures, and Linguistics	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
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
16.0408	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
16.0701	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
16.0906	Romanian Language and Literature	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
16.0907	Catalan Language and Literature	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
16.1601	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
16.1699	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
16.0103	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
16.0399	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
16.0407	Polish 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

Table A-6

SED-CIP code crosswalk to historical broad, major, and fine fields: 2021

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
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
16.0999	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
16.1599	Turkic, Uralic-Altaic, Caucasian, and Central Asian Languages, Literatures, and Linguistics, Other	Humanities and arts	Foreign languages and literature	Foreign languages and literatures, other
16.1603	Sign Language Interpretation and Translation	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
54.0199c	African History	Humanities and arts	History	African history
54.0107	Canadian History	Humanities and arts	History	American history (U.S. and Canada)
54.0102a	American History (United States)	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
54.0199d	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
30.4501a	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

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
54.0108	Military History	Humanities and arts	History	History, other
54.0199a	History, Other	Humanities and arts	History	History, other
23.1403	American Literature (Canadian)	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1401	General Literature	Humanities and arts	Letters	American literature (U.S. and Canada)
23.1402a	American Literature (United States)	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)
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
23.1302	Creative Writing	Humanities and arts	Letters	Creative writing
50.0504	Playwriting and Screenwriting	Humanities and arts	Letters	Creative writing
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
23.1404	English Literature (British and Commonwealth)	Humanities and arts	Letters	English literature (British and commonwealth)
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
09.0101	Speech Communication and Rhetoric	Humanities and arts	Letters	Speech and rhetorical studies
23.1301	Writing, General	Humanities and arts	Letters	Letters, general
23.1303	Professional, Technical, Business, and Scientific Writing	Humanities and arts	Letters	Letters, general
05.0201	African-American/ Black Studies	Humanities and arts	Other humanities and arts	African American studies/ literature/ history

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
23.1402b	African-American/ Black Literature	Humanities and arts	Other humanities and arts	African American studies/ literature/ history
30.4501b	African-American/ Black History and Literature	Humanities and arts	Other humanities and arts	African American studies/ literature/ history
54.0102b	African-American/ Black History	Humanities and arts	Other humanities and arts	African American studies/ literature/ history
30.1201	Historic Preservation and Conservation, General	Humanities and arts	Other humanities and arts	Archaeology (humanities)
30.1299	Historic Preservation and Conservation, Other	Humanities and arts	Other humanities and arts	Archaeology (humanities)
45.0301b	Archaeology/ Archeology (HUMANITIES)	Humanities and arts	Other humanities and arts	Archaeology (humanities)
30.5203	Textual Studies	Humanities and arts	Other humanities and arts	Art history/ criticism/ conservation
50.0703	Art History, Criticism and Conservation	Humanities and arts	Other humanities and arts	Art history/ criticism/ conservation
39.0201	Bible/ Biblical Studies	Humanities and arts	Other humanities and arts	Bible/ biblical studies
50.0301	Dance, General	Humanities and arts	Other humanities and arts	Dance
50.0302	Ballet	Humanities and arts	Other humanities and arts	Dance
50.0399	Dance, Other	Humanities and arts	Other humanities and arts	Dance
50.0501	Drama and Dramatics/ Theatre Arts, General	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0502	Technical Theatre/ Theatre Design and Technology	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0505	Theatre Literature, History and Criticism	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0506	Acting	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0507	Directing and Theatrical Production	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0509	Musical Theatre	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0510	Costume Design	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0511	Comedy Writing and Performance	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
50.0599	Dramatic/ Theatre Arts and Stagecraft, Other	Humanities and arts	Other humanities and arts	Drama/ theater arts/ performance studies
38.0103	Ethics	Humanities and arts	Other humanities and arts	Ethics
38.0104	Applied and Professional Ethics	Humanities and arts	Other humanities and arts	Ethics
51.3201	Bioethics/ Medical Ethics	Humanities and arts	Other humanities and arts	Ethics
50.0601	Film/ Cinema/ Media Studies	Humanities and arts	Other humanities and arts	Film/ cinema/ media studies
50.0602	Cinematography and Film/ Video Production	Humanities and arts	Other humanities and arts	Film/ cinema/ media studies
50.0607	Documentary Production	Humanities and arts	Other humanities and arts	Film/ cinema/ media studies

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
50.0699	Film/ Video and Photographic Arts, Other	Humanities and arts	Other humanities and arts	Film/ cinema/ media studies
50.1099	Arts, Entertainment, and Media Management, Other	Humanities and arts	Other humanities and arts	Film/ cinema/ media studies
38.0206	Jewish/ Judaic Studies	Humanities and arts	Other humanities and arts	Jewish/ Judaic studies
50.0901	Music, General	Humanities and arts	Other humanities and arts	Music
50.0902	Music History, Literature, and Theory	Humanities and arts	Other humanities and arts	Music
50.0912	Music Pedagogy	Humanities and arts	Other humanities and arts	Music
50.0913	Music Technology	Humanities and arts	Other humanities and arts	Music
50.0905	Musicology and Ethnomusicology	Humanities and arts	Other humanities and arts	Musicology/ ethnomusicology
50.0903	Music Performance, General	Humanities and arts	Other humanities and arts	Music performance
50.0906	Conducting	Humanities and arts	Other humanities and arts	Music performance
50.0907	Keyboard Instruments	Humanities and arts	Other humanities and arts	Music performance
50.0908	Voice and Opera	Humanities and arts	Other humanities and arts	Music performance
50.0910	Jazz/ Jazz Studies	Humanities and arts	Other humanities and arts	Music performance
50.0911	Stringed Instruments	Humanities and arts	Other humanities and arts	Music performance
50.0914	Brass Instruments	Humanities and arts	Other humanities and arts	Music performance
50.0915	Woodwind Instruments	Humanities and arts	Other humanities and arts	Music performance
50.0916	Percussion Instruments	Humanities and arts	Other humanities and arts	Music performance
50.0904	Music Theory and Composition	Humanities and arts	Other humanities and arts	Music theory and composition
50.0917	Sound Arts	Humanities and arts	Other humanities and arts	Music, other
50.0999	Music, Other	Humanities and arts	Other humanities and arts	Music, other
50.1003	Music Management	Humanities and arts	Other humanities and arts	Music, other
30.5101	Philosophy, Politics, and Economics	Humanities and arts	Other humanities and arts	Philosophy
38.0001	Philosophy and Religious Studies, General	Humanities and arts	Other humanities and arts	Philosophy
38.0101	Philosophy	Humanities and arts	Other humanities and arts	Philosophy
38.0199	Philosophy, Other	Humanities and arts	Other humanities and arts	Philosophy
38.0201	Religion/ Religious Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0202	Buddhist Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
38.0203	Christian Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0204	Hindu Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0205	Islamic Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0207	Talmudic Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0208	Catholic Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0209	Mormon Studies	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.0299	Religion/ Religious Studies, Other	Humanities and arts	Other humanities and arts	Religion/ religious studies
38.9999	Philosophy and Religious Studies, Other	Humanities and arts	Other humanities and arts	Religion/ religious studies
39.0802	Religious/ Canon Law	Humanities and arts	Other humanities and arts	Religion/ religious studies
39.0899	Religious Institution Administration and Law, Other	Humanities and arts	Other humanities and arts	Religion/ religious studies
39.0705	Lay Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0706	Chaplain/ Chaplaincy Studies	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0799	Pastoral Counseling and Specialized Ministries, Other	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0801	Religious Institution Administration and Management	Humanities and arts	Other humanities and arts	Theology/ religious education
39.9999	Theology and Religious Vocations, Other	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0301	Missions/ Missionary Studies	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0302	Church Planting	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0399	Missions/ Missionary Studies and Missiology, Other	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0401	Religious Education	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0501	Religious/ Sacred Music	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0502	Worship Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0599	Religious Music and Worship, Other	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0601	Theology/ Theological Studies	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0602	Divinity/ Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0604	Pre-Theology/ Pre-Ministerial Studies	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0605	Rabbinical Studies	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0699	Theological and Ministerial Studies, Other	Humanities and arts	Other humanities and arts	Theology/ religious education

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
39.0701	Pastoral Studies/ Counseling	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0702	Youth Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0703	Urban Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
39.0704	Women's Ministry	Humanities and arts	Other humanities and arts	Theology/ religious education
24.0103	Humanities/ Humanistic Studies	Humanities and arts	Other humanities and arts	Humanities, general
50.0102	Digital Arts	Humanities and arts	Other humanities and arts	Humanities, general
50.0409	Graphic Design	Humanities and arts	Other humanities and arts	Humanities, general
30.1401	Museology/ Museum Studies	Humanities and arts	Other humanities and arts	Humanities, other
30.5201	Digital Humanities and Textual Studies, General	Humanities and arts	Other humanities and arts	Humanities, other
30.5202	Digital Humanities	Humanities and arts	Other humanities and arts	Humanities, other
30.5299	Digital Humanities and Textual Studies, Other	Humanities and arts	Other humanities and arts	Humanities, other
50.0101	Visual and Performing Arts, General	Humanities and arts	Other humanities and arts	Humanities, other
50.0201	Crafts/ Craft Design, Folk Art and Artisanry	Humanities and arts	Other humanities and arts	Humanities, other
50.0406	Commercial Photography	Humanities and arts	Other humanities and arts	Humanities, other
50.0410	Illustration	Humanities and arts	Other humanities and arts	Humanities, other
50.0512	Theatre and Dance	Humanities and arts	Other humanities and arts	Humanities, other
50.0605	Photography	Humanities and arts	Other humanities and arts	Humanities, other
50.0701	Art/ Art Studies, General	Humanities and arts	Other humanities and arts	Humanities, other
50.0702	Fine/ Studio Arts, General	Humanities and arts	Other humanities and arts	Humanities, other
50.0705	Drawing	Humanities and arts	Other humanities and arts	Humanities, other
50.0706	Intermedia/ Multimedia	Humanities and arts	Other humanities and arts	Humanities, other
50.0708	Painting	Humanities and arts	Other humanities and arts	Humanities, other
50.0709	Sculpture	Humanities and arts	Other humanities and arts	Humanities, other
50.0710	Printmaking	Humanities and arts	Other humanities and arts	Humanities, other
50.0711	Ceramic Arts and Ceramics	Humanities and arts	Other humanities and arts	Humanities, other
50.0712	Fiber, Textile and Weaving Arts	Humanities and arts	Other humanities and arts	Humanities, other
50.0713	Jewelry Arts	Humanities and arts	Other humanities and arts	Humanities, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
50.0714	Metal Arts	Humanities and arts	Other humanities and arts	Humanities, other
50.0799	Fine Arts and Art Studies, Other	Humanities and arts	Other humanities and arts	Humanities, other
50.1002	Fine and Studio Arts Management	Humanities and arts	Other humanities and arts	Humanities, other
50.1101	Community/ Environmental/ Socially-Engaged Art	Humanities and arts	Other humanities and arts	Humanities, other
50.9999	Visual and Performing Arts, Other	Humanities and arts	Other humanities and arts	Humanities, other
51.2301	Art Therapy/ Therapist	Humanities and arts	Other humanities and arts	Humanities, other
51.2305	Music Therapy/ Therapist	Humanities and arts	Other humanities and arts	Humanities, other
51.3206	Arts in Medicine/ Health	Humanities and arts	Other humanities and arts	Humanities, other
30.1601	Accounting and Computer Science	Other	Business management and administration	Accounting
52.0301	Accounting	Other	Business management and administration	Accounting
52.0302	Accounting Technology and Bookkeeping	Other	Business management and administration	Accounting
52.0303	Auditing	Other	Business management and administration	Accounting
52.0304	Accounting and Finance	Other	Business management and administration	Accounting
52.0305	Accounting and Business/ Management	Other	Business management and administration	Accounting
52.0399	Accounting and Related Services, Other	Other	Business management and administration	Accounting
01.0106	Agricultural Business Technology	Other	Business management and administration	Business administration and management
52.0202	Purchasing, Procurement/ Acquisitions and Contracts Management	Other	Business management and administration	Business administration and management
52.0204	Office Management and Supervision	Other	Business management and administration	Business administration and management
52.0207	Customer Service Management	Other	Business management and administration	Business administration and management
52.0208	E-Commerce/ Electronic Commerce	Other	Business management and administration	Business administration and management
52.0210	Research and Development Management	Other	Business management and administration	Business administration and management
52.0212	Retail Management	Other	Business management and administration	Business administration and management
52.0401	Administrative Assistant and Secretarial Science, General	Other	Business management and administration	Business administration and management
52.0402	Executive Assistant/ Executive Secretary	Other	Business management and administration	Business administration and management
52.0406	Receptionist	Other	Business management and administration	Business administration and management
52.0407	Business/ Office Automation/ Technology/ Data Entry	Other	Business management and administration	Business administration and management
52.0408	General Office Occupations and Clerical Services	Other	Business management and administration	Business administration and management

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
52.0409	Parts, Warehousing, and Inventory Management Operations	Other	Business management and administration	Business administration and management
52.0410	Traffic, Customs, and Transportation Clerk/ Technician	Other	Business management and administration	Business administration and management
52.0411	Customer Service Support/ Call Center/ Teleservice Operation	Other	Business management and administration	Business administration and management
52.0499	Business Operations Support and Secretarial Services, Other	Other	Business management and administration	Business administration and management
52.1802	Merchandising and Buying Operations	Other	Business management and administration	Business administration and management
52.1803	Retailing and Retail Operations	Other	Business management and administration	Business administration and management
52.1804	Selling Skills and Sales Operations	Other	Business management and administration	Business administration and management
52.1899	General Merchandising, Sales, and Related Marketing Operations, Other	Other	Business management and administration	Business administration and management
52.2101	Telecommunications Management	Other	Business management and administration	Business administration and management
01.0102	Agribusiness/ Agricultural Business Operations	Other	Business management and administration	Business administration and management
52.0101	Business/ Commerce, General	Other	Business management and administration	Business administration and management
52.0201a	Business Administration and Management, General	Other	Business management and administration	Business administration and management
52.0203	Logistics, Materials, and Supply Chain Management	Other	Business management and administration	Business administration and management
52.0205	Operations Management and Supervision	Other	Business management and administration	Business administration and management
52.0206	Non-Profit/ Public/ Organizational Management	Other	Business management and administration	Business administration and management
52.0209	Transportation/ Mobility Management	Other	Business management and administration	Business administration and management
52.0299	Business Administration, Management and Operations, Other	Other	Business management and administration	Business administration and management
52.0703	Small Business Administration/ Management	Other	Business management and administration	Business administration and management
52.1801	Sales, Distribution, and Marketing Operations, General	Other	Business management and administration	Business administration and management
52.0601	Business/ Managerial Economics	Other	Business management and administration	Business/ managerial economics
30.7104	Financial Analytics	Other	Business management and administration	Finance
52.0801	Finance, General	Other	Business management and administration	Finance
52.0803	Banking and Financial Support Services	Other	Business management and administration	Finance
52.0804	Financial Planning and Services	Other	Business management and administration	Finance
52.0806	International Finance	Other	Business management and administration	Finance
52.0807	Investments and Securities	Other	Business management and administration	Finance
52.0808	Public Finance	Other	Business management and administration	Finance

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
52.0809	Credit Management	Other	Business management and administration	Finance
52.0810	Financial Risk Management	Other	Business management and administration	Finance
52.0899	Finance and Financial Management Services, Other	Other	Business management and administration	Finance
52.0906	Resort Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0907	Meeting and Event Planning	Other	Business management and administration	Hospitality, food service and tourism management
52.0908	Casino Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0909	Hotel, Motel, and Restaurant Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0910	Brewery/ Brewpub Operations/ Management	Other	Business management and administration	Hospitality, food service and tourism management
52.1905	Tourism and Travel Services Marketing Operations	Other	Business management and administration	Hospitality, food service and tourism management
52.1906	Tourism Promotion Operations	Other	Business management and administration	Hospitality, food service and tourism management
52.1910	Hospitality and Recreation Marketing Operations	Other	Business management and administration	Hospitality, food service and tourism management
49.0104	Aviation/ Airway Management and Operations	Other	Business management and administration	Business management/ administration, other
52.0901	Hospitality Administration/ Management, General	Other	Business management and administration	Hospitality, food service and tourism management
52.0903	Tourism and Travel Services Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0904	Hotel/ Motel Administration/ Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0905	Restaurant/ Food Services Management	Other	Business management and administration	Hospitality, food service and tourism management
52.0999	Hospitality Administration/ Management, Other	Other	Business management and administration	Hospitality, food service and tourism management
52.1001	Human Resources Management/ Personnel Administration, General	Other	Business management and administration	Human resources development
52.1002	Labor and Industrial Relations	Other	Business management and administration	Human resources development
52.1004	Labor Studies	Other	Business management and administration	Human resources development
52.1005	Human Resources Development	Other	Business management and administration	Human resources development
52.1006	Executive/ Career Coaching	Other	Business management and administration	Human resources development
52.1099	Human Resources Management and Services, Other	Other	Business management and administration	Human resources development
52.1101	International Business/ Trade/ Commerce	Other	Business management and administration	International business/ trade/ commerce
30.7102	Business Analytics	Other	Business management and administration	Management information systems/ business statistics
52.1201	Management Information Systems, General	Other	Business management and administration	Management information systems/ business statistics
52.1206	Information Resources Management	Other	Business management and administration	Management information systems/ business statistics

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
52.1207	Knowledge Management	Other	Business management and administration	Management information systems/ business statistics
52.1299	Management Information Systems and Services, Other	Other	Business management and administration	Management information systems/ business statistics
52.1301	Management Science	Other	Business management and administration	Management information systems/ business statistics
52.1302	Business Statistics	Other	Business management and administration	Management information systems/ business statistics
52.1304	Actuarial Science	Other	Business management and administration	Management information systems/ business statistics
52.1399	Management Sciences and Quantitative Methods, Other	Other	Business management and administration	Management information systems/ business statistics
52.1907	Vehicle and Vehicle Parts and Accessories Marketing Operations	Other	Business management and administration	Marketing management and research
52.1909	Special Products Marketing Operations	Other	Business management and administration	Marketing management and research
52.1401	Marketing/ Marketing Management, General	Other	Business management and administration	Marketing management and research
52.1402	Marketing Research	Other	Business management and administration	Marketing management and research
52.1403	International Marketing	Other	Business management and administration	Marketing management and research
52.1404	Digital Marketing	Other	Business management and administration	Marketing management and research
52.1499	Marketing, Other	Other	Business management and administration	Marketing management and research
52.1908	Business and Personal/ Financial Services Marketing Operations	Other	Business management and administration	Marketing management and research
14.3701c	Operations Research (BUSINESS)	Other	Business management and administration	Operations research (business)
52.0213	Organizational Leadership	Other	Business management and administration	Organizational behavior
52.1003	Organizational Behavior Studies	Other	Business management and administration	Organizational behavior
01.0101	Agricultural Business and Management, General	Other	Business management and administration	Business management/ administration, general
52.0201b	Business Management/ Administration	Other	Business management and administration	Business management/ administration, general
52.0701	Entrepreneurship/ Entrepreneurial Studies	Other	Business management and administration	Business management/ administration, general
52.0702	Franchising and Franchise Operations	Other	Business management and administration	Business management/ administration, general
52.2001	Construction Management, General	Other	Business management and administration	Business management/ administration, general
01.0104	Farm/ Farm and Ranch Management	Other	Business management and administration	Business management/ administration, other
01.0105	Agricultural/ Farm Supplies Retailing and Wholesaling	Other	Business management and administration	Business management/ administration, other
01.0199	Agricultural Business and Management, Other	Other	Business management and administration	Business management/ administration, other
01.0301	Agricultural Production Operations, General	Other	Business management and administration	Business management/ administration, other
50.1001	Arts, Entertainment, and Media Management, General	Other	Business management and administration	Business management/ administration, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
50.1004	Theatre/ Theatre Arts Management	Other	Business management and administration	Business management/ administration, other
52.0211	Project Management	Other	Business management and administration	Business management/ administration, other
52.0214	Research Administration	Other	Business management and administration	Business management/ administration, other
52.0215	Risk Management	Other	Business management and administration	Business management/ administration, other
52.0216	Science/ Technology Management	Other	Business management and administration	Business management/ administration, other
52.0502	Grantsmanship	Other	Business management and administration	Business management/ administration, other
52.0704	Social Entrepreneurship	Other	Business management and administration	Business management/ administration, other
52.0799	Entrepreneurial and Small Business Operations, Other	Other	Business management and administration	Business management/ administration, other
52.1501	Real Estate	Other	Business management and administration	Business management/ administration, other
52.1601	Taxation	Other	Business management and administration	Business management/ administration, other
52.1701	Insurance	Other	Business management and administration	Business management/ administration, other
52.1901	Auctioneering	Other	Business management and administration	Business management/ administration, other
52.1999	Specialized Merchandising, Sales, and Marketing Operations, Other	Other	Business management and administration	Business management/ administration, other
52.2002	Construction Project Management	Other	Business management and administration	Business management/ administration, other
52.2099	Construction Management, Other	Other	Business management and administration	Business management/ administration, other
52.9999	Business, Management, Marketing, and Related Support Services, Other	Other	Business management and administration	Business management/ administration, other
09.0100b	Communication Research	Other	Communication	Communication research
09.0407	Science/ Health/ Environmental Journalism	Other	Communication	Communication research
09.0100c	Communication Theory	Other	Communication	Communication theory
09.0404	Photojournalism	Other	Communication	Film, radio, TV and digital communication
09.0405	Business and Economic Journalism	Other	Communication	Film, radio, TV and digital communication
09.0406	Cultural Journalism	Other	Communication	Film, radio, TV and digital communication
09.0701	Radio and Television	Other	Communication	Film, radio, TV and digital communication
10.0201	Photographic and Film/ Video Technology	Other	Communication	Film, radio, TV and digital communication
10.0202	Radio and Television Broadcasting Technology	Other	Communication	Film, radio, TV and digital communication
10.0203	Recording Arts Technology	Other	Communication	Film, radio, TV and digital communication
10.0204	Voice Writing Technology	Other	Communication	Film, radio, TV and digital communication
09.0401	Journalism	Other	Communication	Film, radio, TV and digital communication
09.0402	Broadcast Journalism	Other	Communication	Film, radio, TV and digital communication

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
09.0499	Journalism, Other	Other	Communication	Film, radio, TV and digital communication
09.0702	Digital Communication and Media/ Multimedia	Other	Communication	Film, radio, TV and digital communication
09.0799	Radio, Television, and Digital Communication, Other	Other	Communication	Film, radio, TV and digital communication
10.0299	Audiovisual Communications Technologies, Other	Other	Communication	Film, radio, TV and digital communication
09.0102	Mass Communication/ Media Studies	Other	Communication	Mass communication/ media studies
09.0199	Communication and Media Studies, Other	Other	Communication	Mass communication/ media studies
09.0100a	Communication, General	Other	Communication	Communication, general
09.0901	Organizational Communication, General	Other	Communication	Communication, general
09.0902	Public Relations/ Image Management	Other	Communication	Communication, general
09.0903	Advertising	Other	Communication	Communication, general
09.0905	Health Communication	Other	Communication	Communication, general
10.0105	Communications Technology	Other	Communication	Communication, general
10.0301	Graphic Communications, General	Other	Communication	Communication, general
10.0303	Prepress/ Desktop Publishing and Digital Imaging Design	Other	Communication	Communication, general
10.0304	Animation, Interactive Technology, Video Graphics, and Special Effects	Other	Communication	Communication, general
10.0305	Graphic and Printing Equipment Operator, General Production	Other	Communication	Communication, general
10.0306	Platemaker/ Imager	Other	Communication	Communication, general
10.0307	Printing Press Operator	Other	Communication	Communication, general
10.0399	Graphic Communications, Other	Other	Communication	Communication, general
10.9999	Communications Technologies and Support Services, Other	Other	Communication	Communication, general
51.2703	Medical Illustration/ Medical Illustrator	Other	Communication	Communication, general
52.0501	Business/ Corporate Communications, General	Other	Communication	Communication, general
01.0802	Agricultural Communication/ Journalism	Other	Communication	Communication, other
09.0900	Public Relations, Advertising, and Applied Communication	Other	Communication	Communication, other
09.0904	Political Communication	Other	Communication	Communication, other
09.0906	Sports Communication	Other	Communication	Communication, other
09.0907	International and Intercultural Communication	Other	Communication	Communication, other
09.0908	Technical and Scientific Communication	Other	Communication	Communication, other
09.0909	Communication Management and Strategic Communications	Other	Communication	Communication, other
09.0999	Public Relations, Advertising, and Applied Communication, Other	Other	Communication	Communication, other
09.1001	Publishing	Other	Communication	Communication, other
09.9999	Communication, Journalism, and Related Programs, Other	Other	Communication	Communication, other
10.0302	Printing Management	Other	Communication	Communication, other
50.0401	Design and Visual Communications, General	Other	Communication	Communication, other
50.0402	Commercial and Advertising Art	Other	Communication	Communication, other
50.0404	Industrial and Product Design	Other	Communication	Communication, other
50.0411	Game and Interactive Media Design	Other	Communication	Communication, other
50.0499	Design and Applied Arts, Other	Other	Communication	Communication, other

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
52.0599	Business/ Corporate Communications, Other	Other	Communication	Communication, other
04.0200	Pre-Architecture Studies	Other	Non-S&E fields nec	Architecture/ environmental design
04.0201	Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0202	Architectural Design	Other	Non-S&E fields nec	Architecture/ environmental design
04.0299	Architecture, Other	Other	Non-S&E fields nec	Architecture/ environmental design
04.0401	Environmental Design/ Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0402	Healthcare Environment Design/ Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0403	Sustainable Design/ Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0499	Environmental Design, Other	Other	Non-S&E fields nec	Architecture/ environmental design
04.0501	Interior Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0601	Landscape Architecture	Other	Non-S&E fields nec	Architecture/ environmental design
04.0801	Architectural History and Criticism, General	Other	Non-S&E fields nec	Architecture/ environmental design
04.0802	Architectural Conservation	Other	Non-S&E fields nec	Architecture/ environmental design
04.0803	Architectural Studies	Other	Non-S&E fields nec	Architecture/ environmental design
04.0899	Architectural History, Criticism, and Conservation, Other	Other	Non-S&E fields nec	Architecture/ environmental design
04.0901	Architectural Technology	Other	Non-S&E fields nec	Architecture/ environmental design
04.0902	Architectural and Building Sciences/ Technology	Other	Non-S&E fields nec	Architecture/ environmental design
04.0999	Architectural Sciences and Technology, Other	Other	Non-S&E fields nec	Architecture/ environmental design
04.9999	Architecture and Related Services, Other	Other	Non-S&E fields nec	Architecture/ environmental design
50.0408	Interior Design	Other	Non-S&E fields nec	Architecture/ environmental design
19.0101	Family and Consumer Sciences/ Human Sciences, General	Other	Non-S&E fields nec	Family, consumer, and human science
19.0201	Business Family and Consumer Sciences/ Human Sciences	Other	Non-S&E fields nec	Family, consumer, and human science
19.0202	Family and Consumer Sciences/ Human Sciences Communication	Other	Non-S&E fields nec	Family, consumer, and human science
19.0203	Consumer Merchandising/ Retailing Management	Other	Non-S&E fields nec	Family, consumer, and human science
19.0299	Family and Consumer Sciences/ Human Sciences Business Services, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.0401	Family Resource Management Studies, General	Other	Non-S&E fields nec	Family, consumer, and human science
19.0402	Consumer Economics	Other	Non-S&E fields nec	Family, consumer, and human science
19.0403	Consumer Services and Advocacy	Other	Non-S&E fields nec	Family, consumer, and human science

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
19.0499	Family and Consumer Economics and Related Services, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.0501	Foods, Nutrition, and Wellness Studies, General	Other	Non-S&E fields nec	Family, consumer, and human science
19.0505	Foodservice Systems Administration/ Management	Other	Non-S&E fields nec	Family, consumer, and human science
19.0599	Foods, Nutrition, and Related Services, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.0601	Housing and Human Environments, General	Other	Non-S&E fields nec	Family, consumer, and human science
19.0604	Facilities Planning and Management	Other	Non-S&E fields nec	Family, consumer, and human science
19.0605	Home Furnishings and Equipment Installers	Other	Non-S&E fields nec	Family, consumer, and human science
19.0699	Housing and Human Environments, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.0707	Family and Community Services	Other	Non-S&E fields nec	Family, consumer, and human science
19.0708	Child Care and Support Services Management	Other	Non-S&E fields nec	Family, consumer, and human science
19.0709	Child Care Provider/ Assistant	Other	Non-S&E fields nec	Family, consumer, and human science
19.0710	Developmental Services Worker	Other	Non-S&E fields nec	Family, consumer, and human science
19.0712	Parent Education Services	Other	Non-S&E fields nec	Family, consumer, and human science
19.0799	Human Development, Family Studies, and Related Services, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.0901	Apparel and Textiles, General	Other	Non-S&E fields nec	Family, consumer, and human science
19.0902	Apparel and Textile Manufacture	Other	Non-S&E fields nec	Family, consumer, and human science
19.0904	Textile Science	Other	Non-S&E fields nec	Family, consumer, and human science
19.0905	Apparel and Textile Marketing Management	Other	Non-S&E fields nec	Family, consumer, and human science
19.0906	Fashion and Fabric Consultant	Other	Non-S&E fields nec	Family, consumer, and human science
19.0999	Apparel and Textiles, Other	Other	Non-S&E fields nec	Family, consumer, and human science
19.9999	Family and Consumer Sciences/ Human Sciences, Other	Other	Non-S&E fields nec	Family, consumer, and human science
50.0407	Fashion/ Apparel Design	Other	Non-S&E fields nec	Family, consumer, and human science
52.1902	Fashion Merchandising	Other	Non-S&E fields nec	Family, consumer, and human science
52.1903	Fashion Modeling	Other	Non-S&E fields nec	Family, consumer, and human science
52.1904	Apparel and Accessories Marketing Operations	Other	Non-S&E fields nec	Family, consumer, and human science
22.0000	Legal Studies	Other	Non-S&E fields nec	Law
22.0001	Pre-Law Studies	Other	Non-S&E fields nec	Law
22.0099	Non-Professional Legal Studies, Other	Other	Non-S&E fields nec	Law
22.0101	Law	Other	Non-S&E fields nec	Law
22.0201	Advanced Legal Research/ Studies, General	Other	Non-S&E fields nec	Law

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
22.0202	Programs for Foreign Lawyers	Other	Non-S&E fields nec	Law
22.0203	American/ US Law/ Legal Studies/ Jurisprudence	Other	Non-S&E fields nec	Law
22.0204	Canadian Law/ Legal Studies/ Jurisprudence	Other	Non-S&E fields nec	Law
22.0205	Banking, Corporate, Finance, and Securities Law	Other	Non-S&E fields nec	Law
22.0206	Comparative Law	Other	Non-S&E fields nec	Law
22.0207	Energy, Environment, and Natural Resources Law	Other	Non-S&E fields nec	Law
22.0208	Health Law	Other	Non-S&E fields nec	Law
22.0209	International Law and Legal Studies	Other	Non-S&E fields nec	Law
22.0210	International Business, Trade, and Tax Law	Other	Non-S&E fields nec	Law
22.0211	Tax Law/ Taxation	Other	Non-S&E fields nec	Law
22.0212	Intellectual Property Law	Other	Non-S&E fields nec	Law
22.0213	Patent Law	Other	Non-S&E fields nec	Law
22.0214	Agriculture Law	Other	Non-S&E fields nec	Law
22.0215	Arts and Entertainment Law	Other	Non-S&E fields nec	Law
22.0216	Compliance Law	Other	Non-S&E fields nec	Law
22.0217	Criminal Law and Procedure	Other	Non-S&E fields nec	Law
22.0218	Entrepreneurship Law	Other	Non-S&E fields nec	Law
22.0219	Family/ Child/ Elder Law	Other	Non-S&E fields nec	Law
22.0220	Human Resources Law	Other	Non-S&E fields nec	Law
22.0221	Insurance Law	Other	Non-S&E fields nec	Law
22.0222	Real Estate and Land Development Law	Other	Non-S&E fields nec	Law
22.0223	Transportation Law	Other	Non-S&E fields nec	Law
22.0224	Tribal/ Indigenous Law	Other	Non-S&E fields nec	Law
22.0299	Legal Research and Advanced Professional Studies, Other	Other	Non-S&E fields nec	Law
22.0301	Legal Administrative Assistant/ Secretary	Other	Non-S&E fields nec	Law
22.0302	Legal Assistant/ Paralegal	Other	Non-S&E fields nec	Law
22.0303	Court Reporting and Captioning/ Court Reporter	Other	Non-S&E fields nec	Law
22.0304	Court Interpreter	Other	Non-S&E fields nec	Law
22.0305	Scopist	Other	Non-S&E fields nec	Law
22.0399	Legal Support Services, Other	Other	Non-S&E fields nec	Law
22.9999	Legal Professions and Studies, Other	Other	Non-S&E fields nec	Law
25.0101	Library and Information Science	Other	Non-S&E fields nec	Library science
25.0102	Children and Youth Library Services	Other	Non-S&E fields nec	Library science
25.0103	Archives/ Archival Administration	Other	Non-S&E fields nec	Library science
25.0199	Library Science and Administration, Other	Other	Non-S&E fields nec	Library science
25.0301	Library and Archives Assisting	Other	Non-S&E fields nec	Library science
25.9999	Library Science, Other	Other	Non-S&E fields nec	Library science
03.0207	Environmental/ Natural Resource Recreation and Tourism	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0101	Parks, Recreation, and Leisure Studies	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0301	Parks, Recreation, and Leisure Facilities Management, General	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0302	Golf Course Operation and Grounds Management	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0399	Parks, Recreation, and Leisure Facilities Management, Other	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness

Table A-6**SED-CIP code crosswalk to historical broad, major, and fine fields: 2021**

(Field)

SED-CIP code	SED-CIP title	Historical broad field	Historical major field	Historical fine field
31.0504	Sport and Fitness Administration/ Management	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0507	Physical Fitness Technician	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0508	Sports Studies	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
31.0601	Outdoor Education	Other	Non-S&E fields nec	Parks/ sports/ recreation/ leisure/ fitness
01.0899	Agricultural Public Services, Other	Other	Non-S&E fields nec	Public administration
43.0202	Fire Services Administration	Other	Non-S&E fields nec	Public administration
44.0201	Community Organization and Advocacy	Other	Non-S&E fields nec	Public administration
44.0401	Public Administration	Other	Non-S&E fields nec	Public administration
44.0402	Public Works Management	Other	Non-S&E fields nec	Public administration
44.0403	Transportation and Infrastructure Planning/ Studies	Other	Non-S&E fields nec	Public administration
44.0499	Public Administration, Other	Other	Non-S&E fields nec	Public administration
44.9999	Public Administration and Social Service Professions, Other	Other	Non-S&E fields nec	Public administration
44.0000	Human Services, General	Other	Non-S&E fields nec	Social work
44.0701	Social Work	Other	Non-S&E fields nec	Social work
44.0702	Youth Services/ Administration	Other	Non-S&E fields nec	Social work
44.0703	Forensic Social Work	Other	Non-S&E fields nec	Social work
44.0799	Social Work, Other	Other	Non-S&E fields nec	Social work
51.1503	Clinical/ Medical Social Work	Other	Non-S&E fields nec	Social work
01.0504	Dog/ Pet/ Animal Grooming	Other	Non-S&E fields nec	Other fields nec
01.0508	Taxidermy/ Taxidermist	Other	Non-S&E fields nec	Other fields nec
24.0101	Liberal Arts and Sciences/ Liberal Studies	Other	Non-S&E fields nec	Other fields nec
24.0102	General Studies	Other	Non-S&E fields nec	Other fields nec
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	Other	Non-S&E fields nec	Other fields nec
29.0204	Command & Control (C3, C4I) Systems and Operations (MILITARY)	Other	Non-S&E fields nec	Other fields nec
29.0307	Undersea Warfare (MILITARY)	Other	Non-S&E fields nec	Other fields nec
29.0399	Military Applied Sciences, Other	Other	Non-S&E fields nec	Other fields nec
29.0405	Joint Command/ Task Force (C3, C4I) Systems (MILITARY)	Other	Non-S&E fields nec	Other fields nec
29.0499	Military Systems and Maintenance Technology, Other	Other	Non-S&E fields nec	Other fields nec
29.0601	Military Technology and Applied Sciences Management	Other	Non-S&E fields nec	Other fields nec
29.9999	Military Technologies and Applied Sciences, Other	Other	Non-S&E fields nec	Other fields nec
30.0000	Multi-/ Interdisciplinary Studies, General	Other	Non-S&E fields nec	Other fields nec
30.0001	Comprehensive Transition and Postsecondary (CTP) Program	Other	Non-S&E fields nec	Other fields nec
30.0601	Systems Science and Theory	Other	Non-S&E fields nec	Other fields nec
30.9999a	Multi-/ Interdisciplinary Studies, Other	Other	Non-S&E fields nec	Other fields nec
40.0101	Physical Sciences, General	Other	Non-S&E fields nec	Other fields nec
40.9999	Physical Sciences, Other	Other	Non-S&E fields nec	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 CIP codes were used in the survey data collection; the historical field of study codes re constructed using the crosswalk above. Therefore, the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information, [table A-4](#) for a summary of SED-CIP codes in the new SED field taxonomy, and [table A-5](#) for a full list of SED-CIP codes in the new field taxonomy.

Source(s):

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

Table B-1

SED data tables list: 2020 and 2021

(Crosswalk)

2020	2021	Table title
Trends in research doctorate recipient characteristics		
Table 1	Table 1-1	Research doctorate recipients from U.S. colleges and universities: 1958–2021
Table 11	Table 1-2	Research doctorate recipients, by historical broad field of doctorate and 2018 Carnegie Classification of doctorate institution: 2011–21
Table 12	Table 1-3	Research doctorate recipients, by historical major field of doctorate: Selected years, 1991–2021
Table 14	Table 1-4	Research doctorate recipients, by historical broad field of doctorate and sex: Selected years, 1991–2021
Table 15	Table 1-5	Research doctorate recipients, by historical major field of doctorate and sex: 2011–21
Table 17	Table 1-6	Research doctorate recipients, by historical broad field of doctorate and citizenship status: Selected years, 1976–2021
Table 18	Table 1-7	Research doctorate recipients, by historical major field of doctorate and citizenship status: 2011–21
Table 19	Table 1-8	Research doctorate recipients, by ethnicity, race, and citizenship status: 2011–21
Table 20	Table 1-9	Male research doctorate recipients, by ethnicity, race, and citizenship status: 2011–21
Table 21	Table 1-10	Female research doctorate recipients, by ethnicity, race, and citizenship status: 2011–21
Table 23	Table 1-11	U.S. citizen and permanent resident research doctorate recipients, by historical broad field of doctorate, ethnicity, and race: Selected years, 1976–2021
Table 31	Table 1-12	Median years to research doctorate, by historical major field of doctorate: Selected years, 1971–2021
Table 39	Table 1-13	Education-related debt of research doctorate recipients, by historical broad field of doctorate: 2011–21
Table 34	Table 1-14	Highest educational attainment of either parent of research doctorate recipients: 1970–2021
Trends in postgraduation commitments of research doctorate recipients		
Table 42	Table 2-1	Postgraduation commitment of research doctorate recipients, by historical broad field of doctorate: Selected years, 1991–2021
Table 43	Table 2-2	Postgraduation commitment of research doctorate recipients, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021
Table 44	Table 2-3	Postgraduation plans of research doctorate recipients with definite commitments, by historical broad field of doctorate: Selected years, 1991–2021
Table 45	Table 2-4	Postgraduation plans of research doctorate recipients with definite commitments, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021
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, 1991–2021
Table 46	Table 2-6	Employment sector of research doctorate recipients with definite postgraduation commitments for employment in the United States, by historical broad field of doctorate: Selected years, 1991–2021
Table 47	Table 2-7	Employment sector of research doctorate recipients with definite postgraduation commitments for employment in the United States, by sex, citizenship status, ethnicity, and race: Selected years, 1991–2021
Table 53	Table 2-8	Research doctorate recipients with temporary visas intending to stay in the United States after doctorate receipt, by country or economy of citizenship: 2015–21
Field and demographic characteristics of research doctorate recipients		
Table 13	Table 3-1	Research doctorate recipients, by detailed field of doctorate: 2021
Table 16	Table 3-2	Research doctorate recipients, by detailed field of doctorate and sex: 2021
Table 22	Table 3-3	Research doctorate recipients, by detailed field of doctorate, citizenship status, ethnicity, and race: 2021
Table 24	Table 3-4	U.S. citizen and permanent resident research doctorate recipients, by major field of doctorate, ethnicity, and race: 2021
Table 32	Table 3-5	Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2021
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: 2021
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: 2021
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SED data tables list: 2020 and 2021

(Crosswalk)

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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 only the most recent data year, and the historical broad and major fields were used in the tables reporting multiple data years. As a result, the data tables were reorganized and renumbered in 2021 and the field of doctorate data in 2021 may not be comparable to prior years; see the "[Technical Notes](#)" for more information.

Source(s):

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

Survey Description

Survey Overview (2021 survey cycle)

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

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

Survey contractor. RTI International.

Major changes to the recent survey cycle. Changed the SED field of study taxonomy to the modified 2020 Curriculum of Instructional Program (CIP).

Key Survey Information

Frequency. Annual.

Initial survey year. Academic year 1957–58.

Reference period. Academic year 2020–21 (1 July 2020 to 30 June 2021).

Response unit. Individuals.

Sample or census. Census.

Population size. 52,250.

Sample size. Not applicable.

Key variables. Key variables of interest are listed below.

- Academic institution of doctorate
- Baccalaureate-origin institution (U.S. and foreign)
- Birth year
- Citizenship status at graduation
- Country of birth and citizenship
- Disability status
- Educational attainment of parents
- Educational history in college
- Field of each degree earned
- Graduate and undergraduate educational debt
- Marital status, as well as the number and age of dependents
- Postgraduation plans (e.g., work, postdoc, other study or training)
 - Primary and secondary work activities

- Source and type of financial support for postdoctoral study or research
- Type and location of employer
- Basic annual salary
- Race and ethnicity
- Sex
- Sources of financial support during graduate school
- Type of academic institution (e.g., historically Black colleges and universities, Carnegie codes, public or private) awarding the doctorate

Survey Design

Target population. The population for the 2021 SED consists of all individuals receiving a research doctorate from a U.S. academic institution in the 12-month period beginning 1 July 2020 and ending 30 June 2021. 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 most common research doctoral degree is the PhD. Recipients of professional doctoral degrees, such as MD, DDS, DVM, JD, DPharm, DMin, and PsyD, are not included in the SED.

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 2021. 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. The total universe in 2021 included 52,250 persons from 448 institutions that conferred research doctorates.

Sample design. The SED is a census.

Data Collection and Processing

Data collection. Two modes of data collection are used in the SED: self-administered Web survey and computer-assisted telephone interviewing (CATI). The self-administered Web survey is the primary mode of SED completion. The proportion of SED completions using the Web has increased each year since it was introduced in 2001, and it reached 97.6% in 2021.

Nonrespondents are contacted by e-mail and mail to complete the Web survey. If the series of follow-up e-mails and mailings is unsuccessful, the survey contractor attempts to reach nonrespondents to complete an abbreviated survey by CATI. Approximately 2.4% of SED completions were from CATI in 2021. At the end of data collection phase, institutional coordinators are contacted to obtain information on a small number of critical SED data items for nonrespondents from their institution.

Data processing. The data collected in the SED are subject to automated editing and coding procedures. Imputation is not performed for missing survey data items except for the month value used in calculation of the age at doctorate and time to degree variables.

Estimation techniques. The survey is a census, which does not require any sampling; weighting is not used to adjust for nonresponse.

Survey Quality Measures

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

Coverage error. Due to the availability of comprehensive lists of doctorate-granting institutions and the institutions' high levels of participation in the survey, coverage error of institutions is minimal. Because the graduate schools collect the survey data from degree recipients at the time of doctorate completion, coverage error for the universe of doctorate recipients is also minimal. Comparisons of the institutions and the number of research doctorate recipients covered by the SED with the total number of doctorate recipients (including non-research doctoral degree recipients) reported by institutions to the [National Center for Education Statistics](#) confirm that there is minimal coverage error of doctorate recipients. In 2021, 12 doctorate-granting institutions declined to fully enumerate their doctorate recipients for academic year 2021. Information on the graduates for all of these institutions were found from other sources, such as ProQuest.

Nonresponse error.

Unit nonresponse. Of the 52,250 individuals granted a research doctorate in 2021, 91.5% completed the survey. 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) are constructed for nonrespondents from commencement programs, graduation lists, and other similar public records. Nonresponse was concentrated in a small number of institutions, with 22 institutions accounting for 50% of the total unit nonresponse.

Item nonresponse. Among the 52,250 individuals who received a research doctorate in 2021, item nonresponse rates for the five key SED demographic variables—sex, citizenship, country of citizenship, race and ethnicity, and location after graduation—range from 0.0% for sex to 7.9% for location after graduation.

Measurement error. Measurement error in the SED is attributable to several sources, including errors in respondent reporting and errors that occur during data processing. Data reported by respondents about their educational history, including degree institutions and field of study, that are not self-coded within the survey instrument are reviewed and coded by trained coders. Generally, the percentage of responses that require manual coding is low. In 2021, 1.6% of doctorate fields of study were manually coded, as well as 1.8% of associate's degree fields, 0.7% of bachelor's degree fields, and 1.3% of master's degree fields.

Data Comparability

Data availability. Each year's survey data are compiled into the Doctorate Records File (DRF) and trend data are available back to 1958; more limited information (sex, institution, field, and year of doctorate) is contained on the DRF for PhDs who graduated in 1920–56.

Data comparability. Because of procedural changes implemented during the 1990 survey cycle to improve the completeness of race, ethnicity, and citizenship data, the data from 1990 and later years are not directly comparable to data before 1990.

In 2021, the education history section was changed to a table format in which respondents can select all the postsecondary degrees received, up to nine degrees. Based on the degrees reported, follow-up questions asked about each type of degree, including any professional doctorate being earned.

Beginning in 2021, field of study and doctorate dissertation field data are collected using a modified version of the 2020 [Classification of Instructional Programs](#) (CIP) codes. Therefore, the field of study data in 2021 may not be comparable to prior survey cycle data; see the 2021 survey cycle "[Technical Notes](#)" at <https://nces.nsf.gov/sed> for more information.

Data Products

Publications. The data from this survey are published annually in the series *Doctorate Recipients from U.S. Universities*. Other survey data products are also available at <https://www.nsf.gov/statistics/srvydoctorates/#tabs-3>.

Information from the survey is also included in the series *Science and Engineering Degrees by Race/Ethnicity of Recipients*, in *Science and Engineering Indicators*, and in *Women, Minorities, and Persons with Disabilities in Science and Engineering*.

Electronic access. Access to tabular data on selected variables from 1958 onward is available in an [interactive data tool](#) from the National Center for Science and Engineering Statistics (NCSES). Users can create custom tables of the number of doctorate recipients by academic discipline and institutional characteristics of either the doctorate-granting institution or the baccalaureate-granting institution of doctorate recipients. A limited set of demographic characteristics are available to create custom tables by academic discipline. A more comprehensive set of analysis variables are available in the [SED Restricted Data Analysis System \(RDAS\)](#) for the data user to generate custom data tables in a secured platform.

Restricted access. Access to restricted data for researchers interested in analyzing microdata can be arranged through a licensing agreement. For more information, see the [NCSES Licensing Page](#).

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Additional Resources

The National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation has a wealth of information on the U.S. science and engineering (S&E) enterprise, including additional data and analysis on degree recipients and degree-granting institutions. The latest information from NCSES is available at <https://ncses.nsf.gov/>.

Data tools

NCSES data tools at ncesdata.nsf.gov provide additional ways to interact with data from the Survey of Earned Doctorates (SED).

- The **NCSES interactive data tool** enables the creation of visualizations and custom tables from the SED and other NCSES surveys. To build a custom table using SED data, visit ncesdata.nsf.gov/builder/sed.
- The SED Restricted Data Analysis System (RDAS) (ncesdata.nsf.gov/rdas/) expands public access to SED data through a secure platform to analyze a more comprehensive set of SED data items starting with the 2017 survey. The SED RDAS uses statistical procedures to produce estimates that reflect the entire population of doctorate recipients while protecting confidentiality of individuals' data.

Publications

Survey of Earned Doctorates

The SED questionnaire, all editions of *Doctorate Recipients from U.S. Universities*, InfoBriefs, and other data products related to the SED are available at <https://nsf.gov/statistics/srvydoctorates/>.

Science and Engineering Indicators

Science and Engineering Indicators is a biennial report that offers a comprehensive look at the U.S. S&E enterprise, including education, demographics, employment, research and development expenditures, science and technology capabilities, and public attitudes and understanding about science. SED data are included in the *Science and Engineering Indicators* report *Higher Education in Science and Engineering* available at <https://ncses.nsf.gov/indicators>.

Women, Minorities, and Persons with Disabilities in Science and Engineering

The biennial report *Women, Minorities, and Persons with Disabilities in Science and Engineering* looks at the participation of these three groups in S&E education and employment. Topics in the report include enrollment; field of degree; employment status; and occupation, including academic careers. SED data are included in the report, which is available at <https://ncses.nsf.gov/wmpd>.

Related survey

Survey of Doctorate Recipients

The SED serves as a sampling frame for the Survey of Doctorate Recipients (SDR). The SDR provides demographic, education, and career history information from individuals with a U.S. research doctoral degree in a science, engineering, or health field. The SDR is a unique source of information about the educational and occupational achievements and career movement of U.S.-trained doctoral scientists and engineers in the United States and abroad. The survey description, questionnaires, data tables, and latest SDR publications are available at <https://www.nsf.gov/statistics/srvydoctoratework/>.

Corrections

5 December 2023: The unit of measure label in table A was corrected from “percent” to “number.” The wording in the first sentence of the “Field of doctorate” section, subsection “Minority U.S. citizens and permanent residents” was corrected from “S&E doctorate recipients” to “doctorate recipients.” The title text of table B was corrected from “S&E doctorates . . .” to “Doctorates. . .” The values in table B’s “Not Hispanic or Latino” row (number and percent) and “Ethnicity not reported” row (percent) were corrected for a calculation error, and the “Ethnicity not reported” label was outdented one level to indicate this category is not a subset of the “Not Hispanic or Latino” category. The unit of measure in several values in the “Field of doctorate” and the “Postgraduation trends” sections was changed from “percent” to “percentage point.”