

TABLE 1-3

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

(Number and percent)

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

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

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

Note(s):

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

Source(s):

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