

TABLE 6-2

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

(Number)

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

TABLE 6-2

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

(Number)

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

TABLE 6-2

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

(Number)

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

TABLE 6-2

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

(Number)

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

D = suppressed to avoid disclosure of confidential information.

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

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

**Source(s):**

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