

TABLE 51

## Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2018

(Number)

Citizenship status and major field of study	All recipients	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>		
All doctorate recipients <sup>c</sup>	55,195	34,289	30,762	11,840	8,172	6,967	3,783	3,514	13
Life sciences	12,780	7,754	7,170	4,353	1,119	1,055	643	583	1
Agricultural sciences and natural resources	1,445	865	708	338	137	136	97	157	0
Biological and biomedical sciences	8,801	5,308	4,994	3,492	465	738	299	313	1
Health sciences	2,534	1,581	1,468	523	517	181	247	113	0
Physical sciences and earth sciences	6,335	3,950	3,480	1,965	283	1,025	207	469	1
Chemistry	2,810	1,696	1,550	833	129	514	74	146	0
Geosciences, atmospheric sciences, and ocean sciences	1,185	751	659	420	76	97	66	92	0
Physics and astronomy	2,340	1,503	1,271	712	78	414	67	231	1
Mathematics and computer sciences	4,030	2,775	2,443	722	530	1,053	138	332	0
Computer and information sciences	2,004	1,370	1,243	233	258	682	70	127	0
Mathematics and statistics	2,026	1,405	1,200	489	272	371	68	205	0
Psychology and social sciences	8,899	5,880	5,140	2,068	1,673	650	749	737	3
Psychology	3,837	2,581	2,477	1,460	438	283	296	103	1
Anthropology	424	233	189	77	76	16	20	43	1
Economics	1,247	940	667	105	285	179	98	273	0
Political science and government	734	494	411	127	191	33	60	83	0
Sociology	669	444	402	102	232	24	44	42	0
Other social sciences	1,988	1,188	994	197	451	115	231	193	1
Engineering	10,183	6,109	5,507	1,881	466	2,699	461	598	4
Aerospace, aeronautical, and astronautical engineering	383	245	228	64	23	85	56	16	1
Bioengineering and biomedical engineering	1,134	634	577	326	42	186	23	57	0
Chemical engineering	981	551	513	188	18	284	23	37	1
Civil engineering	677	396	336	135	44	127	30	59	1
Electrical, electronics, and communications engineering	1,951	1,289	1,180	264	66	756	94	109	0
Industrial and manufacturing engineering	272	166	141	28	36	65	12	25	0
Materials science engineering	995	561	513	211	23	247	32	48	0
Mechanical engineering	1,504	862	784	289	85	341	69	78	0

TABLE 51

## Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2018

(Number)

Citizenship status and major field of study	All recipients	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>		
Other engineering	2,286	1,405	1,235	376	129	608	122	169	1
Education	4,834	3,121	2,913	257	1,468	172	1,016	207	1
Education administration	898	583	558	16	238	26	278	25	0
Education research	2,507	1,628	1,518	168	755	106	489	109	1
Teacher education	97	60	D	D	29	8	19	D	0
Teaching fields	963	654	594	50	360	22	162	60	0
Other education	369	196	D	D	86	10	68	D	0
Humanities and arts	5,145	2,742	2,437	444	1,485	137	371	303	2
Foreign languages and literature	617	346	305	52	212	7	34	41	0
History	948	510	441	124	229	18	70	67	2
Letters	1,442	787	725	110	505	43	67	62	0
Other humanities and arts	2,138	1,099	966	158	539	69	200	133	0
Other <sup>d</sup>	2,989	1,958	1,672	150	1,148	176	198	285	1
Business management and administration	1,481	1,063	867	51	640	106	70	195	1
Communication	631	395	363	38	274	31	20	32	0
Non-S&E fields nec	877	500	442	61	234	39	108	58	0
U.S. citizen or permanent resident	35,404	22,944	22,002	7,870	6,716	3,929	3,487	937	5
Life sciences	9,041	5,671	5,492	3,120	1,005	769	598	178	1
Agricultural sciences and natural resources	793	493	468	166	115	102	85	25	0
Biological and biomedical sciences	6,406	3,961	3,822	2,580	417	547	278	138	1
Health sciences	1,842	1,217	1,202	374	473	120	235	15	0
Physical sciences and earth sciences	3,771	2,406	2,237	1,160	228	660	189	168	1
Chemistry	1,711	1,055	1,005	474	106	357	68	50	0
Geosciences, atmospheric sciences, and ocean sciences	760	511	476	280	68	65	63	35	0
Physics and astronomy	1,300	840	756	406	54	238	58	83	1
Mathematics and computer sciences	1,739	1,251	1,182	349	327	395	111	69	0
Computer and information sciences	743	542	528	95	148	233	52	14	0
Mathematics and statistics	996	709	654	254	179	162	59	55	0
Psychology and social sciences	6,704	4,632	4,418	1,802	1,398	537	681	213	1
Psychology	3,321	2,380	2,331	1,370	406	267	288	49	0
Anthropology	335	193	172	68	70	16	18	20	1
Economics	484	392	365	48	155	102	60	27	0

TABLE 51

## Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2018

(Number)

Citizenship status and major field of study	All recipients	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>		
Political science and government	543	379	350	D	168	D	58	29	0
Sociology	556	386	364	D	217	D	42	22	0
Other social sciences	1,465	902	836	138	382	101	215	66	0
Engineering	4,218	2,650	2,566	758	287	1,141	380	83	1
Aerospace, aeronautical, and astronautical engineering	221	160	D	26	16	62	D	D	1
Bioengineering and biomedical engineering	744	410	392	203	37	131	21	18	0
Chemical engineering	469	262	257	80	D	145	D	5	0
Civil engineering	200	138	132	37	27	45	23	6	0
Electrical, electronics, and communications engineering	544	399	392	66	38	219	69	7	0
Industrial and manufacturing engineering	62	43	D	6	D	17	9	D	0
Materials science engineering	463	272	260	76	15	140	29	12	0
Mechanical engineering	608	380	369	108	59	150	52	11	0
Other engineering	907	586	568	156	72	232	108	18	0
Education	4,033	2,793	2,756	216	1,382	160	998	36	1
Education administration	784	556	D	D	D	26	278	D	0
Education research	2,060	1,432	1,411	D	698	D	474	20	1
Teacher education	88	D	D	D	D	8	19	0	0
Teaching fields	788	567	558	D	337	D	161	9	0
Other education	313	D	178	D	D	10	66	D	0
Humanities and arts	4,150	2,331	2,185	370	1,331	130	354	146	0
Foreign languages and literature	406	243	226	34	156	7	29	17	0
History	800	438	400	D	212	D	68	38	0
Letters	1,235	710	681	100	473	43	65	29	0
Other humanities and arts	1,709	940	878	D	490	D	192	62	0
Other <sup>d</sup>	1,748	1,210	1,166	95	758	137	176	44	0
Business management and administration	744	551	519	25	362	75	57	32	0
Communication	435	280	274	D	202	D	19	6	0
Non-S&E fields nec	569	379	373	D	194	D	100	6	0
Temporary visa holder	17,604	11,229	8,666	3,939	1,432	3,015	280	2,559	4
Life sciences	3,364	2,065	1,662	1,225	112	281	44	403	0
Agricultural sciences and natural resources	609	371	239	172	22	33	12	132	0

TABLE 51

## Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2018

(Number)

Citizenship status and major field of study	All recipients	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 and biomedical sciences	2,160	1,336	1,163	907	48	187	21	173	0
Health sciences	595	358	260	146	42	61	11	98	0
Physical sciences and earth sciences	2,375	1,535	1,237	801	55	364	17	298	0
Chemistry	1,022	636	541	357	23	156	5	95	0
Geosciences, atmospheric sciences, and ocean sciences	392	239	182	139	8	32	3	57	0
Physics and astronomy	961	660	514	305	24	176	9	146	0
Mathematics and computer sciences	2,130	1,510	1,249	370	201	652	26	261	0
Computer and information sciences	1,166	819	707	136	109	444	18	112	0
Mathematics and statistics	964	691	542	234	92	208	8	149	0
Psychology and social sciences	1,771	1,227	706	259	270	111	66	521	0
Psychology	285	191	138	84	31	16	7	53	0
Anthropology	70	40	17	9	6	0	2	23	0
Economics	707	544	298	57	128	76	37	246	0
Political science and government	159	115	61	D	23	D	2	54	0
Sociology	89	57	37	D	15	D	2	20	0
Other social sciences	461	280	155	58	67	14	16	125	0
Engineering	5,583	3,438	2,925	1,117	179	1,550	79	510	3
Aerospace, aeronautical, and astronautical engineering	146	84	D	37	7	23	D	D	0
Bioengineering and biomedical engineering	362	222	183	121	5	55	2	39	0
Chemical engineering	478	289	256	108	D	139	D	32	1
Civil engineering	443	257	204	98	17	82	7	52	1
Electrical, electronics, and communications engineering	1,319	884	784	198	28	534	24	100	0
Industrial and manufacturing engineering	196	123	D	22	D	48	3	D	0
Materials science engineering	502	287	251	133	8	107	3	36	0
Mechanical engineering	831	477	410	181	26	187	16	67	0
Other engineering	1,306	815	665	219	57	375	14	149	1
Education	613	319	149	39	83	12	15	170	0
Education administration	53	27	D	D	D	0	0	D	0

TABLE 51

## Definite postgraduation commitments of doctorate recipients, by citizenship status and major field of study: 2018

(Number)

Citizenship status and major field of study	All recipients	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>
Education research	367	190	102	D	55	D	13	88	0
Teacher education	8	D	D	D	D	0	0	D	0
Teaching fields	155	85	34	D	22	D	1	51	0
Other education	30	D	D	D	D	0	1	7	0
Humanities and arts	738	398	241	73	149	6	13	156	1
Foreign languages and literature	180	103	79	18	56	0	5	24	0
History	112	69	39	D	16	D	1	29	1
Letters	139	75	42	10	30	0	2	33	0
Other humanities and arts	307	151	81	D	47	D	5	70	0
Other <sup>d</sup>	1,030	737	497	55	383	39	20	240	0
Business management and administration	644	505	342	26	272	31	13	163	0
Communication	165	115	89	D	72	D	1	26	0
Non-S&E fields nec	221	117	66	D	39	D	6	51	0

D = suppressed to avoid disclosure of confidential information.

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

<sup>a</sup> Includes doctorate recipients who indicated self-employment.<sup>b</sup> Includes doctorate recipients who indicated government, nonprofit, elementary or secondary school, or other employment and those with unknown employment.<sup>c</sup> Includes respondents who did not report citizenship status.<sup>d</sup> Includes other non-S&E fields not shown separately.**Note(s)**

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

**Source(s)**

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