

Table 52. Definite postgraduation commitments of doctorate recipients, by sex and major field of study: 2016

Sex 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 ^a	Other ^b		
All doctorate recipients ^c	54,904	29,300	26,514	10,209	7,268	5,639	3,398	2,740	46
Life sciences	12,568	6,660	6,148	3,847	882	865	554	503	9
Agricultural sciences and natural resources	1,385	710	591	264	119	130	78	D	D
Biological and biomedical sciences	8,884	4,716	4,414	3,193	374	577	270	D	D
Health sciences	2,299	1,234	1,143	390	389	158	206	D	D
Physical sciences and earth sciences	6,252	3,466	3,088	1,824	253	831	180	D	D
Chemistry	2,704	1,436	1,324	757	108	418	41	112	0
Geosciences, atmospheric, and ocean sciences	1,227	738	646	414	74	92	66	92	0
Physics and astronomy	2,321	1,292	1,118	653	71	321	73	D	D
Mathematics and computer sciences	3,957	2,330	2,089	610	437	916	126	237	4
Computer and information sciences	2,085	1,212	1,112	220	201	616	75	97	3
Mathematics and statistics	1,872	1,118	977	390	236	300	51	140	1
Psychology and social sciences	9,078	5,175	4,586	1,740	1,543	544	759	579	10
Psychology	3,946	2,297	2,210	1,232	411	247	320	84	3
Anthropology	460	197	162	72	58	10	22	34	1
Economics	1,238	857	623	87	258	147	131	232	2
Political science and government	745	431	374	94	193	25	62	57	0
Sociology	615	362	326	82	186	14	44	36	0
Other social sciences	2,074	1,031	891	173	437	101	180	136	4
Engineering	9,469	4,846	4,396	1,469	412	2,133	382	433	17
Aerospace, aeronautical, and astronautical engineering	369	215	198	68	24	59	47	17	0
Bioengineering and biomedical engineering	1,089	538	511	287	36	167	21	26	1
Chemical engineering	923	485	440	161	14	248	17	44	1
Civil engineering	565	278	245	91	40	85	29	31	2
Electrical, electronics, and communications engineering	1,827	929	860	186	56	537	81	66	3
Industrial and manufacturing engineering	256	135	110	20	25	55	10	24	1
Materials science engineering	985	474	436	184	23	202	27	34	4

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Mechanical engineering	1,299	662	606	199	60	291	56	54	2
Other engineering	2,156	1,130	990	273	134	489	94	137	3
Education	5,153	2,787	2,634	201	1,415	116	902	D	D
Education administration	829	461	450	11	183	14	242	11	0
Education research	2,386	1,303	1,228	127	672	74	355	D	D
Teacher education	181	D	D	D	48	D	32	D	0
Teaching fields	1,167	649	596	41	366	16	173	53	0
Other education	590	D	D	D	146	D	100	D	0
Humanities and arts	5,484	2,386	2,124	408	1,311	88	317	260	2
Foreign languages and literature	599	263	235	37	173	D	D	28	0
History	1,147	492	441	124	222	19	76	50	1
Letters	1,533	699	648	102	463	D	D	51	0
Other humanities and arts	2,205	932	800	145	453	44	158	131	1
Other ^d	2,943	1,650	1,449	110	1,015	146	178	199	2
Business management and administration	1,510	923	789	24	613	90	62	132	2
Communication	673	346	317	40	222	24	31	29	0
Non-S&E fields not elsewhere classified	760	381	343	46	180	32	85	38	0
Unknown field	0	0	0	0	0	0	0	0	0
Male	29,616	16,187	14,405	5,615	3,339	3,856	1,595	1,759	23
Life sciences	5,643	3,078	2,809	1,852	333	421	203	267	2
Agricultural sciences and natural resources	760	407	332	138	67	79	48	74	1
Biological and biomedical sciences	4,163	2,283	2,129	1,574	161	277	117	153	1
Health sciences	720	388	348	140	105	65	38	40	0
Physical sciences and earth sciences	4,286	2,429	2,154	1,296	149	597	112	274	1
Chemistry	1,713	939	859	517	59	265	18	80	0
Geosciences, atmospheric, and ocean sciences	716	443	383	242	38	63	40	60	0
Physics and astronomy	1,857	1,047	912	537	52	269	54	134	1
Mathematics and computer sciences	2,998	1,787	1,596	469	292	741	94	187	4
Computer and information sciences	1,666	990	910	178	148	525	59	77	3
Mathematics and statistics	1,332	797	686	291	144	216	35	110	1

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Psychology and social sciences	3,749	2,195	1,843	569	686	244	344	349	3
Psychology	1,138	660	626	316	134	84	92	33	1
Anthropology	171	78	58	22	24	D	D	20	0
Economics	820	582	412	55	168	94	95	169	1
Political science and government	462	275	229	56	107	17	49	46	0
Sociology	259	144	134	35	75	D	D	10	0
Other social sciences	899	456	384	85	178	38	83	71	1
Engineering	7,277	3,803	3,451	1,151	299	1,695	306	342	10
Aerospace, aeronautical, and astronautical engineering	313	185	D	61	D	51	38	D	0
Bioengineering and biomedical engineering	687	345	326	179	25	108	14	18	1
Chemical engineering	626	326	293	121	7	157	8	33	0
Civil engineering	438	225	200	75	29	72	24	25	0
Electrical, electronics, and communications engineering	1,532	798	741	161	46	461	73	55	2
Industrial and manufacturing engineering	185	101	D	15	17	41	D	D	0
Materials science engineering	723	358	332	144	D	146	D	24	2
Mechanical engineering	1,097	574	527	177	44	258	48	45	2
Other engineering	1,676	891	780	218	91	401	70	108	3
Education	1,550	888	813	50	443	37	283	75	0
Education administration	306	D	D	D	67	6	112	D	0
Education research	719	413	381	35	234	24	88	32	0
Teacher education	43	D	D	D	11	0	9	D	0
Teaching fields	315	170	137	D	84	D	43	33	0
Other education	167	D	D	5	47	D	31	D	0
Humanities and arts	2,639	1,146	1,002	188	588	43	183	142	2
Foreign languages and literature	228	108	93	18	65	D	D	15	0
History	621	257	228	59	114	11	44	28	1
Letters	600	278	256	39	175	D	D	22	0
Other humanities and arts	1,190	503	425	72	234	22	97	77	1
Other ^d	1,474	861	737	40	549	78	70	123	1

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Business management and administration	933	585	494	13	387	56	38	90	1	
Communication	261	140	128	14	90	14	10	12	0	
Non-S&E fields not elsewhere classified	280	136	115	13	72	8	22	21	0	
Unknown field	0	0	0	0	0	0	0	0	0	
Female	25,278	13,113	12,109	4,594	3,929	1,783	1,803	981	23	
Life sciences	6,923	3,582	3,339	1,995	549	444	351	236	7	
Agricultural sciences and natural resources	624	303	259	126	52	51	30	D	D	
Biological and biomedical sciences	4,720	2,433	2,285	1,619	213	300	153	D	D	
Health sciences	1,579	846	795	250	284	93	168	D	D	
Physical sciences and earth sciences	1,963	1,037	934	528	104	234	68	D	D	
Chemistry	991	497	465	240	49	153	23	32	0	
Geosciences, atmospheric, and ocean sciences	510	295	263	172	36	29	26	32	0	
Physics and astronomy	462	245	206	116	19	52	19	D	D	
Mathematics and computer sciences	959	543	493	141	145	175	32	50	0	
Computer and information sciences	419	222	202	42	53	91	16	20	0	
Mathematics and statistics	540	321	291	99	92	84	16	30	0	
Psychology and social sciences	5,329	2,980	2,743	1,171	857	300	415	230	7	
Psychology	2,808	1,637	1,584	916	277	163	228	51	2	
Anthropology	289	119	104	50	34	D	D	14	1	
Economics	418	275	211	32	90	53	36	63	1	
Political science and government	283	156	145	38	86	8	13	11	0	
Sociology	356	218	192	47	111	D	D	26	0	
Other social sciences	1,175	575	507	88	259	63	97	65	3	
Engineering	2,192	1,043	945	318	113	438	76	91	7	
Aerospace, aeronautical, and astronautical engineering	56	30	D	7	D	8	9	D	0	
Bioengineering and biomedical engineering	402	193	185	108	11	59	7	8	0	
Chemical engineering	297	159	147	40	7	91	9	11	1	

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Civil engineering	127	53	45	16	11	13	5	6	2
Electrical, electronics, and communications engineering	295	131	119	25	10	76	8	11	1
Industrial and manufacturing engineering	71	34	D	5	8	14	D	D	1
Materials science engineering	262	116	104	40	D	56	D	10	2
Mechanical engineering	202	88	79	22	16	33	8	9	0
Other engineering	480	239	210	55	43	88	24	29	0
Education	3,603	1,899	1,821	151	972	79	619	D	D
Education administration	523	D	D	D	116	8	130	D	0
Education research	1,667	890	847	92	438	50	267	D	D
Teacher education	138	D	D	D	37	D	23	D	0
Teaching fields	852	479	459	D	282	D	130	20	0
Other education	423	D	185	D	99	D	69	6	0
Humanities and arts	2,843	1,240	1,122	220	723	45	134	118	0
Foreign languages and literature	371	155	142	19	108	D	D	13	0
History	526	235	213	65	108	8	32	22	0
Letters	933	421	392	63	288	D	D	29	0
Other humanities and arts	1,013	429	375	73	219	22	61	54	0
Other ^d	1,466	789	712	70	466	68	108	76	1
Business management and administration	576	338	295	11	226	34	24	42	1
Communication	410	206	189	26	132	10	21	17	0
Non-S&E fields not elsewhere classified	480	245	228	33	108	24	63	17	0
Unknown field	0	0	0	0	0	0	0	0	0

D = suppressed to avoid disclosure of confidential information.

S&E = science and engineering.

^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.

^c Includes respondents who did not report sex.

^d Non-science and engineering fields.

NOTES: 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: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2016.