

TABLE 18

Doctorate recipients, by citizenship status and major field of study: 2008–17

(Number)

Citizenship status and major field of study	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% change 2008–17
All doctorate recipients ^a	48,777	49,552	48,029	48,911	50,944	52,704	53,992	54,901	54,862	54,664	12.1
Life sciences	11,086	11,403	11,319	11,535	11,964	12,208	12,484	12,499	12,554	12,592	13.6
Agricultural sciences and natural resources	1,198	1,283	1,100	1,206	1,255	1,324	1,338	1,434	1,381	1,606	34.1
Biological and biomedical sciences	7,797	8,025	8,046	8,152	8,322	8,355	8,868	8,788	8,873	8,477	8.7
Health sciences	2,091	2,095	2,173	2,177	2,387	2,529	2,278	2,277	2,300	2,509	20.0
Physical sciences and earth sciences	4,946	5,160	4,995	5,271	5,419	5,584	5,911	5,918	6,252	6,081	22.9
Chemistry	2,246	2,391	2,304	2,432	2,416	2,484	2,673	2,668	2,704	2,697	20.1
Geosciences, atmospheric sciences, and ocean sciences	865	877	862	852	941	989	1,099	1,057	1,227	1,165	34.7
Physics and astronomy	1,835	1,892	1,829	1,987	2,062	2,111	2,139	2,193	2,321	2,219	20.9
Mathematics and computer sciences	3,187	3,163	3,223	3,273	3,496	3,660	3,862	3,818	3,956	3,843	20.6
Computer and information sciences	1,787	1,610	1,633	1,667	1,793	1,843	1,988	2,003	2,084	1,987	11.2
Mathematics and statistics	1,400	1,553	1,590	1,606	1,703	1,817	1,874	1,815	1,872	1,856	32.6
Psychology and social sciences	7,635	7,945	7,883	8,221	8,498	8,580	8,751	9,078	9,060	9,079	18.9
Psychology	3,357	3,472	3,421	3,576	3,599	3,592	3,724	3,776	3,931	3,960	18.0
Anthropology	483	503	507	553	547	550	524	492	460	455	-5.8
Economics	1,091	1,118	1,073	1,121	1,243	1,183	1,195	1,255	1,236	1,237	13.4
Political science and government	628	682	728	685	724	803	777	859	745	752	19.7
Sociology	601	662	639	657	633	636	679	742	615	689	14.6
Other social sciences	1,475	1,508	1,515	1,629	1,752	1,816	1,852	1,954	2,073	1,986	34.6
Engineering	7,864	7,642	7,578	8,032	8,469	9,000	9,627	9,876	9,458	9,843	25.2
Aerospace, aeronautical, and astronautical engineering	266	297	252	262	307	348	386	361	370	378	42.1
Bioengineering and biomedical engineering	762	834	824	898	943	1,039	1,046	1,126	1,090	1,041	36.6
Chemical engineering	873	807	822	823	840	824	973	1,002	921	936	7.2
Civil engineering	713	707	643	634	495	542	617	632	563	741	3.9
Electrical, electronics, and communications engineering	1,888	1,693	1,778	1,886	1,938	1,897	1,953	1,997	1,822	1,900	0.6
Industrial and manufacturing engineering	280	251	215	258	226	241	298	243	256	253	-9.6
Materials science engineering	636	625	670	662	743	815	832	871	984	958	50.6
Mechanical engineering	1,082	1,095	983	1,084	1,220	1,277	1,331	1,466	1,296	1,409	30.2
Other engineering	1,364	1,333	1,391	1,525	1,757	2,017	2,191	2,178	2,156	2,227	63.3
Education	6,561	6,528	5,287	4,670	4,803	4,934	4,789	5,098	5,146	4,823	-26.5
Education administration	2,238	2,146	1,439	924	1,057	965	893	920	823	1,023	-54.3
Education research	2,640	2,663	2,443	2,438	2,569	2,703	2,560	2,772	2,384	2,405	-8.9
Teacher education	274	332	245	204	156	109	152	156	180	112	-59.1
Teaching fields	912	906	799	805	757	892	915	953	1,166	908	-0.4
Other education	497	481	361	299	264	265	269	297	593	375	-24.5
Humanities and arts	4,736	4,904	5,015	5,226	5,561	5,715	5,524	5,594	5,480	5,290	11.7
Foreign languages and literature	627	598	601	644	684	701	674	656	599	624	-0.5
History	971	1,045	1,005	1,065	1,086	1,148	1,186	1,146	1,148	1,066	9.8
Letters	1,420	1,413	1,516	1,513	1,638	1,606	1,551	1,583	1,531	1,465	3.2
Other humanities and arts	1,718	1,848	1,893	2,004	2,153	2,260	2,113	2,209	2,202	2,135	24.3
Other ^b	2,762	2,807	2,729	2,683	2,734	3,023	3,044	3,020	2,956	3,113	12.7
Business management and administration	1,421	1,405	1,366	1,327	1,404	1,551	1,584	1,583	1,509	1,522	7.1
Communication	557	627	638	650	595	645	663	667	672	626	12.4
Non-S&E fields nec	784	775	725	706	735	827	796	770	760	965	23.1
Unknown field	0	0	0	0	0	0	1	0	15	0	0.0

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Citizenship status and major field of study	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% change 2008–17
U.S. citizen or permanent resident	30,844	32,327	31,602	31,726	32,981	33,965	34,005	35,079	35,704	35,791	16.0
Life sciences	7,279	7,803	7,812	7,892	8,184	8,353	8,390	8,474	8,691	8,857	21.7
Agricultural sciences and natural resources	647	712	618	697	675	737	754	774	772	902	39.4
Biological and biomedical sciences	5,141	5,528	5,585	5,614	5,790	5,769	5,993	6,032	6,220	6,082	18.3
Health sciences	1,491	1,563	1,609	1,581	1,719	1,847	1,643	1,668	1,699	1,873	25.6
Physical sciences and earth sciences	2,674	2,914	2,860	3,048	3,148	3,247	3,300	3,481	3,669	3,717	39.0
Chemistry	1,231	1,391	1,323	1,407	1,385	1,443	1,447	1,572	1,581	1,691	37.4
Geosciences, atmospheric sciences, and ocean sciences	536	559	573	555	623	654	722	704	803	787	46.8
Physics and astronomy	907	964	964	1,086	1,140	1,150	1,131	1,205	1,285	1,239	36.6
Mathematics and computer sciences	1,370	1,506	1,599	1,603	1,627	1,631	1,738	1,663	1,729	1,746	27.4
Computer and information sciences	697	734	761	790	785	758	807	774	783	796	14.2
Mathematics and statistics	673	772	838	813	842	873	931	889	946	950	41.2
Psychology and social sciences	5,588	5,714	5,803	6,070	6,319	6,464	6,391	6,688	6,817	6,874	23.0
Psychology	2,892	2,908	2,874	3,062	3,046	3,067	3,042	3,103	3,357	3,403	17.7
Anthropology	400	403	384	455	445	457	406	397	360	357	-10.8
Economics	405	418	459	428	517	505	469	552	521	539	33.1
Political science and government	441	483	522	488	536	593	574	621	579	578	31.1
Sociology	463	506	519	511	512	516	545	596	508	567	22.5
Other social sciences	987	996	1,045	1,126	1,263	1,326	1,355	1,419	1,492	1,430	44.9
Engineering	2,958	3,166	3,332	3,350	3,579	3,767	4,066	4,220	4,180	4,339	46.7
Aerospace, aeronautical, and astronautical engineering	122	160	141	145	181	194	246	216	233	240	96.7
Bioengineering and biomedical engineering	469	513	516	564	602	637	674	724	746	700	49.3
Chemical engineering	396	411	433	393	377	365	445	488	470	471	18.9
Civil engineering	207	262	231	216	159	182	229	231	219	243	17.4
Electrical, electronics, and communications engineering	558	578	627	617	614	603	575	632	546	586	5.0
Industrial and manufacturing engineering	90	70	62	100	75	77	91	65	82	86	-4.4
Materials science engineering	266	254	313	278	350	349	363	381	456	483	81.6
Mechanical engineering	371	421	403	440	505	547	558	620	585	592	59.6
Other engineering	479	497	606	597	716	813	885	863	843	938	95.8
Education	5,584	5,584	4,476	3,878	4,040	4,118	3,934	4,196	4,301	4,047	-27.5
Education administration	2,025	1,979	1,296	833	936	844	763	797	727	871	-57.0
Education research	2,207	2,230	2,059	1,989	2,143	2,216	2,104	2,273	1,980	2,018	-8.6
Teacher education	236	260	203	156	134	90	132	134	158	96	-59.3
Teaching fields	721	743	646	679	613	741	732	762	949	745	3.3
Other education	395	372	272	221	214	227	203	230	487	317	-19.7
Humanities and arts	3,744	3,893	4,029	4,192	4,434	4,535	4,361	4,478	4,447	4,290	14.6
Foreign languages and literature	389	385	389	426	472	467	469	463	399	433	11.3
History	802	880	843	893	889	947	968	944	950	895	11.6
Letters	1,199	1,169	1,287	1,289	1,383	1,354	1,304	1,353	1,312	1,274	6.3
Other humanities and arts	1,354	1,459	1,510	1,584	1,690	1,767	1,620	1,718	1,786	1,688	24.7
Other ^b	1,647	1,747	1,691	1,693	1,650	1,850	1,825	1,879	1,870	1,921	16.6
Business management and administration	703	780	746	755	736	831	849	892	845	830	18.1
Communication	402	443	468	473	426	471	473	479	472	463	15.2
Non-S&E fields nec	542	524	477	465	488	548	503	508	548	628	15.9
Unknown field	0	0	0	0	0	0	0	0	5	0	0.0
Temporary visa holder	15,261	14,736	13,636	14,235	14,784	15,674	15,839	16,130	16,491	16,323	7.0

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Life sciences	3,252	3,097	2,926	3,029	3,197	3,177	3,169	3,264	3,358	3,329	2.4
Agricultural sciences and natural resources	492	509	412	472	529	516	504	555	562	627	27.4
Biological and biomedical sciences	2,302	2,190	2,084	2,124	2,166	2,154	2,229	2,266	2,308	2,163	-6.0
Health sciences	458	398	430	433	502	507	436	443	488	539	17.7
Physical sciences and earth sciences	2,027	2,028	1,884	1,955	1,959	2,032	2,196	2,100	2,314	2,156	6.4
Chemistry	879	889	847	907	880	888	1,000	930	1,001	921	4.8
Geosciences, atmospheric sciences, and ocean sciences	293	295	251	246	281	290	326	307	390	332	13.3
Physics and astronomy	855	844	786	802	798	854	870	863	923	903	5.6
Mathematics and computer sciences	1,656	1,504	1,446	1,449	1,617	1,833	1,850	1,917	2,056	1,931	16.6
Computer and information sciences	1,005	791	760	759	870	990	1,029	1,094	1,204	1,101	9.6
Mathematics and statistics	651	713	686	690	747	843	821	823	852	830	27.5
Psychology and social sciences	1,618	1,720	1,553	1,588	1,601	1,634	1,549	1,622	1,753	1,680	3.8
Psychology	249	258	270	238	254	282	249	260	306	295	18.5
Anthropology	63	81	88	73	74	76	86	68	76	65	3.2
Economics	621	656	556	623	656	615	627	606	656	647	4.2
Political science and government	160	178	162	150	150	163	145	178	128	141	-11.9
Sociology	119	139	95	113	85	92	90	101	89	94	-21.0
Other social sciences	406	408	382	391	382	406	352	409	498	438	7.9
Engineering	4,492	4,221	3,866	4,164	4,355	4,759	4,961	5,108	4,844	5,070	12.9
Aerospace, aeronautical, and astronautical engineering	127	126	99	100	107	138	124	132	121	122	-3.9
Bioengineering and biomedical engineering	265	280	290	291	292	352	318	348	301	303	14.3
Chemical engineering	439	383	359	379	414	409	482	461	401	429	-2.3
Civil engineering	468	419	378	373	303	333	339	359	307	444	-5.1
Electrical, electronics, and communications engineering	1,219	1,050	1,040	1,109	1,181	1,160	1,217	1,237	1,161	1,230	0.9
Industrial and manufacturing engineering	175	175	142	152	140	156	185	161	164	161	-8.0
Materials science engineering	339	352	326	350	334	435	419	448	495	433	27.7
Mechanical engineering	651	646	519	568	631	664	686	783	652	750	15.2
Other engineering	809	790	713	842	953	1,112	1,191	1,179	1,242	1,198	48.1
Education	567	567	478	497	460	515	478	539	563	536	-5.5
Education administration	61	47	35	41	46	44	39	35	32	54	-11.5
Education research	303	315	277	294	278	319	265	327	280	305	0.7
Teacher education	27	32	19	26	13	17	14	13	13	11	-59.3
Teaching fields	136	119	112	96	101	116	134	145	181	133	-2.2
Other education	40	54	35	40	22	19	26	19	57	33	-17.5
Humanities and arts	723	729	667	767	761	779	731	713	712	693	-4.1
Foreign languages and literature	190	183	179	180	160	179	142	151	164	160	-15.8
History	122	131	113	131	136	134	147	131	142	125	2.5
Letters	145	158	134	157	141	150	140	122	126	125	-13.8
Other humanities and arts	266	257	241	299	324	316	302	309	280	283	6.4
Other ^b	926	870	816	786	834	945	905	867	891	928	0.2
Business management and administration	619	530	499	477	542	600	589	546	553	576	-6.9
Communication	116	145	131	132	107	133	137	137	160	121	4.3
Non-S&E fields nec	191	195	186	177	185	212	179	184	177	231	20.9
Unknown field	0	0	0	0	0	0	0	0	1	0	0.0

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

TABLE 18

Doctorate recipients, by citizenship status and major field of study: 2008–17

(Number)

^a Includes respondents who did not report citizenship status.

^b 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.

Source(s)

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