

TABLE 15

## Doctorate recipients, by sex and major field of study: 2008–17

(Number)

Sex and major field of study	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% change 2008–17
All doctorate recipients <sup>a</sup>	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 <sup>b</sup>	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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(Number)

Sex and major field of study	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% change 2008–17
Male	26,272	26,331	25,525	26,189	27,362	28,326	29,011	29,540	29,591	29,146	10.9
Life sciences	5,223	5,183	5,101	5,243	5,335	5,492	5,514	5,566	5,634	5,629	7.8
Agricultural sciences and natural resources	700	722	609	652	698	702	691	746	756	809	15.6
Biological and biomedical sciences	3,861	3,834	3,823	3,878	3,891	3,941	4,088	4,103	4,159	4,014	4.0
Health sciences	662	627	669	713	746	849	735	717	719	806	21.8
Physical sciences and earth sciences	3,505	3,533	3,379	3,629	3,684	3,717	3,969	3,930	4,286	4,068	16.1
Chemistry	1,479	1,490	1,440	1,508	1,521	1,497	1,642	1,594	1,713	1,669	12.8
Geosciences, atmospheric sciences, and ocean sciences	548	539	496	522	538	539	623	600	716	645	17.7
Physics and astronomy	1,478	1,504	1,443	1,599	1,625	1,681	1,704	1,736	1,857	1,754	18.7
Mathematics and computer sciences	2,353	2,327	2,409	2,456	2,638	2,792	2,912	2,877	2,996	2,866	21.8
Computer and information sciences	1,387	1,260	1,286	1,312	1,419	1,502	1,580	1,581	1,664	1,540	11.0
Mathematics and statistics	966	1,067	1,123	1,144	1,219	1,290	1,332	1,296	1,332	1,326	37.3
Psychology and social sciences	3,171	3,297	3,358	3,332	3,539	3,501	3,508	3,758	3,743	3,693	16.5
Psychology	999	991	1,032	1,003	1,040	997	1,063	1,057	1,134	1,135	13.6
Anthropology	189	195	201	223	187	188	195	185	171	158	-16.4
Economics	717	735	703	734	840	767	785	821	819	812	13.2
Political science and government	367	409	434	389	420	469	434	527	462	454	23.7
Sociology	235	263	250	254	230	259	247	284	259	267	13.6
Other social sciences	664	704	738	729	822	821	784	884	898	867	30.6
Engineering	6,168	6,006	5,829	6,242	6,565	6,946	7,402	7,579	7,268	7,389	19.8
Aerospace, aeronautical, and astronautical engineering	238	255	215	228	268	293	330	308	314	334	40.3
Bioengineering and biomedical engineering	477	525	509	563	608	684	660	699	687	612	28.3
Chemical engineering	641	591	574	566	583	566	682	685	624	663	3.4
Civil engineering	568	559	473	486	388	417	465	457	436	520	-8.5
Electrical, electronics, and communications engineering	1,568	1,433	1,462	1,579	1,594	1,616	1,615	1,704	1,528	1,541	-1.7
Industrial and manufacturing engineering	201	186	159	180	164	176	209	154	185	169	-15.9
Materials science engineering	482	466	495	496	556	598	617	648	722	706	46.5
Mechanical engineering	930	942	858	934	1,042	1,081	1,126	1,265	1,096	1,168	25.6
Other engineering	1,063	1,049	1,084	1,210	1,362	1,515	1,698	1,659	1,676	1,676	57.7
Education	2,158	2,161	1,661	1,432	1,500	1,570	1,468	1,605	1,547	1,521	-29.5
Education administration	892	838	547	349	389	372	371	344	305	372	-58.3
Education research	763	819	706	699	761	826	723	849	718	768	0.7
Teacher education	58	92	59	38	43	22	35	36	43	22	-62.1
Teaching fields	289	275	233	250	229	275	265	294	314	256	-11.4
Other education	156	137	116	96	78	75	74	82	167	103	-34.0
Humanities and arts	2,308	2,404	2,462	2,572	2,741	2,829	2,760	2,763	2,637	2,581	11.8
Foreign languages and literature	220	224	218	248	238	271	248	238	228	239	8.6
History	561	608	556	586	602	632	664	632	621	596	6.2
Letters	527	524	625	615	659	665	657	647	600	591	12.1
Other humanities and arts	1,000	1,048	1,063	1,123	1,242	1,261	1,191	1,246	1,188	1,155	15.5
Other <sup>b</sup>	1,386	1,420	1,326	1,283	1,360	1,479	1,478	1,462	1,480	1,399	0.9
Business management and administration	861	872	814	792	837	909	909	935	932	846	-1.7
Communication	232	263	247	233	244	244	277	256	261	198	-14.7
Non-S&E fields nec	293	285	265	258	279	326	292	271	280	355	21.2
Unknown field	0	0	0	0	0	0	0	0	7	0	0.0
Female	22,494	23,187	22,488	22,700	23,527	24,366	24,816	25,354	25,256	25,495	13.3

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## Doctorate recipients, by sex and major field of study: 2008–17

(Number)

Sex and major field of study	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% change 2008–17
Life sciences	5,859	6,210	6,213	6,289	6,614	6,713	6,930	6,932	6,918	6,958	18.8
Agricultural sciences and natural resources	498	559	490	554	554	622	646	688	624	795	59.6
Biological and biomedical sciences	3,934	4,185	4,219	4,272	4,422	4,411	4,747	4,684	4,713	4,461	13.4
Health sciences	1,427	1,466	1,504	1,463	1,638	1,680	1,537	1,560	1,581	1,702	19.3
Physical sciences and earth sciences	1,440	1,618	1,615	1,640	1,730	1,864	1,924	1,987	1,963	2,011	39.7
Chemistry	767	895	864	922	894	985	1,021	1,074	991	1,026	33.8
Geosciences, atmospheric sciences, and ocean sciences	316	338	366	330	403	449	475	457	510	520	64.6
Physics and astronomy	357	385	385	388	433	430	428	456	462	465	30.3
Mathematics and computer sciences	833	832	814	813	855	868	934	939	959	976	17.2
Computer and information sciences	400	349	347	353	374	341	400	422	420	447	11.8
Mathematics and statistics	433	483	467	460	481	527	534	517	539	529	22.2
Psychology and social sciences	4,464	4,646	4,524	4,888	4,955	5,077	5,220	5,319	5,317	5,381	20.5
Psychology	2,358	2,481	2,389	2,573	2,558	2,594	2,648	2,719	2,797	2,824	19.8
Anthropology	294	308	306	330	360	362	329	307	289	297	1.0
Economics	374	382	369	387	402	416	404	434	417	423	13.1
Political science and government	261	272	294	296	303	333	342	332	283	298	14.2
Sociology	366	399	389	403	402	377	432	458	356	421	15.0
Other social sciences	811	804	777	899	930	995	1,065	1,069	1,175	1,118	37.9
Engineering	1,693	1,631	1,746	1,782	1,887	2,052	2,184	2,297	2,189	2,448	44.6
Aerospace, aeronautical, and astronautical engineering	28	41	37	34	39	55	55	53	56	44	57.1
Bioengineering and biomedical engineering	285	308	315	335	335	355	384	427	403	429	50.5
Chemical engineering	232	216	248	256	256	258	290	317	296	272	17.2
Civil engineering	145	148	169	147	106	125	147	175	127	219	51.0
Electrical, electronics, and communications engineering	319	260	315	301	336	279	325	293	294	359	12.5
Industrial and manufacturing engineering	79	65	55	78	62	65	89	89	71	83	5.1
Materials science engineering	154	159	175	166	184	217	211	223	262	252	63.6
Mechanical engineering	152	152	125	150	177	196	197	201	200	241	58.6
Other engineering	299	282	307	315	392	502	486	519	480	549	83.6
Education	4,402	4,366	3,624	3,234	3,299	3,364	3,311	3,492	3,599	3,300	-25.0
Education administration	1,346	1,308	892	574	665	593	522	576	518	651	-51.6
Education research	1,876	1,844	1,736	1,736	1,808	1,877	1,828	1,922	1,666	1,636	-12.8
Teacher education	216	240	186	166	113	87	117	120	137	89	-58.8
Teaching fields	623	630	566	555	527	617	649	659	852	652	4.7
Other education	341	344	244	203	186	190	195	215	426	272	-20.2
Humanities and arts	2,428	2,499	2,552	2,654	2,818	2,885	2,760	2,830	2,842	2,708	11.5
Foreign languages and literature	407	374	382	396	446	430	424	418	371	385	-5.4
History	410	437	449	479	484	516	521	514	527	470	14.6
Letters	893	888	891	898	978	941	894	936	931	874	-2.1
Other humanities and arts	718	800	830	881	910	998	921	962	1,013	979	36.4
Other <sup>b</sup>	1,375	1,385	1,400	1,400	1,369	1,543	1,553	1,558	1,469	1,713	24.6
Business management and administration	560	533	550	535	564	641	669	648	575	675	20.5
Communication	325	364	390	417	350	401	383	411	410	428	31.7
Non-S&E fields nec	490	488	460	448	455	501	501	499	480	610	24.5
Unknown field	0	0	0	0	0	0	0	0	4	0	0.0

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

TABLE 15

**Doctorate recipients, by sex and major field of study: 2008–17**

(Number)

<sup>a</sup> Includes respondents who did not report sex.

<sup>b</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.

**Source(s)**

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