

Table 15**Doctorate recipients, by sex and major field of study: 2010–20**

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
All doctorate recipients ^a	48,028	48,909	50,943	52,703	53,986	54,886	54,809	54,552	55,085	55,614	55,283	15.1
Life sciences	11,319	11,535	11,964	12,207	12,484	12,493	12,539	12,554	12,755	12,753	12,561	11.0
Agricultural sciences and natural resources	1,100	1,206	1,255	1,324	1,338	1,434	1,379	1,493	1,442	1,488	1,472	33.8
Biological and biomedical sciences	8,046	8,152	8,322	8,354	8,868	8,783	8,863	8,566	8,782	8,681	8,418	4.6
Health sciences	2,173	2,177	2,387	2,529	2,278	2,276	2,297	2,495	2,531	2,584	2,671	22.9
Physical sciences and earth sciences	4,995	5,271	5,419	5,584	5,910	5,916	6,251	6,082	6,331	6,579	6,247	25.1
Chemistry	2,304	2,432	2,416	2,484	2,673	2,666	2,703	2,699	2,808	2,939	2,763	19.9
Geosciences, atmospheric sciences, and ocean sciences	862	852	941	989	1,098	1,057	1,227	1,169	1,185	1,272	1,243	44.2
Physics and astronomy	1,829	1,987	2,062	2,111	2,139	2,193	2,321	2,214	2,338	2,368	2,241	22.5
Mathematics and computer sciences	3,223	3,273	3,496	3,660	3,862	3,818	3,954	3,842	4,022	4,231	4,392	36.3
Computer and information sciences	1,633	1,667	1,793	1,843	1,988	2,003	2,082	1,998	2,000	2,221	2,361	44.6
Mathematics and statistics	1,590	1,606	1,703	1,817	1,874	1,815	1,872	1,844	2,022	2,010	2,031	27.7
Psychology and social sciences	7,882	8,220	8,498	8,580	8,748	9,073	9,037	9,034	8,877	9,043	8,946	13.5
Psychology	3,420	3,576	3,599	3,592	3,724	3,776	3,910	3,925	3,821	3,909	3,879	13.4
Anthropology	507	553	547	550	523	492	460	446	424	445	448	-11.6
Economics	1,073	1,121	1,243	1,183	1,196	1,255	1,236	1,239	1,245	1,247	1,216	13.3
Political science and government	728	685	724	803	775	859	745	743	734	707	637	-12.5
Sociology	639	656	633	636	678	741	613	683	668	632	607	-5.0
Other social sciences	1,515	1,629	1,752	1,816	1,852	1,950	2,073	1,998	1,985	2,103	2,159	42.5
Engineering	7,578	8,032	8,469	9,000	9,626	9,875	9,459	9,776	10,165	10,298	10,476	38.2
Aerospace, aeronautical, and astronautical engineering	252	262	307	348	386	361	370	379	383	379	399	58.3
Bioengineering and biomedical engineering	824	898	943	1,039	1,046	1,125	1,089	1,032	1,133	1,163	1,083	31.4
Chemical engineering	822	823	840	824	973	1,002	921	931	981	980	994	20.9
Civil engineering	643	634	495	542	617	632	564	713	675	700	796	23.8
Electrical, electronics, and communications engineering	1,778	1,886	1,938	1,897	1,952	1,997	1,823	1,879	1,943	1,799	1,973	11.0
Industrial and manufacturing engineering	215	258	226	241	298	243	256	249	272	234	304	41.4
Materials science engineering	670	662	743	815	832	871	984	937	992	992	880	31.3
Mechanical engineering	983	1,084	1,220	1,277	1,331	1,466	1,297	1,398	1,503	1,532	1,634	66.2
Other engineering	1,391	1,525	1,757	2,017	2,191	2,178	2,155	2,258	2,283	2,519	2,413	73.5
Education	5,287	4,670	4,802	4,934	4,789	5,098	5,146	4,826	4,818	4,633	4,716	-10.8
Education administration	1,439	924	1,057	965	893	920	824	922	895	839	927	-35.6
Education research	2,443	2,438	2,568	2,703	2,560	2,772	2,384	2,418	2,500	2,304	2,312	-5.4
Teacher education	245	204	156	109	152	156	180	114	96	104	113	-53.9
Teaching fields	799	805	757	892	915	953	1,166	925	959	957	940	17.6
Other education	361	299	264	265	269	297	592	447	368	429	424	17.5
Humanities and arts	5,015	5,225	5,561	5,715	5,524	5,594	5,482	5,286	5,139	5,051	4,939	-1.5
Foreign languages and literature	601	644	684	701	674	656	599	618	617	610	564	-6.2
History	1,005	1,065	1,086	1,148	1,186	1,146	1,148	1,058	948	912	887	-11.7
Letters	1,516	1,513	1,638	1,606	1,551	1,583	1,531	1,462	1,439	1,386	1,392	-8.2

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(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other humanities and arts	1,893	2,003	2,153	2,260	2,113	2,209	2,204	2,148	2,135	2,143	2,096	10.7
Other ^b	2,729	2,683	2,734	3,023	3,043	3,019	2,941	3,152	2,978	3,026	3,006	10.2
Business management and administration	1,366	1,327	1,404	1,551	1,584	1,582	1,509	1,565	1,474	1,532	1,466	7.3
Communication	638	650	595	645	663	667	672	622	630	543	593	-7.1
Non-S&E fields nec	725	706	735	827	796	770	760	965	874	951	947	30.6
Male	25,524	26,188	27,362	28,326	29,008	29,532	29,572	29,081	29,746	30,113	29,886	17.1
Life sciences	5,101	5,243	5,335	5,492	5,514	5,563	5,628	5,612	5,648	5,807	5,553	8.9
Agricultural sciences and natural resources	609	652	698	702	691	746	755	755	746	758	746	22.5
Biological and biomedical sciences	3,823	3,878	3,891	3,941	4,088	4,100	4,154	4,056	4,079	4,192	3,892	1.8
Health sciences	669	713	746	849	735	717	719	801	823	857	915	36.8
Physical sciences and earth sciences	3,379	3,629	3,684	3,717	3,968	3,928	4,285	4,068	4,212	4,363	4,177	23.6
Chemistry	1,440	1,508	1,521	1,497	1,642	1,592	1,712	1,667	1,742	1,788	1,669	15.9
Geosciences, atmospheric sciences, and ocean sciences	496	522	538	539	622	600	716	644	659	738	737	48.6
Physics and astronomy	1,443	1,599	1,625	1,681	1,704	1,736	1,857	1,757	1,811	1,837	1,771	22.7
Mathematics and computer sciences	2,409	2,456	2,638	2,792	2,912	2,877	2,994	2,867	3,036	3,138	3,297	36.9
Computer and information sciences	1,286	1,312	1,419	1,502	1,580	1,581	1,662	1,548	1,565	1,712	1,859	44.6
Mathematics and statistics	1,123	1,144	1,219	1,290	1,332	1,296	1,332	1,319	1,471	1,426	1,438	28.0
Psychology and social sciences	3,357	3,332	3,539	3,501	3,507	3,757	3,741	3,670	3,636	3,666	3,588	6.9
Psychology	1,031	1,003	1,040	997	1,063	1,057	1,133	1,123	1,095	1,113	1,082	4.9
Anthropology	201	223	187	188	195	185	171	155	126	155	145	-27.9
Economics	703	734	840	767	785	821	819	812	849	818	809	15.1
Political science and government	434	389	420	469	433	527	462	449	429	433	388	-10.6
Sociology	250	254	230	259	247	284	257	263	250	229	243	-2.8
Other social sciences	738	729	822	821	784	883	899	868	887	918	921	24.8
Engineering	5,829	6,242	6,565	6,946	7,401	7,578	7,267	7,341	7,711	7,830	7,882	35.2
Aerospace, aeronautical, and astronautical engineering	215	228	268	293	330	308	314	336	337	323	329	53.0
Bioengineering and biomedical engineering	509	563	608	684	660	698	686	605	687	720	653	28.3
Chemical engineering	574	566	583	566	682	685	624	659	688	664	695	21.1
Civil engineering	473	486	388	417	465	457	437	508	505	541	586	23.9
Electrical, electronics, and communications engineering	1,462	1,579	1,594	1,616	1,614	1,704	1,529	1,524	1,599	1,501	1,630	11.5
Industrial and manufacturing engineering	159	180	164	176	209	154	185	168	204	172	209	31.4
Materials science engineering	495	496	556	598	617	648	721	688	718	701	638	28.9
Mechanical engineering	858	934	1,042	1,081	1,126	1,265	1,096	1,159	1,285	1,283	1,373	60.0
Other engineering	1,084	1,210	1,362	1,515	1,698	1,659	1,675	1,694	1,688	1,925	1,769	63.2
Education	1,661	1,432	1,500	1,570	1,468	1,605	1,545	1,519	1,494	1,422	1,456	-12.3
Education administration	547	349	389	372	371	344	304	344	323	342	346	-36.7
Education research	706	699	761	826	723	849	718	772	762	654	675	-4.4
Teacher education	59	38	43	22	35	36	43	21	18	20	28	-52.5
Teaching fields	233	250	229	275	265	294	313	263	271	259	292	25.3

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(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Other education	116	96	78	75	74	82	167	119	120	147	115	-0.9
Humanities and arts	2,462	2,571	2,741	2,829	2,760	2,763	2,639	2,580	2,564	2,478	2,516	2.2
Foreign languages and literature	218	248	238	271	248	238	228	237	247	215	223	2.3
History	556	586	602	632	664	632	621	594	513	529	512	-7.9
Letters	625	615	659	665	657	647	600	591	585	560	589	-5.8
Other humanities and arts	1,063	1,122	1,242	1,261	1,191	1,246	1,190	1,158	1,219	1,174	1,192	12.1
Other ^b	1,326	1,283	1,360	1,479	1,478	1,461	1,473	1,424	1,445	1,409	1,417	6.9
Business management and administration	814	792	837	909	909	934	932	872	863	872	851	4.5
Communication	247	233	244	244	277	256	261	197	234	205	230	-6.9
Non-S&E fields nec	265	258	279	326	292	271	280	355	348	332	336	26.8
Female	22,488	22,699	23,526	24,365	24,813	25,347	25,222	25,449	25,311	25,491	25,392	12.9
Life sciences	6,213	6,289	6,614	6,712	6,930	6,929	6,908	6,937	7,101	6,945	7,007	12.8
Agricultural sciences and natural resources	490	554	554	622	646	688	623	736	693	730	725	48.0
Biological and biomedical sciences	4,219	4,272	4,422	4,410	4,747	4,682	4,707	4,508	4,700	4,488	4,526	7.3
Health sciences	1,504	1,463	1,638	1,680	1,537	1,559	1,578	1,693	1,708	1,727	1,756	16.8
Physical sciences and earth sciences	1,615	1,640	1,730	1,864	1,924	1,987	1,963	2,013	2,116	2,212	2,068	28.0
Chemistry	864	922	894	985	1,021	1,074	991	1,031	1,066	1,151	1,092	26.4
Geosciences, atmospheric sciences, and ocean sciences	366	330	403	449	475	457	510	525	526	533	506	38.3
Physics and astronomy	385	388	433	430	428	456	462	457	524	528	470	22.1
Mathematics and computer sciences	814	813	855	868	934	939	959	974	982	1,092	1,095	34.5
Computer and information sciences	347	353	374	341	400	422	420	450	434	508	502	44.7
Mathematics and statistics	467	460	481	527	534	517	539	524	548	584	593	27.0
Psychology and social sciences	4,524	4,887	4,955	5,077	5,217	5,315	5,295	5,360	5,239	5,377	5,358	18.4
Psychology	2,389	2,573	2,558	2,594	2,648	2,719	2,776	2,802	2,726	2,796	2,797	17.1
Anthropology	306	330	360	362	328	307	289	291	298	290	303	-1.0
Economics	369	387	402	416	404	434	417	425	396	429	407	10.3
Political science and government	294	296	303	333	341	332	283	294	304	274	249	-15.3
Sociology	389	402	402	377	431	457	356	419	418	403	364	-6.4
Other social sciences	777	899	930	995	1,065	1,066	1,174	1,129	1,097	1,185	1,238	59.3
Engineering	1,746	1,782	1,887	2,052	2,184	2,297	2,189	2,429	2,450	2,466	2,593	48.5
Aerospace, aeronautical, and astronautical engineering	37	34	39	55	55	53	56	43	46	56	70	89.2
Bioengineering and biomedical engineering	315	335	335	355	384	427	403	427	445	443	430	36.5
Chemical engineering	248	256	256	258	290	317	296	271	293	316	299	20.6
Civil engineering	169	147	106	125	147	175	127	203	170	159	210	24.3
Electrical, electronics, and communications engineering	315	301	336	279	325	293	293	355	344	297	343	8.9
Industrial and manufacturing engineering	55	78	62	65	89	89	71	80	68	62	95	72.7
Materials science engineering	175	166	184	217	211	223	262	249	274	290	242	38.3
Mechanical engineering	125	150	177	196	197	201	201	239	216	249	261	108.8
Other engineering	307	315	392	502	486	519	480	562	594	594	643	109.4

Table 15**Doctorate recipients, by sex and major field of study: 2010–20**

(Number and percent)

Sex and field	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% change 2010–20
Education	3,624	3,234	3,298	3,364	3,311	3,492	3,601	3,305	3,323	3,211	3,259	-10.1
Education administration	892	574	665	593	522	576	520	578	572	497	580	-35.0
Education research	1,736	1,736	1,807	1,877	1,828	1,922	1,666	1,645	1,737	1,650	1,637	-5.7
Teacher education	186	166	113	87	117	120	137	92	78	84	85	-54.3
Teaching fields	566	555	527	617	649	659	853	662	688	698	648	14.5
Other education	244	203	186	190	195	215	425	328	248	282	309	26.6
Humanities and arts	2,552	2,654	2,818	2,885	2,760	2,830	2,842	2,705	2,572	2,571	2,423	-5.1
Foreign languages and literature	382	396	446	430	424	418	371	381	370	394	341	-10.7
History	449	479	484	516	521	514	527	464	435	383	375	-16.5
Letters	891	898	978	941	894	936	931	871	853	826	803	-9.9
Other humanities and arts	830	881	910	998	921	962	1,013	989	914	968	904	8.9
Other ^b	1,400	1,400	1,369	1,543	1,553	1,558	1,465	1,726	1,528	1,617	1,589	13.5
Business management and administration	550	535	564	641	669	648	575	692	608	660	615	11.8
Communication	390	417	350	401	383	411	410	425	395	338	363	-6.9
Non-S&E fields nec	460	448	455	501	501	499	480	609	525	619	611	32.8

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

^a Includes respondents who did not report sex.^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 Center for Science and Engineering Statistics, Survey of Earned Doctorates.