

Table 7-5

S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2008–18

(Number)

Field, sex, ethnicity, and race	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Female	773	799	857	na	na	na	na	na	na	na	na
Male	659	644	680	na	na	na	na	na	na	na	na
Black or African American	855	902	819	960	965	1,090	1,203	1,202	1,208	1,271	1,196
Female	546	587	546	617	617	695	775	789	795	818	755
Male	309	315	273	343	348	395	428	413	413	453	441
Native Hawaiian or Other Pacific Islander	na	na	na	29	18	16	25	25	27	22	29
Female	na	na	na	14	8	11	16	14	17	15	19
Male	na	na	na	15	10	5	9	11	10	7	10
White	12,108	12,317	11,992	12,355	12,663	13,115	13,569	13,536	13,335	13,488	13,387
Female	6,009	6,087	5,792	6,016	6,170	6,372	6,709	6,621	6,346	6,484	6,519
Male	6,099	6,230	6,200	6,339	6,493	6,743	6,860	6,915	6,989	7,004	6,868
More than one race ^c	na	na	na	150	190	217	299	347	429	532	545
Female	na	na	na	82	101	121	168	180	243	299	304
Male	na	na	na	68	89	96	131	167	186	233	241
Other or unknown race and ethnicity	1,492	1,478	1,649	1,749	1,679	1,685	1,795	1,732	1,607	1,443	1,476
Female	693	741	765	872	807	869	921	885	811	761	745
Male	799	737	884	877	872	816	874	847	796	682	731
Agricultural sciences	668	715	639	660	694	770	755	888	849	825	841
Female	274	350	321	317	330	370	365	439	410	429	428
Male	394	365	318	343	364	400	390	449	439	396	413
Hispanic or Latino ^a	18	21	33	45	41	45	49	47	58	54	57
Female	7	13	21	24	21	26	21	25	29	29	35
Male	11	8	12	21	20	19	28	22	29	25	22
Not Hispanic or Latino	650	694	606	615	653	725	706	841	791	771	784
Female	267	337	300	293	309	344	344	414	381	400	393
Male	383	357	306	322	344	381	362	427	410	371	391
American Indian or Alaska Native	8	5	6	5	9	4	5	8	6	3	5
Female	3	2	3	4	4	3	2	6	3	2	2
Male	5	3	3	1	5	1	3	2	3	1	3
Asian	na	na	na	28	34	29	34	35	43	42	36
Female	na	na	na	16	21	13	19	17	31	22	25
Male	na	na	na	12	13	16	15	18	12	20	11
Asian or Pacific Islander ^b	34	34	32	na	na	na	na	na	na	na	na
Female	20	18	17	na	na	na	na	na	na	na	na
Male	14	16	15	na	na	na	na	na	na	na	na
Black or African American	26	28	47	21	38	33	32	31	38	43	42
Female	18	19	30	8	25	21	18	16	23	25	20
Male	8	9	17	13	13	12	14	15	15	18	22
Native Hawaiian or Other Pacific Islander	na	na	na	1	0	1	1	1	0	0	2
Female	na	na	na	0	0	0	0	1	0	0	2
Male	na	na	na	1	0	1	1	0	0	0	0
White	534	576	480	509	519	586	577	673	633	611	625
Female	204	265	229	239	238	273	277	317	294	305	307
Male	330	311	251	270	281	313	300	356	339	306	318
More than one race ^c	na	na	na	5	4	7	4	14	15	18	17
Female	na	na	na	3	0	3	4	9	9	14	7
Male	na	na	na	2	4	4	0	5	6	4	10
Other or unknown race and ethnicity	48	51	41	46	49	65	53	79	56	54	57
Female	22	33	21	23	21	31	24	48	21	32	30
Male	26	18	20	23	28	34	29	31	35	22	27

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(Number)

Field, sex, ethnicity, and race	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Female	17	29	34	na	na	na	na	na	na	na	na
Male	70	87	90	na	na	na	na	na	na	na	na
Black or African American	24	30	33	31	39	52	52	57	69	62	54
Female	12	9	11	12	16	19	16	19	27	26	15
Male	12	21	22	19	23	33	36	38	42	36	39
Native Hawaiian or Other Pacific Islander	na	na	na	2	0	0	0	0	1	1	0
Female	na	na	na	0	0	0	0	0	0	1	0
Male	na	na	na	2	0	0	0	0	1	0	0
White	446	483	506	514	526	531	554	535	516	529	494
Female	89	102	107	83	90	95	91	101	89	127	101
Male	357	381	399	431	436	436	463	434	427	402	393
More than one race ^c	na	na	na	3	3	3	7	16	19	14	24
Female	na	na	na	1	0	1	1	3	4	2	7
Male	na	na	na	2	3	2	6	13	15	12	17
Other or unknown race and ethnicity	94	76	99	72	94	95	114	98	86	92	83
Female	33	16	18	17	14	28	33	25	19	20	21
Male	61	60	81	55	80	67	81	73	67	72	62
Earth, atmospheric, and ocean sciences	436	477	481	472	498	540	583	566	610	622	619
Female	168	191	199	190	224	256	277	252	266	277	301
Male	268	286	282	282	274	284	306	314	344	345	318
Hispanic or Latino ^a	17	14	16	14	18	24	21	31	27	38	42
Female	10	4	5	8	11	11	10	17	13	21	25
Male	7	10	11	6	7	13	11	14	14	17	17
Not Hispanic or Latino	419	463	465	458	480	516	562	535	583	584	577
Female	158	187	194	182	213	245	267	235	253	256	276
Male	261	276	271	276	267	271	295	300	330	328	301
American Indian or Alaska Native	2	2	2	0	2	4	1	3	5	4	0
Female	0	1	0	0	0	0	1	2	2	4	0
Male	2	1	2	0	2	4	0	1	3	0	0
Asian	na	na	na	22	19	13	21	17	28	29	27
Female	na	na	na	8	13	7	12	8	13	14	11
Male	na	na	na	14	6	6	9	9	15	15	16
Asian or Pacific Islander ^b	17	15	15	na	na	na	na	na	na	na	na
Female	7	8	10	na	na	na	na	na	na	na	na
Male	10	7	5	na	na	na	na	na	na	na	na
Black or African American	7	6	5	5	15	11	12	11	11	11	13
Female	3	4	1	2	7	5	5	3	6	2	5
Male	4	2	4	3	8	6	7	8	5	9	8
Native Hawaiian or Other Pacific Islander	na	na	na	0	1	0	0	1	0	0	1
Female	na	na	na	0	1	0	0	1	0	0	0
Male	na	na	na	0	0	0	0	0	0	0	1
White	349	390	395	385	404	450	483	444	480	486	477
Female	134	152	164	154	177	218	227	190	200	210	233
Male	215	238	231	231	227	232	256	254	280	276	244
More than one race ^c	na	na	na	1	6	5	9	8	14	13	23
Female	na	na	na	1	1	2	6	4	9	5	13
Male	na	na	na	0	5	3	3	4	5	8	10
Other or unknown race and ethnicity	44	50	48	45	33	33	36	51	45	41	36
Female	14	22	19	17	14	13	16	27	23	21	14
Male	30	28	29	28	19	20	20	24	22	20	22

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(Number)

Field, sex, ethnicity, and race	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Female	86	86	84	na	na	na	na	na	na	na	na
Male	130	118	133	na	na	na	na	na	na	na	na
Black or African American	77	78	80	86	79	95	107	107	99	88	93
Female	36	41	37	45	34	49	49	52	49	41	45
Male	41	37	43	41	45	46	58	55	50	47	48
Native Hawaiian or Other Pacific Islander	na	na	na	6	4	0	3	5	2	1	7
Female	na	na	na	1	2	0	2	2	0	1	4
Male	na	na	na	5	2	0	1	3	2	0	3
White	1,685	1,852	1,801	1,913	1,958	2,041	2,002	2,132	2,218	2,203	2,238
Female	469	565	551	574	576	624	602	643	642	648	716
Male	1,216	1,287	1,250	1,339	1,382	1,417	1,400	1,489	1,576	1,555	1,522
More than one race ^c	na	na	na	26	28	38	43	46	62	65	76
Female	na	na	na	7	5	14	13	10	33	26	26
Male	na	na	na	19	23	24	30	36	29	39	50
Other or unknown race and ethnicity	212	227	272	284	265	223	261	263	221	200	181
Female	59	67	86	98	81	63	85	87	63	66	51
Male	153	160	186	186	184	160	176	176	158	134	130
Psychology	4,359	3,770	3,334	3,694	3,616	4,017	4,320	4,261	4,292	4,217	4,042
Female	3,142	2,730	2,354	2,678	2,622	2,939	3,191	3,155	3,129	3,077	2,918
Male	1,217	1,040	980	1,016	994	1,078	1,129	1,106	1,163	1,140	1,124
Hispanic or Latino ^a	420	316	277	335	342	408	483	488	590	530	502
Female	315	231	212	243	246	323	377	370	438	402	373
Male	105	85	65	92	96	85	106	118	152	128	129
Not Hispanic or Latino	3,939	3,454	3,057	3,359	3,274	3,609	3,837	3,773	3,702	3,687	3,540
Female	2,827	2,499	2,142	2,435	2,376	2,616	2,814	2,785	2,691	2,675	2,545
Male	1,112	955	915	924	898	993	1,023	988	1,011	1,012	995
American Indian or Alaska Native	31	23	19	23	21	31	20	21	22	14	18
Female	22	16	12	21	13	23	15	16	16	10	15
Male	9	7	7	2	8	8	5	5	6	4	3
Asian	na	na	na	189	213	199	213	255	228	216	229
Female	na	na	na	143	174	151	174	197	177	165	178
Male	na	na	na	46	39	48	39	58	51	51	51
Asian or Pacific Islander ^b	252	207	197	na	na	na	na	na	na	na	na
Female	196	163	152	na	na	na	na	na	na	na	na
Male	56	44	45	na	na	na	na	na	na	na	na
Black or African American	271	259	212	275	238	299	362	414	406	388	332
Female	209	200	177	218	194	243	300	330	331	305	263
Male	62	59	35	57	44	56	62	84	75	83	69
Native Hawaiian or Other Pacific Islander	na	na	na	1	0	4	6	3	10	4	4
Female	na	na	na	1	0	3	5	3	10	4	3
Male	na	na	na	0	0	1	1	0	0	0	1
White	3,036	2,664	2,342	2,471	2,435	2,633	2,799	2,661	2,566	2,647	2,526
Female	2,157	1,899	1,608	1,761	1,730	1,857	2,001	1,922	1,818	1,864	1,755
Male	879	765	734	710	705	776	798	739	748	783	771
More than one race ^c	na	na	na	40	45	47	72	78	104	108	107
Female	na	na	na	29	32	36	56	59	72	89	86
Male	na	na	na	11	13	11	16	19	32	19	21
Other or unknown race and ethnicity	349	301	287	360	322	396	365	341	366	310	324
Female	243	221	193	262	233	303	263	258	267	238	245
Male	106	80	94	98	89	93	102	83	99	72	79

Table 7-5**S&E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2008–18**

(Number)

Field, sex, ethnicity, and race	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Female	151	138	174	na	na	na	na	na	na	na	na
Male	350	366	343	na	na	na	na	na	na	na	na
Black or African American	128	139	154	141	175	187	172	165	197	182	171
Female	48	43	52	56	67	67	68	55	71	61	58
Male	80	96	102	85	108	120	104	110	126	121	113
Native Hawaiian or Other Pacific Islander	na	na	na	4	2	7	8	1	3	5	0
Female	na	na	na	2	1	1	2	0	0	1	0
Male	na	na	na	2	1	6	6	1	3	4	0
White	2,112	2,235	2,286	2,393	2,592	2,701	2,928	3,023	2,967	2,882	2,957
Female	491	528	508	549	607	596	635	707	658	678	760
Male	1,621	1,707	1,778	1,844	1,985	2,105	2,293	2,316	2,309	2,204	2,197
More than one race ^c	na	na	na	32	42	59	78	87	116	110	137
Female	na	na	na	9	14	15	20	33	24	32	35
Male	na	na	na	23	28	44	58	54	92	78	102
Other or unknown race and ethnicity	294	324	344	347	340	371	368	382	363	390	410
Female	71	103	105	70	81	74	91	88	94	95	119
Male	223	221	239	277	259	297	277	294	269	295	291

na = not applicable; data were not collected for this detail.

S&E = science and engineering.

^a Hispanic or Latino may be any race; race categories exclude Hispanic origin.^b The Asian or Pacific Islander category included Asians, Native Hawaiians, and Other Pacific Islanders.^c In 2011, the survey required institutions to begin reporting information on more than one race, along with information in the other racial and ethnic categories, but institutions were not required to update the race and ethnicity data of individuals who were already in the system. Therefore, the number reported for more than one race for the early years following 2011 is likely to be an undercount. Prior to the 2011 collection cycle, more than one race was reported under Other or unknown race or ethnicity.**Note(s):**

Data in this table differ from doctoral degree data in this report that are based on the National Center for Science and Engineering Statistics' Survey of Earned Doctorates (SED). SED data are for research doctorates only. The greatest differences are in psychology, education, and medical and other health sciences. Before 2008, the National Center for Education Statistics (NCES) used two doctoral degree categories: doctor's and first-professional. In 2008 and 2009, NCES allowed optional reporting in three new doctoral degree categories: doctor's—research or scholarship, doctor's—professional practice, and doctor's—other. In 2010, NCES required institutions to use only the three new doctoral degree categories. With the new reporting system, degrees formerly classified as first-professional (e.g., MDs and JDs) can be reported as doctoral degrees, most often as doctor's—professional practice. In this table, data for 2008 and 2009 include only doctorates reported under the old doctor's degree category plus those reported as doctor's—research or scholarship. Data for 2010 and later include only doctorates reported as doctor's—research or scholarship. Starting with 2011, data reflects the Office of Management and Budget's latest race and ethnicity categories. Data are based on degree-granting institutions eligible to participate in Title IV federal financial aid programs.

Source(s):

Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, unrevised provisional release data, accessed 14 January 2020.