

TABLE 3. Doctorates awarded to women, by field of study: 2000–10

Field	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Percent ^a	
												2000	2010
All fields	18,133	17,888	18,141	18,509	19,154	19,582	20,560	21,901	22,494	23,186	22,505	43.8	46.8
Science and engineering	9,394	9,298	9,174	9,522	9,856	10,539	11,477	12,277	12,972	13,596	13,548	36.2	40.9
Science	8,556	8,369	8,280	8,611	8,835	9,357	10,025	10,672	11,279	11,963	11,805	41.4	46.1
Agricultural sciences	317	340	319	374	399	376	412	456	460	504	450	30.6	45.7
Agronomy and crop science	14	21	19	14	12	14	17	21	16	23	25	20.3	36.2
Animal breeding, animal nutrition, poultry science	15	15	24	22	22	23	23	36	23	23	21	19.7	39.6
Animal science, other	26	19	22	33	26	30	25	30	35	31	30	35.6	55.6
Dairy science ^b	0	0	2	8	na	na	na	na	na	na	na	0.0	na
Environmental science	43	47	41	56	63	52	60	66	96	111	79	45.3	50.3
Fishing and fisheries sciences/management	11	9	13	12	12	9	13	15	14	21	14	25.6	41.2
Food science, food technology-other	68	73	60	85	84	67	81	84	73	73	85	44.7	62.0
Forest biology, forest management, wood science, forestry sciences-other	28	31	27	29	32	29	38	39	37	46	29	28.0	32.6
Forest engineering ^b	0	0	0	0	na	na	na	na	na	na	na	0.0	na
Horticulture science, plant breeding, plant pathology, plant sciences-other	61	49	58	59	65	73	84	82	77	89	79	28.4	44.4
Natural resources/conservation	5	18	12	14	26	25	26	30	38	42	41	26.3	46.6
Soil chemistry, soil sciences-other	23	30	24	23	27	29	27	30	29	28	24	25.6	40.7
Wildlife/range management	11	15	9	12	15	13	13	13	15	11	20	19.6	41.7
Agriculture-general, agricultural sciences-other	12	13	8	7	15	12	5	10	7	6	3	32.4	16.7
Biological sciences	2,622	2,549	2,547	2,605	2,758	3,106	3,271	3,529	3,934	4,184	4,220	44.8	52.4
Anatomy, developmental biology	78	65	42	82	75	94	85	97	110	99	129	51.7	59.4
Bacteriology, parasitology	14	20	13	8	15	17	22	17	25	23	36	41.2	60.0
Biochemistry	325	310	294	320	296	276	348	372	421	403	406	41.9	46.9
Bioinformatics ^c	na	na	na	na	na	na	na	21	36	53	37	na	30.3
Biomedical sciences	68	81	110	88	96	138	144	145	130	150	163	43.9	56.6
Biometrics and biostatistics	41	47	47	49	50	63	57	76	79	57	78	44.6	61.4
Biophysics	49	47	34	53	47	59	62	55	61	67	49	29.9	28.5
Botany, plant pathology, plant physiology	76	64	73	62	87	74	84	84	80	69	66	48.7	42.0
Cancer biology ^c	na	na	na	na	na	na	na	57	164	153	176	na	58.7
Cell/cellular biology and histology	155	148	160	146	127	152	171	193	181	173	195	46.0	54.0
Computational biology ^d	na	na	na	na	na	na	na	na	na	na	17	na	24.6
Ecology	116	128	134	142	161	193	183	211	223	237	213	39.1	49.4
Endocrinology, human/animal pathology	53	63	69	59	57	61	52	70	70	75	53	42.1	52.0
Entomology	37	31	33	31	31	40	33	31	49	56	51	27.0	41.5
Environmental toxicology, toxicology ^e	58	62	65	63	47	54	50	64	68	69	82	47.2	59.4
Evolutionary biology ^c	na	na	na	na	na	na	na	20	80	103	95	na	44.4
Genetics-human/animal, plant genetics	131	121	137	141	140	164	183	237	211	230	228	50.0	52.8
Immunology	116	122	146	121	167	170	212	203	219	250	243	48.5	53.9
Microbiology	189	180	177	159	198	225	256	274	307	328	276	49.5	56.3
Molecular biology	320	323	272	289	362	361	397	367	444	435	401	45.3	57.2
Neurosciences	195	201	203	203	260	322	347	333	421	513	509	39.4	53.4
Nutrition sciences	126	99	107	102	102	126	120	127	143	130	133	84.0	73.9
Pharmacology, human and animal	123	115	113	126	147	173	167	160	140	184	159	46.1	54.8
Physiology, human and animal	99	90	84	87	86	99	103	122	118	138	127	41.1	49.2
Structural biology ^d	na	na	na	na	na	na	na	na	na	na	25	na	47.2
Virology ^d	na	na	na	na	na	na	na	na	na	na	71	na	52.6
Zoology	55	40	47	56	35	50	35	30	34	44	37	41.4	51.4
Biology/biomedical sciences, general	82	86	96	84	85	95	85	105	62	89	102	41.2	54.8
Biotechnology, biology/biomedical sciences-other	116	106	91	134	87	100	75	58	58	56	63	50.2	60.0
Earth, atmospheric, and ocean sciences	196	198	212	213	238	244	266	333	316	338	367	28.2	42.5
Atmospheric sciences	33	28	31	39	46	52	46	63	54	50	64	23.1	37.4
Atmospheric physics, meteorology	9	6	5	10	21	13	12	18	18	12	24	17.6	40.0
Atmospheric chemistry, atmospheric sciences-general, atmospheric sciences-other	24	22	26	29	25	39	34	45	36	38	40	26.1	36.0

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Field	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Percent ^a	
												2000	2010
Earth and ocean sciences	163	170	181	174	192	192	220	270	262	288	303	29.6	43.7
Geochemistry, mineralogy	14	15	26	21	22	24	32	32	40	43	52	25.5	59.1
Geology	28	38	30	38	25	33	40	56	43	47	42	22.8	33.1
Geophysics and seismology	16	22	25	17	26	26	24	31	43	38	30	22.9	32.3
Marine sciences	18	15	17	21	29	25	25	42	40	40	48	50.0	60.8
Ocean/marine sciences, aggregated	24	23	19	15	23	15	18	16	24	22	25	33.3	39.7
Oceanography, chemical and physical	29	31	33	38	20	32	25	40	33	37	36	29.3	41.4
Paleontology, stratigraphy	18	7	8	9	17	13	19	17	11	15	19	40.9	38.0
Geomorphology, geological sciences-general, geological sciences-other	16	19	23	15	30	24	37	36	28	46	51	30.8	48.1
Mathematics/computer sciences	401	431	432	441	504	547	704	734	833	832	820	21.0	25.2
Computer sciences	142	155	167	177	199	221	311	332	400	349	353	16.5	21.2
Computer science	104	111	125	121	137	156	218	262	299	265	233	14.4	17.2
Information science and systems	38	27	26	24	42	36	50	43	67	49	70	27.7	44.6
Robotics ^d	na	na	na	na	na	na	na	na	na	na	5	na	16.1
Computer and information science, other ^f	na	17	16	32	20	29	43	27	34	35	45	na	37.5
Mathematics	259	276	265	264	305	326	393	402	433	483	467	24.7	29.4
Algebra	21	20	15	23	28	25	24	33	37	35	31	25.6	20.7
Analysis and functional analysis	15	20	20	15	28	25	26	28	22	35	39	18.5	27.7
Applied mathematics, computing theory	61	58	65	56	64	87	95	94	119	118	122	23.9	29.3
Geometry/geometric analysis	8	7	12	10	29	13	16	18	22	15	15	13.6	14.3
Logic, topology/foundations	12	21	15	18	21	19	21	22	20	27	28	17.4	26.4
Number theory	5	8	5	7	5	9	13	14	9	16	11	12.5	15.5
Statistics	71	63	61	69	78	108	133	147	141	151	134	36.4	41.0
Operations research, mathematics/statistics- general, mathematics/statistics-other	66	79	72	66	52	40	65	46	63	86	87	24.5	31.9
Physical sciences	827	830	848	891	864	971	1,094	1,175	1,124	1,280	1,271	24.5	30.3
Astronomy	40	41	27	40	46	49	56	59	62	84	89	21.6	33.5
Astronomy	24	21	12	18	24	26	24	31	31	39	45	30.8	43.7
Astrophysics	16	20	15	22	22	23	32	28	31	45	41	15.0	26.6
Astronomy, other ^d	na	na	na	na	na	na	na	na	na	na	3	0.0	33.3
Chemistry	624	628	645	656	635	723	810	832	767	895	863	31.4	37.4
Analytical chemistry	121	123	114	137	119	178	167	182	158	172	176	37.1	43.8
Inorganic chemistry	64	90	86	96	80	84	108	85	101	117	120	29.0	40.7
Medicinal/pharmaceutical chemistry ^d	51	45	39	42	48	49	54	na	na	na	na	47.7	na
Nuclear chemistry ^b	3	0	3	2	na	na	na	na	na	na	na	33.3	na
Organic chemistry	140	132	142	146	142	155	174	199	185	219	172	26.7	28.7
Physical chemistry	76	92	103	84	81	87	113	109	114	111	115	28.0	32.0
Polymer chemistry	31	33	35	25	40	30	32	42	24	37	52	29.0	41.3
Theoretical chemistry	12	6	17	12	16	12	25	24	24	23	26	23.1	30.2
Chemistry, general	81	73	61	72	58	67	69	120	93	112	112	31.0	41.5
Chemistry, other	45	34	45	40	51	61	68	71	68	104	90	40.9	53.6
Physics	163	161	176	195	183	199	228	284	295	301	319	13.5	19.6
Acoustics, optics/photonics	17	15	20	28	22	31	21	28	27	34	35	13.4	21.7
Applied physics ^h	na	na	na	na	7	17	20	20	32	24	33	na	23.1
Atomic physics, polymer physics	27	12	17	15	12	21	20	36	24	29	23	20.6	18.5
Biophysics ^h	na	na	na	na	8	18	22	33	30	28	32	na	25.8
Condensed matter/low temperature physics	42	32	48	48	41	41	48	60	63	56	61	15.1	16.1
Fluids physics ^b	0	1	2	0	na	na	na	na	na	na	na	0.0	na
Medical physics/radiological science ^d	na	na	na	na	na	na	na	na	na	na	20	0.0	32.8
Nuclear physics	9	13	18	10	12	4	14	13	12	14	11	12.2	12.9
Particle (elementary) physics	15	9	27	15	20	21	28	33	33	38	26	10.2	13.3
Plasma/fusion physics	0	3	3	1	4	10	7	5	8	13	8	0.0	16.0
Physics, general	31	24	21	28	28	16	25	30	38	41	47	13.8	21.8
Physics, other	22	52	20	50	29	20	23	26	28	24	23	12.6	25.6

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Field	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Percent ^a	
												2000	2010
Psychology	2,409	2,270	2,137	2,234	2,246	2,263	2,320	2,332	2,357	2,481	2,387	66.6	69.8
Clinical psychology	992	869	854	851	869	840	847	876	835	915	870	73.3	75.5
Cognitive psychology and psycholinguistics	65	76	67	70	76	70	102	93	95	93	128	46.4	58.2
Counseling	312	329	322	312	351	317	274	290	306	318	296	65.7	72.4
Developmental and child psychology	163	161	143	144	159	189	165	170	169	157	154	80.3	80.6
Educational psychology	63	31	38	42	54	57	39	46	56	57	53	64.9	75.7
Experimental psychology	59	72	63	65	45	69	75	77	74	89	71	44.4	50.0
Family psychology	29	22	35	42	19	13	16	32	29	22	32	53.7	72.7
Human development and family studies	103	97	95	111	93	128	146	96	95	115	113	70.1	77.9
Industrial and organizational	113	106	85	88	84	113	105	121	135	120	120	60.1	58.0
Physiological/psychobiology psychology	56	46	51	42	49	43	65	57	48	55	51	62.9	62.2
Psychometrics ^b	5	2	2	4	na	na	na	na	na	na	na	38.5	na
School psychology	78	82	67	72	73	82	100	101	114	92	88	78.8	82.2
Social psychology	135	107	105	130	109	115	115	126	138	144	128	65.2	61.0
Psychology, general	133	152	84	139	126	118	138	136	121	144	119	56.1	64.7
Psychology, aggregated	103	118	126	122	139	109	133	111	142	160	164	57.2	63.6
Social sciences	1,784	1,751	1,785	1,853	1,826	1,850	1,958	2,113	2,255	2,344	2,290	42.9	47.6
Economics	293	306	281	303	314	355	346	378	413	438	410	27.0	34.5
Agricultural economics	38	46	31	41	29	37	36	60	39	55	41	27.5	34.7
Econometrics, economics	255	260	250	262	285	318	310	318	374	383	369	26.9	34.4
Political science	364	330	394	398	346	409	410	463	460	491	516	36.9	42.9
International relations/affairs	26	31	34	28	39	40	61	53	40	46	42	33.8	39.3
Political science and government	235	214	252	251	196	245	220	242	261	272	294	35.1	40.4
Public administration	42	41	36	49	46	46	46	56	63	64	62	40.8	49.6
Public policy analysis	61	44	72	70	65	78	83	112	96	109	118	44.5	48.6
Sociology ^j	367	330	333	352	340	335	363	360	366	399	388	59.5	60.8
Other social sciences	760	785	777	800	826	751	839	912	1,016	1,016	976	51.8	54.8
American/U.S. studies	63	87	56	66	67	56	65	64	75	76	62	55.8	54.4
Anthropology	252	244	290	288	293	256	269	316	294	308	307	56.5	60.3
Archaeology	24	19	15	20	18	29	19	32	27	34	31	66.7	51.7
Area/ethnic/cultural/gender studies	4	10	14	7	11	2	9	69	84	69	76	28.6	67.3
Criminal justice and corrections ^c	na	na	na	na	na	na	na	23	39	31	29	na	39.2
Criminology	34	29	30	31	40	46	55	24	34	41	22	51.5	42.3
Geography	70	66	64	65	85	67	85	79	106	78	95	35.5	42.2
History, science and technology, and society	17	8	12	23	12	16	25	24	20	25	19	40.5	41.3
Linguistics	135	136	115	133	150	138	152	133	144	167	140	58.7	58.1
Urban/city, community, and regional planning ^c	na	na	na	na	na	na	na	25	61	38	50	na	47.2
Social sciences, general	20	20	17	11	20	21	26	21	28	29	25	54.1	52.1
Demography, ⁱ gerontology, ^d statistics, urban affairs, social sciences-other	141	166	164	156	130	120	134	102	104	120	120	49.5	61.9
Engineering ^l	838	929	894	911	1,021	1,182	1,452	1,605	1,693	1,633	1,743	15.7	23.1
Aerospace, aeronautical, and astronautical engineering	21	27	24	27	24	29	25	31	28	41	37	9.8	14.7
Chemical engineering	131	156	150	141	150	183	216	197	232	216	247	21.2	30.1
Civil engineering	78	82	97	87	86	118	117	165	145	149	170	16.3	26.4
Electrical, electronics, and communications engineering	157	159	143	147	194	205	250	304	319	260	315	11.8	17.7
Industrial and manufacturing engineering	35	45	68	55	43	41	67	78	79	66	55	19.9	25.7
Materials science engineering	73	99	78	99	85	112	152	164	154	159	175	18.1	26.1
Mechanical engineering	89	86	88	78	84	114	144	131	152	152	127	11.0	12.9
Other engineering	254	275	246	277	355	380	481	535	584	590	617	19.6	28.2
Bioengineering and biomedical engineering	71	69	69	78	111	111	179	225	285	308	317	28.3	38.4
Computer engineering	31	33	16	27	30	41	61	58	68	66	62	18.0	16.6
Environmental health engineering	10	29	25	39	48	58	59	64	56	43	41	13.2	36.3

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Field	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Percent ^a	
												2000	2010
Nuclear engineering	9	6	13	12	11	8	11	9	18	10	15	9.2	16.7
Operations research	11	17	13	21	11	20	17	18	21	19	22	21.6	26.2
Structural engineering ^d	na	na	na	na	na	na	na	na	na	na	12	na	18.2
Systems engineering	6	8	9	8	11	9	15	14	15	11	14	17.6	20.6
Other engineering, aggregated	116	113	101	92	133	133	139	147	121	133	134	19.0	23.7
Non-science and engineering	8,739	8,590	8,967	8,987	9,298	9,043	9,083	9,624	9,522	9,590	8,957	56.7	60.0
Education	4,179	4,100	4,299	4,395	4,370	4,152	3,984	4,344	4,402	4,366	3,630	64.9	68.6
Health	1,066	989	1,126	1,090	1,177	1,217	1,289	1,452	1,427	1,467	1,482	67.0	70.2
Humanities	2,593	2,587	2,529	2,518	2,596	2,485	2,561	2,390	2,341	2,400	2,459	49.7	51.7
Professional/other/unknown	901	914	1,013	984	1,155	1,189	1,249	1,438	1,352	1,357	1,386	41.7	50.2

na = not applicable; subfield was not identified separately in questionnaire for that year.

^a Percentages are based on the total number of doctorate recipients, including those who did not report sex.

^b This subfield was dropped in 2004.

^c This subfield was introduced in 2007.

^d This subfield was introduced in 2010.

^e Environmental toxicology is classified as biological science in 2010 but was classified as health science in years prior to 2010.

^f This subfield was introduced in 2001.

^g This subfield was removed from the Survey of Earned Doctorates taxonomy in 2007. Graduates who indicated this field in 2007 are represented in the counts for "chemistry, other."

^h This subfield was introduced in 2004.

ⁱ In previous editions of this report, sociology and demography/population studies were reported as constituent fields within the "sociology" group. Beginning 2007 sociology is reported separately, and demography/population studies is reported in "other social sciences."

^j Before 2007, seven major engineering fields and their constituent fine fields were reported in addition to "other engineering." In 2007 each major field was replaced by its largest constituent field; remaining constituent fine fields are reported in "other engineering."

NOTES: Categories are grouped according to National Science Foundation taxonomy, which is different from the classification listed in questionnaire and summary reports. That is, the following categories are included in social sciences and not in humanities: American/U.S. studies; history, science and technology, and society; and archaeology. In addition, public administration is included in social sciences and not in professional fields, agricultural economics is included in social sciences and not in biological sciences, and agricultural business and management is included in business management/administration and not in agricultural sciences. For disclosure protection purposes, some fields of degree reported in this table differ from those reported in table 1. Fields awarding relatively few doctorates are combined with related fields, and the total counts of the "aggregated fields" are reported in this table. See appendix A for a discussion of this disclosure protection approach.

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