

TABLE 2. Doctorates awarded to women, by field of study: 1995–2004

Field	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	% women	
											1995	2004
All fields	16,418	16,956	17,241	17,849	17,480	18,125	17,951	18,124	18,410	19,098	39.3	45.3
Science and engineering	8,287	8,649	8,934	9,349	9,082	9,393	9,331	9,159	9,477	9,819	31.2	37.4
Science	7,591	7,872	8,184	8,575	8,294	8,556	8,402	8,271	8,581	8,805	37.0	43.0
Biological/agricultural sciences	2,473	2,719	2,782	2,864	2,705	2,939	2,888	2,863	2,969	3,145	38.1	45.0
Agricultural sciences	256	304	287	328	311	317	339	318	370	398	22.9	38.0
Agronomy/crop science	13	17	10	18	16	14	21	19	14	11	11.4	17.5
Animal breeding/genetics	1	3	4	6	7	4	4	2	6	7	5.3	58.3
Animal nutrition	9	11	13	13	12	8	6	17	9	7	18.0	14.9
Animal sciences, other	19	26	14	16	23	26	19	22	33	26	22.4	34.2
Conservation/renewable natural resources	5	3	7	11	9	5	18	12	13	26	20.8	57.8
Dairy science ^a	3	2	5	2	5	0	0	2	8	NA	21.4	NA
Environmental science	28	23	27	30	31	43	47	40	57	64	34.6	48.5
Fisheries science/management	9	10	5	8	7	11	9	13	12	11	18.4	29.7
Food engineering	0	0	3	3	2	2	8	4	5	42	0.0	44.2
Food sciences, other	54	69	79	66	67	66	64	56	78	43	40.0	58.1
Forest biology	5	4	1	6	4	8	7	7	3	6	20.8	16.7
Forest engineering ^a	0	0	2	0	0	0	0	0	0	NA	0.0	NA
Forest management	6	2	4	9	3	2	4	2	6	8	30.0	29.6
Forestry and related sciences, other	13	18	15	16	16	17	16	16	15	10	18.3	29.4
Horticulture science	22	22	16	13	16	16	13	13	18	12	32.8	26.7
Plant breeding/genetics	15	13	9	14	13	23	10	12	13	12	20.8	33.3
Plant pathology	9	27	26	24	27	12	16	22	18	24	17.3	43.6
Plant sciences, other	3	3	7	14	12	10	10	11	10	16	10.0	44.4
Poultry science	0	2	2	3	2	3	5	5	5	8	0.0	38.1
Soil chemistry/microbiology	5	9	9	7	8	8	15	8	10	13	18.5	65.0
Soil sciences, other	18	14	8	21	11	15	15	16	13	15	25.0	28.3
Wildlife/range management	8	22	13	15	8	11	15	9	12	14	16.0	35.0
Wood science and pulp/paper technology	6	3	2	4	6	1	4	2	5	8	23.1	42.1
Agricultural sciences, general	3	0	2	1	0	2	0	2	0	1	50.0	16.7
Agricultural sciences, other	2	1	4	8	6	10	13	6	7	14	28.6	37.8
Biological sciences	2,217	2,415	2,495	2,536	2,394	2,622	2,549	2,545	2,599	2,747	41.2	46.3
Anatomy	25	20	19	8	16	17	12	8	11	4	39.1	30.8
Bacteriology	6	8	1	4	6	6	10	7	2	5	46.2	33.3
Biochemistry	341	317	364	351	308	325	309	294	319	295	41.4	42.0
Biological immunology	82	129	93	115	100	116	122	146	121	167	43.2	48.5
Biomedical sciences	42	54	63	80	72	68	81	110	87	97	45.2	52.7
Biometrics/biostatistics	23	34	43	39	36	41	47	47	49	50	34.3	50.0
Biophysics	46	41	41	47	49	49	47	34	53	47	29.7	36.2
Biotechnology research	2	1	3	4	2	6	3	5	7	11	50.0	42.3
Botany, other	34	44	31	55	25	53	33	39	37	65	33.3	48.5
Cell biology	117	107	113	155	134	155	148	160	146	127	49.6	43.5
Developmental biology/embryology	29	49	61	61	54	60	53	34	71	71	45.3	50.4
Ecology	64	84	108	114	121	116	128	135	143	159	31.5	43.4
Endocrinology	6	13	9	14	9	8	7	6	12	11	30.0	50.0
Entomology	27	36	42	38	37	37	31	33	30	30	22.3	27.8
Human/animal genetics	92	101	103	91	105	115	106	109	123	117	45.5	45.7
Human/animal pathology	38	52	42	35	54	45	56	63	46	46	34.9	46.9
Human/animal pharmacology	129	142	143	120	113	123	115	113	126	145	46.4	50.9
Human/animal physiology	103	107	82	100	109	99	91	84	86	85	39.3	41.5
Microbiology	188	185	185	169	164	189	181	177	159	197	44.1	50.4
Molecular biology	265	291	331	322	299	320	323	271	290	359	42.9	49.6
Neuroscience	121	165	190	169	181	195	200	202	202	259	39.3	44.3
Nutritional sciences	92	98	92	96	68	126	99	107	102	102	67.6	76.7
Parasitology	7	12	10	6	6	8	10	6	6	10	50.0	50.0
Plant genetics	12	16	11	18	9	17	15	28	17	21	34.3	38.9
Plant pathology	10	13	8	8	12	8	11	15	12	14	31.3	53.8

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Plant physiology	21	29	18	28	23	15	20	19	13	8	38.2	32.0
Toxicology	50	60	80	60	53	58	62	65	63	48	39.7	44.9
Zoology, other	50	31	34	43	47	55	40	46	56	35	34.5	36.5
Biological sciences, general	148	120	86	82	75	82	86	96	84	87	42.5	45.8
Biological sciences, other	47	56	89	104	107	110	103	86	126	75	37.0	45.2
Earth, atmospheric, and ocean sciences	142	149	182	189	179	187	189	202	202	228	20.3	33.9
Atmospheric sciences	23	22	25	30	22	33	28	31	39	46	17.7	36.5
Atmospheric dynamics	3	4	5	8	5	3	4	3	6	16	18.8	48.5
Atmospheric physics/chemistry	8	7	10	7	11	12	9	15	15	15	29.6	51.7
Meteorology	3	2	3	5	1	6	2	2	4	5	12.0	22.7
Atmospheric sciences/meteorology, general	7	5	5	8	2	7	10	6	5	7	15.9	29.2
Atmospheric sciences/meteorology, other	2	4	2	2	3	5	3	5	9	3	11.1	16.7
Earth sciences	91	88	119	127	112	108	115	121	104	132	20.0	31.4
Geochemistry	10	10	15	22	21	13	11	22	17	18	23.8	47.4
Geology	38	36	39	40	41	28	38	30	38	25	20.4	25.5
Geomorphology/glacial geology	4	1	4	8	9	4	3	6	3	8	36.4	36.4
Geophysics/seismology	19	14	19	21	15	16	22	24	17	26	20.4	29.9
Hydrology/water resources	4	5	8	8	5	16	14	10	4	12	16.7	24.5
Mineralogy/petrology	4	11	6	5	3	1	4	4	4	4	21.1	23.5
Paleontology	3	4	11	7	4	14	4	6	3	12	15.0	48.0
Stratigraphy/sedimentation	1	3	7	4	3	4	3	2	6	5	6.3	26.3
Geological and related sciences, general	4	2	4	5	1	5	6	3	2	6	19.0	26.1
Geological and related sciences, other	4	2	6	7	10	7	10	14	10	16	18.2	38.1
Ocean sciences	28	39	38	32	45	46	46	50	59	50	24.3	39.7
Marine sciences	8	5	8	3	9	17	15	17	21	29	25.0	49.2
Oceanography	20	34	30	29	36	29	31	33	38	21	24.1	31.3
Mathematics/computer sciences	451	370	413	456	434	400	431	431	438	500	20.6	24.7
Computer sciences	186	139	150	159	157	141	155	166	175	195	18.7	20.5
Computer science	160	116	132	120	120	103	111	124	119	134	17.5	17.4
Information science/systems	26	23	18	39	36	38	27	26	24	42	31.0	39.6
Computer and information science, other ^b	NA	NA	NA	NA	1	NA	17	16	32	19	NA	25.3
Mathematics	265	231	263	297	277	259	276	265	263	305	22.3	28.4
Algebra	24	18	20	18	25	21	20	15	23	28	29.3	28.9
Analysis/functional analysis	18	15	13	25	19	15	20	20	15	28	18.2	28.3
Applied mathematics	47	52	55	61	59	59	56	62	56	61	22.3	23.1
Computing theory	2	2	1	3	3	2	2	2	0	3	14.3	30.0
Geometry	8	14	13	15	16	8	7	12	10	29	17.8	30.5
Logic	7	1	5	5	5	2	6	5	5	2	20.0	13.3
Mathematical statistics	54	47	46	62	46	71	63	62	69	78	26.3	34.5
Number theory	9	7	11	7	12	5	8	5	7	5	25.7	12.8
Operations research	5	4	5	6	9	3	2	9	4	6	13.9	26.1
Topology	8	5	14	13	15	10	15	10	13	19	15.7	36.5
Mathematics, general	64	45	44	39	22	34	36	33	32	22	21.0	26.8
Mathematics, other	19	21	36	43	46	29	41	30	29	24	26.4	32.9
Physical sciences	878	842	852	926	831	835	838	861	894	870	22.9	25.9
Astronomy	30	41	37	45	33	40	41	28	41	46	17.3	27.9
Astronomy	18	21	18	22	18	24	21	13	19	24	20.2	35.3
Astrophysics	12	20	19	23	15	16	20	15	22	22	14.3	22.7
Chemistry	661	605	613	695	632	624	628	647	649	629	30.6	31.7
Analytical chemistry	109	111	106	146	108	121	123	114	137	119	34.4	37.0
Inorganic chemistry	92	68	81	84	90	64	91	86	95	80	35.7	33.2
Medicinal/pharmaceutical chemistry	32	32	43	46	50	51	45	39	41	48	33.3	42.9
Nuclear chemistry ^a	3	0	0	1	1	3	0	3	2	NA	60.0	NA
Organic chemistry	134	118	145	160	163	140	132	144	145	141	27.7	26.2

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Physical chemistry	93	85	91	77	75	76	92	102	84	81	27.5	30.7
Polymer chemistry	28	30	25	40	31	31	33	35	25	40	24.1	34.8
Theoretical chemistry	10	14	11	10	9	12	6	17	12	16	25.0	29.6
Chemistry, general	135	119	76	88	52	81	72	61	68	55	29.5	27.8
Chemistry, other	25	28	35	43	53	45	34	46	40	49	49.0	34.5
Physics	182	193	193	177	160	163	160	177	193	184	12.3	15.5
Acoustics	3	2	4	6	1	1	1	1	5	1	16.7	5.9
Chemical and atomic/molecular physics	15	10	11	13	14	21	7	11	14	11	13.6	13.4
Elementary particle physics	7	19	21	11	17	15	9	28	15	20	3.8	12.3
Fluids physics ^a	0	4	0	0	2	0	1	2	0	NA	0.0	NA
Nuclear physics	12	9	11	11	9	9	13	18	10	12	13.2	16.2
Optics	13	20	16	18	12	16	14	19	23	21	13.3	17.6
Plasma/high-temperature physics	5	2	2	2	2	0	3	3	2	4	10.9	10.8
Polymer physics	3	12	7	4	7	6	5	6	1	1	13.0	5.6
Solid state/low-temperature physics	57	54	51	37	42	42	32	48	48	41	15.4	14.9
Physics, general	41	39	36	29	22	31	23	21	25	29	11.5	20.4
Physics, other	26	22	34	46	32	22	52	20	50	44	15.7	17.1
Other physical sciences	5	3	9	9	6	8	9	9	11	11	18.5	73.3
Psychology	2,181	2,330	2,363	2,456	2,449	2,411	2,306	2,133	2,230	2,245	63.6	67.3
Clinical psychology	870	920	894	967	1,033	992	891	852	848	868	67.4	71.1
Cognitive psychology/psycholinguistics	52	60	75	50	70	66	76	67	70	76	50.0	52.8
Comparative psychology	1	2	3	4	7	2	1	1	2	4	25.0	66.7
Counseling	298	303	314	295	295	312	334	321	312	351	63.3	68.7
Developmental/child psychology	121	154	170	207	149	163	159	141	144	160	79.6	86.0
Educational psychology	53	66	45	39	44	63	31	38	42	53	71.6	71.6
Experimental psychology	83	68	70	65	65	59	72	63	65	45	55.0	51.1
Family/marriage counseling	37	28	43	28	38	29	22	35	42	19	64.9	61.3
Human/individual family development	118	121	101	91	112	103	97	95	111	92	78.7	63.9
Industrial/organizational psychology	89	99	103	110	99	113	105	85	86	85	57.4	53.8
Personality	9	11	13	15	11	14	6	12	11	10	56.3	55.6
Physiological/psychobiology	35	41	42	49	49	56	46	51	42	48	38.0	57.8
Psychometrics ^a	4	3	7	5	2	5	2	2	4	NA	40.0	NA
Quantitative psychology	9	7	10	8	7	2	5	6	3	14	69.2	48.3
School psychology	62	71	66	81	89	78	90	68	72	73	68.1	83.9
Social psychology	84	111	116	117	115	135	107	104	129	109	54.2	66.9
Psychology, general	185	181	199	201	132	134	152	86	141	128	60.5	56.6
Psychology, other	71	84	92	124	132	85	110	106	106	110	51.4	65.9
Social sciences	1,466	1,462	1,592	1,684	1,696	1,784	1,750	1,781	1,848	1,817	37.8	44.0
Economics	279	263	266	312	291	293	306	281	302	311	24.2	29.2
Agricultural economics	42	37	34	40	39	38	46	32	40	29	24.3	27.4
Econometrics	4	8	4	4	5	3	2	2	6	3	14.8	16.7
Economics	233	218	228	268	247	252	258	247	256	279	24.5	29.6
Political science	265	305	298	364	356	365	330	394	397	344	29.6	36.4
International relations and affairs	21	32	19	32	38	26	31	34	27	39	28.8	39.4
Political science/government	166	186	197	243	216	235	214	252	251	195	27.7	33.3
Public administration	43	37	30	48	46	42	41	35	48	46	33.6	39.7
Public policy analysis	35	50	52	41	56	62	44	73	71	64	37.2	44.1
Sociology	295	276	334	317	342	376	337	345	361	351	53.1	58.7
Demography/population studies	6	2	16	13	17	10	8	12	9	13	40.0	68.4
Sociology	289	274	318	304	325	366	329	333	352	338	53.4	58.4
Other social sciences	627	618	694	691	707	750	777	761	788	811	49.1	53.3
American studies	53	67	47	52	56	63	87	56	66	67	56.4	58.3
Anthropology	219	214	241	239	263	252	244	289	288	292	58.4	55.2
Archaeology	18	11	20	23	12	24	19	15	20	18	51.4	52.9

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Field	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	% women	
											1995	2004
Area studies	12	9	5	11	3	4	10	14	7	10	44.4	55.6
Criminology	23	25	25	22	20	34	29	30	30	40	52.3	58.0
Geography	43	45	54	49	49	70	66	64	65	86	28.7	44.8
History/philosophy of science and technology	17	10	13	20	18	17	8	11	23	12	41.5	25.0
Linguistics	102	113	135	123	148	135	136	114	132	149	50.7	58.9
Statistics	11	7	23	21	21	22	22	23	19	15	22.9	48.4
Urban affairs and studies	37	39	29	26	17	28	33	35	32	33	35.9	39.3
Social sciences, general	23	15	14	17	14	20	20	17	11	20	65.7	62.5
Social sciences, other	69	63	88	88	86	81	103	93	95	69	55.6	59.5
Engineering	696	777	750	774	788	837	929	888	896	1,014	11.6	17.6
Aeronautical/astronautical engineering	14	24	16	15	17	21	28	24	27	24	5.6	11.9
Chemical engineering	109	143	122	140	123	151	180	176	154	173	15.4	23.9
Chemical engineering	96	126	106	119	101	130	156	150	140	150	15.9	23.6
Petroleum engineering	1	3	3	6	5	6	7	10	5	5	2.1	14.7
Polymer/plastics engineering	12	14	13	15	17	15	17	16	9	18	20.7	33.3
Civil engineering	76	79	80	100	89	88	111	120	125	132	11.6	19.6
Civil engineering	55	64	70	83	76	78	82	96	86	85	9.6	15.5
Environmental health	21	15	10	17	13	10	29	24	39	47	25.0	36.7
Electrical engineering	173	169	150	156	155	195	203	163	179	222	10.0	13.5
Communications	5	2	3	6	6	7	12	4	7	3	17.2	8.8
Computer engineering	18	23	21	22	32	31	33	16	27	30	9.5	13.2
Electrical/electronics engineering	150	144	126	128	117	157	158	143	145	189	9.9	13.6
Industrial/manufacturing engineering	50	51	40	40	42	35	45	67	53	42	17.6	19.4
Materials/metallurgical engineering	95	84	106	84	88	83	105	80	101	90	16.2	17.7
Ceramic sciences	5	3	8	2	9	8	3	1	1	1	12.8	7.1
Materials science	84	72	96	75	75	73	99	78	99	84	17.6	17.8
Metallurgical engineering	6	9	2	7	4	2	3	1	1	5	8.2	22.7
Mechanical engineering	64	78	88	93	96	96	91	96	84	95	6.2	11.1
Engineering mechanics	8	10	6	13	11	7	5	8	9	11	7.4	11.2
Mechanical engineering	56	68	82	80	85	89	86	88	75	84	6.1	11.1
Other engineering	115	149	148	146	178	168	166	162	173	236	15.1	24.9
Agricultural engineering	7	17	12	5	12	7	8	9	6	14	9.6	23.3
Bioengineering/biomedical engineering	48	49	54	51	63	71	69	69	78	111	25.4	30.1
Engineering physics	1	3	4	3	4	1	2	3	9	7	5.9	25.0
Engineering science	6	4	7	8	4	6	9	8	2	15	10.7	24.6
Mining/mineral engineering	0	3	3	4	2	0	2	0	1	2	0.0	22.2
Nuclear engineering	9	9	8	10	8	9	6	13	11	11	8.6	18.6
Ocean engineering	3	3	5	0	1	3	3	3	1	3	14.3	14.3
Operations research	8	16	15	15	16	11	17	13	19	11	16.7	15.3
Systems engineering	5	9	10	9	7	6	8	9	8	11	10.6	19.0
Engineering, general	9	11	3	3	4	10	4	6	4	6	15.0	20.7
Engineering, other	19	25	27	38	57	44	38	29	34	45	14.7	24.6
Non-science and engineering	8,131	8,307	8,307	8,500	8,398	8,732	8,620	8,965	8,933	9,279	53.4	58.4
Education	4,093	4,187	4,120	4,130	4,195	4,173	4,095	4,290	4,364	4,361	61.5	65.7
Health	843	860	936	1,006	899	1,066	1,033	1,123	1,087	1,180	63.4	68.2
Humanities	2,256	2,343	2,381	2,469	2,418	2,593	2,578	2,506	2,505	2,588	48.1	51.6
Professional/other/unknown	939	917	870	895	886	900	914	1,046	977	1,150	36.9	46.0

NA = not available (i.e., subfield was not identified separately in questionnaire for that year).

^a This subfield dropped in 2004.

^b This subfield introduced in 2001.

NOTE: Categories are grouped differently from questionnaire and summary reports in that linguistics, history of science, American studies, and archaeology are included in social science and not in humanities, and public administration is included in social science and not in professional fields.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Earned Doctorates.