

TABLE 17. Graduate students in science, engineering, and health in public doctorate-granting institutions, by detailed field: 2005–11

Field	2005	2006	2007old ^a	2007new ^a	2008	2009	2010	2011
All surveyed fields	366,019	372,074	379,576	387,725	396,733	399,013	402,741	399,959
Science and engineering	303,409	306,122	314,948	324,148	333,478	345,236	353,439	356,869
Science	219,780	222,064	225,512	233,884	238,463	245,153	250,472	255,327
Agricultural sciences	11,689	11,561	11,721	12,016	12,521	13,224	13,793	14,172
Biological sciences	45,094	45,934	46,790	46,594	46,699	46,533	47,208	47,606
Anatomy	646	607	638	510	456	528	519	427
Biochemistry	4,012	3,982	4,130	4,075	3,659	3,634	3,660	3,508
Biology	9,524	10,027	9,669	9,464	10,001	10,008	9,976	9,691
Biometry/epidemiology	2,782	2,881	3,105	3,260	3,357	3,134	3,684	4,478
Biophysics	739	772	766	745	676	641	645	611
Botany	1,787	1,773	1,812	1,742	1,726	1,753	1,789	1,814
Cell biology	3,903	4,149	4,285	4,396	4,581	4,522	4,437	4,064
Ecology	1,806	1,810	1,789	1,645	1,649	1,383	1,444	1,338
Entomology/parasitology	1,094	1,079	1,043	1,043	1,047	1,047	1,084	1,089
Genetics	1,285	1,286	1,285	1,228	1,233	1,247	1,343	1,441
Microbiology/immunology/virology	3,405	3,336	3,309	3,273	3,195	3,140	3,056	3,121
Nutrition	3,527	3,653	3,817	3,457	3,579	3,603	3,652	3,457
Pathology	958	1,006	955	867	859	824	830	780
Pharmacology	2,104	1,923	1,978	2,010	1,982	2,058	1,965	1,953
Physiology	1,272	1,358	1,396	1,691	1,774	1,854	1,942	2,008
Zoology	1,254	1,138	1,078	1,102	919	869	889	1,053
Biological sciences, nec	4,996	5,154	5,735	6,086	6,006	6,288	6,293	6,773
Communication ^a	ne	ne	ne	5,094	5,675	6,319	6,359	6,757
Computer sciences	27,166	26,903	27,407	27,026	27,698	29,133	29,838	30,338
Earth, atmospheric, and ocean sciences	11,641	11,656	11,509	11,051	11,218	11,489	12,239	12,183
Atmospheric sciences	1,082	1,039	1,059	1,120	1,328	1,287	1,378	1,428
Geosciences	5,689	5,627	5,648	5,586	5,580	5,960	6,523	6,560
Oceanography	2,181	2,196	2,104	2,056	2,028	2,033	1,914	1,986
Earth/atmospheric/ocean sciences, nec	2,689	2,794	2,698	2,289	2,282	2,209	2,424	2,209
Family and consumer sciences/human sciences ^a	ne	ne	ne	2,291	2,645	2,675	3,138	3,506
Mathematical sciences	14,422	14,594	15,006	14,883	15,288	15,957	16,523	16,927
Mathematics/applied mathematics	11,300	11,457	11,632	11,521	11,553	12,275	12,516	12,828
Statistics	3,122	3,137	3,374	3,362	3,735	3,682	4,007	4,099
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	2,944	3,586	4,115	5,045	4,629
Neuroscience ^a	na	na	na	1,007	1,168	1,308	1,673	2,276
Physical sciences	26,341	26,520	26,502	26,234	26,566	27,342	27,770	28,298
Astronomy	690	679	698	697	704	821	707	695
Chemistry	15,309	15,394	15,263	15,137	15,373	15,872	16,025	16,302
Physics	9,862	9,963	10,030	10,016	10,085	10,295	10,661	10,866
Physical sciences, nec	480	484	511	384	404	354	377	435
Psychology ^b	22,244	22,204	23,759	23,220	23,681	22,917	22,228	23,325
Clinical psychology	2,972	3,006	3,075	3,084	3,001	3,174	3,284	3,373
Psychology, general	8,483	8,752	8,671	8,608	8,909	8,185	7,476	7,749
Psychology, nec	10,789	10,446	12,013	11,528	11,771	11,558	11,468	12,203
Social sciences	61,183	62,692	62,818	61,524	61,718	64,141	64,658	65,310
Agricultural economics	2,049	2,081	2,047	1,910	2,045	2,130	2,083	2,013
Anthropology (cultural/social)	5,497	5,800	5,711	5,741	5,848	5,913	6,039	5,998
Economics (except agricultural)	7,689	7,834	7,814	7,956	8,132	8,783	8,900	9,173
Geography	3,986	3,921	3,771	3,771	3,807	3,848	4,022	4,109
History and philosophy of science	477	515	677	663	733	706	407	324
Linguistics	2,061	2,203	2,159	2,079	2,207	2,260	2,214	2,325
Political science	20,618	20,686	20,963	20,663	20,444	21,582	22,370	23,851
Sociology	6,121	6,186	6,239	6,213	6,643	6,559	6,726	6,660
Sociology/anthropology	687	711	728	579	542	467	231	202
Social sciences, nec	11,998	12,755	12,709	11,949	11,317	11,893	11,666	10,655

TABLE 17. Graduate students in science, engineering, and health in public doctorate-granting institutions, by detailed field: 2005–11

Field	2005	2006	2007old ^a	2007new ^a	2008	2009	2010	2011
Engineering	83,629	84,058	89,436	90,264	95,015	100,083	102,967	101,542
Aerospace engineering	2,964	3,154	3,275	3,275	3,533	3,929	4,163	4,251
Agricultural engineering	999	1,011	1,059	1,059	1,173	1,230	1,277	1,406
Architecture ^a	na	na	na	3,610	4,597	5,362	5,389	2,465
Biomedical engineering	3,793	3,984	4,308	4,308	4,783	4,873	5,152	5,468
Chemical engineering	5,072	5,052	5,104	5,248	5,458	5,717	5,914	5,953
Civil engineering ^a	14,136	13,783	15,204	12,349	12,974	14,233	14,820	14,849
Electrical engineering	24,978	25,047	26,639	26,833	27,218	27,594	27,495	28,229
Engineering science	1,078	1,088	1,115	1,059	1,255	1,361	1,297	1,354
Industrial engineering	8,163	8,270	9,023	8,714	9,491	9,137	8,547	8,434
Mechanical engineering	12,536	12,686	12,814	12,795	13,321	14,502	15,632	15,331
Metallurgical/materials engineering	3,947	4,010	4,078	4,027	4,144	4,389	4,680	4,996
Mining engineering	265	238	296	211	283	302	408	498
Nuclear engineering	913	992	1,086	1,058	1,065	1,110	1,315	1,352
Petroleum engineering	690	696	887	887	854	1,009	1,105	1,127
Engineering, nec	4,095	4,047	4,548	4,831	4,866	5,335	5,773	5,829
Health ^b	62,610	65,952	64,628	63,577	63,255	53,777	49,302	43,090
Clinical medicine	12,207	12,447	14,240	13,275	14,232	14,385	15,472	15,807
Anesthesiology	544	547	388	388	157	104	11	3
Cardiology	0	3	0	0	25	24	29	31
Endocrinology	56	42	40	40	44	50	52	55
Gastroenterology	7	18	19	19	7	13	2	5
Hematology	13	14	8	8	5	8	5	1
Neurology ^a	1,477	1,548	1,856	814	671	637	454	87
Obstetrics/gynecology	10	16	14	14	5	8	11	9
Oncology/cancer research	186	179	202	171	124	149	127	150
Ophthalmology	392	406	407	379	1	1	5	2
Otorhinolaryngology	12	12	12	12	14	4	1	2
Pediatrics	211	211	231	231	147	114	119	124
Preventive medicine/community health	7,367	7,531	8,738	9,115	10,389	10,872	12,078	13,366
Psychiatry	197	236	233	173	133	165	177	19
Pulmonary disease	26	9	10	10	12	13	12	14
Radiology	192	198	253	264	273	306	284	242
Surgery	81	99	40	24	18	28	48	17
Clinical medicine, nec	1,436	1,378	1,789	1,613	2,207	1,889	2,057	1,680
Other health ^b	50,403	53,505	50,388	50,302	49,023	39,392	33,830	27,283
Dental sciences	1,447	1,311	1,190	1,298	1,333	1,303	1,216	1,425
Nursing	20,405	22,280	20,303	20,303	18,975	11,690	7,540	5,138
Pharmaceutical sciences	4,302	4,257	3,493	3,589	3,211	3,483	3,435	3,371
Speech pathology/audiology	8,621	8,769	9,601	9,593	9,543	9,624	9,470	8,618
Veterinary sciences	1,858	1,951	1,872	2,124	2,244	1,981	1,997	1,757
Other health, nec	13,770	14,937	13,929	13,395	13,717	11,311	10,172	6,974

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible; data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; data were reported under "civil engineering" in 2007old and previous years. See appendix A in <http://www.nsf.gov/statistics/nsf10307/> for more detail.

^b Beginning with 2008, more rigorous follow-up was done with institutions regarding exclusion of practitioner-oriented graduate degree programs in psychology and in other health (a subfield of health). This change may affect interpretation of trends in these fields.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.