

Table 44. Full-time graduate science, engineering, and health students without U.S. citizenship or permanent resident status in doctorate-granting institutions, by detailed field: 1994-2001

Field	1994	1995	1996	1997	1998	1999	2000	2001
Total, all surveyed fields	87,144	84,229	84,606	85,994	88,091	94,705	105,689	115,887
Total, science and engineering fields	83,602	80,668	80,699	82,133	84,177	90,460	101,285	111,002
Sciences, total	53,852	52,124	52,011	51,910	52,716	55,640	61,388	66,881
Physical sciences, total	10,698	10,270	10,072	9,873	9,664	10,215	10,709	11,164
Astronomy	259	225	212	184	206	234	259	271
Chemistry	5,807	5,670	5,586	5,457	5,339	5,548	5,611	5,913
Physics	4,582	4,333	4,245	4,204	4,082	4,368	4,766	4,891
Physical sciences, n.e.c.	50	42	29	28	37	65	73	89
Earth, atmos., & ocean sci., total	2,808	2,550	2,366	2,197	2,149	2,176	2,373	2,417
Atmospheric sciences	250	248	268	280	232	257	283	255
Geosciences	1,540	1,386	1,292	1,168	1,110	1,100	1,178	1,211
Oceanography	661	578	507	469	482	461	488	476
Earth, atmos., & ocean sci., n.e.c.	357	338	299	280	325	358	424	475
Mathematical sciences, total	5,178	4,963	4,926	4,706	4,486	4,999	5,185	5,709
Mathematics & applied mathematics	4,227	4,012	3,997	3,787	3,586	3,875	3,936	4,247
Statistics	951	951	929	919	900	1,124	1,249	1,462
Computer sciences	7,337	7,304	8,031	8,967	10,002	11,509	14,942	17,829
Agricultural sciences	2,758	2,705	2,515	2,320	2,198	2,125	2,037	2,148
Biological sciences, total	11,616	10,990	10,350	10,085	10,314	10,103	10,728	11,268
Anatomy	215	232	204	202	184	188	207	202
Biochemistry	1,680	1,579	1,442	1,365	1,395	1,385	1,545	1,509
Biology	1,616	1,584	1,575	1,675	1,693	1,604	1,660	1,728
Biometry/epidemiology	533	500	468	436	606	627	689	739
Biophysics	208	198	175	170	162	151	202	255
Botany	738	639	627	610	621	595	566	576
Cell biology	855	807	800	780	794	781	915	1,015
Ecology	161	154	143	131	133	156	158	172
Entomology/parasitology	323	332	285	259	266	278	265	247
Genetics	348	340	363	385	367	363	359	396
Microbio., immunology, & virology	1,232	1,115	1,009	938	904	900	896	968
Nutrition	1,090	1,108	1,006	947	909	882	923	992
Pathology	332	318	317	279	278	283	288	283
Pharmacology	631	532	560	541	559	552	609	617
Physiology	574	509	420	401	417	433	425	415
Zoology	262	220	203	176	160	132	184	205
Biosciences, n.e.c.	818	823	753	790	866	793	837	949
Psychology, total	1,631	1,493	1,465	1,500	1,613	1,605	1,715	1,870
Psychology, general	571	550	500	510	540	553	663	729
Clinical psychology	263	225	234	251	290	299	305	330
Psychology, n.e.c.	797	718	731	739	783	753	747	811
Social sciences, total	11,826	11,849	12,286	12,262	12,290	12,908	13,699	14,476
Agricultural economics	809	892	797	816	786	807	903	948
Anthropology (cultural & social)	670	578	586	592	630	693	677	646
Economics (except agricultural)	4,447	4,516	4,732	4,626	4,507	4,760	5,048	5,561
Geography	379	390	391	427	482	487	526	607
History and philosophy of science	52	44	49	64	59	55	66	66
Linguistics	887	865	856	829	839	829	847	865
Political science	2,499	2,528	2,827	2,719	2,812	3,165	3,329	3,423
Sociology	1,014	892	897	942	911	977	1,050	1,053
Sociology/anthropology	69	73	65	70	87	63	67	71
Social sciences, n.e.c.	1,000	1,071	1,086	1,177	1,177	1,072	1,186	1,236
Engineering, total	29,750	28,544	28,688	30,223	31,461	34,820	39,897	44,121
Aerospace engineering	1,133	1,076	1,143	1,193	1,287	1,353	1,387	1,480
Agricultural engineering	441	445	406	351	358	369	333	366
Biomedical engineering	712	654	624	644	654	793	869	1,030
Chemical engineering	2,738	2,646	2,513	2,509	2,560	2,745	3,043	3,106
Civil engineering	4,685	4,521	4,229	4,273	4,216	4,655	5,331	5,678
Electrical engineering	8,687	8,532	8,978	10,083	11,106	12,386	14,840	16,506
Engineering science	514	418	426	398	485	466	573	652
Industrial/manufacturing eng.	2,662	2,409	2,565	2,626	2,593	2,990	3,631	4,299
Mechanical engineering	4,694	4,496	4,546	4,757	4,783	5,181	5,956	6,390
Metallurgical/materials eng.	1,769	1,717	1,731	1,761	1,828	1,846	1,954	2,200
Mining engineering	151	145	112	106	56	90	95	92
Nuclear engineering	379	347	284	274	273	298	312	337
Petroleum engineering	358	304	314	381	419	448	329	340
Engineering, n.e.c.	827	834	817	867	843	1,200	1,244	1,645

See explanatory information, if any, and SOURCE at end of table.

Table 44. Full-time graduate science, engineering, and health students without U.S. citizenship or permanent resident status in doctorate-granting institutions, by detailed field: 1994-2001

Field	1994	1995	1996	1997	1998	1999	2000	2001
Total, health fields	3,542	3,561	3,907	3,861	3,914	4,245	4,404	4,885
Medical fields, total	1,304	1,224	1,309	1,206	1,266	1,442	1,321	1,725
Anesthesiology	2	4	3	2	8	1	1	1
Cardiology	7	10	11	23	13	17	14	16
Oncology/cancer research	59	41	56	34	31	49	41	47
Endocrinology	12	26	22	19	17	17	13	18
Gastroenterology	0	0	0	3	0	0	1	1
Hematology	0	0	0	0	0	0	4	0
Neurology	228	241	267	213	238	261	315	357
Obstetrics and gynecology	1	1	3	0	0	1	1	0
Ophthalmology	6	10	3	5	15	16	16	9
Otorhinolaryngology	0	0	0	0	0	2	0	0
Pediatrics	10	21	15	24	23	23	32	37
Preventive medicine/community health	722	733	811	785	822	932	754	1,079
Psychiatry	3	3	7	1	1	3	1	1
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	69	50	39	38	28	29	30	33
Surgery	6	6	4	5	5	7	9	7
Clinical medicine, n.e.c.	179	78	68	54	65	84	89	119
Other health fields, total	2,238	2,337	2,598	2,655	2,648	2,803	3,083	3,160
Dental sciences	224	260	309	329	317	272	336	294
Nursing	275	284	242	294	299	338	317	288
Pharmaceutical sciences	863	950	1,048	1,057	1,042	1,047	1,192	1,222
Speech pathology/audiology	298	242	266	270	280	294	303	335
Veterinary sciences	219	251	281	280	259	282	307	326
Health related, n.e.c.	359	350	452	425	451	570	628	695

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering