

Table 214.—Graduate enrollment in science and engineering programs in degree-granting institutions, by field of study: United States and outlying areas, fall 1987 to fall 1999

Field of engineering or science	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Percent change, 1990 to 1999
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total, all sciences and engineering	421,526	424,671	434,567	452,178	471,262	493,624	504,409	504,516	499,750	494,195	487,279	485,724	493,425	9.1
Engineering, total	103,953	102,829	104,043	107,625	113,576	118,003	116,834	112,993	107,173	103,189	101,070	99,969	101,468	-5.7
Aerospace	3,015	3,223	3,524	3,934	4,120	4,036	3,940	3,715	3,343	3,208	3,083	3,137	3,349	-14.9
Agricultural	1,080	1,052	1,043	946	983	1,008	1,018	1,061	1,037	1,012	941	925	934	-1.3
Biomedical	1,674	1,752	1,916	2,136	2,239	2,537	2,675	2,750	2,732	2,847	2,847	2,905	3,121	46.1
Chemical	7,111	6,618	6,460	6,735	7,127	7,397	7,516	7,608	7,424	7,373	7,247	7,060	6,849	1.7
Civil	14,682	14,811	14,909	15,542	17,398	19,572	19,583	19,925	19,218	18,528	17,156	16,481	16,190	4.2
Electrical	31,399	32,035	33,257	33,722	35,182	36,428	35,290	33,020	30,721	29,702	30,548	31,129	31,368	-7.0
Engineering science	2,343	2,386	2,077	2,020	2,154	2,218	2,180	2,089	1,955	1,751	1,647	1,701	1,627	-19.5
Industrial	12,220	11,393	11,094	11,248	12,676	13,525	13,596	13,661	13,143	12,399	11,736	10,995	10,886	-3.2
Mechanical	16,366	16,151	16,265	16,879	17,730	18,637	18,477	17,761	16,363	15,509	15,045	14,696	14,956	-11.4
Metallurgical/materials	4,366	4,337	4,594	4,941	5,160	5,512	5,363	5,191	4,920	4,713	4,649	4,644	4,451	-9.9
Mining	513	489	418	437	489	437	427	424	373	371	348	304	328	-24.9
Nuclear	1,279	1,303	1,323	1,278	1,282	1,286	1,306	1,246	1,154	980	868	821	830	-35.1
Petroleum	818	742	665	670	705	737	725	624	610	562	561	571	642	-4.2
Other engineering	7,087	6,537	6,498	7,137	6,331	4,673	4,738	3,918	4,180	4,349	4,394	4,600	5,937	-16.8
All sciences, total	317,573	321,842	330,524	344,553	357,686	375,621	387,575	391,523	392,577	391,006	386,209	385,755	391,957	13.8
Physical sciences, total	32,727	32,962	33,616	34,075	34,710	35,348	35,318	34,449	33,388	32,324	31,078	30,571	30,689	-9.9
Astronomy	719	731	789	810	829	869	880	973	912	874	778	820	832	2.7
Chemistry	18,827	18,579	18,828	19,118	19,407	19,929	20,131	19,797	19,565	19,327	18,764	18,479	18,414	-3.7
Physics	12,807	13,308	13,657	13,813	14,081	14,122	13,841	13,162	12,425	11,728	11,147	10,809	10,869	-21.3
Other physical sciences	374	344	342	334	393	428	466	517	486	395	389	463	574	71.9
Earth, atmospheric, and ocean sciences	14,371	13,867	13,643	13,984	14,480	15,333	15,731	15,968	15,722	15,185	14,565	14,259	14,082	0.7
Atmospheric sciences	952	940	912	929	968	1,089	1,112	1,109	1,072	1,086	1,092	965	913	-1.7
Geosciences	8,998	8,463	8,052	7,692	7,567	7,744	7,785	7,741	7,608	7,323	6,997	6,705	6,652	-13.5
Oceanography	2,127	2,033	2,207	2,333	2,386	2,530	2,611	2,853	2,703	2,598	2,458	2,545	2,608	11.8
Other environmental sciences	2,294	2,431	2,472	3,030	3,559	3,970	4,223	4,265	4,339	4,178	4,018	4,044	3,909	29.0
Mathematical sciences, total	18,508	19,077	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015	16,729	16,488	16,254	-17.8
Mathematics and applied mathematics	16,015	16,490	16,723	17,096	17,206	17,404	16,945	16,463	15,400	14,970	14,048	13,841	13,530	-20.9
Statistics	2,493	2,587	2,524	2,678	2,746	2,951	3,055	3,116	3,109	3,045	2,681	2,647	2,724	1.7
Computer sciences, total	32,051	32,227	32,482	34,257	34,610	36,325	36,213	34,158	33,458	34,626	35,991	38,027	42,560	24.2
Life sciences, total	106,036	108,084	111,862	116,348	121,849	129,010	136,986	143,708	148,442	149,116	148,656	149,822	151,473	30.2
Agricultural sciences, total	11,118	11,135	11,190	11,316	11,506	11,841	11,988	12,273	12,450	12,009	11,893	11,877	12,036	6.4
Biological sciences, total	46,747	47,565	48,852	49,989	51,778	54,180	56,458	58,152	58,775	58,170	57,140	57,124	57,320	14.7
Anatomy	1,016	1,056	1,078	1,000	1,051	991	986	1,043	1,008	1,046	1,029	947	913	-8.7
Biochemistry	4,813	4,921	5,082	5,039	5,201	5,376	5,513	5,632	5,579	5,296	5,123	5,173	5,120	1.6
Biology	12,331	12,393	12,761	13,027	13,292	13,874	14,327	14,220	14,284	14,635	14,643	14,289	13,996	7.4
Biometry/epidemiology	1,556	1,682	1,722	1,871	2,032	2,365	2,658	2,710	2,812	3,001	2,900	3,484	3,575	91.1
Biophysics	591	592	655	642	697	751	780	794	845	833	748	737	710	10.6
Botany	2,979	2,912	2,826	2,733	2,694	2,689	2,714	2,748	2,609	2,504	2,402	2,328	2,261	-17.3
Cell biology	1,964	2,078	2,234	2,555	2,809	3,132	3,415	3,804	3,938	3,961	4,046	4,148	4,402	72.3
Ecology	963	999	1,084	1,136	1,180	1,301	1,410	1,566	1,680	1,615	1,619	1,655	1,687	48.5
Entomology/parasitology	1,244	1,240	1,181	1,173	1,171	1,193	1,247	1,263	1,241	1,234	1,161	1,168	1,145	-2.4
Genetics	1,314	1,289	1,365	1,408	1,520	1,639	1,785	1,699	1,700	1,729	1,760	1,705	1,767	25.5
Microbiology, immunology, and virology	4,452	4,773	4,827	4,873	4,928	4,972	5,068	5,141	5,072	4,963	4,854	4,869	4,910	0.8
Nutrition	4,158	4,132	4,164	4,172	4,164	4,159	4,388	4,747	5,016	4,859	4,550	4,430	4,449	6.6
Pathology	1,369	1,333	1,369	1,354	1,449	1,456	1,575	1,707	1,670	1,656	1,674	1,580	1,580	16.7
Pharmacology	2,072	2,124	2,267	2,353	2,432	2,532	2,651	2,839	2,710	2,663	2,597	2,730	2,757	17.2
Physiology	2,213	2,220	2,206	2,236	2,332	2,317	2,372	2,378	2,540	2,377	2,298	2,151	2,100	-6.1
Zoology	2,104	2,029	2,083	2,104	2,191	2,139	2,120	2,092	2,068	1,911	1,730	1,676	1,614	-23.3
Other biosciences	1,608	1,792	1,948	2,313	2,635	3,294	3,449	3,769	4,003	3,887	4,006	4,054	4,334	87.4
Health fields, total	48,171	49,384	51,820	55,043	58,565	62,989	68,540	73,283	77,217	78,937	79,623	80,821	82,117	49.2
Medical fields	9,809	10,101	10,232	10,950	11,707	12,594	14,184	15,027	15,500	15,293	15,403	16,600	17,244	57.5
Other health fields	38,362	39,283	41,588	44,093	46,858	50,395	54,356	58,256	61,717	63,644	64,220	64,221	64,873	47.1
Dentistry	1,022	1,048	1,004	956	1,016	1,121	1,133	1,199	1,251	1,291	1,411	1,426	1,383	44.7
Nursing	18,444	18,862	19,689	21,194	22,012	23,213	24,781	26,997	28,405	27,388	26,861	25,591	25,068	18.3
Pharmaceutical sciences	2,607	2,613	2,787	2,889	2,968	2,792	2,859	2,887	2,808	2,846	2,710	2,882	3,422	18.4
Speech pathology/audiology	7,314	7,479	7,911	8,354	8,945	9,791	10,740	11,473	12,092	12,973	13,320	13,331	13,653	63.4
Veterinary sciences	731	752	801	900	894	942	877	875	929	946	1,175	1,192	1,216	35.1
Other health related	8,244	8,529	9,396	9,800	11,023	12,536	13,966	14,825	16,232	18,200	18,743	19,799	20,131	105.4
Psychology, total	42,612	43,963	45,528	48,167	51,343	53,484	54,557	54,554	53,641	53,122	53,126	52,557	51,874	7.7
Psychology, general	267	15,443	19,408	20,108	19,555	18,802	18,887	18,297	17,666	16,894	17,350	17,241	16,353	-18.7
Clinical psychology	41,566	20,548	9,298	9,916	10,834	12,090	12,526	12,684	12,519	12,787	13,008	12,648	12,716	28.2
Other psychology	779	7,972	16,822	18,143	20,954	22,592	23,144	23,573	23,456	23,441	22,768	22,668	22,805	25.7
Social sciences, total	71,268	71,662	74,146	77,948	80,742	85,766	88,770	89,107	89,417	88,618	86,064	84,031	85,025	9.1
Agricultural economics	2,203	2,259	2,276	2,273	2,364	2,522	2,415	2,289	2,338	2,117	2,043	1,995	2,014	-11.4
Anthropology	5,835	5,945	6,128	6,479	6,731	7,123	7,361	7,665	7,693	7,773	7,560	7,577	7,633	17.8
Economics (except agricultural)	11,998	12,036	12,139	12,326	12,707	13,252	13,214	12,913	12,673	12,080				