



APPENDIX TABLE 2-25 

S&E graduate enrollment, by citizenship and field: 2000–15

(Number)

Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
All citizenships																
S&E	493,311	509,607	540,404	567,121	574,463	582,226	597,643	604,815	613,591	611,629	611,841	608,171	609,760	615,706	648,525	667,939
Engineering	104,112	109,493	119,668	127,377	123,566	120,565	123,041	127,075	131,951	137,873	142,446	143,390	146,022	150,873	162,671	167,789
Aerospace	3,407	3,451	3,685	4,048	4,089	4,170	4,482	4,616	4,902	5,266	5,540	5,691	5,069	5,181	5,116	5,345
Chemical	7,056	6,913	7,414	7,516	7,452	7,173	7,261	7,584	7,892	8,188	8,668	8,828	9,222	9,698	9,870	10,008
Civil	16,451	16,665	17,713	18,890	18,561	18,114	17,802	16,071	16,931	18,638	19,559	19,596	19,922	20,110	20,789	20,978
Electrical	33,611	36,100	39,948	41,763	38,995	37,450	38,265	40,588	41,164	41,218	41,336	41,580	42,347	45,562	51,909	52,940
Industrial	12,119	12,940	14,033	14,313	13,852	13,650	13,829	14,474	15,692	15,825	15,205	14,494	14,469	14,363	14,845	16,284
Materials	4,377	4,721	4,992	5,131	5,059	5,160	5,268	5,314	5,539	5,863	6,274	6,649	6,985	7,144	7,518	7,741
Mechanical	15,235	15,852	17,139	18,393	17,852	17,373	17,919	18,347	19,585	21,243	22,509	21,883	23,088	24,087	25,651	27,314
Other	11,856	12,851	14,744	17,323	17,706	17,475	18,215	20,081	20,246	21,632	23,355	24,669	24,920	24,728	26,973	27,179
Science	389,199	400,114	420,736	439,744	450,897	461,661	474,602	477,740	481,640	473,756	469,395	464,781	463,738	464,833	485,854	500,150
Natural sciences	255,406	263,978	279,369	292,453	299,439	304,952	314,602	310,489	313,706	303,195	298,812	292,097	295,414	297,561	324,083	339,566
Agricultural sciences	12,023	12,235	12,698	13,197	13,445	13,123	13,016	13,528	14,153	15,200	15,656	16,129	16,234	16,429	17,505	18,610
Biological sciences ^c	56,282	57,639	61,088	64,701	66,565	68,479	69,941	73,516	74,678	75,660	77,726	79,540	80,994	81,444	83,413	85,098
Earth, atmospheric, and ocean sciences	13,941	13,841	14,240	14,620	15,131	14,836	14,920	14,100	14,389	14,839	15,655	15,820	16,069	15,816	15,710	15,447



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Atmospheric sciences	963	924	1,036	1,150	1,086	1,146	1,079	1,178	1,400	1,355	1,455	1,513	1,546	1,534	1,466	1,387
Earth sciences	6,596	6,544	6,712	6,889	7,358	7,212	7,177	7,020	7,089	7,539	8,251	8,361	8,659	8,754	8,821	8,876
Oceanography	2,668	2,585	2,618	2,695	2,801	2,760	2,770	2,615	2,634	2,633	2,556	2,680	2,642	2,682	2,666	2,574
Other geosciences	3,714	3,788	3,874	3,886	3,886	3,718	3,894	3,287	3,266	3,312	3,393	3,266	3,222	2,846	2,757	2,610
Mathematics and computer sciences	63,000	68,847	73,432	73,161	69,947	68,188	68,468	69,221	70,953	73,387	74,682	75,035	76,364	81,143	102,420	112,636
Computer sciences	47,350	52,196	55,269	53,696	50,016	47,978	47,653	48,246	49,553	51,161	51,546	51,234	51,789	56,339	76,546	86,192
Mathematics and statistics	15,650	16,651	18,163	19,465	19,931	20,210	20,815	20,975	21,400	22,226	23,136	23,801	24,575	24,804	25,874	26,444
Medical and other health sciences	79,775	80,378	85,570	92,476	98,590	103,951	111,356	103,300	102,214	85,960	76,120	65,879	65,825	62,710	64,703	67,389
Medical sciences	22,815	24,012	26,841	29,440	29,762	31,223	33,437	31,876	32,311	32,508	33,862	34,348	34,555	34,332	35,323	36,978
Other health sciences ^d	56,960	56,366	58,729	63,036	68,828	72,728	77,919	71,424	69,903	53,452	42,258	31,531	31,270	28,378	29,380	30,411
Physical sciences	30,385	31,038	32,341	34,298	35,761	36,375	36,901	36,824	37,319	38,149	38,973	39,694	39,928	40,019	40,332	40,386
Astronomy	888	916	990	1,080	1,119	1,191	1,211	1,232	1,275	1,409	1,331	1,345	1,278	1,250	1,241	1,273
Chemistry	18,105	18,366	19,045	20,049	20,776	21,101	21,351	21,298	21,574	22,094	22,436	22,802	23,117	22,949	22,936	22,840
Physics	10,841	11,248	11,701	12,555	13,298	13,472	13,722	13,816	13,862	14,060	14,507	14,829	14,940	15,239	15,564	15,609
Other physical sciences	551	508	605	614	568	611	617	478	608	586	699	718	593	581	591	664
Social and behavioral sciences	133,793	136,136	141,367	147,291	151,458	156,709	160,000	162,767	162,375	164,004	162,639	166,147	162,286	161,380	154,575	152,446
Psychology ^d	50,466	50,454	51,152	52,162	54,126	57,282	57,653	59,617	58,991	56,184	53,419	54,486	54,117	54,102	48,833	49,740
Social sciences	83,327	85,682	90,215	95,129	97,332	99,427	102,347	103,150	103,384	107,820	109,220	111,661	108,169	107,278	105,742	102,706
Anthropology	7,626	7,491	7,481	7,789	7,826	7,750	8,150	8,129	8,333	8,359	8,528	8,406	8,247	8,172	7,955	7,625



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Economics	12,827	13,569	14,196	14,634	14,513	13,932	14,290	14,586	15,103	16,215	16,497	17,015	17,004	16,735	16,535	16,355
History of science	532	571	663	737	994	965	968	1,054	1,177	1,006	705	597	508	391	371	379
Linguistics	2,674	2,744	2,875	3,028	2,941	3,187	3,074	2,879	3,095	3,170	3,132	3,219	3,256	3,509	3,489	3,370
Political science and public administration	31,131	31,805	34,934	36,880	39,023	40,780	41,784	41,349	40,871	43,919	45,045	49,660	48,855	48,411	47,370	45,781
Sociology	9,397	9,620	9,665	9,900	9,713	9,866	9,872	10,324	10,655	10,307	10,212	9,959	9,157	9,188	8,834	8,479
Other social sciences	19,140	19,882	20,401	22,161	22,322	22,947	24,209	24,829	24,150	24,844	25,101	22,805	21,142	20,872	21,188	20,717
Multidisciplinary and interdisciplinary studies	ne	ne	ne	ne	ne	ne	ne	4,484	5,559	6,557	7,944	6,537	6,038	5,892	7,196	8,138
U.S. citizens and permanent residents																
S&E	364,894	368,737	387,416	412,105	423,218	434,730	446,625	447,903	448,347	442,779	440,839	434,718	429,197	422,078	424,585	427,756
Engineering	56,651	56,890	61,277	67,310	66,379	66,551	67,698	67,592	69,411	73,031	76,747	76,970	75,669	74,201	72,852	72,522
Aerospace	1,894	1,805	1,999	2,361	2,401	2,528	2,998	3,090	3,311	3,605	3,893	4,045	3,614	3,629	3,389	3,418
Chemical	3,711	3,398	3,686	3,736	3,753	3,675	3,685	3,744	3,821	4,022	4,272	4,402	4,473	4,630	4,725	4,604
Civil	10,306	10,072	10,553	11,458	11,436	11,415	11,421	9,972	10,477	11,750	12,482	12,221	11,984	11,448	10,929	10,465
Electrical	15,315	15,534	16,579	18,118	16,878	16,662	16,166	16,024	16,042	15,936	16,109	15,985	15,301	14,892	14,454	14,346
Industrial	7,574	7,588	8,290	8,820	8,763	9,071	9,249	9,090	9,464	9,511	9,028	8,552	8,233	8,006	7,372	7,361
Materials	2,265	2,385	2,482	2,546	2,501	2,518	2,690	2,719	2,796	2,949	3,197	3,315	3,425	3,504	3,633	3,745
Mechanical	8,052	8,141	8,562	9,602	9,724	9,719	10,205	10,481	11,075	11,893	12,986	12,635	12,859	12,791	12,696	12,679
Other	7,534	7,967	9,126	10,669	10,923	10,963	11,284	12,472	12,425	13,365	14,780	15,815	15,780	15,301	15,654	15,904
Science	308,243	311,847	326,139	344,795	356,839	368,179	378,927	380,311	378,936	369,748	364,092	357,748	353,528	347,877	351,733	355,234



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Natural sciences	193,036	195,250	205,691	218,875	226,950	232,603	240,588	235,170	234,181	222,537	217,406	209,614	210,464	206,530	216,627	222,115
Agricultural sciences	9,612	9,722	10,085	10,601	10,750	10,464	10,341	10,631	11,047	11,938	12,416	12,702	12,676	12,773	13,604	14,466
Biological sciences ^c	44,521	45,196	47,253	49,865	50,734	52,012	53,034	56,558	56,746	57,904	59,829	61,374	62,592	63,118	65,088	66,741
Earth, atmospheric, and ocean sciences	11,249	11,059	11,463	11,837	12,337	12,058	12,153	11,488	11,612	12,082	12,729	12,730	12,863	12,589	12,392	12,025
Atmospheric sciences	659	639	721	861	813	849	821	891	1,080	1,056	1,133	1,180	1,199	1,191	1,074	1,012
Earth sciences	5,294	5,189	5,333	5,456	5,906	5,785	5,749	5,633	5,686	6,036	6,607	6,588	6,781	6,860	6,887	6,814
Oceanography	2,142	2,071	2,152	2,206	2,304	2,270	2,267	2,184	2,164	2,170	2,122	2,211	2,204	2,220	2,222	2,168
Other geosciences	3,154	3,160	3,257	3,314	3,314	3,154	3,316	2,780	2,682	2,820	2,867	2,751	2,679	2,318	2,209	2,031
Mathematics and computer sciences	34,681	36,309	39,342	41,477	40,785	40,177	39,894	38,873	38,551	40,236	40,691	40,307	39,702	38,553	44,070	45,052
Computer sciences	25,088	26,142	28,203	29,420	28,261	27,409	26,675	25,441	25,316	26,325	26,170	25,656	24,962	24,191	29,630	31,027
Mathematics and statistics	9,593	10,167	11,139	12,057	12,524	12,768	13,219	13,432	13,235	13,911	14,521	14,651	14,740	14,362	14,440	14,025
Medical and other health sciences	74,243	74,129	78,297	84,924	91,196	96,217	103,022	95,203	93,669	77,306	68,089	58,363	58,354	55,071	56,797	59,322
Medical sciences	19,090	19,784	21,773	24,212	24,789	26,163	27,936	26,297	26,354	26,218	27,976	28,482	28,764	28,401	29,216	30,747
Other health sciences ^d	55,153	54,345	56,524	60,712	66,407	70,054	75,086	68,906	67,315	51,088	40,113	29,881	29,590	26,670	27,581	28,575
Physical sciences	18,730	18,835	19,251	20,171	21,148	21,675	22,144	22,417	22,556	23,071	23,652	24,138	24,277	24,426	24,676	24,509
Astronomy	617	633	687	747	749	828	845	851	873	969	932	939	934	920	915	921
Chemistry	11,883	11,797	11,792	12,168	12,637	12,833	13,050	13,201	13,155	13,515	13,766	14,057	14,263	14,266	14,348	14,251
Physics	5,757	5,991	6,259	6,744	7,270	7,473	7,722	7,918	7,988	8,078	8,460	8,656	8,639	8,832	9,020	8,934
Other physical sciences	473	414	513	512	492	541	527	447	540	509	494	486	441	408	393	403



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Social and behavioral sciences	115,207	116,597	120,448	125,920	129,889	135,576	138,339	141,353	140,102	141,683	139,979	142,639	138,117	136,612	129,561	127,277
Psychology ^d	48,203	47,933	48,295	49,055	50,932	54,228	54,802	56,574	55,912	53,246	50,332	51,398	51,016	51,042	45,868	46,631
Social sciences	67,004	68,664	72,153	76,865	78,957	81,348	83,537	84,779	84,190	88,437	89,647	91,241	87,101	85,570	83,693	80,646
Anthropology	6,797	6,722	6,634	6,967	6,966	6,892	7,225	7,155	7,352	7,410	7,538	7,424	7,283	7,182	6,952	6,608
Economics	6,006	6,233	6,530	6,920	6,938	6,590	6,810	7,068	7,331	8,194	8,307	8,502	8,055	7,639	7,289	7,043
History of science	463	501	595	668	925	886	881	978	1,081	913	630	511	425	319	294	299
Linguistics	1,714	1,782	1,893	2,065	1,936	2,257	2,124	2,028	2,150	2,229	2,182	2,232	2,235	2,409	2,404	2,321
Political science and public administration	26,972	27,582	30,280	32,003	34,054	35,895	36,477	36,263	35,621	38,328	39,520	43,561	42,556	42,018	40,705	39,135
Sociology	8,065	8,228	8,275	8,485	8,356	8,481	8,493	9,046	9,371	9,073	8,983	8,751	7,936	7,925	7,596	7,269
Other social sciences	16,987	17,616	17,946	19,757	19,782	20,347	21,527	22,241	21,284	22,290	22,487	20,260	18,611	18,078	18,453	17,971
Multidisciplinary and interdisciplinary studies	ne	ne	ne	ne	ne	ne	ne	3,788	4,653	5,528	6,707	5,495	4,947	4,735	5,545	5,842
Temporary visa holders																
S&E	128,417	140,870	152,988	155,016	151,245	147,496	151,018	156,912	165,244	168,850	171,002	173,453	180,563	193,628	223,940	240,183
Engineering	47,461	52,603	58,391	60,067	57,187	54,014	55,343	59,483	62,540	64,842	65,699	66,420	70,353	76,672	89,819	95,267
Aerospace	1,513	1,646	1,686	1,687	1,688	1,642	1,484	1,526	1,591	1,661	1,647	1,646	1,455	1,552	1,727	1,927
Chemical	3,345	3,515	3,728	3,780	3,699	3,498	3,576	3,840	4,071	4,166	4,396	4,426	4,749	5,068	5,145	5,404
Civil	6,145	6,593	7,160	7,432	7,125	6,699	6,381	6,099	6,454	6,888	7,077	7,375	7,938	8,662	9,860	10,513
Electrical	18,296	20,566	23,369	23,645	22,117	20,788	22,099	24,564	25,122	25,282	25,227	25,595	27,046	30,670	37,455	38,594
Industrial	4,545	5,352	5,743	5,493	5,089	4,579	4,580	5,384	6,228	6,314	6,177	5,942	6,236	6,357	7,473	8,923



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Materials	2,112	2,336	2,510	2,585	2,558	2,642	2,578	2,595	2,743	2,914	3,077	3,334	3,560	3,640	3,885	3,996
Mechanical	7,183	7,711	8,577	8,791	8,128	7,654	7,714	7,866	8,510	9,350	9,523	9,248	10,229	11,296	12,955	14,635
Other	4,322	4,884	5,618	6,654	6,783	6,512	6,931	7,609	7,821	8,267	8,575	8,854	9,140	9,427	11,319	11,275
Science	80,956	88,267	94,597	94,949	94,058	93,482	95,675	97,429	102,704	104,008	105,303	107,033	110,210	116,956	134,121	144,916
Natural sciences	62,370	68,728	73,678	73,578	72,489	72,349	74,014	75,319	79,525	80,658	81,406	82,483	84,950	91,031	107,456	117,451
Agricultural sciences	2,411	2,513	2,613	2,596	2,695	2,659	2,675	2,897	3,106	3,262	3,240	3,427	3,558	3,656	3,901	4,144
Biological sciences ^c	11,761	12,443	13,835	14,836	15,831	16,467	16,907	16,958	17,932	17,756	17,897	18,166	18,402	18,326	18,325	18,357
Earth, atmospheric, and ocean sciences	2,692	2,782	2,777	2,783	2,794	2,778	2,767	2,612	2,777	2,757	2,926	3,090	3,206	3,227	3,318	3,422
Atmospheric sciences	304	285	315	289	273	297	258	287	320	299	322	333	347	343	392	375
Earth sciences	1,302	1,355	1,379	1,433	1,452	1,427	1,428	1,387	1,403	1,503	1,644	1,773	1,878	1,894	1,934	2,062
Oceanography	526	514	466	489	497	490	503	431	470	463	434	469	438	462	444	406
Other geosciences	560	628	617	572	572	564	578	507	584	492	526	515	543	528	548	579
Mathematics and computer sciences	28,319	32,538	34,090	31,684	29,162	28,011	28,574	30,348	32,402	33,151	33,991	34,728	36,662	42,590	58,350	67,584
Computer sciences	22,262	26,054	27,066	24,276	21,755	20,569	20,978	22,805	24,237	24,836	25,376	25,578	26,827	32,148	46,916	55,165
Mathematics and statistics	6,057	6,484	7,024	7,408	7,407	7,442	7,596	7,543	8,165	8,315	8,615	9,150	9,835	10,442	11,434	12,419
Medical and other health sciences	5,532	6,249	7,273	7,552	7,394	7,734	8,334	8,097	8,545	8,654	8,031	7,516	7,471	7,639	7,906	8,067
Medical sciences	3,725	4,228	5,068	5,228	4,973	5,060	5,501	5,579	5,957	6,290	5,886	5,866	5,791	5,931	6,107	6,231
Other health sciences ^d	1,807	2,021	2,205	2,324	2,421	2,674	2,833	2,518	2,588	2,364	2,145	1,650	1,680	1,708	1,799	1,836
Physical sciences	11,655	12,203	13,090	14,127	14,613	14,700	14,757	14,407	14,763	15,078	15,321	15,556	15,651	15,593	15,656	15,877



Citizenship and field	2000	2001	2002	2003	2004	2005	2006	2007 ^a	2008	2009	2010	2011	2012	2013	2014 ^b	2015
Astronomy	271	283	303	333	370	363	366	381	402	440	399	406	344	330	326	352
Chemistry	6,222	6,569	7,253	7,881	8,139	8,268	8,301	8,097	8,419	8,579	8,670	8,745	8,854	8,683	8,588	8,589
Physics	5,084	5,257	5,442	5,811	6,028	5,999	6,000	5,898	5,874	5,982	6,047	6,173	6,301	6,407	6,544	6,675
Other physical sciences	78	94	92	102	76	70	90	31	68	77	205	232	152	173	198	261
Social and behavioral sciences	18,586	19,539	20,919	21,371	21,569	21,133	21,661	21,414	22,273	22,321	22,660	23,508	24,169	24,768	25,014	25,169
Psychology ^d	2,263	2,521	2,857	3,107	3,194	3,054	2,851	3,043	3,079	2,938	3,087	3,088	3,101	3,060	2,965	3,109
Social sciences	16,323	17,018	18,062	18,264	18,375	18,079	18,810	18,371	19,194	19,383	19,573	20,420	21,068	21,708	22,049	22,060
Anthropology	829	769	847	822	860	858	925	974	981	949	990	982	964	990	1,003	1,017
Economics	6,821	7,336	7,666	7,714	7,575	7,342	7,480	7,518	7,772	8,021	8,190	8,513	8,949	9,096	9,246	9,312
History of science	69	70	68	69	69	79	87	76	96	93	75	86	83	72	77	80
Linguistics	960	962	982	963	1,005	930	950	851	945	941	950	987	1,021	1,100	1,085	1,049
Political science and public administration	4,159	4,223	4,654	4,877	4,969	4,885	5,307	5,086	5,250	5,591	5,525	6,099	6,299	6,393	6,665	6,646
Sociology	1,332	1,392	1,390	1,415	1,357	1,385	1,379	1,278	1,284	1,234	1,229	1,208	1,221	1,263	1,238	1,210
Other social sciences	2,153	2,266	2,455	2,404	2,540	2,600	2,682	2,588	2,866	2,554	2,614	2,545	2,531	2,794	2,735	2,746
Multidisciplinary and interdisciplinary studies	ne	ne	ne	ne	ne	ne	ne	696	906	1,029	1,237	1,042	1,091	1,157	1,651	2,296

ne = not eligible; data were not collected for this field before 2007.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. Because of methodological changes, counts should be used with caution for trend analysis. For more details, see appendix A in <https://www.nsf.gov/statistics/nsf10307/>.

^b In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed U.S. academic institutions with master's- or doctorate-granting programs in science, engineering, or health. For more details on the impact of the frame update, see <https://www.nsf.gov/statistics/2016/nsf16314/>.



^c Starting in 2007, includes neuroscience, which may have been reported under other fields in prior years.

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

Note(s)

S&E includes health fields (medical sciences and other health sciences) and excludes newly eligible fields (architecture, communication, and family and consumer sciences and human sciences) added starting in 2007. Therefore, the S&E numbers in this table differ from the data used in National Science Foundation, National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering (annual series), and elsewhere. The survey changes in 2007 and 2014 may affect interpretation of trends.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016), 2015 Survey of Graduate Students and Postdoctorates in Science and Engineering.

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