

Appendix table 2-1

**S&E degrees awarded, by degree level, Carnegie institution type, and field: 2005**

Degree/institution type	S&E field										
	All fields	S&E	Agricultural sciences	Biological sciences	Computer science	Mathematics	Earth, atmospheric, and ocean sciences	Physical sciences	Psychology	Social sciences	Engineering
Bachelor's .....	1,437,200	466,003	17,111	67,982	50,564	14,840	3,959	15,030	85,936	144,448	66,133
Doctorate-granting universities—very high research activity .....	360,445	170,069	7,965	25,501	9,731	5,029	1,426	4,897	23,491	57,800	34,229
Doctorate-granting universities—high research activity .....	230,149	74,359	3,111	10,090	6,902	1,827	689	2,101	13,123	20,637	15,879
Doctoral/research universities .....	91,964	23,851	428	2,969	4,451	728	190	723	5,083	7,273	2,006
Master's colleges and universities .....	521,962	131,499	3,848	18,029	20,617	4,678	1,105	4,398	31,647	38,006	9,171
Baccalaureate colleges .....	193,963	61,393	1,718	10,681	6,670	2,557	544	2,869	12,273	20,536	3,545
Associate's colleges .....	1,316	272	23	3	139	0	0	0	87	20	0
Medical schools and medical centers .....	5,572	16	0	16	0	0	0	0	0	0	0
Schools of engineering .....	1,547	1,396	0	9	80	17	5	35	0	1	1,249
Other specialized institutions .....	30,122	3,103	7	684	1,968	4	0	7	232	147	54
Tribal colleges .....	160	45	11	0	6	0	0	0	0	28	0
Master's .....	567,875	120,025	4,171	8,099	17,820	4,598	1,685	4,116	16,076	29,361	34,099
Doctorate-granting universities—very high research activity .....	153,544	50,382	2,223	3,866	5,931	2,506	800	2,389	1,495	12,822	18,350
Doctorate-granting universities—high research activity .....	93,605	26,482	921	1,557	4,140	1,073	608	916	2,020	5,862	9,385
Doctoral/research universities .....	66,480	9,918	240	472	2,018	244	48	239	2,517	2,506	1,634
Master's colleges and universities .....	219,907	29,045	721	1,478	5,227	766	203	529	8,074	7,740	4,307
Baccalaureate colleges .....	11,229	1,073	56	59	118	3	9	31	499	184	114
Medical schools and medical centers .....	6,448	771	10	593	2	0	1	9	49	14	93
Schools of engineering .....	417	230	0	0	6	0	16	0	0	0	208
Other specialized institutions .....	16,236	2,121	0	74	378	6	0	3	1,422	230	8
Tribal colleges .....	9	3	0	0	0	0	0	0	0	3	0
Doctoral .....	52,588	28,251	1,004	5,934	1,120	1,180	572	3,620	4,348	3,922	6,551
Doctorate-granting universities—very high research activity .....	31,127	19,608	791	4,286	793	971	457	2,866	1,238	3,011	5,195
Doctorate-granting universities—high research activity .....	9,679	5,031	175	754	210	183	104	634	1,082	684	1,205
Doctoral/research universities .....	4,970	1,460	25	85	85	21	3	66	925	164	86
Master's colleges and universities .....	2,122	356	9	32	28	0	3	16	203	25	40
Baccalaureate colleges .....	176	30	0	4	0	5	0	3	16	1	1
Medical schools and medical centers .....	1,964	933	4	770	3	0	0	30	93	13	20
Schools of engineering .....	9	9	0	0	0	0	5	0	0	0	4
Other specialized institutions .....	2,541	824	0	3	1	0	0	5	791	24	0

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-2

**Higher education instructional faculty, by teaching field, highest degree, and employment status: Fall 1992 and fall 2003**

(Percent)

Teaching field	All faculty (number)			Doctoral/first professional faculty (number)				Other faculty (number)	
		Full time	Part time	Full time	Part time	Full time	Part time		
<b>1992</b>									
All faculty .....	904,900	58.4	41.6	440,500	77.7	22.3	453,100	40.4	59.6
S&E .....	425,500	64.2	35.8	248,800	79.4	20.6	174,200	43.0	57.0
Agriculture/biological/health sciences .....	180,000	67.9	32.2	112,600	76.7	23.3	66,700	53.2	46.8
Physical/mathematical/computer science/engineering .....	152,800	60.3	39.7	75,500	84.9	15.1	76,000	36.6	63.4
Social/behavioral sciences .....	92,700	63.6	36.4	60,800	77.5	22.5	31,400	37.0	63.0
Non-S&E .....	465,500	52.9	47.1	186,100	75.4	24.6	271,500	38.2	61.8
<b>2003</b>									
All faculty .....	1,093,100	56.7	43.3	540,700	77.8	22.2	552,400	36.0	64.0
S&E .....	507,500	63.7	36.3	305,000	80.7	19.3	202,500	38.2	61.8
Agriculture/biological/health sciences .....	207,200	67.9	32.1	131,100	81.2	18.8	76,100	44.9	55.1
Physical/mathematical/computer science/engineering .....	198,100	60.4	39.6	103,900	82.3	17.7	94,200	36.2	63.8
Social/behavioral sciences .....	102,200	61.8	38.2	70,000	77.3	22.7	32,200	28.2	71.8
Non-S&E .....	585,600	50.6	49.4	235,600	74.2	25.8	349,900	34.7	65.3

NOTES: For 1992, total includes missing field and missing highest degree not shown separately. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: National Center for Education Statistics, National Survey of Postsecondary Faculty, 1993 and 2004, special tabulations (2006).

*Science and Engineering Indicators 2008*

Appendix table 2-3

**Full-time higher education instructional faculty, by teaching field, highest degree, and institution type: Fall 1992 and fall 2003**

(Percent)

Teaching field	All institutions (number)	Research	Other institutions
<b>1992</b>			
All faculty .....	528,300	29.3	70.7
S&E .....	273,200	35.7	64.3
Agriculture/biological/health sciences .....	122,100	40.9	59.1
Physical/mathematical/computer science/engineering .....	92,100	32.2	67.8
Social/behavioral sciences .....	59,000	30.4	69.6
Non-S&E .....	246,100	21.7	78.3
Doctorate/first professional.....	342,100	39.5	60.5
S&E .....	197,500	46.1	54.0
Agriculture/biological/health sciences .....	86,400	52.7	47.3
Physical/mathematical/computer science/engineering .....	64,100	44.5	55.5
Social/behavioral sciences .....	47,100	35.8	64.2
Non-S&E .....	140,300	29.7	70.3
Other .....	183,000	10.2	89.8
S&E .....	74,900	8.4	91.7
Agriculture/biological/health sciences .....	35,500	12.1	87.9
Physical/mathematical/computer science/engineering .....	27,800	3.8	96.2
Social/behavioral sciences .....	11,600	7.8	92.2
Non-S&E .....	103,600	11.1	89.0
<b>2003</b>			
All faculty .....	619,800	31.1	68.9
S&E .....	323,500	38.1	61.9
Agriculture/biological/health sciences .....	140,700	44.2	55.8
Physical/mathematical/computer science/engineering .....	119,600	33.6	66.4
Social/behavioral sciences .....	63,200	33.0	67.0
Non-S&E .....	296,400	23.4	76.6
Doctorate/first professional.....	420,900	40.0	60.0
S&E .....	246,100	46.7	53.3
Agriculture/biological/health sciences .....	106,500	54.4	45.6
Physical/mathematical/computer science/engineering .....	85,500	43.3	56.7
Social/behavioral sciences .....	54,100	37.0	63.0
Non-S&E .....	174,800	30.5	69.5
Other .....	199,000	12.3	87.8
S&E .....	77,400	10.6	89.4
Agriculture/biological/health sciences .....	34,200	12.3	87.7
Physical/mathematical/computer science/engineering .....	34,100	9.3	90.7
Social/behavioral sciences .....	9,100	9.4	90.7
Non-S&E .....	121,600	13.3	86.7

NOTES: For 1992, total includes missing field and missing highest degree not shown separately. Physical sciences include earth, atmospheric, and ocean sciences. Institution type based on 1994 Carnegie classification. See National Science Board, *Science and Engineering Indicators 2006* (NSB 06-01A) for characteristics of these institution types.

SOURCE: National Center for Education Statistics, National Survey of Postsecondary Faculty, 1993 and 2004, special tabulations (2006).

Appendix table 2-4

**Full-time instructional faculty, by teaching field, highest degree, and level of student: Fall 1992 and fall 2003**

(Percent)

Teaching field	All levels (number)	Only undergraduate	Undergraduate and graduate	Only graduate/first professional
<b>1992</b>				
All faculty .....	476,100	70.1	13.7	16.2
S&E.....	239,200	66.7	13.5	19.8
Agriculture/biological/health sciences.....	96,600	56.5	9.7	33.8
Physical/mathematical/computer science/engineering .....	87,300	75.1	14.7	10.2
Social/behavioral sciences .....	55,200	71.3	18.2	10.5
Non-S&E .....	233,600	73.4	14.0	12.7
Doctorate/first professional.....	303,500	57.5	18.6	23.9
S&E.....	168,200	55.4	17.6	26.9
Agriculture/biological/health sciences.....	63,800	38.6	13.0	48.4
Physical/mathematical/computer science/engineering .....	60,200	65.6	20.1	14.4
Social/behavioral sciences .....	44,200	65.9	21.1	13.0
Non-S&E .....	134,100	60.1	19.8	20.1
Other .....	169,900	92.5	5.0	2.5
S&E.....	70,500	93.7	3.6	2.7
Agriculture/biological/health sciences.....	32,600	91.7	3.3	5.0
Physical/mathematical/computer science/engineering .....	27,000	96.5	2.8	0.8
Social/behavioral sciences .....	11,000	93.0	6.4	0.6
Non-S&E .....	97,400	91.5	6.0	2.5
<b>2003</b>				
All faculty .....	554,200	66.4	14.4	19.3
S&E.....	281,100	61.8	13.4	24.8
Agriculture/biological/health sciences.....	112,200	47.1	10.7	42.2
Physical/mathematical/computer science/engineering .....	111,300	73.6	13.9	12.6
Social/behavioral sciences .....	57,600	67.6	17.9	14.5
Non-S&E .....	273,100	71.1	15.3	13.6
Doctorate/first professional.....	372,800	54.7	18.9	26.4
S&E.....	208,800	51.4	16.9	31.8
Agriculture/biological/health sciences.....	81,000	32.3	12.8	54.9
Physical/mathematical/computer science/engineering .....	78,400	63.8	18.9	17.3
Social/behavioral sciences .....	49,500	62.9	20.3	16.8
Non-S&E .....	164,000	58.9	21.5	19.6
Other .....	181,400	90.4	5.1	4.6
S&E.....	72,300	91.8	3.5	4.8
Agriculture/biological/health sciences.....	31,200	85.5	5.3	9.2
Physical/mathematical/computer science/engineering .....	33,000	96.7	1.9	1.4
Social/behavioral sciences .....	8,100	96.0	3.1	0.9
Non-S&E .....	109,200	89.4	6.1	4.4

NOTES: For 1992, total includes missing field and missing highest degree not shown separately. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: National Center for Education Statistics, National Survey of Postsecondary Faculty, 1993 and 2004, special tabulations (2006).

Appendix table 2-5

**Full-time undergraduate instructional faculty, by teaching field and presence of teaching assistant: Fall 1992 and fall 2003**

(Percent)

Teaching field	All undergraduates	Yes	No
<b>1992</b>			
All faculty .....	399,000	20.2	79.8
S&E .....	191,800	26.4	73.6
Agriculture/biological/health sciences.....	64,000	24.4	75.6
Physical/mathematical/computer science/engineering .....	78,400	30.2	69.8
Social/behavioral sciences .....	49,400	23.0	77.0
Non-S&E .....	204,100	14.3	85.7
Doctoral faculty .....	231,100	26.2	73.8
S&E .....	122,900	26.2	73.8
Agriculture/biological/health sciences.....	32,900	32.7	67.3
Physical/mathematical/computer science/engineering .....	51,500	40.3	59.7
Social/behavioral sciences .....	38,400	27.8	72.2
Non-S&E .....	107,100	16.8	83.2
Other faculty .....	167,900	11.9	88.1
S&E .....	68,900	12.3	87.7
Agriculture/biological/health sciences.....	31,000	15.7	84.3
Physical/mathematical/computer science/engineering .....	26,900	11.0	89.0
Social/behavioral sciences .....	11,000	6.0	94.0
Non-S&E .....	97,000	11.6	88.5
<b>2003</b>			
All faculty .....	447,500	25.5	74.5
S&E .....	211,400	34.2	65.8
Agriculture/biological/health sciences.....	64,800	28.7	71.3
Physical/mathematical/computer science/engineering .....	97,300	43.4	56.6
Social/behavioral sciences .....	49,200	31.8	68.2
Non-S&E .....	236,100	17.7	82.3
Doctoral faculty .....	274,300	32.4	67.6
S&E .....	142,500	43.1	56.9
Agriculture/biological/health sciences.....	36,500	35.4	64.6
Physical/mathematical/computer science/engineering .....	64,900	53.7	46.3
Social/behavioral sciences .....	41,200	33.2	66.8
Non-S&E .....	131,800	20.8	79.2
Other faculty .....	173,200	14.6	85.4
S&E .....	68,800	15.9	84.1
Agriculture/biological/health sciences.....	28,300	14.5	85.5
Physical/mathematical/computer science/engineering .....	32,500	18.5	81.5
Social/behavioral sciences .....	8,000	10.2	89.8
Non-S&E .....	104,300	13.8	86.2

NOTES: For 1992, total includes missing field and missing highest degree not shown separately. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: National Center for Education Statistics, National Survey of Postsecondary Faculty, 1993 and 2004, special tabulations (2006).

Appendix table 2-6

**Undergraduate faculty, by teaching field and primary instruction methods: Fall 1992 and fall 2003**

(Percent)

Teaching field	All fields	Agriculture/ biological/health sciences	Physical/ mathematical/ computer science/ engineering	Social/behavioral sciences	Non-S&E
<b>1992</b>					
All faculty (number) .....	370,900	57,100	73,900	46,800	190,200
Multiple-choice midterm/final exam .....	55.7	79.2	40.9	63.9	52.3
Essay midterm/final exam .....	61.2	46.9	40.4	77.2	69.7
Short-answer midterm/final exam .....	56.3	52.8	59.5	52.7	57.2
Term/research paper .....	57.8	53.5	34.4	77.2	63.4
Multiple drafts of written work.....	34.2	26.1	17.8	38.8	41.8
Student presentations .....	64.5	63.3	41.7	63.1	74.1
Student evaluations of each others' work .....	34.7	26.8	17.5	25.4	45.8
<b>2003</b>					
All faculty (number) .....	446,400	64,500	97,200	49,200	235,600
Multiple-choice midterm/final exam .....	54.8	76.0	47.9	65.1	49.7
Essay midterm/final exam .....	55.1	44.2	37.5	67.2	62.9
Short-answer midterm/final exam .....	59.9	59.2	68.2	57.8	57.1
Term/research paper .....	76.2	75.6	57.3	84.8	82.3
Multiple drafts of written work.....	42.1	30.3	25.5	46.6	51.3
Oral presentations .....	62.7	62.0	44.1	58.2	71.5
Student evaluations of each others' work .....	38.4	31.9	23.2	28.2	48.5
Group projects.....	56.8	57.0	53.0	48.0	60.1
Laboratory/shop/studio assignments .....	47.5	68.0	61.9	23.9	41.0
Service/co-op interactions with business.....	28.5	37.0	14.9	24.3	32.7

NOTES: Percentage is those reporting use in "some" or "all" courses. Because respondents could select more than one, percentages will not add to 100. For 1992, total includes missing field not shown separately. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: National Center for Education Statistics, National Survey of Postsecondary Faculty, 1993 and 2004, special tabulations (2006).

## Full-time S&amp;E graduate students, by source and mechanism of primary support: 1985–2005

Source	All mechanisms		Research assistantship		Fellowship		Traineeship		Teaching assistantship		Other		Self-support <sup>a</sup>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>All sources</b>														
1985	257,287	100.0	60,995	23.7	22,540	8.8	13,665	5.3	61,822	24.0	20,635	8.0	77,630	30.2
1986	266,168	100.0	66,010	24.8	22,954	8.6	13,526	5.1	62,552	23.5	22,246	8.4	78,880	29.6
1987	271,056	100.0	70,214	25.9	21,953	8.1	14,096	5.2	62,847	23.2	22,166	8.2	79,780	29.4
1988	275,127	100.0	74,588	27.1	22,353	8.1	14,397	5.2	63,053	22.9	21,576	7.8	79,160	28.8
1989	282,648	100.0	79,045	28.0	23,450	8.3	14,524	5.1	64,296	22.7	21,082	7.5	80,251	28.4
1990	292,782	100.0	80,746	27.6	25,254	8.6	15,198	5.2	64,950	22.2	22,250	7.6	84,384	28.8
1991	307,010	100.0	85,175	27.7	26,695	8.7	15,403	5.0	65,214	21.2	22,940	7.5	91,583	29.8
1992	322,555	100.0	88,030	27.3	28,627	8.9	15,361	4.8	65,702	20.4	23,536	7.3	101,299	31.4
1993	329,644	100.0	90,154	27.3	29,132	8.8	15,445	4.7	67,290	20.4	21,347	6.5	106,276	32.2
1994	332,088	100.0	92,008	27.7	28,892	8.7	15,681	4.7	66,844	20.1	21,628	6.5	107,035	32.2
1995	329,283	100.0	89,946	27.3	28,887	8.8	15,943	4.8	65,976	20.0	21,844	6.6	106,687	32.4
1996	328,536	100.0	87,694	26.7	28,862	8.8	15,481	4.7	65,756	20.0	21,268	6.5	109,475	33.3
1997	327,289	100.0	88,001	26.9	28,956	8.8	14,488	4.4	65,425	20.0	21,678	6.6	108,741	33.2
1998	327,389	100.0	88,097	26.9	29,106	8.9	14,946	4.6	65,173	19.9	21,843	6.7	108,224	33.1
1999	334,423	100.0	91,279	27.3	30,112	9.0	14,707	4.4	66,294	19.8	22,615	6.8	109,416	32.7
2000	341,283	100.0	94,323	27.6	31,330	9.2	14,171	4.2	66,423	19.5	22,604	6.6	112,432	32.9
2001	354,522	100.0	99,923	28.2	32,270	9.1	14,086	4.0	68,267	19.3	23,340	6.6	116,636	32.9
2002	378,991	100.0	108,183	28.5	34,851	9.2	14,925	3.9	70,732	18.7	23,646	6.2	126,654	33.4
2003	397,420	100.0	114,256	28.7	34,460	8.7	15,097	3.8	73,105	18.4	25,772	6.5	134,730	33.9
2004	402,630	100.0	114,741	28.5	35,089	8.7	14,815	3.7	73,034	18.1	27,872	6.9	137,079	34.1
2005	406,653	100.0	114,251	28.1	36,487	9.0	14,522	3.6	74,276	18.3	27,697	6.8	139,420	34.3
<b>Federal</b>														
1985	49,051	100.0	30,433	62.0	4,416	9.0	8,954	18.3	549	1.1	4,699	9.6	NA	NA
1986	51,361	100.0	32,739	63.7	4,596	8.9	8,688	16.9	495	1.0	4,843	9.4	NA	NA
1987	53,538	100.0	34,996	65.4	4,445	8.3	8,922	16.7	444	0.8	4,731	8.8	NA	NA
1988	55,489	100.0	36,752	66.2	4,566	8.2	8,664	15.6	504	0.9	5,003	9.0	NA	NA
1989	57,433	100.0	38,555	67.1	5,166	9.0	8,682	15.1	490	0.9	4,540	7.9	NA	NA
1990	59,258	100.0	38,504	65.0	6,314	10.7	9,228	15.6	609	1.0	4,603	7.8	NA	NA
1991	63,000	100.0	40,790	64.7	7,445	11.8	9,616	15.3	476	0.8	4,673	7.4	NA	NA
1992	65,607	100.0	42,586	64.9	7,757	11.8	10,040	15.3	643	1.0	4,581	7.0	NA	NA
1993	67,673	100.0	44,502	65.8	7,510	11.1	10,174	15.0	846	1.3	4,641	6.9	NA	NA
1994	68,550	100.0	45,621	66.6	6,939	10.1	10,407	15.2	780	1.1	4,803	7.0	NA	NA
1995	67,294	100.0	44,597	66.3	6,914	10.3	10,234	15.2	739	1.1	4,810	7.1	NA	NA
1996	65,240	100.0	43,370	66.5	7,044	10.8	9,869	15.1	843	1.3	4,114	6.3	NA	NA
1997	64,522	100.0	43,328	67.2	7,074	11.0	9,291	14.4	908	1.4	3,921	6.1	NA	NA
1998	63,759	100.0	41,826	65.6	7,033	11.0	9,658	15.1	1,120	1.8	4,122	6.5	NA	NA
1999	65,796	100.0	43,061	65.4	7,345	11.2	9,725	14.8	997	1.5	4,668	7.1	NA	NA
2000	67,588	100.0	44,620	66.0	7,475	11.1	9,544	14.1	1,371	2.0	4,578	6.8	NA	NA
2001	68,873	100.0	46,205	67.1	7,406	10.8	9,497	13.8	1,077	1.6	4,688	6.8	NA	NA
2002	75,565	100.0	51,621	68.3	7,899	10.5	9,996	13.2	1,227	1.6	4,822	6.4	NA	NA
2003	81,776	100.0	57,255	70.0	7,608	9.3	10,090	12.3	1,531	1.9	5,292	6.5	NA	NA
2004	83,812	100.0	58,547	69.9	7,999	9.5	9,876	11.8	1,533	1.8	5,857	7.0	NA	NA
2005	83,832	100.0	58,199	69.4	8,347	10.0	9,725	11.6	1,619	1.9	5,942	7.1	NA	NA

## Full-time S&amp;E graduate students, by source and mechanism of primary support: 1985–2005

Source	All mechanisms		Research assistantship		Fellowship		Traineeship		Teaching assistantship		Other		Self-support <sup>a</sup>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Nonfederal														
1985 .....	130,606	100.0	30,562	23.4	18,124	13.9	4,711	3.6	61,273	46.9	15,936	12.2	NA	NA
1986 .....	135,927	100.0	33,271	24.5	18,358	13.5	4,838	3.6	62,057	45.7	17,403	12.8	NA	NA
1987 .....	137,738	100.0	35,218	25.6	17,508	12.7	5,174	3.8	62,403	45.3	17,435	12.7	NA	NA
1988 .....	140,478	100.0	37,836	26.9	17,787	12.7	5,733	4.1	62,549	44.5	16,573	11.8	NA	NA
1989 .....	144,964	100.0	40,490	27.9	18,284	12.6	5,842	4.0	63,806	44.0	16,542	11.4	NA	NA
1990 .....	149,140	100.0	42,242	28.3	18,940	12.7	5,970	4.0	64,341	43.1	17,647	11.8	NA	NA
1991 .....	152,427	100.0	44,385	29.1	19,250	12.6	5,787	3.8	64,738	42.5	18,267	12.0	NA	NA
1992 .....	155,649	100.0	45,444	29.2	20,870	13.4	5,321	3.4	65,059	41.8	18,955	12.2	NA	NA
1993 .....	155,695	100.0	45,652	29.3	21,622	13.9	5,271	3.4	66,444	42.7	16,706	10.7	NA	NA
1994 .....	156,503	100.0	46,387	29.6	21,953	14.0	5,274	3.4	66,064	42.2	16,825	10.8	NA	NA
1995 .....	155,302	100.0	45,349	29.2	21,973	14.1	5,709	3.7	65,237	42.0	17,034	11.0	NA	NA
1996 .....	153,821	100.0	44,324	28.8	21,818	14.2	5,612	3.6	64,913	42.2	17,154	11.2	NA	NA
1997 .....	154,026	100.0	44,673	29.0	21,882	14.2	5,197	3.4	64,517	41.9	17,757	11.5	NA	NA
1998 .....	155,406	100.0	46,271	29.8	22,073	14.2	5,288	3.4	64,053	41.2	17,721	11.4	NA	NA
1999 .....	159,211	100.0	48,218	30.3	22,767	14.3	4,982	3.1	65,297	41.0	17,947	11.3	NA	NA
2000 .....	161,263	100.0	49,703	30.8	23,855	14.8	4,627	2.9	65,052	40.3	18,026	11.2	NA	NA
2001 .....	169,013	100.0	53,718	31.8	24,864	14.7	4,589	2.7	67,190	39.8	18,652	11.0	NA	NA
2002 .....	176,772	100.0	56,562	32.0	26,952	15.2	4,929	2.8	69,505	39.3	18,824	10.6	NA	NA
2003 .....	180,914	100.0	57,001	31.5	26,852	14.8	5,007	2.8	71,574	39.6	20,480	11.3	NA	NA
2004 .....	181,739	100.0	56,194	30.9	27,090	14.9	4,939	2.7	71,501	39.3	22,015	12.1	NA	NA
2005 .....	183,401	100.0	56,052	30.6	28,140	15.3	4,797	2.6	72,657	39.6	21,755	11.9	NA	NA

NA = not available

<sup>a</sup>Includes any loans (including federal) and support from personal or family financial contributions.

NOTES: S&amp;E includes health fields (i.e., medical sciences and other life sciences). These fields reported separately in National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Graduate Students and Postdoctorates in Science and Engineering (annual series).

SOURCE: NSF/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Science and Engineering Indicators 2008



Appendix table 2-8

Full-time S&E graduate students, by field and mechanism of primary support: 2005

Field	All mechanisms		Research assistantship		Fellowship		Traineeship		Teaching assistantship		Other		Self-support <sup>a</sup>	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
S&E .....	406,653	100.0	114,251	28.1	36,487	9.0	14,522	3.6	74,276	18.3	27,697	6.8	139,420	34.3
Engineering .....	84,375	100.0	34,725	41.2	7,274	8.6	1,030	1.2	11,927	14.1	5,794	6.9	23,625	28.0
Aerospace .....	3,241	100.0	1,369	42.2	260	8.0	35	1.1	460	14.2	345	10.6	772	23.8
Chemical .....	6,139	100.0	3,593	58.5	658	10.7	123	2.0	757	12.3	229	3.7	779	12.7
Civil .....	13,118	100.0	4,450	33.9	1,103	8.4	160	1.2	1,993	15.2	786	6.0	4,626	35.3
Electrical .....	25,843	100.0	10,196	39.5	1,571	6.1	147	0.6	3,869	15.0	1,645	6.4	8,415	32.6
Industrial .....	6,113	100.0	1,490	24.4	434	7.1	51	0.8	924	15.1	772	12.6	2,442	39.9
Materials .....	4,507	100.0	2,767	61.4	652	14.5	23	0.5	413	9.2	119	2.6	533	11.8
Mechanical .....	12,178	100.0	5,329	43.8	927	7.6	109	0.9	2,202	18.1	617	5.1	2,994	24.6
Other .....	13,236	100.0	5,531	41.8	1,669	12.6	382	2.9	1,309	9.9	1281	9.7	3,064	23.1
Science .....	322,278	100.0	79,526	24.7	29,213	9.1	13,492	4.2	62,349	19.3	21,903	6.8	115,795	35.9
Natural sciences .....	219,570	100.0	65,494	29.8	17,780	8.1	11,164	5.1	42,526	19.4	14,610	6.7	67,996	31.0
Agricultural sciences .....	9,710	100.0	5,534	57.0	656	6.8	20	0.2	1,187	12.2	393	4.1	1,920	19.8
Biological sciences .....	57,651	100.0	24,582	42.6	7,230	12.5	5,604	9.7	9,126	15.8	2,920	5.1	8,189	14.2
Earth, atmospheric, and ocean sciences .....	11,370	100.0	4,740	41.7	1,356	11.9	111	1.0	2,664	23.4	419	3.7	2080	18.3
Atmospheric sciences .....	1,002	100.0	666	66.5	50	5.0	14	1.4	138	13.8	18	1.8	116	11.6
Earth sciences .....	5,537	100.0	2,038	36.8	702	12.7	21	0.4	1,856	33.5	125	2.3	795	14.4
Oceanography .....	2,198	100.0	1,238	56.3	264	12.0	21	1.0	289	13.1	61	2.8	325	14.8
Other geosciences .....	2,633	100.0	798	30.3	340	12.9	55	2.1	381	14.5	215	8.2	844	32.1
Mathematics/computer sciences .....	43,578	100.0	9,078	20.8	2,893	6.6	326	0.7	12,962	29.7	3,158	7.2	15,161	34.8
Computer sciences .....	28,317	100.0	7,186	25.4	1,465	5.2	231	0.8	4,742	16.7	2,451	8.7	12,242	43.2
Mathematics/statistics .....	15,261	100.0	1,892	12.4	1,428	9.4	95	0.6	8,220	53.9	707	4.6	2,919	19.1
Medical/other life sciences .....	64,875	100.0	7,547	11.6	2,855	4.4	4,681	7.2	4,003	6.2	6,986	10.8	38,803	59.8
Medical sciences .....	22,529	100.0	4,844	21.5	1,557	6.9	1,793	8.0	1,713	7.6	2,094	9.3	10,528	46.7
Other life sciences .....	42,346	100.0	2,703	6.4	1,298	3.1	2,888	6.8	2,290	5.4	4,892	11.6	28,275	66.8
Physical sciences .....	32,386	100.0	14,013	43.3	2,790	8.6	422	1.3	12,584	38.9	734	2.3	1,843	5.7
Astronomy .....	1,129	100.0	613	54.3	222	19.7	7	0.6	226	20.0	31	2.7	30	2.7
Chemistry .....	18,760	100.0	7,829	41.7	1,510	8.1	321	1.7	7,829	41.7	362	1.9	909	4.8
Physics .....	12,210	100.0	5,533	45.3	1,028	8.4	92	0.8	4,507	36.9	323	2.6	727	6.0
Other physical sciences .....	287	100.0	38	13.2	30	10.5	2	0.7	22	7.7	18	6.3	177	61.7
Social/behavioral sciences .....	102,708	100.0	14,032	13.7	11,433	11.1	2,328	2.3	19,823	19.3	7,293	7.1	47,799	46.5
Psychology .....	38,957	100.0	5,837	15.0	2,512	6.4	1,081	2.8	6,240	16.0	3,295	8.5	19,992	51.3
Social sciences .....	63,751	100.0	8,195	12.9	8,921	14.0	1,247	2.0	13,583	21.3	3,998	6.3	27,807	43.6
Anthropology .....	5,833	100.0	567	9.7	1,402	24.0	59	1.0	1,653	28.3	318	5.5	1,834	31.4
Economics .....	11,537	100.0	2,134	18.5	1,596	13.8	148	1.3	3,418	29.6	646	5.6	3,595	31.2
History of science .....	582	100.0	41	7.0	172	29.6	0	0.0	165	28.4	27	4.6	177	30.4
Linguistics .....	2,519	100.0	207	8.2	421	16.7	9	0.4	779	30.9	289	11.5	814	32.3
Political science/public administration .....	22,243	100.0	1,917	8.6	3,222	14.5	703	3.2	2,970	13.4	1,306	5.9	12,125	54.5
Sociology .....	7,234	100.0	1,078	14.9	989	13.7	213	2.9	2,513	34.7	430	5.9	2,011	27.8
Other social sciences .....	13,803	100.0	2,251	16.3	1,119	8.1	115	0.8	2,085	15.1	982	7.1	7,251	52.5

<sup>a</sup>Includes any loans (including federal) and support from personal or family financial contributions.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-9

**Full-time S&E graduate students primarily supported by federal government, by field and mechanism of primary support: 2005**

(Percent)

Field	All mechanisms	Research assistantship	Fellowship	Traineeship	Teaching assistantship	Other
S&E .....	20.6	50.9	22.9	67.0	2.2	3.6
Engineering .....	25.2	49.4	24.4	52.4	2.0	5.3
Aerospace .....	37.5	63.8	33.8	17.1	1.3	21.7
Chemical .....	34.2	49.4	30.9	72.4	2.5	1.2
Civil .....	15.2	37.8	18.8	12.5	1.5	1.1
Electrical .....	23.4	52.4	21.7	32.0	1.8	2.3
Industrial .....	15.5	36.9	26.5	66.7	1.5	7.4
Materials .....	35.2	50.6	22.5	30.4	3.6	2.9
Mechanical .....	25.6	50.3	29.8	43.1	2.5	1.6
Other .....	32.1	51.2	23.8	75.9	2.3	16.1
Science .....	19.4	51.6	22.5	68.1	2.2	3.2
Natural sciences .....	25.2	57.1	28.2	75.7	2.4	4.2
Agricultural sciences .....	24.1	37.3	23.3	60.0	3.8	3.0
Biological sciences .....	38.4	59.4	28.9	75.0	4.1	7.9
Earth, atmospheric, and ocean sciences .....	29.1	56.9	29.6	45.9	3.3	2.9
Atmospheric sciences .....	52.8	71.5	32.0	57.1	18.8	2.2
Earth sciences .....	27.0	59.8	28.5	9.5	3.1	2.2
Oceanography .....	35.6	53.2	36.7	47.6	0.7	3.6
Other geosciences .....	19.0	42.9	26.2	56.4	1.1	3.3
Mathematics/computer sciences .....	16.3	57.5	28.2	34.7	1.4	4.3
Computer sciences .....	19.0	58.0	29.4	29.9	1.3	4.3
Mathematics/statistics .....	11.5	55.7	27.0	46.3	1.5	4.2
Medical/other life sciences .....	14.2	41.4	25.0	80.7	3.1	3.2
Medical sciences .....	21.7	48.8	27.4	79.4	3.6	4.8
Other life sciences .....	10.3	28.2	22.0	81.5	2.8	2.6
Physical sciences .....	34.6	69.2	30.0	70.1	1.7	6.6
Astronomy .....	45.1	67.7	31.1	100.0	2.2	21.3
Chemistry .....	32.1	66.3	28.3	75.7	1.7	2.9
Physics .....	38.2	73.8	32.3	47.8	1.8	11.4
Other physical sciences .....	7.0	21.1	30.0	100.0	4.5	0.0
Social/behavioral sciences .....	7.0	26.0	13.6	31.4	1.7	1.6
Psychology .....	9.5	33.1	26.6	47.1	2.1	2.0
Social sciences .....	5.5	21.0	10.0	17.9	1.6	1.4
Anthropology .....	6.4	14.8	13.5	28.8	2.1	2.2
Economics .....	6.9	27.4	6.9	21.6	0.7	1.1
History of science .....	3.8	2.4	10.5	0.0	0.6	1.0
Linguistics .....	5.6	33.3	8.8	33.3	0.5	2.5
Political science/public administration .....	3.5	11.2	7.3	10.7	3.3	1.1
Sociology .....	6.3	21.2	11.2	31.0	1.0	1.1
Other social sciences .....	6.8	23.9	17.1	26.1	1.3	1.8

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-10

**Full-time S&E graduate students primarily supported by federal government, by agency: 1985–2005**

Year	All federal		National Institutes of Health		Other Department of Health and Human Services		National Science Foundation		Department of Defense		Department of Agriculture		National Aeronautics and Space Administration		Department of Energy		Other agencies	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1985.....	49,051	100	11,112	22.7	4,740	9.7	10,180	20.8	7,326	14.9	2,171	4.4	NA	NA	NA	NA	13,522	27.6
1986.....	51,361	100	11,877	23.1	4,500	8.8	10,826	21.1	7,940	15.5	2,328	4.5	NA	NA	NA	NA	13,890	27.0
1987.....	53,538	100	12,944	24.2	4,247	7.9	11,247	21.0	8,795	16.4	2,684	5.0	NA	NA	NA	NA	13,621	25.4
1988.....	55,489	100	13,715	24.7	4,186	7.5	11,634	21.0	9,546	17.2	2,591	4.7	NA	NA	NA	NA	13,817	24.9
1989.....	57,433	100	14,357	25.0	4,335	7.5	11,900	20.7	9,140	15.9	2,728	4.7	NA	NA	NA	NA	14,973	26.1
1990.....	59,258	100	14,996	25.3	4,512	7.6	12,025	20.3	8,868	15.0	2,722	4.6	NA	NA	NA	NA	16,135	27.2
1991.....	63,000	100	16,018	25.4	4,461	7.1	12,666	20.1	9,128	14.5	3,075	4.9	NA	NA	NA	NA	17,652	28.0
1992.....	65,607	100	17,091	26.1	4,321	6.6	13,366	20.4	9,247	14.1	3,216	4.9	NA	NA	NA	NA	18,366	28.0
1993.....	67,673	100	18,135	26.8	3,888	5.7	13,530	20.0	9,750	14.4	3,324	4.9	NA	NA	NA	NA	19,046	28.1
1994.....	68,550	100	18,292	26.7	4,374	6.4	13,990	20.4	9,449	13.8	3,422	5.0	NA	NA	NA	NA	19,023	27.8
1995.....	67,294	100	18,109	26.9	4,666	6.9	13,661	20.3	9,339	13.9	3,254	4.8	NA	NA	NA	NA	18,265	27.1
1996.....	65,240	100	17,929	27.5	4,432	6.8	13,412	20.6	8,802	13.5	3,004	4.6	2,309	3.5	NA	NA	15,352	23.5
1997.....	64,522	100	18,087	28.0	4,443	6.9	13,362	20.7	9,021	14.0	2,646	4.1	2,586	4.0	NA	NA	14,377	22.3
1998.....	63,759	100	18,215	28.6	4,489	7.0	13,459	21.1	8,259	13.0	2,485	3.9	2,646	4.2	NA	NA	14,206	22.3
1999.....	65,796	100	19,019	28.9	4,423	6.7	13,835	21.0	8,026	12.2	2,634	4.0	2,579	3.9	2,749	4.2	12,531	19.1
2000.....	67,588	100	19,472	28.8	4,018	5.9	14,599	21.6	8,141	12.1	2,630	3.9	2,780	4.1	2,995	4.4	12,953	19.2
2001.....	68,873	100	19,904	28.9	4,433	6.4	15,429	22.4	7,960	11.6	2,735	4.0	2,819	4.1	3,116	4.5	12,477	18.1
2002.....	75,565	100	22,129	29.3	4,830	6.4	17,135	22.7	7,977	10.6	3,100	4.1	3,082	4.1	3,548	4.7	13,764	18.2
2003.....	81,776	100	24,309	29.7	4,922	6.0	19,308	23.6	9,204	11.3	3,468	4.2	3,230	3.9	4,024	4.9	13,311	16.3
2004.....	83,812	100	26,683	31.8	4,211	5.0	19,969	23.8	9,007	10.7	3,562	4.2	2,916	3.5	4,135	4.9	13,329	15.9
2005.....	83,832	100	26,810	32.0	3,942	4.7	20,423	24.4	8,976	10.7	3,370	4.0	2,691	3.2	4,392	5.2	13,228	15.8

NA = not available

NOTES: Detail may not add to total because of rounding. Data not reported until first year given.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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Appendix table 2-11

## Primary support mechanisms for S&amp;E doctorate recipients, by citizenship, sex, and race/ethnicity: 2005

Support mechanism	All doctorate recipients	Non-U.S. citizen	Temporary resident	Permanent resident	U.S. citizen <sup>c</sup>							
					Total	Male	Female	White	Asian	Underrepresented minority	Other/unknown race/ethnicity	Unknown citizenship
<b>All mechanisms</b>												
Number .....	29,751	11,981	10,792	1,189	16,118	8,624	7,492	12,777	1,198	1,887	256	1,652
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Research assistantships</b>												
Number .....	9,079	5,700	5,294	406	3,340	2,134	1,205	2,779	295	226	40	39
Percent.....	30.5	47.6	49.1	34.1	20.7	24.7	16.1	21.8	24.6	12.0	15.6	2.4
<b>Fellowships</b>												
Number .....	5,084	1,602	1,408	194	3,463	1,824	1,639	2,526	263	637	37	19
Percent.....	17.1	13.4	13.1	16.3	21.5	21.2	21.9	19.8	22.0	33.8	14.5	1.2
<b>Traineeships</b>												
Number .....	276	31	23	8	241	102	139	188	30	20	3	4
Percent.....	0.9	0.3	0.2	0.7	1.5	1.2	1.9	1.5	2.5	1.1	1.2	0.2
<b>Teaching assistantships</b>												
Number .....	4,221	2,100	1,899	201	2,108	1,161	947	1,760	115	193	40	13
Percent.....	14.2	17.5	17.6	16.9	13.1	13.5	12.6	13.8	9.6	10.2	15.6	0.8
<b>Other assistantships</b>												
Number .....	166	54	43	11	107	44	63	84	4	17	2	5
Percent.....	0.6	0.5	0.4	0.9	0.7	0.5	0.8	0.7	0.3	0.9	0.8	0.3
<b>Grant/stipend</b>												
Number .....	3,117	716	605	111	2,389	1,251	1,137	1,854	272	238	25	12
Percent.....	10.5	6.0	5.6	9.3	14.8	14.5	15.2	14.5	22.7	12.6	9.8	0.7
<b>Personal<sup>a</sup></b>												
Number .....	3,545	470	336	134	3,060	1,310	1,750	2,515	134	376	35	15
Percent.....	11.9	3.9	3.1	11.3	19.0	15.2	23.4	19.7	11.2	19.9	13.7	0.9
<b>Other<sup>b</sup></b>												
Number .....	1,223	577	531	46	644	399	245	538	38	57	11	2
Percent.....	4.1	4.8	4.9	3.9	4.0	4.6	3.3	4.2	3.2	3.0	4.3	0.1
<b>Unknown</b>												
Number .....	3,040	731	653	78	766	399	367	533	47	123	63	1,543
Percent.....	10.2	6.1	6.1	6.6	4.8	4.6	4.9	4.2	3.9	6.5	24.6	93.4

<sup>a</sup>Personal savings, other personal earnings in graduate school, other family earnings or savings, and loans.

<sup>b</sup>Employer reimbursement or assistance, foreign support, and other sources.

<sup>c</sup>Includes naturalized citizens.

NOTES: S&E includes health fields (i.e., medical and other life sciences). U.S. citizen total includes unknown sex. Underrepresented minority includes blacks, Hispanics, American Indians/Alaska Natives, Native Hawaiians/other Pacific Islanders, and multiple races/ethnicities. Traineeships include internship and residency.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, special tabulations (2007).

Appendix table 2-12

**Amount of undergraduate and graduate debt of S&E doctorate recipients, by field: 2005**

(Percent)

Field	Doctorates (n)	Debt						
		None	≤\$10,000	\$10,001– \$20,000	\$20,001– \$30,000	\$30,001– \$40,000	\$40,001– 50,000	≥\$50,001
<b>Cumulative debt</b>								
All fields .....	38,739	51.4	11.4	9.1	6.9	4.9	4.1	12.2
S&E.....	26,805	54.0	11.4	9.3	6.5	4.5	3.7	10.6
Engineering.....	5,744	66.4	10.9	6.7	4.6	2.7	2.3	6.4
Sciences.....	21,061	50.7	11.5	10.0	7.0	5.0	4.1	11.8
Agricultural sciences.....	911	52.9	14.7	8.7	7.4	4.0	3.8	8.6
Biological sciences.....	5,845	50.7	12.2	12.6	7.8	5.3	3.4	7.9
Computer sciences.....	1,010	73.3	9.0	5.7	3.2	2.0	1.4	5.4
Earth, atmospheric, and ocean sciences.....	641	50.1	16.4	10.5	8.1	5.3	3.3	6.4
Mathematics.....	1,093	68.7	11.7	7.4	3.6	2.1	2.1	4.4
Medical/other health sciences.....	1,577	51.8	9.1	7.4	7.0	6.3	5.0	13.3
Physical sciences.....	3,340	59.0	12.1	9.8	6.3	3.9	2.8	6.0
Psychology.....	2,872	30.5	8.3	9.5	8.8	6.8	6.7	29.4
Social sciences.....	3,772	46.3	12.0	9.5	6.9	5.6	5.2	14.4
Non-S&E.....	11,934	45.6	11.6	8.9	7.6	5.6	5.0	15.7
<b>Undergraduate debt</b>								
All fields .....	38,742	72.6	9.1	8.1	5.0	2.7	1.5	1.0
S&E.....	26,808	72.1	9.2	8.5	5.3	2.7	1.4	0.9
Engineering.....	5,745	80.5	7.2	5.3	3.6	1.7	0.8	0.9
Sciences.....	21,063	69.7	9.7	9.4	5.7	2.9	1.6	1.0
Agricultural sciences.....	911	73.3	9.8	7.9	5.2	2.1	1.1	0.7
Biological sciences.....	5,845	64.4	10.3	12.5	6.8	3.4	1.7	0.9
Computer sciences.....	1,010	85.2	6.3	4.4	2.0	1.1	0.3	0.7
Earth, atmospheric, and ocean sciences.....	641	66.0	13.4	9.5	5.3	3.3	2.0	0.5
Mathematics.....	1,093	81.0	8.1	6.0	2.8	1.1	0.4	0.6
Medical/other health sciences.....	1,577	74.5	8.0	6.3	4.4	3.7	2.0	1.1
Physical sciences.....	3,340	69.6	9.7	9.8	5.8	2.8	1.3	1.0
Psychology.....	2,873	64.1	10.6	10.4	7.4	3.9	2.2	1.4
Social sciences.....	3,773	72.8	9.5	7.5	5.1	2.6	1.6	1.0
Non-S&E.....	11,934	73.8	9.1	7.0	4.6	2.8	1.7	1.1
<b>Graduate debt</b>								
All fields .....	38,739	67.1	7.6	5.0	4.3	3.3	2.8	10.0
S&E.....	26,805	70.4	7.4	4.6	3.7	3.0	2.4	8.4
Engineering.....	5,744	78.0	7.5	3.5	2.8	2.0	1.5	4.8
Sciences.....	21,061	68.4	7.3	4.9	4.0	3.3	2.7	9.4
Agricultural sciences.....	911	67.8	10.3	5.8	3.7	2.7	2.6	6.9
Biological sciences.....	5,845	74.3	7.4	4.7	3.9	2.7	1.8	5.3
Computer sciences.....	1,010	82.5	5.8	2.7	1.6	1.9	0.9	4.7
Earth, atmospheric, and ocean sciences.....	641	72.2	9.8	4.1	4.8	2.5	1.9	4.7
Mathematics.....	1,093	80.8	7.1	3.2	2.7	1.3	1.4	3.6
Medical/other health sciences.....	1,577	65.6	5.8	5.2	5.3	4.7	2.7	10.7
Physical sciences.....	3,340	78.5	7.1	4.2	3.1	2.1	1.2	3.8
Psychology.....	2,872	46.6	5.6	5.7	5.3	5.4	5.0	26.4
Social sciences.....	3,772	60.3	8.6	6.4	4.4	4.1	4.5	11.8
Non-S&E.....	11,934	59.5	8.0	5.7	5.6	4.1	3.6	13.5

NOTE: 4,612 doctorate recipients did not report undergraduate debt; 4,615 did not report graduate debt.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, special tabulations (2007).

Appendix table 2-13

**Enrollment in higher education, by Carnegie institution type: 1986–2004**

Year	All institutions	Doctorate-granting universities—very high research activity	Doctorate-granting universities—high research activity	Doctoral/ research universities	Master's colleges/ universities	Baccalaureate colleges	Associate's colleges	Medical schools/ medical centers	Schools of engineering	Other special focus institutions	Tribal colleges	Not classified
1986.....	12,670,121	2,028,365	1,408,854	538,407	2,742,615	988,017	4,210,265	66,255	8,954	207,414	6,050	464,925
1987.....	12,925,116	2,081,103	1,429,880	552,972	2,791,503	1,000,337	4,391,135	65,828	8,988	207,051	6,992	389,327
1988.....	13,201,196	2,101,752	1,463,739	559,423	2,870,397	1,043,039	4,501,474	67,516	10,350	215,406	7,205	360,895
1989.....	13,621,203	2,119,271	1,508,679	571,276	2,980,237	1,067,801	4,714,824	67,131	10,667	217,126	7,350	356,841
1990.....	13,983,255	2,154,796	1,529,924	584,693	3,091,747	1,089,745	4,899,502	68,407	12,047	226,756	7,193	318,445
1991.....	14,527,724	2,166,048	1,546,223	593,116	3,142,636	1,111,202	5,302,915	70,689	12,764	234,271	8,046	339,814
1992.....	14,657,118	2,158,689	1,533,625	603,048	3,172,014	1,129,156	5,379,531	75,777	13,275	241,506	9,715	340,782
1993.....	14,477,792	2,146,394	1,512,688	606,412	3,164,308	1,131,893	5,263,181	76,839	14,075	247,173	10,251	304,578
1994.....	14,449,476	2,143,968	1,505,465	608,538	3,167,715	1,130,525	5,224,917	77,693	12,733	256,391	9,619	311,912
1995.....	14,445,438	2,147,614	1,505,914	610,804	3,174,249	1,144,858	5,209,476	78,889	13,314	265,221	9,798	285,301
1996.....	14,481,915	2,146,987	1,493,408	616,414	3,188,063	1,151,943	5,254,403	80,084	13,055	272,802	9,680	255,076
1997.....	14,521,994	2,152,915	1,506,792	616,402	3,222,192	1,160,817	5,299,102	80,539	11,859	275,127	9,979	186,270
1998.....	14,835,140	2,177,443	1,517,419	628,402	3,270,069	1,178,466	5,214,709	80,018	12,624	287,643	10,424	457,923
2000.....	15,592,671	2,212,283	1,552,492	654,576	3,388,151	1,220,648	6,013,139	79,588	12,757	294,959	9,689	154,389
2001.....	15,749,338	2,261,898	1,599,014	692,004	3,505,595	1,235,676	5,958,162	80,442	14,158	316,338	10,061	75,990
2002.....	16,440,463	2,326,033	1,653,569	735,301	3,662,414	1,296,988	6,260,838	82,178	14,106	333,118	10,744	65,174
2003.....	16,622,932	2,354,908	1,675,963	776,609	3,755,773	1,323,723	6,258,095	83,513	14,278	343,727	12,227	24,116
2004.....	16,901,039	2,362,063	1,693,731	832,888	3,854,479	1,335,972	6,343,388	87,549	13,740	354,940	12,553	9,736

NOTE: Data not available for 1999.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey (various years); and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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Appendix table 2-14

**Estimates and projections of U.S. population ages 20–24 years, by sex and race/ethnicity: 2000–2050**

Sex	All races		White, non-Hispanic		Asian		Black		Hispanic		Other race/ethnicity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Both sexes</b>												
2000	19,116,000	100.0	11,780,000	61.6	850,000	4.4	2,757,000	14.4	3,427,000	17.9	568,000	3.0
2005	20,823,000	100.0	12,836,000	61.6	898,000	4.3	3,078,000	14.8	3,604,000	17.3	695,000	3.3
2010	21,676,000	100.0	12,992,000	59.9	943,000	4.4	3,357,000	15.5	3,927,000	18.1	785,000	3.6
2015	21,810,000	100.0	12,380,000	56.8	1,020,000	4.7	3,451,000	15.8	4,472,000	20.5	866,000	4.0
2020	20,751,000	100.0	11,380,000	54.8	1,076,000	5.2	3,109,000	15.0	4,656,000	22.4	936,000	4.5
2025	22,052,000	100.0	11,606,000	52.6	1,234,000	5.6	3,315,000	15.0	5,285,000	24.0	1,088,000	4.9
2030	23,136,000	100.0	11,759,000	50.8	1,380,000	6.0	3,568,000	15.4	5,733,000	24.8	1,226,000	5.3
2035	24,227,000	100.0	12,030,000	49.7	1,507,000	6.2	3,768,000	15.6	6,142,000	25.4	1,367,000	5.6
2040	24,897,000	100.0	12,074,000	48.5	1,622,000	6.5	3,834,000	15.4	6,525,000	26.2	1,488,000	6.0
2045	25,534,000	100.0	11,976,000	46.9	1,758,000	6.9	3,929,000	15.4	6,970,000	27.3	1,618,000	6.3
2050	26,297,000	100.0	11,838,000	45.0	1,922,000	7.3	4,089,000	15.6	7,478,000	28.4	1,771,000	6.7
<b>Male</b>												
2000	9,763,000	100.0	5,961,000	61.1	425,000	4.4	1,345,000	13.8	1,884,000	19.3	286,000	2.9
2005	10,657,000	100.0	6,549,000	61.5	448,000	4.2	1,545,000	14.5	1,911,000	17.9	351,000	3.3
2010	11,075,000	100.0	6,648,000	60.0	475,000	4.3	1,687,000	15.2	2,034,000	18.4	398,000	3.6
2015	11,137,000	100.0	6,330,000	56.8	514,000	4.6	1,735,000	15.6	2,312,000	20.8	438,000	3.9
2020	10,584,000	100.0	5,811,000	54.9	539,000	5.1	1,562,000	14.8	2,404,000	22.7	475,000	4.5
2025	11,235,000	100.0	5,917,000	52.7	618,000	5.5	1,664,000	14.8	2,722,000	24.2	556,000	4.9
2030	11,787,000	100.0	5,997,000	50.9	691,000	5.9	1,792,000	15.2	2,951,000	25.0	627,000	5.3
2035	12,344,000	100.0	6,136,000	49.7	755,000	6.1	1,893,000	15.3	3,160,000	25.6	699,000	5.7
2040	12,688,000	100.0	6,160,000	48.6	813,000	6.4	1,927,000	15.2	3,356,000	26.5	761,000	6.0
2045	13,014,000	100.0	6,112,000	47.0	881,000	6.8	1,976,000	15.2	3,584,000	27.5	827,000	6.4
2050	13,404,000	100.0	6,042,000	45.1	964,000	7.2	2,057,000	15.3	3,844,000	28.7	906,000	6.8
<b>Female</b>												
2000	9,353,000	100.0	5,819,000	62.2	426,000	4.6	1,412,000	15.1	1,544,000	16.5	282,000	3.0
2005	10,166,000	100.0	6,287,000	61.8	450,000	4.4	1,532,000	15.1	1,693,000	16.7	344,000	3.4
2010	10,602,000	100.0	6,344,000	59.8	469,000	4.4	1,670,000	15.7	1,893,000	17.9	388,000	3.7
2015	10,673,000	100.0	6,050,000	56.7	506,000	4.7	1,716,000	16.1	2,160,000	20.2	428,000	4.0
2020	10,166,000	100.0	5,568,000	54.8	537,000	5.3	1,547,000	15.2	2,252,000	22.2	461,000	4.5
2025	10,817,000	100.0	5,689,000	52.6	615,000	5.7	1,650,000	15.3	2,563,000	23.7	532,000	4.9
2030	11,349,000	100.0	5,763,000	50.8	689,000	6.1	1,776,000	15.6	2,782,000	24.5	599,000	5.3
2035	11,883,000	100.0	5,894,000	49.6	752,000	6.3	1,875,000	15.8	2,982,000	25.1	668,000	5.6
2040	12,209,000	100.0	5,914,000	48.4	809,000	6.6	1,907,000	15.6	3,169,000	26.0	727,000	6.0
2045	12,520,000	100.0	5,865,000	46.8	876,000	7.0	1,954,000	15.6	3,386,000	27.0	790,000	6.3
2050	12,893,000	100.0	5,795,000	44.9	958,000	7.4	2,032,000	15.8	3,634,000	28.2	865,000	6.7

NOTES: Numbers rounded to nearest 1,000. Detail will not add to total because of rounding. Asian, black, and other race/ethnicity include Hispanics; Hispanics may be of any race.

SOURCES: Census Bureau, Population Projections Program, U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin, <http://www.census.gov/ipc/www/usinterimproj>.

## Freshmen intending S&amp;E major, by sex, race/ethnicity, and field: Selected years, 1985–2006

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
All intending S&E major .....	32.6	28.9	30.6	32.2	33.3	32.4	34.2	33.7	33.1	33.5	33.5	32.6	33.1	30.9	32.0
Physical sciences .....	2.2	1.8	2.0	2.1	2.5	2.3	2.1	1.9	1.8	1.9	2.0	2.0	2.3	2.8	2.3
Biological/agricultural sciences.....	5.6	5.1	5.3	6.6	8.2	9.4	9.1	8.2	7.5	7.5	7.8	7.7	8.3	8.1	8.8
Mathematics/statistics.....	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
Computer sciences.....	4.1	2.3	2.3	2.4	2.1	3.0	4.1	5.1	5.2	4.7	3.1	2.4	2.0	1.2	1.6
Social/behavioral sciences.....	8.6	9.4	10.3	9.5	9.7	8.9	8.5	8.9	9.2	9.6	10.4	10.5	10.2	9.6	10.5
Engineering .....	11.0	9.4	9.9	10.8	10.0	8.1	9.7	9.0	8.7	9.1	9.5	9.3	9.6	8.4	8.0
Male .....	41.9	36.5	38.2	40.1	41.1	39.2	42.4	42.4	41.4	42.2	41.2	39.6	40.8	37.0	37.9
Physical sciences .....	3.1	2.7	2.8	2.9	3.2	2.8	2.7	2.4	2.3	2.4	2.4	2.5	2.9	2.7	2.8
Biological/agricultural sciences .....	6.1	5.6	6.0	7.0	8.8	9.2	8.4	7.3	6.5	6.5	6.6	6.7	7.4	7.2	8.1
Mathematics/statistics .....	1.1	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.8	0.7	0.8	0.9	1.0	0.9	0.9
Computer sciences.....	5.5	3.5	3.4	3.4	3.5	5.1	7.1	9.1	9.3	8.8	6.0	4.7	4.1	3.1	3.0
Social/behavioral sciences .....	7.2	7.0	7.7	7.0	7.5	6.7	6.3	6.4	6.6	7.1	7.5	7.7	7.5	7.5	8.6
Engineering .....	18.9	16.8	17.4	18.9	17.3	14.6	17.2	16.5	15.9	16.7	17.9	17.1	17.9	15.6	14.5
Female .....	24.6	22.3	24.5	25.3	26.8	27.1	27.7	26.8	26.2	26.7	26.7	26.2	26.3	27.0	27.2
Physical sciences .....	1.4	1.1	1.3	1.5	1.9	1.8	1.6	1.5	1.5	1.5	1.6	1.7	1.9	1.9	2.0
Biological/agricultural sciences .....	5.3	4.8	4.9	6.2	7.7	9.6	9.7	9.0	7.9	8.3	8.5	8.5	9.0	8.7	9.6
Mathematics/statistics .....	1.1	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.6
Computer sciences.....	2.8	1.4	1.4	1.5	1.1	1.3	1.7	1.8	1.9	1.6	0.9	0.5	0.4	0.8	0.4
Social/behavioral sciences .....	10.2	11.3	12.8	11.6	11.5	11.0	10.5	11.0	11.3	11.7	12.0	12.0	11.5	12.3	12.1
Engineering .....	3.8	2.9	3.3	3.7	3.9	2.7	3.5	2.9	3.0	3.0	3.0	2.9	2.9	2.6	2.5
White.....	31.7	27.8	29.6	30.5	31.7	30.9	32.8	31.7	30.6	31.9	31.3	30.1	30.1	29.0	29.5
Physical sciences .....	2.3	1.9	2.0	2.3	2.6	2.5	2.4	2.0	2.0	2.1	2.1	2.1	2.3	2.4	2.5
Biological/agricultural sciences .....	5.3	4.7	5.1	6.0	7.6	9.0	8.6	7.9	6.6	7.0	7.0	6.4	7.0	7.0	7.5
Mathematics/statistics .....	1.1	0.9	0.9	0.8	0.9	0.7	0.7	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Computer sciences.....	3.4	2.1	1.9	1.8	1.8	2.5	3.5	4.1	4.3	4.0	2.8	2.3	1.9	1.5	1.5
Social/behavioral sciences .....	8.9	9.3	10.1	9.3	9.4	8.7	8.6	8.6	8.7	9.1	9.4	9.6	9.1	9.3	9.6
Engineering .....	10.7	8.9	9.6	10.3	9.4	7.5	9.0	8.5	8.3	9.0	9.2	8.9	9.0	8.0	7.6
Male .....	41.0	35.6	37.4	38.8	39.8	37.5	40.6	40.0	39.6	41.0	39.6	38.3	38.7	36.1	36.4
Physical sciences.....	3.2	2.8	3.0	3.1	3.3	2.9	3.0	2.4	2.5	2.6	2.8	2.8	3.0	3.1	3.0
Biological/agricultural sciences .....	5.8	5.3	5.5	6.5	8.1	8.6	7.8	7.1	6.0	6.1	6.2	5.8	6.4	6.5	7.0
Mathematics/statistics .....	1.2	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.9	0.7	0.9	0.9	1.0	1.0	0.9
Computer sciences.....	5.1	3.3	3.1	3.0	3.2	4.6	6.4	7.7	8.2	7.7	5.5	4.7	3.9	3.0	3.0
Social/behavioral sciences .....	7.2	7.0	7.8	7.1	7.6	6.9	6.3	6.3	6.7	7.0	7.2	7.7	7.4	7.6	8.3
Engineering.....	18.5	16.2	17.0	18.2	16.7	13.7	16.4	15.8	15.3	16.9	17.0	16.4	17.0	14.9	14.2
Female .....	22.9	20.9	22.7	23.1	25.2	25.3	25.8	24.9	23.8	24.2	23.9	23.9	23.9	23.2	24.2
Physical sciences.....	1.3	1.2	1.3	1.4	2.0	1.9	1.8	1.6	1.5	1.5	1.5	1.7	1.9	1.8	1.9
Biological/agricultural sciences .....	4.9	4.3	4.5	5.7	7.3	9.1	9.3	8.8	7.5	7.6	7.6	7.4	7.7	7.3	8.1
Mathematics/statistics .....	1.1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Computer sciences.....	1.9	0.9	0.8	0.8	0.6	0.7	1.0	1.1	1.1	0.8	0.5	0.4	0.3	0.3	0.3
Social/behavioral sciences .....	10.5	11.2	12.5	11.4	11.2	10.5	10.1	10.4	10.6	11.1	11.1	11.2	10.6	11.0	11.0
Engineering.....	3.2	2.4	2.8	3.0	3.4	2.4	3.0	2.4	2.5	2.5	2.5	2.5	2.7	2.1	2.2



## Freshmen intending S&amp;E major, by sex, race/ethnicity, and field: Selected years, 1985–2006

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Asian American.....	51.3	47.5	44.0	44.6	42.8	41.5	45.9	47.5	44.5	42.5	43.2	44.2	45.5	42.0	44.7
Physical sciences.....	4.2	2.9	2.3	2.5	2.5	2.1	2.0	1.6	1.5	1.7	1.9	2.1	2.4	2.4	2.8
Biological/agricultural sciences.....	11.6	12.1	9.8	12.2	13.4	13.2	11.8	11.2	10.2	10.1	11.9	14.6	16.1	15.1	17.3
Mathematics/statistics.....	1.1	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.9	0.9	1.1
Computer sciences.....	3.0	3.7	2.4	3.5	2.7	5.2	7.9	12.6	11.0	9.3	4.6	3.2	2.2	1.7	1.5
Social/behavioral sciences.....	7.5	8.2	9.4	8.4	8.8	7.1	6.8	6.7	7.4	7.3	8.1	8.6	8.8	8.5	10.3
Engineering.....	23.9	19.7	19.3	17.2	14.7	13.3	16.8	14.8	13.8	13.4	15.9	14.8	15.1	13.4	11.7
Male.....	61.0	56.0	52.7	55.3	51.1	50.3	57.5	60.0	56.3	54.3	55.0	53.4	54.3	49.3	50.7
Physical sciences.....	5.5	3.2	3.0	3.2	2.8	2.8	2.2	2.0	1.7	1.8	2.2	2.7	2.6	2.6	3.3
Biological/agricultural sciences.....	10.2	11.1	10.0	12.2	13.4	12.2	9.9	8.9	8.5	8.4	10.2	13.0	14.1	13.4	15.3
Mathematics/statistics.....	1.2	0.7	0.6	0.8	0.6	0.6	0.6	0.6	0.7	0.7	0.9	1.1	1.0	1.0	1.3
Computer sciences.....	3.1	4.6	3.3	5.4	4.2	8.0	12.5	19.4	17.8	15.5	8.1	5.4	4.1	3.1	2.8
Social/behavioral sciences.....	6.4	5.4	5.7	5.8	6.5	4.7	4.9	4.8	5.5	5.6	6.1	6.3	6.7	6.3	8.3
Engineering.....	34.6	31.0	30.1	27.9	23.6	22.0	27.4	24.3	22.1	22.3	27.5	24.9	25.8	22.9	19.7
Female.....	40.9	38.1	34.7	34.0	34.5	32.9	34.3	35.9	34.5	32.8	33.5	35.9	37.6	35.1	39.4
Physical sciences.....	2.9	2.4	1.9	1.8	2.2	1.6	1.5	1.4	1.3	1.5	1.6	1.8	2.0	2.2	2.5
Biological/agricultural sciences.....	13.1	13.0	9.4	12.3	13.5	14.0	13.4	13.3	11.7	12.0	13.5	16.1	18.0	16.4	18.7
Mathematics/statistics.....	1.2	1.2	1.0	0.8	0.8	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.8	0.7	0.9
Computer sciences.....	2.8	2.6	1.5	1.6	1.4	2.5	3.4	6.2	5.2	4.0	1.6	1.0	0.6	0.4	0.5
Social/behavioral sciences.....	8.7	11.3	13.4	10.9	10.7	9.3	8.8	8.5	8.9	8.9	9.9	10.6	10.6	10.4	12.2
Engineering.....	12.2	7.6	7.5	6.6	5.9	4.9	6.6	5.9	6.7	5.7	6.1	5.7	5.6	5.0	4.6
Black.....	33.3	31.0	32.0	35.5	37.9	35.8	38.0	37.2	36.8	35.2	35.4	33.6	34.3	32.0	34.0
Physical sciences.....	1.6	1.0	1.2	1.2	1.6	1.6	1.2	1.2	1.2	1.0	1.2	1.4	1.8	1.7	1.6
Biological/agricultural sciences.....	4.2	4.1	4.6	5.3	7.4	8.7	8.8	7.9	7.5	7.8	8.4	8.6	9.5	8.5	9.4
Mathematics/statistics.....	0.7	0.6	0.4	0.6	0.6	0.7	0.6	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.5
Computer sciences.....	10.4	5.2	5.9	5.6	5.4	6.3	7.1	8.4	8.1	7.4	4.7	3.3	3.3	2.5	2.2
Social/behavioral sciences.....	6.8	9.6	10.6	10.4	10.0	9.9	10.3	11.4	11.1	12.5	12.0	12.2	11.5	12.0	13.1
Engineering.....	9.6	10.5	9.3	12.4	12.9	8.6	10.0	7.7	8.4	6.1	8.6	7.7	7.7	6.8	7.2
Male.....	39.1	36.8	36.3	41.3	44.6	40.5	43.6	41.7	41.7	37.7	40.2	36.7	38.2	33.9	36.3
Physical sciences.....	1.9	1.3	1.1	1.1	2.0	1.7	1.6	1.4	1.4	1.0	1.3	1.4	1.7	1.7	1.8
Biological/agricultural sciences.....	3.9	4.1	4.2	4.9	6.8	7.6	7.4	5.8	5.8	5.6	5.8	5.7	7.5	6.3	6.8
Mathematics/statistics.....	0.8	0.7	0.4	0.6	0.6	0.8	0.5	0.6	0.4	0.4	0.4	0.7	0.6	0.5	0.8
Computer sciences.....	11.2	6.3	6.9	6.0	6.6	8.5	9.8	13.2	12.4	12.2	8.2	6.1	6.2	4.8	3.8
Social/behavioral sciences.....	5.4	6.9	7.7	7.4	7.4	6.4	6.6	7.4	6.5	7.4	8.0	8.1	7.1	7.4	8.7
Engineering.....	15.9	17.5	16.0	21.3	21.2	15.5	17.7	13.3	15.2	11.1	16.5	14.7	15.1	13.2	14.4
Female.....	28.9	26.8	29.1	31.7	34.0	32.8	34.7	34.0	34.3	33.1	32.5	31.5	31.9	30.6	32.1
Physical sciences.....	1.3	0.9	1.1	1.2	1.7	1.5	1.1	1.0	1.2	1.0	1.3	1.4	1.9	1.6	1.6
Biological/agricultural sciences.....	4.5	3.9	4.7	5.7	7.8	9.4	9.7	9.2	8.6	9.0	10.0	10.2	10.9	9.9	11.0
Mathematics/statistics.....	0.6	0.6	0.5	0.6	0.6	0.7	0.8	0.6	0.5	0.4	0.5	0.3	0.4	0.5	0.4
Computer sciences.....	9.9	4.4	5.2	5.3	4.6	4.8	5.2	5.3	5.5	4.3	2.5	1.7	1.5	1.1	1.1
Social/behavioral sciences.....	7.7	11.2	12.4	12.3	11.7	12.0	12.8	13.8	14.1	15.3	14.5	14.7	14.3	14.7	15.7
Engineering.....	4.9	5.8	5.2	6.6	7.6	4.4	5.1	4.1	4.4	3.1	3.7	3.2	2.9	2.8	2.3

**Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1985–2006**

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Mexican American/Chicano and Puerto Rican American .....	38.9	35.1	33.5	30.6	33.2	36.0	36.9	36.2	33.3	33.6	34.7	34.7	37.2	34.8	35.9
Physical sciences .....	1.9	1.5	1.7	1.4	1.6	1.3	1.4	1.0	1.4	1.2	1.6	1.7	1.6	1.7	2.1
Biological/agricultural sciences .....	7.1	6.7	5.6	6.2	6.9	7.9	9.3	8.6	7.1	7.4	8.2	8.1	9.3	7.6	9.8
Mathematics/statistics .....	0.7	0.5	0.6	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.8	0.9
Computer sciences .....	4.7	2.6	2.2	2.8	2.1	2.9	3.4	3.8	3.8	3.8	2.4	2.1	2.2	1.1	1.2
Social/behavioral sciences .....	11.9	12.4	12.9	9.9	12.5	12.2	11.4	10.9	12.3	11.6	13.2	13.1	12.6	14.0	15.5
Engineering .....	12.6	11.4	10.5	10.0	9.7	11.2	10.8	11.3	8.1	8.9	8.6	8.9	10.8	9.6	6.4
Male .....	47.5	41.9	40.2	35.6	38.8	42.0	43.0	45.0	40.6	40.4	40.8	40.8	45.0	40.6	40.8
Physical sciences .....	2.8	1.9	2.2	1.7	2.2	1.7	1.8	1.1	1.7	1.3	1.8	2.2	2.1	1.9	2.6
Biological/agricultural sciences .....	7.4	6.8	5.9	5.5	7.4	6.8	7.7	7.3	7.1	5.9	6.8	6.3	7.9	6.3	9.2
Mathematics/statistics .....	0.8	0.8	0.8	0.5	0.5	0.3	0.6	0.8	0.6	0.9	1.0	1.0	0.8	1.0	1.1
Computer sciences .....	6.5	3.2	3.1	3.9	3.1	4.7	5.7	6.8	7.3	7.1	5.2	4.6	4.5	2.7	3.1
Social/behavioral sciences .....	9.3	9.7	10.0	7.3	9.8	7.8	8.0	6.9	7.7	7.6	7.9	8.2	8.7	9.0	11.3
Engineering .....	20.7	19.5	18.2	16.7	15.8	20.7	19.2	22.1	16.2	17.6	18.1	18.5	21.0	19.7	13.5
Female .....	31.7	29.4	28.3	26.3	28.2	31.0	31.5	28.7	27.6	28.4	30.7	30.5	31.7	30.7	32.5
Physical sciences .....	1.1	1.0	1.3	1.3	1.1	1.2	1.2	0.8	1.2	1.3	1.5	1.2	1.3	1.5	1.6
Biological/agricultural sciences .....	7.0	6.6	5.6	6.7	6.5	8.7	10.3	9.4	6.9	8.2	9.2	9.2	10.4	8.4	10.1
Mathematics/statistics .....	0.5	0.3	0.4	0.2	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.7	0.7	0.8	0.7
Computer sciences .....	3.1	2.2	1.6	1.9	1.1	1.5	1.5	1.4	1.5	1.4	0.6	0.4	0.6	0.2	0.1
Social/behavioral sciences .....	14.0	14.9	15.2	12.5	14.7	15.8	14.2	13.8	15.3	14.3	16.7	16.4	15.6	17.3	17.9
Engineering .....	6.0	4.4	4.2	3.7	4.4	3.3	3.9	2.9	2.2	2.7	2.2	2.6	3.1	2.5	2.1
Other Latino .....	NA	NA	NA	NA	38.0	39.5	38.2	37.2	35.2	36.6	35.4	37.6	38.3	34.3	36.7
Physical sciences .....	NA	NA	NA	NA	2.0	1.4	1.8	1.3	1.3	1.4	1.6	1.7	1.9	1.4	1.8
Biological/agricultural sciences .....	NA	NA	NA	NA	9.5	10.9	9.4	7.6	7.6	7.9	7.8	8.4	9.1	8.7	10.0
Mathematics/statistics .....	NA	NA	NA	NA	0.2	0.5	0.4	0.4	0.3	0.4	0.7	0.6	0.9	0.6	0.6
Computer sciences .....	NA	NA	NA	NA	2.2	3.5	4.4	5.0	5.7	4.4	2.5	2.4	1.8	1.3	1.3
Social/behavioral sciences .....	NA	NA	NA	NA	13.1	12.7	11.9	13.1	12.7	13.4	13.9	14.6	14.4	13.9	15.4
Engineering .....	NA	NA	NA	NA	11.0	10.5	10.3	9.8	7.6	9.1	8.9	9.9	10.2	8.4	7.6
Male .....	NA	NA	NA	NA	40.4	44.5	43.9	45.4	43.9	45.5	42.2	43.8	45.1	39.8	40.1
Physical sciences .....	NA	NA	NA	NA	1.8	2.0	2.2	1.9	1.8	2.1	2.0	2.1	2.7	1.5	1.9
Biological/agricultural sciences .....	NA	NA	NA	NA	8.7	8.3	7.9	5.3	6.8	7.1	6.9	6.4	7.4	7.4	8.9
Mathematics/statistics .....	NA	NA	NA	NA	0.3	0.6	0.6	0.4	0.3	0.5	0.9	0.8	1.1	0.8	0.9
Computer sciences .....	NA	NA	NA	NA	2.9	5.8	7.2	9.4	11.2	8.7	4.8	4.7	3.4	3.3	2.8
Social/behavioral sciences .....	NA	NA	NA	NA	9.0	9.0	7.6	9.7	8.5	9.0	10.0	10.6	10.5	9.4	11.0
Engineering .....	NA	NA	NA	NA	17.7	18.8	18.4	18.7	15.3	18.1	17.6	19.2	20.0	17.4	14.6
Female .....	NA	NA	NA	NA	35.4	35.8	33.3	31.3	29.9	30.3	31.1	33.1	33.8	30.8	34.2
Physical sciences .....	NA	NA	NA	NA	2.0	1.2	1.3	1.1	0.9	0.9	1.5	1.4	1.6	1.3	1.5
Biological/agricultural sciences .....	NA	NA	NA	NA	9.9	13.2	10.6	9.4	8.5	8.3	8.3	9.7	10.4	9.5	10.6
Mathematics/statistics .....	NA	NA	NA	NA	0.2	0.5	0.3	0.3	0.3	0.3	0.6	0.5	0.7	0.5	0.6
Computer sciences .....	NA	NA	NA	NA	1.5	1.5	2.1	1.7	2.1	1.6	0.9	0.8	0.7	0.2	0.3
Social/behavioral sciences .....	NA	NA	NA	NA	17.0	16.1	15.1	15.5	15.3	16.4	16.6	17.5	17.0	16.8	18.4
Engineering .....	NA	NA	NA	NA	4.8	3.3	3.9	3.3	2.8	2.8	3.2	3.2	3.4	2.5	2.8

Appendix table 2-15

**Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1985–2006**

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
American Indian .....	29.2	31.5	33.9	31.2	31.9	30.6	34.9	35.4	33.8	35.3	32.0	34.2	33.8	32.9	34.4
Physical sciences .....	1.6	2.2	2.0	2.0	1.5	2.0	2.5	2.7	2.6	1.8	1.7	1.7	2.5	2.3	2.7
Biological/agricultural sciences .....	5.5	6.3	4.8	6.5	8.0	9.3	8.8	9.3	6.9	8.4	7.9	9.7	8.6	8.7	10.0
Mathematics/statistics .....	0.5	1.0	0.6	0.3	0.7	0.4	0.5	0.7	0.4	0.6	0.6	0.8	0.6	0.7	0.4
Computer sciences.....	5.1	2.7	2.2	3.0	2.3	3.0	5.0	4.4	4.0	4.4	2.8	2.3	2.2	1.7	1.6
Social/behavioral sciences .....	9.9	9.3	13.5	9.7	11.0	9.5	10.7	10.4	11.9	12.7	11.5	13.4	12.1	12.3	12.2
Engineering.....	6.6	10.0	10.8	9.7	8.4	6.4	7.4	7.9	8.0	7.4	7.5	6.3	7.8	7.2	7.5
Male.....	33.0	39.7	38.8	37.0	35.9	36.5	37.0	39.0	36.6	41.0	36.8	40.9	40.7	37.4	39.5
Physical sciences.....	2.6	3.6	2.5	2.4	2.0	2.4	3.2	2.9	3.6	2.3	2.2	2.1	3.2	2.6	3.2
Biological/agricultural sciences .....	7.7	7.2	5.9	6.1	9.5	9.6	6.8	7.9	4.9	6.9	5.3	8.8	8.2	8.1	7.7
Mathematics/statistics .....	1.0	0.8	0.4	0.3	0.8	0.2	0.8	0.7	0.4	0.6	0.8	0.6	0.7	0.5	0.7
Computer sciences.....	3.8	2.6	1.5	3.0	1.9	4.1	5.8	5.4	5.1	7.2	4.0	5.3	4.7	3.5	3.3
Social/behavioral sciences .....	6.4	7.2	11.2	6.7	8.2	7.5	6.9	7.0	8.2	8.3	8.6	10.0	8.7	8.8	10.4
Engineering.....	11.5	18.3	17.3	18.5	13.5	12.7	13.5	15.1	14.4	15.7	15.9	14.1	15.2	13.9	14.2
Female.....	20.8	23.4	28.3	25.3	26.5	25.1	30.7	30.0	28.4	30.6	27.2	30.7	29.4	30.1	30.8
Physical sciences.....	0.7	0.9	1.3	1.7	1.0	1.9	1.9	2.4	1.8	1.6	1.4	1.7	2.1	2.1	2.4
Biological/agricultural sciences .....	3.1	5.6	4.0	6.7	6.7	9.1	10.2	10.4	7.9	9.0	8.8	10.2	9.0	9.0	11.9
Mathematics/statistics .....	0.2	1.2	0.6	0.3	0.6	0.5	0.3	0.5	0.3	0.7	0.4	0.9	0.5	0.8	0.2
Computer sciences.....	1.9	0.7	1.0	1.5	1.6	0.7	2.3	1.3	0.9	1.1	0.5	0.4	0.5	0.6	0.4
Social/behavioral sciences .....	12.4	11.3	15.5	12.0	12.4	11.2	12.9	12.7	14.4	15.2	13.3	15.7	14.4	14.9	13.5
Engineering.....	2.5	3.7	5.9	3.1	4.2	1.7	3.1	2.7	3.1	3.0	2.8	1.8	2.9	2.7	2.4

NA = not available

NOTE: Physical sciences include physics; chemistry; astronomy; and earth, atmospheric, and ocean sciences.

SOURCE: Higher Education Research Institute, University of California at Los Angeles, Survey of the American Freshman: National Norms, special tabulations (2007).

**Freshmen intending to major in selected S&E fields, by sex and race/ethnicity: Selected years, 1985–2006**

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Male .....	61.4	59.2	57.3	57.9	56.1	54.5	55.6	56.2	55.9	55.8	55.5	54.8	55.0	53.5	53.2
Female .....	38.6	40.8	42.7	42.1	43.9	45.5	44.4	43.8	44.1	44.2	44.4	45.2	45.0	46.5	46.8
White.....	83.7	83.1	81.8	76.9	79.1	76.2	76.3	74.4	72.4	71.2	72.1	71.6	72.1	70.6	72.0
Physical sciences .....	86.3	88.3	87.6	85.0	85.7	84.7	84.6	84.9	82.5	80.8	80.6	78.6	79.7	78.8	79.0
Biological/agricultural sciences.....	84.2	82.9	81.9	77.5	79.4	76.6	77.0	75.3	71.5	68.9	68.3	65.1	65.1	64.5	65.8
Mathematics/statistics.....	89.7	89.1	89.8	84.7	86.9	83.5	82.9	82.7	82.8	81.4	80.0	78.6	80.8	79.2	78.5
Computer sciences.....	71.2	73.4	68.5	61.3	66.3	65.2	68.0	63.7	64.0	62.6	68.8	71.7	71.6	69.9	74.7
Social/behavioral sciences.....	88.2	85.6	83.5	79.0	81.3	78.6	78.5	76.9	74.3	71.9	73.0	73.2	74.1	72.3	72.3
Engineering .....	83.3	81.5	81.1	76.1	77.2	74.3	75.2	74.5	73.3	74.1	72.6	72.8	73.6	71.3	74.8
Asian American.....	4.2	4.7	4.7	5.9	5.7	7.2	8.1	9.4	9.7	9.6	10.2	11.6	11.9	11.8	12.0
Physical sciences .....	5.4	4.5	4.0	5.2	4.6	5.5	5.4	6.2	6.5	6.9	7.3	9.5	9.2	9.4	10.5
Biological/agricultural sciences.....	5.6	6.9	6.2	8.2	7.4	8.5	8.3	9.4	10.8	10.9	12.7	16.4	16.8	16.7	17.0
Mathematics/statistics.....	2.8	3.1	3.3	4.3	4.2	4.5	5.1	6.3	6.9	8.0	8.3	10.3	9.0	9.5	11.4
Computer sciences.....	1.9	4.5	3.4	6.2	5.5	9.3	11.4	16.1	14.8	14.4	11.8	10.6	9.2	9.1	8.6
Social/behavioral sciences.....	2.4	2.5	3.0	3.8	4.0	4.3	4.8	5.0	5.6	5.8	6.4	7.2	7.8	7.4	8.5
Engineering .....	5.7	6.0	6.4	6.7	6.3	8.9	10.3	10.8	11.1	10.9	12.8	13.3	13.4	13.8	12.6
Black.....	10.0	9.6	10.5	13.1	11.4	11.6	11.4	10.4	11.5	11.0	10.7	9.8	10.1	11.6	11.0
Physical sciences .....	6.9	5.3	6.1	7.0	7.2	7.2	6.5	6.3	7.4	6.6	6.5	7.0	7.8	8.6	7.6
Biological/agricultural sciences.....	7.8	7.3	9.0	10.0	9.3	10.6	10.5	9.6	11.3	11.4	11.3	10.9	11.3	12.2	11.2
Mathematics/statistics.....	6.2	6.6	5.3	8.7	7.3	10.0	10.0	8.5	6.6	5.5	6.7	5.6	5.3	6.5	6.8
Computer sciences.....	24.9	19.3	25.1	27.5	24.1	20.8	17.0	15.3	15.6	15.7	14.4	12.7	15.1	17.4	14.0
Social/behavioral sciences.....	7.7	9.2	10.3	13.0	10.3	11.4	12.2	11.9	12.1	13.3	12.1	11.3	11.4	13.3	12.7
Engineering .....	8.5	9.8	9.4	13.4	12.7	10.9	10.3	7.9	9.7	6.9	8.7	7.5	7.6	9.0	9.3
Hispanic .....	1.5	1.9	2.1	2.6	3.9	5.1	5.0	6.4	7.1	7.6	6.9	7.4	8.1	8.8	9.1
Physical sciences .....	1.1	1.3	1.7	1.8	2.6	2.8	3.6	3.8	5.3	5.1	5.3	5.3	5.5	5.4	6.5
Biological/agricultural sciences.....	1.7	2.1	2.1	2.6	3.6	4.6	5.0	6.1	7.4	7.6	7.0	7.3	8.1	8.0	9.2
Mathematics/statistics.....	0.7	1.0	1.5	1.1	1.9	2.6	3.3	5.2	4.7	6.4	6.1	6.7	6.9	7.3	7.8
Computer sciences.....	1.4	1.8	1.9	3.3	3.6	4.5	4.1	4.9	5.9	6.1	5.2	6.0	7.0	6.2	6.5
Social/behavioral sciences.....	1.7	2.1	2.4	2.8	5.0	5.9	6.1	7.5	9.1	9.2	8.7	9.0	9.5	10.8	11.6
Engineering .....	1.5	1.9	2.2	2.5	3.7	5.9	4.9	7.0	6.1	7.1	5.8	6.7	7.6	8.4	7.0
American Indian.....	0.9	1.0	1.0	1.6	1.7	2.1	3.1	2.3	1.9	1.3	1.2	1.3	2.0	1.8	2.4
Physical sciences .....	0.8	1.1	0.9	1.6	1.1	2.1	3.5	3.3	2.5	1.2	1.1	1.1	2.0	1.8	2.6
Biological/agricultural sciences.....	1.1	1.1	0.8	1.7	1.8	2.2	3.1	2.5	1.8	1.4	1.3	1.5	2.0	1.8	2.5
Mathematics/statistics.....	0.5	1.1	0.6	0.6	1.6	1.1	2.1	2.4	0.9	1.1	1.0	1.2	1.4	1.5	1.1
Computer sciences.....	1.3	1.1	0.9	2.1	1.9	2.2	3.7	1.9	1.4	1.1	1.1	1.1	2.2	1.8	2.4
Social/behavioral sciences.....	1.2	0.9	1.2	1.7	2.1	2.4	3.7	2.6	2.4	1.6	1.5	1.7	2.4	2.1	2.6
Engineering .....	0.6	1.0	1.0	1.5	1.5	1.8	2.3	2.0	1.7	1.0	1.0	0.9	1.6	1.4	2.1

Appendix table 2-16

**Freshmen intending to major in selected S&E fields, by sex and race/ethnicity: Selected years, 1985–2006**

(Percent)

Sex, race/ethnicity, and field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Unknown .....	1.6	1.9	1.9	2.6	1.9	2.5	3.3	3.9	3.8	3.3	3.2	3.3	3.4	3.1	4.0
Physical sciences .....	1.4	1.8	1.8	2.1	1.7	2.5	3.4	4.0	3.2	3.2	2.9	3.1	3.3	2.8	3.8
Biological/agricultural sciences.....	1.7	2.1	1.9	2.9	2.0	2.9	3.7	3.8	3.7	3.8	3.7	4.2	4.0	3.8	4.6
Mathematics/statistics.....	0.8	1.3	1.3	2.2	2.1	1.3	2.5	3.6	3.5	1.7	2.5	2.5	2.3	2.2	2.3
Computer sciences.....	1.0	2.2	1.6	2.3	1.6	2.2	2.9	4.0	4.1	3.4	2.8	2.0	2.4	2.5	2.9
Social/behavioral sciences.....	1.5	2.0	1.9	3.1	2.1	2.5	3.2	4.0	4.2	3.5	3.6	3.6	3.7	3.5	4.5
Engineering .....	1.9	1.8	2.0	2.3	1.6	2.5	3.2	3.6	3.3	2.9	2.6	2.6	2.8	2.4	3.1

NOTES: Physical sciences include physics; chemistry; astronomy; and earth, atmospheric, and ocean sciences. Hispanic includes three group designations from freshman norms survey: Mexican American/Chicano, Puerto Rican American, and other Latino. Detail may not add to total because students may check more than one race/ethnicity, e.g., white and Hispanic.

SOURCE: Higher Education Research Institute, University of California at Los Angeles, Survey of the American Freshman: National Norms, special tabulations (2007).

Science and Engineering Indicators 2008

Appendix table 2-17

## Foreign undergraduate student enrollment in U.S. universities, by field and selected places of origin: April 2006 and 2007

Place of origin	All fields	S&E	Agricultural sciences	Biological sciences	Computer sciences	Engineering	Mathematics	Physical sciences	Psychology	Social sciences	Non-S&E
<b>April 2006</b>											
All locations.....	245,050	70,310	400	9,800	15,660	20,110	2,150	3,010	5,420	13,760	174,740
South Korea.....	27,810	6,380	20	1,340	1,100	1,340	270	330	380	1,600	21,430
Japan.....	27,420	5,870	90	820	790	530	170	350	1,110	2,010	21,550
India.....	10,000	4,720	10	460	890	2,540	80	130	110	510	5,280
Canada.....	12,290	2,410	30	640	150	460	50	130	340	620	9,880
Nepal.....	5,240	2,160	30	460	710	480	70	130	40	250	3,090
China.....	7,880	2,150	40	270	390	580	200	80	100	480	5,730
Hong Kong.....	6,460	2,110	10	230	300	610	120	110	280	450	4,360
Taiwan.....	8,690	2,110	0	330	540	590	80	110	180	290	6,580
Saudi Arabia.....	3,750	2,100	0	60	850	1,050	10	70	10	60	1,640
Nigeria.....	4,110	2,000	0	420	350	790	30	110	50	260	2,120
Malaysia.....	3,720	1,940	10	170	230	1,140	70	60	140	130	1,780
Indonesia.....	5,770	1,780	20	140	500	780	50	70	70	160	3,990
Kenya.....	5,400	1,600	10	350	520	300	50	100	80	190	3,810
Mexico.....	5,890	1,450	10	110	250	660	30	40	150	200	4,450
Pakistan.....	2,830	1,240	0	70	450	450	30	10	30	200	1,600
Turkey.....	3,580	1,220	0	50	340	340	30	20	60	390	2,350
Vietnam.....	3,720	1,120	0	170	370	290	50	110	10	120	2,610
Jamaica.....	3,780	1,110	0	220	320	210	30	60	110	150	2,670
Trinidad and Tobago.....	2,760	1,080	10	220	210	260	40	60	140	130	1,680
Singapore.....	1,950	820	0	90	70	330	20	40	70	210	1,120
Other locations.....	92,000	24,970	110	3,190	6,340	6,370	680	900	1,990	5,380	67,040
<b>April 2007</b>											
All locations.....	253,303	70,680	474	10,272	13,895	20,924	2,195	3,299	5,280	14,341	182,623
South Korea.....	31,527	7,044	21	1,465	1,012	1,567	301	420	438	1,820	24,483
Japan.....	24,547	5,106	95	740	605	487	146	329	867	1,837	19,441
India.....	10,603	4,974	5	516	944	2,594	79	138	116	582	5,629
Saudi Arabia.....	5,358	2,976	0	97	1,050	1,642	13	95	12	67	2,382
China.....	10,924	2,938	77	390	480	757	280	145	140	669	7,986
Nepal.....	6,582	2,611	47	581	751	639	75	198	48	272	3,971
Canada.....	12,441	2,458	28	647	142	479	45	123	345	649	9,983
Hong Kong.....	6,519	1,925	6	204	203	530	110	118	277	477	4,594
Nigeria.....	4,000	1,922	3	423	275	787	27	107	44	256	2,078
Taiwan.....	8,217	1,902	2	319	388	555	64	101	158	315	6,315
Malaysia.....	3,484	1,732	12	182	155	968	92	63	146	114	1,752
Indonesia.....	5,364	1,517	22	123	353	724	39	61	53	142	3,847
Mexico.....	6,059	1,500	6	115	217	710	32	48	139	233	4,559
Kenya.....	5,213	1,422	8	317	420	298	43	90	71	175	3,791
Turkey.....	3,677	1,340	2	52	354	355	39	13	66	459	2,337
Vietnam.....	5,196	1,333	4	192	448	341	50	135	22	141	3,863
Jamaica.....	3,775	1,050	1	230	288	205	38	55	112	121	2,725
Pakistan.....	2,553	1,028	0	69	272	418	20	17	25	207	1,525
Trinidad and Tobago.....	2,620	974	16	218	148	257	39	58	126	112	1,646
Singapore.....	1,948	770	4	85	54	306	23	33	71	194	1,178
Other locations.....	92,696	24,158	115	3,307	5,336	6,305	640	952	2,004	5,499	68,538

NOTE: Numbers rounded to nearest 10.

SOURCE: Bureau of Citizenship and Immigration Services, Student and Exchange Visitor Information System database, special tabulations (2007).

Appendix table 2-18

**Undergraduate enrollment in engineering and engineering technology programs: Selected years, 1985–2005**

Enrollment level	1985	1987	1989	1991	1993	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Engineering</b>															
Students.....	420,864	392,198	378,277	379,977	375,944	363,315	365,358	366,991	361,395	390,803	409,557	421,178	421,791	419,387	409,326
Full time.....	384,191	356,998	338,529	339,397	337,817	325,489	326,458	329,657	323,713	353,118	367,954	383,109	384,612	384,792	375,112
Freshman.....	103,225	95,453	95,420	93,002	88,875	86,299	90,882	94,909	93,951	101,773	106,825	107,086	103,834	103,361	100,411
Sophomore.....	79,627	73,317	71,267	71,257	69,974	67,981	67,879	69,608	69,941	76,706	78,348	81,854	82,542	82,002	79,664
Junior.....	84,875	77,085	70,483	73,516	73,449	68,894	68,812	67,638	66,975	74,055	76,938	79,806	80,703	81,621	78,891
Senior or fifth year.....	116,464	111,143	101,359	101,622	105,519	102,315	98,885	97,502	92,846	100,584	105,843	114,363	117,533	117,808	116,146
Part time.....	36,673	35,200	39,748	40,580	38,127	37,826	38,900	37,334	37,682	37,685	41,603	38,069	37,179	34,595	34,214
<b>Engineering technologies</b>															
Students.....	123,571	128,501	127,687	127,135	106,976	105,809	108,459	108,993	108,754	107,165	108,886	112,654	110,250	107,931	97,371
Full time.....	83,038	80,600	76,179	75,340	65,581	63,929	67,864	68,545	69,173	66,771	71,147	72,704	72,040	69,584	62,560
First year.....	34,389	32,685	32,225	31,302	24,824	25,665	30,227	28,367	29,490	29,531	31,588	30,252	28,033	27,938	25,388
Second year.....	23,293	22,906	21,627	20,815	19,962	18,863	19,106	18,426	17,326	18,318	19,171	20,360	21,009	19,364	17,465
Other years associated.....	466	1,404	1,810	2,221	2,564	2,007	3,442	6,080	5,289	2,474	2,207	2,786	3,720	2,827	1,822
Bachelor's of engineering technologies third and later years.....	24,890	23,605	20,517	21,002	18,231	17,394	15,089	15,672	17,068	16,448	18,181	19,306	19,278	19,455	17,885
Part time.....	40,533	47,901	51,508	51,795	41,395	41,880	40,595	40,448	39,581	40,394	37,739	39,950	38,210	38,347	34,811

SOURCE: Engineering Workforce Commission, Engineering & Technology Enrollments, Fall 2005, American Association of Engineering Societies (2006).

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Appendix table 2-19  
**Engineering enrollment, by enrollment level and attendance: 1985–2005**

Year	Undergraduate						Graduate					
	All enrolled		Full time		Part time		All enrolled		Full time		Part time	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1985.....	420,864	100.0	384,191	91.3	36,673	8.7	95,505	100.0	60,641	63.5	34,864	36.5
1986.....	407,657	100.0	369,520	90.6	38,137	9.4	107,196	100.0	67,333	62.8	39,863	37.2
1987.....	392,198	100.0	356,998	91.0	35,200	9.0	110,778	100.0	69,343	62.6	41,435	37.4
1988.....	385,412	100.0	346,169	89.8	39,243	10.2	112,007	100.0	69,226	61.8	42,781	38.2
1989.....	378,277	100.0	338,529	89.5	39,748	10.5	114,048	100.0	68,967	60.5	45,081	39.5
1990.....	380,287	100.0	338,842	89.1	41,445	10.9	117,834	100.0	72,456	61.5	45,378	38.5
1991.....	379,977	100.0	339,397	89.3	40,580	10.7	123,497	100.0	74,568	60.4	48,929	39.6
1992.....	382,525	100.0	344,126	90.0	38,399	10.0	128,854	100.0	78,651	61.0	50,203	39.0
1993.....	375,944	100.0	337,817	89.9	38,127	10.1	128,081	100.0	78,885	61.6	49,196	38.4
1994.....	367,298	100.0	328,463	89.4	38,835	10.6	122,242	100.0	74,596	61.0	47,646	39.0
1995.....	363,315	100.0	325,489	89.6	37,826	10.4	118,506	100.0	72,215	60.9	46,291	39.1
1996.....	356,177	100.0	317,772	89.2	38,405	10.8	113,063	100.0	70,129	62.0	42,934	38.0
1997.....	365,358	100.0	326,458	89.4	38,900	10.6	112,257	100.0	70,447	62.8	41,810	37.2
1998.....	366,991	100.0	329,657	89.8	37,334	10.2	110,355	100.0	69,519	63.0	40,836	37.0
1999.....	361,395	100.0	323,713	89.6	37,682	10.4	105,006	100.0	67,634	64.4	37,372	35.6
2000.....	390,803	100.0	353,118	90.4	37,685	9.6	118,257	100.0	81,821	69.2	36,436	30.8
2001.....	409,557	100.0	367,954	89.8	41,603	10.2	128,764	100.0	87,187	67.7	41,577	32.3
2002.....	421,178	100.0	383,109	91.0	38,069	9.0	140,240	100.0	97,752	69.7	42,488	30.3
2003.....	421,791	100.0	384,612	91.2	37,179	8.8	147,940	100.0	103,223	69.8	44,717	30.2
2004.....	419,387	100.0	384,792	91.8	34,595	8.2	145,278	100.0	100,756	69.4	44,522	30.6
2005.....	409,326	100.0	375,112	91.6	34,214	8.4	139,755	100.0	97,676	69.9	42,079	30.1

SOURCE: Engineering Workforce Commission, Engineering & Technology Enrollments, Fall 2005, American Association of Engineering Societies (2006).



**S&E graduate enrollment, by field and sex: Selected years, 1985–2005**

Field/sex	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Both sexes</b>														
S&E.....	404,021	421,497	434,478	471,212	504,304	499,640	487,208	493,256	493,311	509,620	540,417	567,170	574,937	583,226
Engineering.....	96,018	103,983	104,065	113,535	116,872	107,201	101,148	101,691	104,112	109,493	119,668	127,377	123,566	120,473
Aerospace.....	2,538	3,015	3,524	4,120	3,940	3,343	3,083	3,349	3,407	3,451	3,685	4,048	4,089	4,170
Chemical.....	7,177	7,141	6,482	7,157	7,554	7,452	7,288	6,883	7,056	6,913	7,414	7,516	7,452	7,173
Civil.....	14,902	14,682	14,909	17,398	19,583	19,218	17,193	16,226	16,451	16,665	17,713	18,890	18,561	18,050
Electrical.....	28,203	31,399	33,257	35,111	35,290	30,861	30,787	31,822	33,611	36,100	39,948	41,763	38,995	37,444
Industrial.....	10,525	12,353	11,333	12,996	13,905	13,475	11,957	11,803	12,119	12,940	14,033	14,313	13,852	13,614
Materials.....	3,959	4,397	4,635	5,203	5,410	4,956	4,688	4,481	4,377	4,721	4,992	5,131	5,059	5,160
Mechanical.....	14,157	16,366	16,265	17,730	18,477	16,363	15,045	14,956	15,235	15,852	17,139	18,393	17,852	17,387
Other.....	14,557	14,630	13,660	13,820	12,713	11,533	11,107	12,171	11,856	12,851	14,744	17,323	17,706	17,475
Science.....	308,003	317,514	330,413	357,677	387,432	392,439	386,060	391,565	389,199	400,127	420,749	439,793	451,371	462,753
Natural sciences.....	197,318	203,637	210,734	225,574	244,098	249,363	246,849	254,854	255,406	263,978	279,369	292,453	299,574	305,495
Agricultural sciences.....	11,846	11,405	11,461	11,766	12,305	12,768	12,823	12,312	12,023	12,235	12,698	13,197	13,445	13,123
Biological sciences.....	45,709	46,317	48,449	51,365	55,950	58,344	56,705	56,959	56,282	57,639	61,088	64,701	66,548	68,449
Earth, atmospheric, and ocean sciences.....	15,414	14,357	13,630	14,466	15,721	15,716	14,548	14,083	13,941	13,841	14,240	14,620	15,131	14,827
Atmospheric sciences.....	964	952	912	968	1,112	1,072	1,092	913	963	924	1,036	1,150	1,086	1,146
Earth sciences.....	10,288	8,976	8,032	7,544	7,759	7,582	6,959	6,637	6,596	6,544	6,712	6,889	7,358	7,212
Oceanography.....	2,081	2,135	2,214	2,395	2,627	2,723	2,479	2,624	2,668	2,585	2,618	2,695	2,801	2,760
Other geosciences.....	2,081	2,294	2,472	3,559	4,223	4,339	4,018	3,909	3,714	3,788	3,874	3,886	3,886	3,709
Mathematics/computer sciences.....	47,332	50,559	51,729	54,633	56,213	51,962	52,710	58,735	63,000	68,847	73,432	73,161	69,947	68,256
Computer sciences.....	29,769	32,051	32,482	34,681	36,213	33,458	35,991	42,478	47,350	52,196	55,269	53,696	50,016	48,046
Mathematics/statistics.....	17,563	18,508	19,247	19,952	20,000	18,504	16,719	16,257	15,650	16,651	18,163	19,465	19,931	20,210
Medical/other life sciences.....	46,030	48,258	51,836	58,620	68,581	77,174	79,578	82,074	79,775	80,378	85,570	92,476	98,742	104,444
Medical sciences.....	13,276	14,256	14,914	16,702	19,224	20,659	20,895	23,479	22,815	24,012	26,841	29,440	29,807	31,410
Other life sciences.....	32,754	34,002	36,922	41,918	49,357	56,515	58,683	58,595	56,960	56,366	58,729	63,036	68,935	73,034
Physical sciences.....	30,987	32,741	33,629	34,724	35,328	33,399	31,105	30,691	30,385	31,038	32,341	34,298	35,761	36,396
Astronomy.....	671	719	789	829	880	912	778	832	888	916	990	1,080	1,119	1,191
Chemistry.....	18,305	18,827	18,828	19,407	20,131	19,570	18,774	18,416	18,105	18,366	19,045	20,049	20,776	21,122
Physics.....	11,672	12,807	13,657	14,081	13,841	12,425	11,147	10,869	10,841	11,248	11,701	12,555	13,298	13,472
Other physical sciences.....	339	388	355	407	476	492	406	574	551	508	605	614	568	611
Social/behavioral sciences.....	110,685	113,877	119,679	132,103	143,334	143,076	139,211	136,711	133,793	136,149	141,380	147,340	151,797	157,258
Psychology.....	40,721	42,612	45,528	51,343	54,557	53,641	53,126	51,727	50,466	50,467	51,165	52,211	54,218	57,412
Social sciences.....	69,964	71,265	74,151	80,760	88,777	89,435	86,085	84,984	83,327	85,682	90,215	95,129	97,579	99,846
Anthropology.....	5,631	5,835	6,128	6,731	7,361	7,693	7,560	7,633	7,626	7,491	7,481	7,789	7,826	7,706
Economics.....	14,698	14,201	14,415	15,071	15,629	15,011	13,140	12,576	12,827	13,569	14,196	14,634	14,513	13,923
History of science.....	272	294	304	337	369	401	443	557	532	571	663	737	994	965
Linguistics.....	3,055	3,282	3,286	3,425	3,321	3,194	3,068	2,799	2,674	2,744	2,875	3,028	2,941	3,187
Political science/public administration.....	26,621	27,429	29,194	31,707	35,076	34,298	32,083	31,372	31,131	31,805	34,934	36,880	39,270	41,106
Sociology.....	7,620	7,968	8,393	9,292	10,360	10,505	10,361	9,707	9,397	9,620	9,665	9,900	9,713	9,885
Other social sciences.....	12,067	12,256	12,431	14,197	16,661	18,333	19,430	20,340	19,140	19,882	20,401	22,161	22,322	23,074

**S&E graduate enrollment, by field and sex: Selected years, 1985–2005**

Field/sex	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Male</b>														
S&E.....	258,216	267,941	268,725	284,897	294,476	279,305	264,497	262,675	262,109	271,157	287,061	298,694	296,847	295,547
Engineering.....	84,935	91,012	90,457	97,837	99,184	89,188	82,428	81,804	83,366	87,236	94,701	99,790	96,294	93,595
Aerospace.....	2,375	2,791	3,281	3,793	3,583	2,992	2,712	2,926	2,938	2,966	3,169	3,445	3,489	3,563
Chemical.....	6,170	5,979	5,445	5,897	6,050	5,885	5,568	5,150	5,181	5,084	5,419	5,416	5,346	5,094
Civil.....	12,755	12,579	12,474	14,296	15,725	14,986	13,029	12,069	12,174	12,162	12,808	13,492	13,120	12,655
Electrical.....	25,768	28,301	29,742	31,260	30,977	26,707	26,237	26,689	28,075	29,888	32,678	33,969	31,794	30,656
Industrial.....	8,743	10,085	9,180	10,594	11,260	10,652	9,301	9,144	9,406	10,132	10,957	11,047	10,622	10,327
Materials.....	3,352	3,659	3,820	4,208	4,373	3,882	3,571	3,397	3,336	3,548	3,741	3,800	3,738	3,812
Mechanical.....	13,146	15,070	14,867	16,219	16,703	14,686	13,266	13,168	13,403	13,908	15,056	16,039	15,396	14,977
Other.....	12,626	12,548	11,648	11,570	10,513	9,398	8,744	9,261	8,853	9,548	10,873	12,582	12,789	12,511
Science.....	173,281	176,929	178,268	187,060	195,292	190,117	182,069	180,871	178,743	183,921	192,360	198,904	200,553	201,952
Natural sciences.....	115,931	119,402	119,883	124,821	130,391	127,014	122,954	124,771	125,060	129,753	136,353	141,081	141,024	141,662
Agricultural sciences.....	8,769	8,367	8,224	8,098	8,058	8,169	7,497	7,263	6,935	6,892	7,045	7,171	7,187	6,921
Biological sciences.....	25,932	26,013	26,348	27,372	29,081	29,629	28,229	27,338	26,475	26,590	27,677	28,818	29,270	29,946
Earth, atmospheric, and ocean sciences.....	11,489	10,581	9,776	10,015	10,695	10,282	9,132	8,358	8,188	7,949	7,993	8,082	8,199	7,939
Atmospheric sciences.....	807	784	734	778	887	835	829	671	695	626	703	776	723	758
Earth sciences.....	7,806	6,819	6,078	5,546	5,665	5,299	4,663	4,237	4,141	4,061	4,099	4,125	4,299	4,169
Oceanography.....	1,471	1,497	1,484	1,543	1,611	1,616	1,424	1,402	1,401	1,330	1,309	1,303	1,292	1,279
Other geosciences.....	1,405	1,481	1,480	2,148	2,532	2,532	2,216	2,048	1,951	1,932	1,882	1,878	1,885	1,733
Mathematics/computer sciences.....	34,417	36,948	37,756	40,045	41,144	37,571	36,961	40,147	43,140	47,275	50,521	51,056	49,173	48,758
Computer sciences.....	22,208	24,036	24,494	26,391	27,782	25,325	26,110	29,933	33,270	36,894	39,244	38,880	36,739	35,985
Mathematics/statistics.....	12,209	12,912	13,262	13,654	13,362	12,246	10,851	10,214	9,870	10,381	11,277	12,176	12,434	12,773
Medical/other life sciences.....	10,846	11,869	11,955	13,135	15,291	17,049	18,878	19,889	19,052	19,345	20,842	22,434	22,734	23,428
Medical sciences.....	6,634	7,388	7,172	8,044	8,967	9,355	9,626	10,303	9,748	10,136	11,045	11,917	11,533	11,714
Other life sciences.....	4,212	4,481	4,783	5,091	6,324	7,694	9,252	9,586	9,304	9,209	9,797	10,517	11,201	11,714
Physical sciences.....	24,478	25,624	25,824	26,156	26,122	24,314	22,257	21,776	21,270	21,702	22,275	23,520	24,461	24,670
Astronomy.....	563	601	649	657	682	689	570	607	621	651	688	735	764	797
Chemistry.....	13,516	13,649	13,158	13,145	13,279	12,742	12,052	11,799	11,349	11,511	11,720	12,210	12,544	12,699
Physics.....	10,175	11,134	11,789	12,101	11,865	10,590	9,403	8,993	8,931	9,206	9,500	10,189	10,797	10,803
Other physical sciences.....	224	240	228	253	296	293	232	377	369	334	367	386	356	371
Social/behavioral sciences.....	57,350	57,527	58,385	62,239	64,901	63,103	59,115	56,100	53,683	54,168	56,007	57,823	59,529	60,290
Psychology.....	15,597	15,683	15,673	16,556	16,567	15,877	15,507	14,456	13,594	13,149	13,437	13,395	13,992	13,993
Social sciences.....	41,753	41,844	42,712	45,683	48,334	47,226	43,608	41,644	40,089	41,019	42,570	44,428	45,537	46,297
Anthropology.....	2,510	2,482	2,548	2,778	2,969	3,140	3,059	2,989	2,941	2,929	2,864	2,919	2,853	2,782
Economics.....	11,134	10,683	10,591	10,876	11,023	10,352	8,940	8,362	8,273	8,739	9,084	9,226	9,174	8,796
History of science.....	180	198	192	205	227	262	281	345	313	327	362	425	580	525
Linguistics.....	1,198	1,305	1,334	1,512	1,301	1,194	1,051	966	930	951	984	1,023	1,014	1,132
Political science/public administration.....	16,276	16,563	17,024	17,971	19,320	18,348	16,679	15,799	15,204	15,304	16,315	17,038	18,292	19,020
Sociology.....	3,583	3,616	3,828	4,191	4,280	4,168	3,968	3,498	3,354	3,388	3,444	3,493	3,372	3,540
Other social sciences.....	6,872	6,997	7,195	8,150	9,214	9,762	9,630	9,685	9,074	9,381	9,517	10,304	10,252	10,502

**S&E graduate enrollment, by field and sex: Selected years, 1985–2005**

Field/sex	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Female</b>														
S&E.....	145,805	153,556	165,753	186,315	209,828	220,335	222,711	230,581	231,202	238,463	253,356	268,476	278,090	287,679
Engineering.....	11,083	12,971	13,608	15,698	17,688	18,013	18,720	19,887	20,746	22,257	24,967	27,587	27,272	26,878
Aerospace.....	163	224	243	327	357	351	371	423	469	485	516	603	600	607
Chemical.....	1,007	1,162	1,037	1,260	1,504	1,567	1,720	1,733	1,875	1,829	1,995	2,100	2,106	2,079
Civil.....	2,147	2,103	2,435	3,102	3,858	4,232	4,164	4,157	4,277	4,503	4,905	5,398	5,441	5,395
Electrical.....	2,435	3,098	3,515	3,851	4,313	4,154	4,550	5,133	5,536	6,212	7,270	7,794	7,201	6,788
Industrial.....	1,782	2,268	2,153	2,402	2,645	2,823	2,656	2,659	2,713	2,808	3,076	3,266	3,230	3,287
Materials.....	607	738	815	995	1,037	1,074	1,117	1,084	1,041	1,173	1,251	1,331	1,321	1,348
Mechanical.....	1,011	1,296	1,398	1,511	1,774	1,677	1,779	1,788	1,832	1,944	2,083	2,354	2,456	2,410
Other.....	1,931	2,082	2,012	2,250	2,200	2,135	2,363	2,910	3,003	3,303	3,871	4,741	4,917	4,964
Science.....	134,722	140,585	152,145	170,617	192,140	202,322	203,991	210,694	210,456	216,206	228,389	240,889	250,818	260,801
Natural sciences.....	81,387	84,235	90,851	100,753	113,707	122,349	123,895	130,083	130,346	134,225	143,016	151,372	158,550	163,833
Agricultural sciences.....	3,077	3,038	3,237	3,668	4,247	4,599	4,706	5,049	5,088	5,343	5,653	6,026	6,258	6,202
Biological sciences.....	19,777	20,304	22,101	23,993	26,869	28,715	28,476	29,621	29,807	31,049	33,411	35,883	37,278	38,503
Earth, atmospheric, and ocean sciences.....	3,925	3,776	3,854	4,451	5,026	5,434	5,416	5,725	5,753	5,892	6,247	6,538	6,932	6,888
Atmospheric sciences.....	157	168	178	190	225	237	263	242	268	298	333	374	363	388
Earth sciences.....	2,482	2,157	1,954	1,998	2,094	2,283	2,296	2,400	2,455	2,483	2,613	2,764	3,059	3,043
Oceanography.....	610	638	730	852	1,016	1,107	1,055	1,222	1,267	1,255	1,309	1,392	1,509	1,481
Other geosciences.....	676	813	992	1,411	1,691	1,807	1,802	1,861	1,763	1,856	1,992	2,008	2,001	1,976
Mathematics/computer sciences.....	12,915	13,611	13,973	14,588	15,069	14,391	15,749	18,588	19,860	21,572	22,911	22,105	20,774	19,498
Computer sciences.....	7,561	8,015	7,988	8,290	8,431	8,133	9,881	12,545	14,080	15,302	16,025	14,816	13,277	12,061
Mathematics/statistics.....	5,354	5,596	5,985	6,298	6,638	6,258	5,868	6,043	5,780	6,270	6,886	7,289	7,497	7,437
Medical/other life sciences.....	35,184	36,389	39,881	45,485	53,290	60,125	60,700	62,185	60,723	61,033	64,728	70,042	76,008	81,016
Medical sciences.....	6,642	6,868	7,742	8,658	10,257	11,304	11,269	13,176	13,067	13,876	15,796	17,523	18,274	19,696
Other life sciences.....	28,542	29,521	32,139	36,827	43,033	48,821	49,431	49,009	47,656	47,157	48,932	52,519	57,734	61,320
Physical sciences.....	6,509	7,117	7,805	8,568	9,206	9,085	8,848	8,915	9,115	9,336	10,066	10,778	11,300	11,726
Astronomy.....	108	118	140	172	198	223	208	225	267	265	302	345	355	394
Chemistry.....	4,789	5,178	5,670	6,262	6,852	6,828	6,722	6,617	6,756	6,855	7,325	7,839	8,232	8,423
Physics.....	1,497	1,673	1,868	1,980	1,976	1,835	1,744	1,876	1,910	2,042	2,201	2,366	2,501	2,669
Other physical sciences.....	115	148	127	154	180	199	174	197	182	174	238	228	212	240
Social/behavioral sciences.....	53,335	56,350	61,294	69,864	78,433	79,973	80,096	80,611	80,110	81,981	85,373	89,517	92,268	96,968
Psychology.....	25,124	26,929	29,855	34,787	37,990	37,764	37,619	37,271	36,872	37,318	37,728	38,816	40,226	43,419
Social sciences.....	28,211	29,421	31,439	35,077	40,443	42,209	42,477	43,340	43,238	44,663	47,645	50,701	52,042	53,549
Anthropology.....	3,121	3,353	3,580	3,953	4,392	4,553	4,501	4,644	4,685	4,562	4,617	4,870	4,973	4,924
Economics.....	3,564	3,518	3,824	4,195	4,606	4,659	4,200	4,214	4,554	4,830	5,112	5,408	5,339	5,127
History of science.....	92	96	112	132	142	139	162	212	219	244	301	312	414	440
Linguistics.....	1,857	1,977	1,952	1,913	2,020	2,000	2,017	1,833	1,744	1,793	1,891	2,005	1,927	2,055
Political science/public administration.....	10,345	10,866	12,170	13,736	15,756	15,950	15,404	15,573	15,927	16,501	18,619	19,842	20,978	22,086
Sociology.....	4,037	4,352	4,565	5,101	6,080	6,337	6,393	6,209	6,043	6,232	6,221	6,407	6,341	6,345
Other social sciences.....	5,195	5,259	5,236	6,047	7,447	8,571	9,800	10,655	10,066	10,501	10,884	11,857	12,070	12,572

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-21

## First-time full-time S&amp;E graduate students, by field: Selected years, 1985–2005

Field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
S&E .....	80,678	80,843	84,532	93,147	92,748	89,482	89,177	92,214	94,340	98,112	104,184	107,715	106,580	110,401
Engineering .....	18,277	19,440	19,831	22,542	20,349	18,076	18,848	20,513	22,191	23,306	24,607	24,429	22,025	22,373
Aerospace .....	722	920	982	1,125	963	650	735	727	775	767	712	845	834	804
Chemical .....	1,546	1,372	1,343	1,527	1,532	1,421	1,467	1,491	1,595	1,541	1,616	1,600	1,392	1,293
Civil .....	3,536	3,221	3,404	4,210	4,019	3,825	3,792	3,726	3,840	3,820	4,107	4,363	4,175	4,057
Electrical .....	4,892	5,462	5,768	6,231	5,484	5,002	5,548	6,369	7,195	7,882	8,221	7,834	6,633	6,987
Industrial .....	1,195	1,506	1,754	2,056	1,663	1,541	1,549	1,851	2,005	2,216	2,238	2,029	1,724	1,674
Materials .....	806	881	920	1,012	892	822	870	892	1,005	975	1,044	958	926	992
Mechanical .....	3,030	3,270	3,306	3,771	3,514	2,832	2,829	3,119	3,269	3,583	3,709	3,476	3,129	3,225
Other .....	2,550	2,808	2,354	2,610	2,282	1,983	2,058	2,338	2,507	2,522	2,960	3,324	3,212	3,341
Science .....	62,401	61,403	64,701	70,605	72,399	71,406	70,329	71,701	72,149	74,806	79,577	83,286	84,555	88,028
Natural sciences .....	40,397	39,954	41,671	44,725	45,309	46,055	45,825	48,677	49,626	51,215	54,124	55,791	56,676	58,262
Agricultural sciences .....	2,525	2,281	2,420	2,495	2,363	2,290	2,157	2,253	2,335	2,338	2,320	2,424	2,316	2,260
Biological sciences .....	9,713	9,621	9,882	10,570	11,017	11,356	11,053	10,959	10,955	11,608	12,127	12,719	12,796	12,896
Earth, atmospheric, and ocean sciences .....	3,218	2,566	2,636	2,908	2,985	2,801	2,681	2,746	2,649	2,794	3,085	3,104	2,926	2,777
Atmospheric sciences .....	286	256	211	224	214	198	224	203	222	205	213	268	228	228
Earth sciences .....	2,133	1,554	1,451	1,503	1,505	1,423	1,339	1,296	1,230	1,383	1,437	1,412	1,336	1,327
Oceanography .....	392	367	440	474	488	420	410	474	479	511	533	567	534	463
Other geosciences .....	407	389	534	707	778	760	708	773	718	695	902	857	828	759
Mathematics/computer sciences .....	8,678	9,006	9,716	9,920	8,786	8,361	8,320	9,948	11,850	12,763	12,955	12,319	12,035	12,454
Computer sciences .....	4,703	5,092	5,487	5,570	4,742	4,783	5,018	6,677	8,431	9,077	9,037	8,134	7,783	8,258
Mathematics/statistics .....	3,975	3,914	4,229	4,350	4,044	3,578	3,302	3,271	3,419	3,686	3,918	4,185	4,252	4,196
Medical/other life sciences .....	9,616	9,702	10,164	11,724	13,468	15,118	15,577	16,767	16,008	15,701	17,357	18,384	20,000	21,218
Medical sciences .....	3,435	3,635	3,838	4,024	4,419	4,743	4,531	5,037	5,127	5,361	5,780	6,034	6,546	6,704
Other life sciences .....	6,181	6,067	6,326	7,700	9,049	10,375	11,046	11,730	10,881	10,340	11,577	12,350	13,454	14,514
Physical sciences .....	6,647	6,778	6,853	7,108	6,690	6,129	6,037	6,004	5,829	6,011	6,280	6,841	6,603	6,657
Astronomy .....	155	171	160	153	153	147	125	171	183	193	194	225	210	190
Chemistry .....	3,882	3,764	3,861	4,088	3,842	3,708	3,758	3,672	3,482	3,651	3,746	3,983	3,862	3,904
Physics .....	2,550	2,772	2,784	2,820	2,642	2,188	2,074	2,074	2,101	2,102	2,231	2,543	2,442	2,458
Other physical sciences .....	60	71	48	47	53	86	80	87	63	65	109	90	89	105
Social/behavioral sciences .....	22,004	21,449	23,030	25,880	27,090	25,351	24,504	23,024	22,523	23,591	25,453	27,495	27,879	29,766
Psychology .....	7,597	7,859	8,516	9,457	9,686	9,241	8,800	8,305	7,545	7,691	8,420	8,858	9,478	10,377
Social sciences .....	14,407	13,590	14,514	16,423	17,404	16,110	15,704	14,719	14,978	15,900	17,033	18,637	18,401	19,389
Anthropology .....	986	988	1,055	1,271	1,309	1,247	1,196	1,193	1,157	1,119	1,177	1,279	1,187	1,257
Economics .....	3,337	2,988	3,128	3,516	3,407	3,097	2,835	2,837	2,963	3,058	3,418	3,457	3,209	3,233
History of science .....	53	65	67	69	69	70	79	91	78	72	97	107	107	138
Linguistics .....	685	648	655	675	611	594	579	422	454	495	466	588	570	633
Political science/public administration .....	5,130	4,639	5,213	6,121	6,567	5,916	5,264	4,837	5,142	5,562	6,241	6,950	7,348	7,810
Sociology .....	1,380	1,554	1,665	1,710	1,932	1,650	1,696	1,451	1,464	1,591	1,690	1,722	1,537	1,677
Other social sciences .....	2,836	2,708	2,731	3,061	3,509	3,536	4,055	3,888	3,720	4,003	3,944	4,534	4,443	4,641

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.



**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>U.S. citizen/permanent resident</b>														
<b>S&amp;E</b>	324,081	329,350	332,503	358,025	393,985	396,755	383,327	377,802	364,954	368,840	387,532	412,282	424,147	436,530
Engineering	67,187	70,594	67,365	72,181	77,577	71,717	64,642	60,188	56,711	56,971	61,362	67,393	66,456	66,638
Aerospace	1,729	2,144	2,431	2,892	2,739	2,157	1,765	1,817	1,894	1,805	1,999	2,361	2,401	2,528
Chemical	4,747	4,643	3,681	3,956	4,369	4,483	4,424	3,869	3,726	3,418	3,701	3,753	3,768	3,690
Civil	9,515	9,095	9,074	10,854	13,299	13,559	12,090	10,801	10,306	10,072	10,553	11,458	11,436	11,417
Electrical	19,760	21,282	22,109	22,297	22,839	19,585	18,032	16,517	15,315	15,534	16,579	18,118	16,878	16,706
Industrial	8,578	9,734	8,392	9,190	10,428	10,123	8,616	8,073	7,574	7,607	8,318	8,845	8,783	9,065
Materials	2,590	2,704	2,687	3,027	3,237	3,029	2,721	2,438	2,265	2,385	2,482	2,546	2,501	2,518
Mechanical	9,370	10,855	10,450	11,056	12,199	10,905	9,351	8,760	8,097	8,183	8,604	9,643	9,766	9,744
Other	10,898	10,137	8,541	8,909	8,467	7,876	7,643	7,913	7,534	7,967	9,126	10,669	10,923	10,970
Science	256,894	258,756	265,138	285,844	316,408	325,038	318,685	317,614	308,243	311,869	326,170	344,889	357,691	369,892
Natural sciences	161,021	160,976	162,407	171,451	190,145	198,753	196,206	198,867	193,036	195,259	205,709	218,925	227,424	233,716
Agricultural sciences	9,096	8,401	8,422	8,466	9,083	9,567	9,414	9,774	9,612	9,722	10,085	10,601	10,750	10,474
Biological sciences	38,961	37,768	37,795	39,001	43,175	46,276	45,641	45,770	44,521	45,205	47,262	49,865	50,755	52,047
Earth, atmospheric, and ocean sciences	13,549	12,167	11,055	11,569	12,713	12,769	12,033	11,563	11,249	11,059	11,472	11,845	12,344	12,066
Atmospheric sciences	755	713	663	658	815	806	801	639	659	639	730	869	819	863
Earth sciences	9,263	7,763	6,628	6,010	6,088	6,039	5,666	5,413	5,294	5,189	5,333	5,456	5,906	5,785
Oceanography	1,736	1,731	1,651	1,785	2,037	2,102	1,972	2,108	2,142	2,071	2,152	2,206	2,304	2,270
Other geosciences	1,795	1,960	2,113	3,116	3,773	3,822	3,594	3,403	3,154	3,160	3,257	3,314	3,315	3,148
Mathematics/computer sciences	34,490	35,653	35,352	36,375	38,170	35,358	34,249	35,653	34,681	36,309	39,342	41,477	40,846	40,369
Computer sciences	22,272	23,274	22,788	23,057	24,304	22,663	23,074	25,323	25,088	26,142	28,203	29,420	28,286	27,555
Mathematics/statistics	12,218	12,379	12,564	13,318	13,866	12,695	11,175	10,330	9,593	10,167	11,139	12,057	12,560	12,814
Medical/other life sciences	42,880	44,874	47,927	54,041	63,928	72,793	74,659	76,548	74,243	74,129	78,297	84,924	91,523	96,980
Medical sciences	11,002	11,769	12,051	13,305	15,827	17,522	17,440	19,646	19,090	19,784	21,773	24,212	24,982	26,553
Other life sciences	31,878	33,105	35,876	40,736	48,101	55,271	57,219	56,902	55,153	54,345	56,524	60,712	66,541	70,427
Physical sciences	22,045	22,113	21,856	21,999	23,076	21,990	20,210	19,559	18,730	18,835	19,251	20,213	21,206	21,780
Astronomy	517	537	625	612	663	680	593	593	617	633	687	747	749	828
Chemistry	13,934	13,528	12,721	12,509	13,456	13,156	12,662	12,331	11,883	11,797	11,792	12,210	12,685	12,905
Physics	7,278	7,692	8,188	8,511	8,557	7,745	6,608	6,140	5,757	5,991	6,259	6,744	7,280	7,506
Other physical sciences	316	356	322	367	400	409	347	495	473	414	513	512	492	541
Social/behavioral sciences	95,873	97,780	102,731	114,393	126,263	126,285	122,479	118,747	115,207	116,610	120,461	125,964	130,267	136,176
Psychology	39,229	41,073	43,897	49,355	52,676	51,554	51,118	49,488	48,203	47,946	48,308	49,099	51,045	54,384
Social sciences	56,644	56,707	58,834	65,038	73,587	74,731	71,361	69,259	67,004	68,664	72,153	76,865	79,222	81,792
Anthropology	5,090	5,173	5,365	5,907	6,561	6,999	6,858	6,810	6,797	6,722	6,634	6,967	6,966	6,861
Economics	9,234	8,493	8,182	8,589	9,204	8,624	6,837	6,118	6,006	6,233	6,530	6,920	6,938	6,590
History of science	217	251	264	286	314	355	376	498	463	501	595	668	925	886
Linguistics	1,983	2,179	2,109	2,166	2,260	2,197	2,086	1,837	1,714	1,782	1,893	2,065	1,936	2,257
Political science/public administration	23,446	23,712	25,648	28,099	31,545	30,920	28,657	27,453	26,972	27,582	30,280	32,003	34,318	36,234
Sociology	6,044	6,267	6,589	7,570	8,809	9,209	9,107	8,449	8,065	8,228	8,275	8,485	8,356	8,494
Other social sciences	10,630	10,632	10,677	12,421	14,894	16,427	17,440	18,094	16,987	17,616	17,946	19,757	19,783	20,470

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>White</b>														
S&E.....	259,332	266,111	269,670	288,765	309,131	304,438	286,607	275,325	261,112	260,380	270,034	283,276	288,866	292,510
Engineering.....	50,159	53,818	51,503	54,738	57,415	51,931	46,093	42,063	39,083	38,459	40,559	43,469	43,235	42,836
Aerospace.....	1,342	1,631	2,015	2,196	2,071	1,774	1,440	1,437	1,451	1,434	1,512	1,747	1,791	1,844
Chemical.....	3,883	3,844	3,107	3,157	3,407	3,429	3,365	2,805	2,627	2,417	2,565	2,554	2,666	2,561
Civil.....	7,327	7,066	7,337	8,684	10,415	10,434	9,208	8,088	7,759	7,492	7,707	8,333	8,270	8,139
Electrical.....	13,461	14,922	15,818	15,508	15,606	12,630	11,092	9,897	8,982	8,876	9,121	9,709	9,444	9,144
Industrial.....	7,055	8,021	6,731	7,275	7,681	7,262	6,391	5,761	5,329	5,255	5,668	5,680	5,484	5,632
Materials.....	2,108	2,276	2,226	2,533	2,575	2,402	2,019	1,935	1,751	1,839	1,882	1,909	1,815	1,859
Mechanical.....	7,159	7,984	7,633	8,416	9,029	8,059	6,979	6,491	6,005	5,932	6,254	6,883	6,998	6,898
Other.....	7,824	8,074	6,636	6,969	6,631	5,941	5,599	5,649	5,179	5,214	5,850	6,654	6,767	6,759
Science.....	209,173	212,293	218,167	234,027	251,716	252,507	240,514	233,262	222,029	221,921	229,475	239,807	245,631	249,674
Natural sciences.....	133,142	133,184	134,647	141,586	152,198	156,251	149,950	148,357	142,528	141,957	148,248	155,919	160,700	163,627
Agricultural sciences.....	8,062	7,627	7,460	7,628	7,977	8,233	7,990	8,383	8,152	8,147	8,486	8,799	8,936	8,662
Biological sciences.....	33,741	32,370	32,107	32,823	34,819	36,279	34,778	34,319	33,255	33,193	34,568	35,809	36,057	36,635
Earth, atmospheric, and ocean sciences.....	11,756	10,912	10,126	10,519	11,076	11,245	10,402	10,007	9,812	9,573	9,799	9,963	10,342	10,120
Atmospheric sciences.....	708	657	594	589	714	691	657	552	557	547	623	713	663	697
Earth sciences.....	7,912	7,081	6,109	5,492	5,365	5,388	4,989	4,796	4,720	4,603	4,639	4,691	5,111	5,010
Oceanography.....	1,507	1,431	1,473	1,556	1,711	1,825	1,699	1,815	1,872	1,769	1,845	1,871	1,933	1,896
Other geosciences.....	1,629	1,743	1,950	2,882	3,286	3,341	3,057	2,844	2,663	2,654	2,692	2,688	2,635	2,517
Mathematics/computer sciences.....	25,511	26,806	26,560	26,984	27,376	24,427	22,413	22,036	21,423	22,443	23,885	25,674	25,813	25,510
Computer sciences.....	15,724	17,156	16,496	16,527	16,804	14,773	14,062	14,377	14,468	15,057	15,962	17,260	16,954	16,595
Mathematics/statistics.....	9,787	9,650	10,064	10,457	10,572	9,654	8,351	7,659	6,955	7,386	7,923	8,414	8,859	8,915
Medical/other life sciences.....	35,744	37,370	40,065	45,218	52,359	58,581	58,600	58,575	55,543	54,353	56,890	60,567	63,827	66,373
Medical sciences.....	8,769	9,154	9,195	10,077	11,546	12,372	11,915	12,763	12,017	12,492	14,307	15,425	15,602	15,658
Other life sciences.....	26,975	28,216	30,870	35,141	40,813	46,209	46,685	45,812	43,526	41,861	42,583	45,142	48,225	50,715
Physical sciences.....	18,328	18,099	18,329	18,414	18,591	17,486	15,767	15,037	14,343	14,248	14,620	15,107	15,725	16,327
Astronomy.....	472	486	553	544	580	577	514	511	523	527	570	610	631	677
Chemistry.....	11,378	10,763	10,498	10,414	10,687	10,297	9,712	9,394	9,028	8,977	8,926	8,955	9,170	9,463
Physics.....	6,227	6,561	7,003	7,164	7,005	6,250	5,268	4,840	4,514	4,485	4,789	5,209	5,600	5,765
Other physical sciences.....	251	289	275	292	319	362	273	292	278	259	335	333	324	422
Social/behavioral sciences.....	76,031	79,109	83,520	92,441	99,518	96,256	90,564	84,905	79,501	79,964	81,227	83,888	84,931	86,047
Psychology.....	32,757	34,785	37,227	40,990	42,662	40,146	38,724	36,267	33,801	33,578	33,473	33,587	33,655	34,479
Social sciences.....	43,274	44,324	46,293	51,451	56,856	56,110	51,840	48,638	45,700	46,386	47,754	50,301	51,276	51,568
Anthropology.....	4,553	4,448	4,631	5,116	5,581	5,815	5,641	5,440	5,311	5,190	5,153	5,316	5,258	5,077
Economics.....	7,166	6,674	6,527	6,832	7,173	6,691	5,107	4,476	4,314	4,392	4,481	4,778	4,819	4,625
History of science.....	210	223	227	269	294	317	303	424	386	414	426	514	700	679
Linguistics.....	1,672	1,720	1,670	1,697	1,770	1,688	1,518	1,375	1,237	1,293	1,335	1,418	1,349	1,540
Political science/public administration.....	16,772	18,132	19,529	21,657	24,044	22,413	19,984	18,317	17,401	17,635	18,785	19,525	20,566	21,115
Sociology.....	4,796	4,833	5,233	5,944	6,552	6,673	6,446	5,796	5,445	5,590	5,549	5,602	5,535	5,560
Other social sciences.....	8,105	8,294	8,476	9,936	11,442	12,513	12,841	12,810	11,606	11,872	12,025	13,148	13,049	12,972

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Asian/Pacific Islander</b>														
S&E.....	12,954	15,669	17,109	20,060	26,853	29,361	30,371	32,717	30,250	32,035	35,021	38,290	38,080	38,737
Engineering.....	4,805	5,850	6,020	7,111	8,996	9,018	8,133	8,161	7,274	8,007	9,384	10,770	9,784	9,667
Aerospace.....	84	109	143	196	224	177	153	153	206	138	186	207	212	251
Chemical.....	277	349	244	399	461	458	512	486	501	494	566	557	468	508
Civil.....	436	582	597	837	1,167	1,322	1,050	931	744	771	855	1,024	997	1,006
Electrical.....	1,966	2,453	2,703	3,021	3,746	3,712	3,489	3,491	3,119	3,454	4,079	4,606	3,823	3,788
Industrial.....	326	442	455	596	883	855	739	784	628	686	878	1,023	949	1,046
Materials.....	219	241	276	260	336	311	295	240	246	244	298	316	346	315
Mechanical.....	794	883	824	985	1,307	1,225	947	1,008	804	945	912	1,035	1,015	987
Other.....	703	791	778	817	872	958	948	1,068	1,026	1,275	1,610	2,002	1,974	1,766
Science.....	8,149	9,819	11,089	12,949	17,857	20,343	22,238	24,556	22,976	24,028	25,637	27,520	28,296	29,070
Natural sciences.....	6,159	7,383	8,442	9,920	13,532	15,402	16,879	19,161	17,843	18,634	19,726	20,956	21,452	21,857
Agricultural sciences.....	139	172	228	227	282	282	309	310	250	262	286	316	329	300
Biological sciences.....	1,440	1,642	1,972	2,333	3,433	4,298	4,479	4,476	4,246	4,710	4,835	5,158	5,300	5,461
Earth, atmospheric, and ocean sciences.....	194	179	207	267	462	419	417	400	351	341	355	363	436	415
Atmospheric sciences.....	25	37	45	28	55	69	56	41	41	26	31	54	59	58
Earth sciences.....	110	68	95	136	217	151	166	144	132	139	149	126	149	136
Oceanography.....	27	44	31	37	66	83	60	67	64	51	64	48	69	65
Other geosciences.....	32	30	36	66	124	116	135	148	114	125	111	135	159	156
Mathematics/computer sciences.....	2,491	3,235	3,430	3,729	4,577	5,164	5,677	7,146	6,280	6,412	7,137	7,131	6,453	6,090
Computer sciences.....	1,868	2,466	2,727	2,863	3,557	4,043	4,626	6,144	5,332	5,427	5,953	5,767	5,118	4,671
Mathematics/statistics.....	623	769	703	866	1,020	1,121	1,051	1,002	948	985	1,184	1,364	1,335	1,419
Medical/other life sciences.....	958	1,108	1,430	1,935	2,805	3,459	4,359	5,147	5,192	5,451	5,689	6,369	7,199	7,885
Medical sciences.....	451	555	655	965	1,458	1,729	2,074	2,490	2,437	2,495	2,506	2,881	3,210	3,532
Other life sciences.....	507	553	775	970	1,347	1,730	2,285	2,657	2,755	2,956	3,183	3,488	3,989	4,353
Physical sciences.....	937	1,047	1,175	1,429	1,973	1,780	1,638	1,682	1,524	1,458	1,424	1,619	1,735	1,706
Astronomy.....	6	14	36	30	24	30	39	31	33	36	44	53	38	46
Chemistry.....	660	715	680	820	1,186	1,122	1,106	1,133	1,079	983	950	1,103	1,170	1,135
Physics.....	265	304	452	557	732	611	467	490	393	422	405	431	502	503
Other physical sciences.....	6	14	7	22	31	17	26	28	19	17	25	32	25	22
Social/behavioral sciences.....	1,990	2,436	2,647	3,029	4,325	4,941	5,359	5,395	5,133	5,394	5,911	6,564	6,844	7,213
Psychology.....	559	727	817	1,040	1,470	1,598	1,909	2,038	2,063	2,176	2,186	2,376	2,447	2,569
Social sciences.....	1,431	1,709	1,830	1,989	2,855	3,343	3,450	3,357	3,070	3,218	3,725	4,188	4,397	4,644
Anthropology.....	53	98	109	117	172	208	236	256	260	253	252	283	294	305
Economics.....	314	414	427	424	639	646	601	650	506	524	623	694	663	636
History of science.....	3	10	15	7	12	14	21	20	20	21	28	29	48	36
Linguistics.....	45	109	83	91	139	179	212	148	106	154	183	215	176	247
Political science/public administration.....	676	651	710	810	1,025	1,227	1,264	1,163	1,206	1,225	1,489	1,622	1,803	1,975
Sociology.....	155	191	212	220	343	434	420	406	367	374	387	456	402	410
Other social sciences.....	185	236	274	320	525	635	696	714	605	667	763	889	1,011	1,035



**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Black</b>														
S&E.....	12,405	12,409	14,034	16,406	20,433	22,148	23,560	25,200	25,928	27,075	28,719	31,242	32,619	33,708
Engineering.....	1,387	1,416	1,616	2,025	2,561	2,857	2,879	2,965	2,977	2,915	3,074	3,212	3,399	3,470
Aerospace.....	24	25	27	44	56	51	35	52	57	45	51	59	68	73
Chemical.....	71	87	79	119	160	175	172	147	168	167	160	173	169	146
Civil.....	182	160	244	279	393	471	443	450	448	431	453	428	453	456
Electrical.....	455	422	564	669	864	821	874	886	830	812	846	812	850	843
Industrial.....	234	276	264	394	451	541	489	541	557	591	616	685	714	764
Materials.....	33	24	37	57	75	88	112	92	94	107	112	110	105	102
Mechanical.....	161	187	200	246	336	403	428	375	396	354	358	382	369	411
Other.....	227	235	201	217	226	307	326	422	427	408	478	563	671	675
Science.....	11,018	10,993	12,418	14,381	17,872	19,291	20,681	22,235	22,951	24,160	25,645	28,030	29,220	30,238
Natural sciences.....	4,966	5,009	5,663	6,633	8,233	8,998	9,724	10,650	10,849	11,695	12,584	14,100	14,976	15,511
Agricultural sciences.....	138	133	160	157	268	308	288	310	292	327	375	460	394	417
Biological sciences.....	1,181	1,053	1,203	1,296	1,701	1,871	2,105	2,218	2,241	2,351	2,479	2,757	2,893	2,980
Earth, atmospheric, and ocean sciences.....	127	93	95	140	223	215	203	213	220	227	266	270	261	262
Atmospheric sciences.....	7	2	7	6	13	18	12	7	18	19	25	32	36	30
Earth sciences.....	70	49	43	54	65	67	56	62	56	57	64	75	84	82
Oceanography.....	18	14	21	24	30	34	26	28	28	31	36	35	30	37
Other geosciences.....	32	28	24	56	115	96	109	116	118	120	141	128	111	113
Mathematics/computer sciences.....	1,031	1,210	1,311	1,617	1,877	1,844	1,957	2,079	2,084	2,299	2,524	2,606	2,498	2,482
Computer sciences.....	622	769	848	1,093	1,167	1,155	1,300	1,485	1,512	1,709	1,898	1,951	1,802	1,761
Mathematics/statistics.....	409	441	463	524	710	689	657	594	572	590	626	655	696	721
Medical/other life sciences.....	1,954	1,984	2,261	2,723	3,320	3,863	4,219	4,927	5,094	5,616	6,047	7,068	7,935	8,362
Medical sciences.....	509	558	568	818	1,034	1,179	1,239	1,728	1,780	1,829	1,955	2,402	2,444	2,652
Other life sciences.....	1,445	1,426	1,693	1,905	2,286	2,684	2,980	3,199	3,314	3,787	4,092	4,666	5,491	5,710
Physical sciences.....	535	536	633	700	844	897	952	903	918	875	893	939	995	1,008
Astronomy.....	6	6	6	11	12	11	11	9	9	12	10	9	10	10
Chemistry.....	381	374	440	477	594	624	667	633	650	631	636	663	713	694
Physics.....	121	136	173	189	211	248	245	234	235	211	220	236	248	272
Other physical sciences.....	27	20	14	23	27	14	29	27	24	21	27	31	24	32
Social/behavioral sciences.....	6,052	5,984	6,755	7,748	9,639	10,293	10,957	11,585	12,102	12,465	13,061	13,930	14,244	14,727
Psychology.....	1,790	1,794	2,061	2,455	3,284	3,359	3,644	3,749	4,214	4,347	4,491	4,692	5,001	5,251
Social sciences.....	4,262	4,190	4,694	5,293	6,355	6,934	7,313	7,836	7,888	8,118	8,570	9,238	9,243	9,476
Anthropology.....	95	101	116	132	176	215	254	291	270	274	248	276	272	277
Economics.....	392	379	359	365	482	468	389	375	397	390	405	441	434	384
History of science.....	2	5	3	5	4	8	8	14	14	16	24	25	30	42
Linguistics.....	119	142	151	145	63	51	45	49	44	47	44	49	47	64
Political science/public administration.....	2,143	2,133	2,500	2,831	3,258	3,552	3,699	4,097	4,073	4,264	4,632	4,849	4,968	5,000
Sociology.....	580	557	598	752	985	1,096	1,161	1,159	1,098	1,132	1,132	1,201	1,164	1,194
Other social sciences.....	931	873	967	1,063	1,387	1,544	1,757	1,851	1,992	1,995	2,085	2,397	2,328	2,515

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Hispanic														
S&E.....	10,138	10,533	11,205	13,053	16,050	17,237	18,154	20,322	21,327	22,329	24,282	26,687	28,126	29,457
Engineering.....	1,481	1,730	1,707	2,124	2,696	2,808	2,812	2,924	3,018	3,183	3,461	3,979	4,164	4,090
Aerospace.....	33	37	49	54	70	65	71	80	80	71	92	119	118	116
Chemical.....	107	117	111	159	181	202	142	182	182	180	206	249	249	240
Civil.....	251	263	275	383	550	593	694	701	776	747	778	846	898	896
Electrical.....	443	521	558	661	842	785	810	769	717	825	941	1,094	1,097	1,090
Industrial.....	254	286	242	257	337	386	396	426	439	469	477	562	629	579
Materials.....	37	49	53	56	76	102	86	75	84	80	79	98	99	106
Mechanical.....	181	282	214	338	382	422	360	388	366	407	450	537	566	575
Other.....	175	175	205	216	258	253	253	303	374	404	438	474	508	488
Science.....	8,657	8,803	9,498	10,929	13,354	14,429	15,342	17,398	18,309	19,146	20,821	22,708	23,962	25,367
Natural sciences.....	4,367	4,598	5,003	5,540	6,853	7,399	7,899	9,016	9,269	9,787	10,579	12,046	12,908	13,210
Agricultural sciences.....	322	222	299	279	309	292	411	422	440	425	406	490	524	506
Biological sciences.....	933	1,030	1,196	1,369	1,647	1,822	1,987	2,185	2,183	2,338	2,585	2,830	2,998	3,146
Earth, atmospheric, and ocean sciences.....	238	227	208	250	370	365	399	400	355	397	413	484	537	507
Atmospheric sciences.....	11	10	8	24	15	10	12	7	12	15	16	21	27	36
Earth sciences.....	105	99	109	116	160	152	161	154	136	155	163	187	217	206
Oceanography.....	98	90	68	59	102	99	116	132	113	137	131	158	161	150
Other geosciences.....	24	28	23	51	93	104	110	107	94	90	103	118	132	115
Mathematics/computer sciences.....	750	817	847	980	1,110	1,064	1,150	1,312	1,323	1,376	1,546	1,705	1,768	1,835
Computer sciences.....	488	551	542	631	695	664	723	865	863	894	1,004	1,101	1,143	1,202
Mathematics/statistics.....	262	266	305	349	415	400	427	447	460	482	542	604	625	633
Medical/other life sciences.....	1,525	1,711	1,772	2,013	2,670	3,125	3,170	3,802	4,124	4,355	4,648	5,443	5,849	5,976
Medical sciences.....	450	539	617	769	1,051	1,125	1,055	1,493	1,533	1,734	1,669	1,874	2,009	1,964
Other life sciences.....	1,075	1,172	1,155	1,244	1,619	2,000	2,115	2,309	2,591	2,621	2,979	3,569	3,840	4,012
Physical sciences.....	599	591	681	649	747	731	782	895	844	896	981	1,094	1,232	1,240
Astronomy.....	7	8	13	11	13	16	11	13	17	17	17	25	23	27
Chemistry.....	438	419	464	398	472	485	523	618	602	629	668	750	837	821
Physics.....	151	159	195	233	252	219	237	229	202	239	274	297	343	358
Other physical sciences.....	3	5	9	7	10	11	11	35	23	11	22	22	29	34
Social/behavioral sciences.....	4,290	4,205	4,495	5,389	6,501	7,030	7,443	8,382	9,040	9,359	10,242	10,662	11,054	12,157
Psychology.....	1,611	1,665	1,751	2,365	2,562	2,799	3,075	3,567	4,145	4,309	4,655	4,680	4,800	5,119
Social sciences.....	2,679	2,540	2,744	3,024	3,939	4,231	4,368	4,815	4,895	5,050	5,587	5,982	6,254	7,038
Anthropology.....	151	152	162	207	248	345	338	327	368	383	409	436	453	470
Economics.....	315	292	305	336	391	419	330	283	277	346	362	411	409	390
History of science.....	2	3	3	4	3	4	10	22	17	18	55	38	56	60
Linguistics.....	68	93	128	132	165	138	157	135	142	126	140	136	148	163
Political science/public administration.....	1,445	1,254	1,390	1,453	1,902	1,927	1,926	2,166	2,303	2,223	2,587	2,749	3,012	3,370
Sociology.....	231	249	276	353	485	531	625	674	634	636	686	709	693	718
Other social sciences.....	467	497	480	539	745	867	982	1,208	1,154	1,318	1,348	1,503	1,483	1,867

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>American Indian/Alaska Native</b>														
S&E.....	871	943	1,068	1,365	1,605	1,856	1,969	1,994	2,021	2,136	2,239	2,399	2,368	2,651
Engineering.....	122	123	122	184	209	230	239	242	208	227	244	304	278	429
Aerospace.....	2	5	5	5	8	8	3	8	8	8	11	15	16	13
Chemical.....	8	26	10	22	14	21	18	16	20	13	21	19	27	24
Civil.....	16	9	22	34	43	42	58	56	39	43	58	65	51	52
Electrical.....	30	18	37	38	43	51	46	47	37	45	39	63	54	54
Industrial.....	11	24	15	39	36	24	23	39	41	43	34	52	48	51
Materials.....	6	2	5	3	4	8	11	10	5	8	11	8	6	5
Mechanical.....	25	23	13	21	30	44	35	33	27	32	32	42	24	28
Other.....	24	16	15	22	31	32	45	33	31	35	38	40	52	202
Science.....	749	820	946	1,181	1,396	1,626	1,730	1,752	1,813	1,909	1,995	2,095	2,090	2,222
Natural sciences.....	381	420	462	559	716	859	884	932	905	992	1,062	1,104	1,112	1,162
Agricultural sciences.....	22	29	26	31	37	62	62	69	56	58	76	77	82	76
Biological sciences.....	88	90	84	129	155	203	197	186	189	205	210	236	249	278
Earth, atmospheric, and ocean sciences.....	23	18	26	29	45	52	82	63	61	70	81	63	67	61
Atmospheric sciences.....	0	0	0	0	2	4	2	2	3	4	4	5	4	3
Earth sciences.....	17	16	19	20	27	27	38	26	27	32	36	26	33	29
Oceanography.....	2	1	0	3	3	8	17	12	10	12	11	8	11	11
Other geosciences.....	4	1	7	6	13	13	25	23	21	22	30	24	19	18
Mathematics/computer sciences.....	79	76	74	63	102	126	103	104	105	125	107	129	131	138
Computer sciences.....	57	28	40	43	70	56	60	74	80	87	83	104	92	100
Mathematics/statistics.....	22	48	34	20	32	70	43	30	25	38	24	25	39	38
Medical/other life sciences.....	134	161	208	245	296	340	370	441	419	453	505	520	505	527
Medical sciences.....	39	37	61	65	65	82	98	125	113	124	138	167	134	135
Other life sciences.....	95	124	147	180	231	258	272	316	306	329	367	353	371	392
Physical sciences.....	35	46	44	62	81	76	70	69	75	81	83	79	78	82
Astronomy.....	1	1	0	2	3	3	1	2	1	0	2	3	3	5
Chemistry.....	25	29	25	43	54	43	50	53	61	62	58	51	54	53
Physics.....	9	16	19	15	22	30	18	13	12	19	22	24	18	20
Other physical sciences.....	0	0	0	2	2	0	1	1	1	0	1	1	3	4
Social/behavioral sciences.....	368	400	484	622	680	767	846	820	908	917	933	991	978	1,060
Psychology.....	135	152	180	252	289	330	341	300	360	334	320	324	324	334
Social sciences.....	233	248	304	370	391	437	505	520	548	583	613	667	654	726
Anthropology.....	21	36	53	68	79	103	103	105	109	102	89	99	106	123
Economics.....	17	19	70	57	23	26	19	20	24	25	32	38	56	42
History of science.....	0	0	0	0	0	1	1	2	2	2	2	5	7	5
Linguistics.....	8	13	10	7	3	9	7	15	13	13	12	16	17	17
Political science/public administration.....	108	98	91	114	139	140	155	177	175	192	217	241	219	251
Sociology.....	34	38	37	55	62	58	86	75	75	82	82	83	71	68
Other social sciences.....	45	44	43	69	85	100	134	126	150	167	179	185	178	220

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Other/unknown race/ethnicity														
S&E.....	28,381	23,685	19,417	18,376	19,913	21,715	22,666	22,244	24,316	24,885	27,237	30,388	34,088	39,467
Engineering.....	9,233	7,657	6,397	5,999	5,700	4,873	4,486	3,833	4,151	4,180	4,640	5,659	5,596	6,146
Aerospace.....	244	337	192	397	310	82	63	87	92	109	147	214	196	231
Chemical.....	401	220	130	100	146	198	215	233	228	147	183	201	189	211
Civil.....	1,303	1,015	599	637	731	697	637	575	540	588	702	762	767	868
Electrical.....	3,405	2,946	2,429	2,400	1,738	1,586	1,721	1,427	1,630	1,522	1,553	1,834	1,610	1,787
Industrial.....	698	685	685	629	1,040	1,055	578	522	580	563	645	843	959	993
Materials.....	187	112	90	118	171	118	198	86	85	107	100	105	130	131
Mechanical.....	1,050	1,496	1,566	1,050	1,115	752	602	465	499	513	598	764	794	845
Other.....	1,945	846	706	668	449	385	472	438	497	631	712	936	951	1,080
Science.....	19,148	16,028	13,020	12,377	14,213	16,842	18,180	18,411	20,165	20,705	22,597	24,729	28,492	33,321
Natural sciences.....	12,006	10,382	8,190	7,213	8,613	9,844	10,870	10,751	11,642	12,194	13,510	14,800	16,276	18,349
Agricultural sciences.....	413	218	249	144	210	390	354	280	422	503	456	459	485	513
Biological sciences.....	1,578	1,583	1,233	1,051	1,420	1,803	2,095	2,386	2,407	2,408	2,585	3,075	3,258	3,547
Earth, atmospheric, and ocean sciences.....	1,211	738	393	364	537	473	530	480	450	451	558	702	701	701
Atmospheric sciences.....	4	7	9	11	16	14	62	30	28	28	31	44	30	39
Earth sciences.....	1,049	450	253	192	254	254	256	231	223	203	282	351	312	322
Oceanography.....	84	151	58	106	125	53	54	54	55	71	65	86	100	111
Other geosciences.....	74	130	73	55	142	152	158	165	144	149	180	221	259	229
Mathematics/computer sciences.....	4,628	3,509	3,130	3,002	3,128	2,733	2,949	2,976	3,466	3,654	4,143	4,232	4,183	4,314
Computer sciences.....	3,513	2,304	2,135	1,900	2,011	1,972	2,303	2,378	2,833	2,968	3,303	3,237	3,177	3,226
Mathematics/statistics.....	1,115	1,205	995	1,102	1,117	761	646	598	633	686	840	995	1,006	1,088
Medical/other life sciences.....	2,565	2,540	2,191	1,907	2,478	3,425	3,941	3,656	3,871	3,901	4,518	4,957	6,208	7,857
Medical sciences.....	784	926	955	611	673	1,035	1,059	1,047	1,210	1,110	1,198	1,463	1,583	2,612
Other life sciences.....	1,781	1,614	1,236	1,296	1,805	2,390	2,882	2,609	2,661	2,791	3,320	3,494	4,625	5,245
Physical sciences.....	1,611	1,794	994	745	840	1,020	1,001	973	1,026	1,277	1,250	1,375	1,441	1,417
Astronomy.....	25	22	17	14	31	43	17	27	34	41	44	47	44	63
Chemistry.....	1,052	1,228	614	357	463	585	604	500	463	515	554	688	741	739
Physics.....	505	516	346	353	335	387	373	334	401	615	549	547	569	588
Other physical sciences.....	29	28	17	21	11	5	7	112	128	106	103	93	87	27
Social/behavioral sciences.....	7,142	5,646	4,830	5,164	5,600	6,998	7,310	7,660	8,523	8,511	9,087	9,929	12,216	14,972
Psychology.....	2,377	1,950	1,861	2,253	2,409	3,322	3,425	3,567	3,620	3,202	3,183	3,440	4,818	6,632
Social sciences.....	4,765	3,696	2,969	2,911	3,191	3,676	3,885	4,093	4,903	5,309	5,904	6,489	7,398	8,340
Anthropology.....	217	338	294	267	305	313	286	391	479	520	483	557	583	609
Economics.....	1,030	715	494	575	496	374	391	314	488	556	627	558	557	513
History of science.....	0	10	16	1	1	11	33	16	24	30	60	57	84	64
Linguistics.....	71	102	67	94	120	132	147	115	172	149	179	231	199	226
Political science/public administration.....	2,302	1,444	1,428	1,234	1,177	1,661	1,629	1,533	1,814	2,043	2,570	3,017	3,750	4,523
Sociology.....	248	399	233	246	382	417	369	339	446	414	439	434	491	544
Other social sciences.....	897	688	437	494	710	768	1,030	1,385	1,480	1,597	1,546	1,635	1,734	1,861

Appendix table 2-22

**S&E graduate enrollment, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, citizenship, and race/ethnicity	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Temporary resident</b>														
S&E.....	79,940	92,147	101,975	113,187	110,319	102,885	103,881	115,454	128,357	140,780	152,885	154,888	150,790	146,696
Engineering.....	28,831	33,389	36,700	41,354	39,295	35,484	36,506	41,503	47,401	52,522	58,306	59,984	57,110	53,835
Aerospace.....	809	871	1,093	1,228	1,201	1,186	1,318	1,532	1,513	1,646	1,686	1,687	1,688	1,642
Chemical.....	2,430	2,498	2,801	3,201	3,185	2,969	2,864	3,014	3,330	3,495	3,713	3,763	3,684	3,483
Civil.....	5,387	5,587	5,835	6,544	6,284	5,659	5,103	5,425	6,145	6,593	7,160	7,432	7,125	6,633
Electrical.....	8,443	10,117	11,148	12,814	12,451	11,276	12,755	15,305	18,296	20,566	23,369	23,645	22,117	20,738
Industrial.....	1,947	2,619	2,941	3,806	3,477	3,352	3,341	3,730	4,545	5,333	5,715	5,468	5,069	4,549
Materials.....	1,369	1,693	1,948	2,176	2,173	1,927	1,967	2,043	2,112	2,336	2,510	2,585	2,558	2,642
Mechanical.....	4,787	5,511	5,815	6,674	6,278	5,458	5,694	6,196	7,138	7,669	8,535	8,750	8,086	7,643
Other.....	3,659	4,493	5,119	4,911	4,246	3,657	3,464	4,258	4,322	4,884	5,618	6,654	6,783	6,505
Science.....	51,109	58,758	65,275	71,833	71,024	67,401	67,375	73,951	80,956	88,258	94,579	94,904	93,680	92,861
Natural sciences.....	36,297	42,661	48,327	54,123	53,953	50,610	50,643	55,987	62,370	68,719	73,660	73,528	72,150	71,779
Agricultural sciences.....	2,750	3,004	3,039	3,300	3,222	3,201	2,789	2,538	2,411	2,513	2,613	2,596	2,695	2,649
Biological sciences.....	6,748	8,549	10,654	12,364	12,775	12,068	11,064	11,189	11,761	12,434	13,826	14,836	15,793	16,402
Earth, atmospheric, and ocean sciences.....	1,865	2,190	2,575	2,897	3,008	2,947	2,515	2,520	2,692	2,782	2,768	2,775	2,787	2,761
Atmospheric sciences.....	209	239	249	310	297	266	291	274	304	285	306	281	267	283
Earth sciences.....	1,025	1,213	1,404	1,534	1,671	1,543	1,293	1,224	1,302	1,355	1,379	1,433	1,452	1,427
Oceanography.....	345	404	563	610	590	621	507	516	526	514	466	489	497	490
Other geosciences.....	286	334	359	443	450	517	424	506	560	628	617	572	571	561
Mathematics/computer sciences.....	12,842	14,906	16,377	18,258	18,043	16,604	18,461	23,082	28,319	32,538	34,090	31,684	29,101	27,887
Computer sciences.....	7,497	8,777	9,694	11,624	11,909	10,795	12,917	17,155	22,262	26,054	27,066	24,276	21,730	20,491
Mathematics/statistics.....	5,345	6,129	6,683	6,634	6,134	5,809	5,544	5,927	6,057	6,484	7,024	7,408	7,371	7,396
Medical/other life sciences.....	3,150	3,384	3,909	4,579	4,653	4,381	4,919	5,526	5,532	6,249	7,273	7,552	7,219	7,464
Medical sciences.....	2,274	2,487	2,863	3,397	3,397	3,137	3,455	3,833	3,725	4,228	5,068	5,228	4,825	4,857
Other life sciences.....	876	897	1,046	1,182	1,256	1,244	1,464	1,693	1,807	2,021	2,205	2,324	2,394	2,607
Physical sciences.....	8,942	10,628	11,773	12,725	12,252	11,409	10,895	11,132	11,655	12,203	13,090	14,085	14,555	14,616
Astronomy.....	154	182	164	217	217	232	185	239	271	283	303	333	370	363
Chemistry.....	4,371	5,299	6,107	6,898	6,675	6,414	6,112	6,085	6,222	6,569	7,253	7,839	8,091	8,217
Physics.....	4,394	5,115	5,469	5,570	5,284	4,680	4,539	4,729	5,084	5,257	5,442	5,811	6,018	5,966
Other physical sciences.....	23	32	33	40	76	83	59	79	78	94	92	102	76	70
Social/behavioral sciences.....	14,812	16,097	16,948	17,710	17,071	16,791	16,732	17,964	18,586	19,539	20,919	21,376	21,530	21,082
Psychology.....	1,492	1,539	1,631	1,988	1,881	2,087	2,008	2,239	2,263	2,521	2,857	3,112	3,173	3,028
Social sciences.....	13,320	14,558	15,317	15,722	15,190	14,704	14,724	15,725	16,323	17,018	18,062	18,264	18,357	18,054
Anthropology.....	541	662	763	824	800	694	702	823	829	769	847	822	860	845
Economics.....	5,464	5,708	6,233	6,482	6,425	6,387	6,303	6,458	6,821	7,336	7,666	7,714	7,575	7,333
History of science.....	55	43	40	51	55	46	67	59	69	70	68	69	69	79
Linguistics.....	1,072	1,103	1,177	1,259	1,061	997	982	962	960	962	982	963	1,005	930
Political science/public administration.....	3,175	3,717	3,546	3,608	3,531	3,378	3,426	3,919	4,159	4,223	4,654	4,877	4,952	4,872
Sociology.....	1,576	1,701	1,804	1,722	1,551	1,296	1,254	1,258	1,332	1,392	1,390	1,415	1,357	1,391
Other social sciences.....	1,437	1,624	1,754	1,776	1,767	1,906	1,990	2,246	2,153	2,266	2,455	2,404	2,539	2,604

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-23

**First-time full-time S&E graduate students, by field and citizenship: 2000–2005**

Field/citizenship	2000	2001	2002	2003	2004	2005
All S&E fields .....	94,340	98,112	104,184	107,715	106,580	110,401
Engineering .....	22,191	23,306	24,607	24,429	22,025	22,373
Science .....	72,149	74,806	79,577	83,286	84,555	88,028
Agricultural sciences .....	2,335	2,338	2,320	2,424	2,316	2,260
Biological sciences .....	10,955	11,608	12,127	12,719	12,796	12,896
Computer sciences .....	8,431	9,077	9,037	8,134	7,783	8,258
Earth, atmospheric, and ocean sciences .....	2,649	2,794	3,085	3,104	2,926	2,777
Mathematics/statistics .....	3,419	3,686	3,918	4,185	4,252	4,196
Medical/other life sciences .....	16,008	15,701	17,357	18,384	20,000	21,218
Physical sciences .....	5,829	6,011	6,280	6,841	6,603	6,657
Psychology .....	7,545	7,691	8,420	8,858	9,478	10,377
Social sciences .....	14,978	15,900	17,033	18,637	18,401	19,389
U.S. citizen/permanent resident						
All S&E fields .....	61,036	62,421	70,374	76,498	77,442	80,054
Engineering .....	8,618	8,689	10,773	12,279	11,198	10,922
Science .....	52,418	53,732	59,601	64,219	66,244	69,132
Agricultural sciences .....	1,916	1,845	1,856	1,971	1,870	1,828
Biological sciences .....	8,355	8,772	9,263	9,763	9,828	9,932
Computer sciences .....	2,414	2,621	3,534	3,891	3,651	3,664
Earth, atmospheric, and ocean sciences .....	2,082	2,210	2,550	2,573	2,469	2,288
Mathematics/statistics .....	1,849	2,030	2,311	2,527	2,637	2,571
Medical/other life sciences .....	14,720	14,189	15,721	16,829	18,476	19,585
Physical sciences .....	3,323	3,325	3,775	4,095	4,039	4,154
Psychology .....	7,060	7,167	7,902	8,285	8,960	9,838
Social sciences .....	10,699	11,573	12,689	14,285	14,314	15,272
Temporary resident						
All S&E fields .....	33,304	35,691	33,810	31,217	29,138	30,347
Engineering .....	13,573	14,617	13,834	12,150	10,827	11,451
Science .....	19,731	21,074	19,976	19,067	18,311	18,896
Agricultural sciences .....	419	493	464	453	446	432
Biological sciences .....	2,600	2,836	2,864	2,956	2,968	2,964
Computer sciences .....	6,017	6,456	5,503	4,243	4,132	4,594
Earth, atmospheric, and ocean sciences .....	567	584	535	531	457	489
Mathematics/statistics .....	1,570	1,656	1,607	1,658	1,615	1,625
Medical/other life sciences .....	1,288	1,512	1,636	1,555	1,524	1,633
Physical sciences .....	2,506	2,686	2,505	2,746	2,564	2,503
Psychology .....	485	524	518	573	518	539
Social sciences .....	4,279	4,327	4,344	4,352	4,087	4,117

NOTE: Data on first-time full-time enrollment by race/ethnicity and citizenship not collected before 1999.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-24

## Foreign graduate student enrollment in U.S. universities, by field and selected place of origin: April 2006 and 2007

Place of origin	All fields	S&E	Agricultural sciences	Biological sciences	Computer sciences	Engineering	Mathematics	Physical sciences	Psychology	Social sciences	Non-S&E
<b>April 2006</b>											
All locations.....	246,004	131,455	1,397	12,430	21,971	50,113	7,376	16,862	3,194	18,112	114,549
India.....	55,099	38,862	224	2,779	10,841	20,160	758	2,540	245	1,315	16,237
China.....	44,999	30,862	272	4,063	3,733	10,727	2,959	6,100	221	2,787	14,137
South Korea.....	24,771	10,120	97	780	1,026	4,179	672	1,062	247	2,057	14,651
Taiwan.....	17,791	5,869	50	688	1,035	2,298	288	464	200	846	11,922
Turkey.....	5,919	3,407	12	208	332	1,210	178	404	83	980	2,512
Japan.....	7,316	2,674	64	212	168	335	93	247	302	1,253	4,642
Canada.....	8,452	2,105	57	318	87	340	84	284	404	531	6,347
Thailand.....	5,094	1,572	32	54	414	571	41	95	26	339	3,522
Germany.....	2,952	1,310	18	132	112	228	94	224	104	398	1,642
Iran.....	1,656	1,275	4	47	104	864	52	114	17	73	381
Russia.....	2,047	1,207	8	103	123	164	124	393	37	255	840
Colombia.....	2,304	1,195	47	191	58	416	76	168	26	213	1,109
Mexico.....	3,026	1,190	28	86	99	382	85	176	42	292	1,836
Romania.....	1,929	1,164	6	114	172	159	171	287	31	224	765
Nepal.....	2,008	1,119	52	64	232	356	48	211	9	147	889
France.....	2,335	1,021	9	86	61	421	60	131	19	234	1,314
Pakistan.....	1,729	1,015	3	21	274	429	35	107	4	142	714
Bangladesh.....	1,210	848	12	39	151	378	32	107	2	127	362
United Kingdom.....	2,108	825	12	92	49	111	63	165	71	262	1,283
Italy.....	1,472	782	7	54	54	209	52	133	23	250	690
Other locations.....	51,787	23,033	383	2,299	2,846	6,176	1,411	3,450	1,081	5,387	28,754
<b>April 2007</b>											
All locations.....	265,835	141,767	1,454	13,187	25,123	54,935	7,813	17,203	3,353	18,699	124,068
India.....	66,534	46,743	241	3,202	13,880	24,148	824	2,774	284	1,390	19,791
China.....	48,253	32,167	289	4,131	3,783	11,141	3,240	6,209	252	3,122	16,086
South Korea.....	25,725	10,068	88	796	1,011	4,083	638	1,063	263	2,126	15,657
Taiwan.....	19,013	6,084	49	754	949	2,412	334	501	220	865	12,929
Turkey.....	5,955	3,420	11	220	324	1,209	179	404	97	976	2,535
Japan.....	6,807	2,508	64	214	138	331	100	241	283	1,137	4,299
Canada.....	8,611	2,094	60	295	75	326	90	268	416	564	6,517
Iran.....	1,950	1,496	4	49	126	1,033	55	123	20	86	454
Thailand.....	5,014	1,438	30	60	378	503	44	97	23	303	3,576
Nepal.....	2,627	1,416	59	91	320	445	60	261	12	168	1,211
Germany.....	2,962	1,348	17	145	113	224	107	238	87	417	1,614
Mexico.....	3,148	1,325	32	99	102	419	97	193	46	337	1,823
Colombia.....	2,450	1,276	49	213	65	437	74	187	32	219	1,174
Russia.....	2,001	1,124	11	104	106	156	116	347	31	253	877
Romania.....	1,794	1,049	6	103	176	144	141	240	34	205	745
France.....	2,361	1,035	9	95	51	440	80	132	13	215	1,326
Pakistan.....	1,735	1,021	6	25	290	426	31	97	4	142	714
Bangladesh.....	1,189	838	10	40	145	396	29	95	5	118	351
Sri Lanka.....	1,074	830	17	91	74	147	73	366	14	48	244
United Kingdom.....	2,188	830	13	86	45	106	68	159	78	275	1,358
Other locations.....	54,444	23,657	389	2,374	2,972	6,409	1,433	3,208	1,139	5,733	30,787

NOTE: Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: Bureau of Citizenship and Immigration Services, Student and Exchange Visitor Information System database, special tabulations (2007).

## Earned associate's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Both sexes</b>													
All fields .....	459,087	440,816	440,375	486,297	519,098	544,094	546,031	543,876	552,046	553,735	595,223	605,403	640,910
S&E.....	26,486	23,130	19,733	19,352	23,420	24,228	25,771	33,651	38,063	42,200	51,782	49,420	45,686
Engineering.....	3,923	4,589	2,735	2,513	2,526	2,285	1,888	1,730	1,791	1,647	1,816	2,140	2,072
Aerospace.....	18	20	6	14	8	2	1	1	0	0	0	0	0
Chemical.....	21	37	34	24	43	16	7	13	18	28	7	305	2
Civil.....	114	84	99	102	102	80	110	58	53	45	62	48	41
Electrical.....	1,077	1,770	527	377	400	257	179	239	224	70	226	236	244
Industrial.....	50	53	43	30	94	103	81	67	132	80	71	30	79
Materials.....	11	32	27	28	19	8	5	11	14	10	12	12	13
Mechanical.....	80	100	128	142	96	104	58	77	67	65	69	70	64
Other.....	2,552	2,493	1,871	1,796	1,764	1,715	1,447	1,264	1,283	1,349	1,369	1,439	1,629
Science.....	22,563	18,541	16,998	16,839	20,894	21,943	23,883	31,921	36,272	40,553	49,966	47,280	43,614
Natural sciences.....	18,001	13,647	12,558	12,752	15,062	15,866	17,202	24,454	28,717	32,443	41,569	38,248	34,040
Agricultural sciences.....	2,023	1,569	1,656	1,724	1,896	1,910	1,865	1,943	2,083	1,983	1,993	1,941	1,875
Biological sciences.....	1,233	995	999	1,142	1,499	1,901	2,181	1,468	1,519	1,519	1,783	1,749	1,985
Earth, atmospheric, and ocean sciences.....	63	40	28	28	168	186	191	174	181	58	186	40	182
Atmospheric sciences.....	1	0	0	0	89	107	95	92	103	0	135	2	139
Earth sciences.....	60	40	27	28	22	28	51	28	35	28	33	24	23
Oceanography.....	2	0	1	0	57	51	45	54	43	30	18	14	20
Mathematics/computer sciences.....	13,680	9,953	8,846	8,640	10,275	10,410	11,425	19,598	23,798	27,599	36,522	32,973	28,442
Computer sciences.....	12,890	9,286	8,192	7,970	9,532	9,627	10,632	18,928	23,106	26,916	35,789	32,176	27,641
Mathematics/statistics.....	790	667	654	670	743	783	793	670	692	683	733	797	801
Physical sciences.....	1,002	1,090	1,029	1,218	1,224	1,459	1,540	1,271	1,136	1,284	1,085	1,545	1,556
Astronomy.....	1	0	0	0	0	0	1	1	1	2	2	1	3
Chemistry.....	153	111	108	108	244	293	314	301	183	201	249	279	301
Physics.....	68	69	64	69	85	98	92	106	118	125	144	166	162
Other physical sciences.....	780	910	857	1,041	895	1,068	1,133	863	834	956	690	1,099	1,090
Social/behavioral sciences.....	4,562	4,894	4,440	4,087	5,832	6,077	6,681	7,467	7,555	8,110	8,397	9,032	9,574
Psychology.....	983	1,016	1,113	997	1,235	1,600	1,606	1,445	1,538	1,691	1,766	1,869	1,927
Social sciences.....	3,579	3,878	3,327	3,090	4,597	4,477	5,075	6,022	6,017	6,419	6,631	7,163	7,647
Anthropology.....	36	41	37	29	53	66	77	51	77	82	75	94	118
Area/ethnic studies.....	32	14	15	19	33	63	87	244	297	305	103	90	100
Economics.....	85	137	170	149	192	142	188	210	209	220	220	262	292
Linguistics.....	3	2	0	0	0	0	0	0	0	0	0	0	6
Political science/public administration.....	1,229	1,530	804	844	1,232	1,132	1,344	1,023	911	923	1,232	1,385	1,510
Sociology.....	356	226	257	238	276	364	504	365	370	415	452	551	497
Other social sciences.....	1,838	1,928	2,044	1,811	2,811	2,710	2,875	4,129	4,153	4,474	4,549	4,781	5,124
Non-S&E.....	432,601	417,686	420,642	466,945	495,678	519,866	520,260	510,225	513,983	511,535	543,441	555,983	595,224
Engineering technologies.....	53,667	49,815	48,342	45,106	40,946	39,190	35,221	35,544	35,413	31,557	34,007	29,681	28,769



## Earned associate's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Male</b>													
All fields .....	204,325	192,227	187,125	200,043	213,263	219,704	212,698	216,156	220,011	215,129	236,083	230,029	245,677
S&E.....	14,695	13,152	10,607	10,360	12,103	12,461	12,636	17,186	20,115	23,419	30,229	29,066	27,343
Engineering.....	3,501	4,092	2,408	2,233	2,196	1,978	1,617	1,492	1,494	1,376	1,527	1,665	1,784
Aerospace.....	14	18	6	14	8	2	1	1	0	0	0	0	0
Chemical .....	16	17	20	15	18	13	4	10	16	26	6	117	1
Civil .....	88	71	85	85	83	57	82	38	34	28	48	32	30
Electrical.....	1,011	1,613	468	351	368	238	160	215	200	58	189	211	229
Industrial.....	43	49	40	26	81	87	75	52	115	74	61	24	74
Materials .....	11	27	26	25	17	6	4	10	11	9	8	10	11
Mechanical .....	75	91	119	130	87	98	54	69	60	56	62	66	62
Other .....	2,243	2,206	1,644	1,587	1,534	1,477	1,237	1,097	1,058	1,125	1,153	1,205	1,377
Science.....	11,194	9,060	8,199	8,127	9,907	10,483	11,019	15,694	18,621	22,043	28,702	27,401	25,559
Natural sciences.....	9,588	7,410	6,528	6,716	7,809	8,412	9,008	13,503	16,496	19,765	26,197	24,895	22,837
Agricultural sciences.....	1,201	1,002	965	1,119	1,280	1,300	1,196	1,159	1,302	1,225	1,228	1,236	1,234
Biological sciences .....	554	422	423	457	613	757	789	494	497	484	579	607	674
Earth, atmospheric, and ocean sciences .....	47	26	20	23	130	148	126	116	123	37	123	21	117
Atmospheric sciences.....	1	0	0	0	77	91	74	71	77	0	93	1	93
Earth sciences.....	44	26	19	23	17	21	30	12	25	17	15	12	11
Oceanography .....	2	0	1	0	36	36	22	33	21	20	15	8	13
Mathematics/computer sciences .....	7,128	5,297	4,563	4,438	5,123	5,434	6,164	11,134	13,990	17,345	23,691	22,155	19,880
Computer sciences.....	6,639	4,878	4,148	4,032	4,695	4,996	5,720	10,727	13,541	16,902	23,226	21,654	19,354
Mathematics/statistics.....	489	419	415	406	428	438	444	407	449	443	465	501	526
Physical sciences .....	658	663	557	679	663	773	733	600	584	674	576	876	932
Astronomy.....	1	0	0	0	0	0	1	1	1	1	1	1	3
Chemistry.....	93	64	65	77	130	139	155	126	99	108	121	125	154
Physics.....	64	62	53	55	63	87	74	76	93	89	114	124	120
Other physical sciences.....	500	537	439	547	470	547	503	397	391	476	340	626	655
Social/behavioral sciences.....	1,606	1,650	1,671	1,411	2,098	2,071	2,011	2,191	2,125	2,278	2,505	2,506	2,722
Psychology .....	312	294	283	257	282	446	376	326	355	367	437	429	443
Social sciences.....	1,294	1,356	1,388	1,154	1,816	1,625	1,635	1,865	1,770	1,911	2,068	2,077	2,279
Anthropology .....	9	12	8	9	17	28	26	21	30	28	35	26	39
Area/ethnic studies.....	8	6	8	6	10	17	31	53	43	61	29	39	39
Economics.....	69	79	99	85	120	83	104	116	114	90	112	139	154
Linguistics.....	2	1	0	0	0	0	0	0	0	0	0	0	3
Political science/public administration .....	330	396	312	290	516	365	335	250	204	225	321	282	357
Sociology.....	129	69	82	76	78	100	151	89	104	111	125	130	121
Other social sciences.....	747	793	879	688	1,075	1,032	988	1,336	1,275	1,396	1,446	1,461	1,566
Non-S&E.....	189,630	179,075	176,518	189,683	201,160	207,243	200,062	198,970	199,896	191,710	205,854	200,963	218,334
Engineering technologies .....	47,946	44,158	42,766	39,777	36,129	34,196	29,990	30,079	29,747	26,537	28,331	25,141	24,265

## Earned associate's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Female</b>													
All fields .....	254,762	248,589	253,250	286,254	305,835	324,390	333,333	327,720	332,035	338,606	359,140	375,374	395,233
S&E.....	11,791	9,978	9,126	8,992	11,317	11,767	13,135	16,465	17,948	18,781	21,553	20,354	18,343
Engineering.....	422	497	327	280	330	307	271	238	297	271	289	475	288
Aerospace.....	4	2	0	0	0	0	0	0	0	0	0	0	0
Chemical .....	5	20	14	9	25	3	3	3	2	2	1	188	1
Civil .....	26	13	14	17	19	23	28	20	19	17	14	16	11
Electrical.....	66	157	59	26	32	19	19	24	24	12	37	25	15
Industrial.....	7	4	3	4	13	16	6	15	17	6	10	6	5
Materials .....	0	5	1	3	2	2	1	1	3	1	4	2	2
Mechanical .....	5	9	9	12	9	6	4	8	7	9	7	4	2
Other .....	309	287	227	209	230	238	210	167	225	224	216	234	252
Science.....	11,369	9,481	8,799	8,712	10,987	11,460	12,864	16,227	17,651	18,510	21,264	19,879	18,055
Natural sciences.....	8,413	6,237	6,030	6,036	7,253	7,454	8,194	10,951	12,221	12,678	15,372	13,353	11,203
Agricultural sciences.....	822	567	691	605	616	610	669	784	781	758	765	705	641
Biological sciences .....	679	573	576	685	886	1,144	1,392	974	1,022	1,035	1,204	1,142	1,311
Earth, atmospheric, and ocean sciences .....	16	14	8	5	38	38	65	58	58	21	63	19	65
Atmospheric sciences.....	0	0	0	0	12	16	21	21	26	0	42	1	46
Earth sciences.....	16	14	8	5	5	7	21	16	10	11	18	12	12
Oceanography .....	0	0	0	0	21	15	23	21	22	10	3	6	7
Mathematics/computer sciences .....	6,552	4,656	4,283	4,202	5,152	4,976	5,261	8,464	9,808	10,254	12,831	10,818	8,562
Computer sciences.....	6,251	4,408	4,044	3,938	4,837	4,631	4,912	8,201	9,565	10,014	12,563	10,522	8,287
Mathematics/statistics.....	301	248	239	264	315	345	349	263	243	240	268	296	275
Physical sciences .....	344	427	472	539	561	686	807	671	552	610	509	669	624
Astronomy.....	0	0	0	0	0	0	0	0	0	1	1	0	0
Chemistry.....	60	47	43	31	114	154	159	175	84	93	128	154	147
Physics.....	4	7	11	14	22	11	18	30	25	36	30	42	42
Other physical sciences.....	280	373	418	494	425	521	630	466	443	480	350	473	435
Social/behavioral sciences.....	2,956	3,244	2,769	2,676	3,734	4,006	4,670	5,276	5,430	5,832	5,892	6,526	6,852
Psychology .....	671	722	830	740	953	1,154	1,230	1,119	1,183	1,324	1,329	1,440	1,484
Social sciences.....	2,285	2,522	1,939	1,936	2,781	2,852	3,440	4,157	4,247	4,508	4,563	5,086	5,368
Anthropology .....	27	29	29	20	36	38	51	30	47	54	40	68	79
Area/ethnic studies.....	24	8	7	13	23	46	56	191	254	244	74	51	61
Economics.....	16	58	71	64	72	59	84	94	95	130	108	123	138
Linguistics.....	1	1	0	0	0	0	0	0	0	0	0	0	3
Political science/public administration .....	899	1,134	492	554	716	767	1,009	773	707	698	911	1,103	1,153
Sociology.....	227	157	175	162	198	264	353	276	266	304	327	421	376
Other social sciences.....	1,091	1,135	1,165	1,123	1,736	1,678	1,887	2,793	2,878	3,078	3,103	3,320	3,558
Non-S&E.....	242,971	238,611	244,124	277,262	294,518	312,623	320,198	311,255	314,087	319,825	337,587	355,020	376,890
Engineering technologies .....	5,721	5,657	5,576	5,329	4,817	4,994	5,231	5,465	5,666	5,020	5,676	4,540	4,504

NOTE: Engineering technologies focused more on applied skills than on fundamental science and mathematics.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

**Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>All races/ethnicities and citizenships</b>													
All fields .....	459,087	440,816	440,375	486,297	519,098	544,094	546,031	543,876	552,046	553,735	595,223	605,403	640,910
S&E.....	25,957	22,167	19,479	19,154	23,118	24,228	25,771	33,651	38,063	42,200	51,782	49,420	45,686
Engineering.....	3,923	4,588	2,732	2,510	2,525	2,285	1,888	1,730	1,791	1,647	1,816	2,140	2,072
Aerospace.....	NA	NA	NA	NA	NA	2	1	1	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	16	7	13	18	28	7	305	2
Civil.....	NA	NA	NA	NA	NA	80	110	58	53	45	62	48	41
Electrical.....	NA	NA	NA	NA	NA	257	179	239	224	70	226	236	244
Industrial.....	NA	NA	NA	NA	NA	103	81	67	132	80	71	30	79
Materials.....	NA	NA	NA	NA	NA	8	5	11	14	10	12	12	13
Mechanical.....	NA	NA	NA	NA	NA	104	58	77	67	65	69	70	64
Other.....	3,923	4,588	2,732	2,510	2,525	1,715	1,447	1,264	1,283	1,349	1,369	1,439	1,629
Science.....	22,034	17,579	16,747	16,644	20,593	21,943	23,883	31,921	36,272	40,553	49,966	47,280	43,614
Natural sciences.....	18,370	13,903	12,798	13,070	15,345	15,866	17,202	24,454	28,717	32,443	41,569	38,248	34,040
Agricultural sciences.....	2,393	1,824	1,893	2,039	2,227	1,910	1,865	1,943	2,083	1,983	1,993	1,941	1,875
Biological sciences.....	1,233	995	999	1,142	1,471	1,901	2,181	1,468	1,519	1,519	1,783	1,749	1,985
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	186	191	174	181	58	186	40	182
Atmospheric sciences.....	NA	NA	NA	NA	NA	107	95	92	103	0	135	2	139
Earth sciences.....	NA	NA	NA	NA	NA	28	51	28	35	28	33	24	23
Oceanography.....	NA	NA	NA	NA	NA	51	45	54	43	30	18	14	20
Mathematics/computer sciences.....	13,679	9,953	8,846	8,640	10,255	10,410	11,425	19,598	23,798	27,599	36,522	32,973	28,442
Computer sciences.....	12,890	9,286	8,192	7,970	9,512	9,627	10,632	18,928	23,106	26,916	35,789	32,176	27,641
Mathematics.....	789	667	654	670	743	783	793	670	692	683	733	797	801
Physical sciences.....	1,065	1,131	1,060	1,249	1,392	1,459	1,540	1,271	1,136	1,284	1,085	1,545	1,556
Astronomy.....	NA	NA	NA	NA	NA	0	1	1	1	2	2	1	3
Chemistry.....	NA	NA	NA	NA	NA	293	314	301	183	201	249	279	301
Physics.....	NA	NA	NA	NA	NA	98	92	106	118	125	144	166	162
Other physical sciences.....	1,065	1,131	1,060	1,249	1,392	1,068	1,133	863	834	956	690	1,099	1,090
Social/behavioral sciences.....	3,664	3,676	3,949	3,574	5,248	6,077	6,681	7,467	7,555	8,110	8,397	9,032	9,574
Psychology.....	983	1,016	1,113	997	1,237	1,600	1,606	1,445	1,538	1,691	1,766	1,869	1,927
Social sciences.....	2,681	2,660	2,836	2,577	4,011	4,477	5,075	6,022	6,017	6,419	6,631	7,163	7,647
Anthropology.....	NA	NA	NA	NA	NA	66	77	51	77	82	75	94	118
Area/ethnic studies.....	32	14	15	19	33	63	87	244	297	305	103	90	100
Economics.....	NA	NA	NA	NA	NA	142	188	210	209	220	220	262	292
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	6
Political science/public administration.....	NA	NA	NA	NA	NA	1,132	1,344	1,023	911	923	1,232	1,385	1,510
Sociology.....	NA	NA	NA	NA	NA	364	504	365	370	415	452	551	497
Other social sciences.....	2,649	2,646	2,821	2,558	3,978	2,710	2,875	4,129	4,153	4,474	4,549	4,781	5,124
Non-S&E.....	433,130	418,649	420,896	467,143	495,980	519,866	520,260	510,225	513,983	511,535	543,441	555,983	595,224
Engineering technologies.....	51,579	47,434	46,180	42,595	38,473	39,190	35,221	35,544	35,413	31,557	34,007	29,681	28,769
<b>U.S. citizen/permanent resident</b>													
All fields.....	452,661	436,331	434,406	479,320	510,074	534,183	535,432	533,982	540,911	541,689	582,148	591,222	627,194

## Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
S&E.....	25,341	21,759	19,018	18,786	22,481	23,524	25,012	32,827	36,980	40,825	50,243	47,859	44,368
Engineering.....	3,767	4,468	2,649	2,442	2,447	2,208	1,821	1,662	1,695	1,590	1,736	2,032	1,952
Aerospace.....	NA	NA	NA	NA	NA	2	1	1	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	16	7	11	17	26	7	302	2
Civil.....	NA	NA	NA	NA	NA	78	105	54	53	43	56	47	41
Electrical.....	NA	NA	NA	NA	NA	251	173	236	187	69	223	232	236
Industrial.....	NA	NA	NA	NA	NA	103	80	66	130	78	70	30	77
Materials.....	NA	NA	NA	NA	NA	8	5	11	14	10	12	12	13
Mechanical.....	NA	NA	NA	NA	NA	102	57	76	67	64	68	69	62
Other.....	3,767	4,468	2,649	2,442	2,447	1,648	1,393	1,207	1,227	1,300	1,300	1,340	1,521
Science.....	21,574	17,291	16,369	16,344	20,034	21,316	23,191	31,165	35,285	39,235	48,507	45,827	42,416
Natural sciences.....	17,983	13,645	12,496	12,826	14,923	15,393	16,705	23,849	27,911	31,296	40,305	37,022	33,053
Agricultural sciences.....	2,359	1,812	1,870	2,018	2,194	1,892	1,846	1,920	2,037	1,931	1,982	1,898	1,861
Biological sciences.....	1,213	960	964	1,120	1,433	1,824	2,103	1,441	1,484	1,489	1,734	1,692	1,927
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	184	189	173	177	57	186	38	182
Atmospheric sciences.....	NA	NA	NA	NA	NA	105	95	92	103	0	135	2	139
Earth sciences.....	NA	NA	NA	NA	NA	28	49	27	31	27	33	22	23
Oceanography.....	NA	NA	NA	NA	NA	51	45	54	43	30	18	14	20
Mathematics/computer sciences.....	13,366	9,776	8,641	8,469	9,971	10,111	11,119	19,099	23,110	26,579	35,376	31,934	27,643
Computer sciences.....	12,616	9,121	8,005	7,815	9,275	9,367	10,370	18,462	22,460	25,932	34,689	31,184	26,902
Mathematics.....	750	655	636	654	696	744	749	637	650	647	687	750	741
Physical sciences.....	1,045	1,097	1,021	1,219	1,325	1,382	1,448	1,216	1,103	1,240	1,027	1,460	1,440
Astronomy.....	NA	NA	NA	NA	NA	0	1	1	1	2	2	1	3
Chemistry.....	NA	NA	NA	NA	NA	247	253	269	174	196	236	266	282
Physics.....	NA	NA	NA	NA	NA	89	82	98	115	120	128	157	151
Other physical sciences.....	1,045	1,097	1,021	1,219	1,325	1,046	1,112	848	813	922	661	1,036	1,004
Social/behavioral sciences.....	3,591	3,646	3,873	3,518	5,111	5,923	6,486	7,316	7,374	7,939	8,202	8,805	9,363
Psychology.....	969	1,008	1,086	989	1,220	1,581	1,567	1,423	1,513	1,655	1,723	1,826	1,889
Social sciences.....	2,622	2,638	2,787	2,529	3,891	4,342	4,919	5,893	5,861	6,284	6,479	6,979	7,474
Anthropology.....	NA	NA	NA	NA	NA	58	66	48	75	81	75	92	117
Area/ethnic studies.....	32	14	15	19	31	49	82	228	276	290	97	87	98
Economics.....	NA	NA	NA	NA	NA	120	150	192	182	200	189	225	260
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	2
Political science/public administration.....	NA	NA	NA	NA	NA	1,115	1,317	1,011	897	912	1,222	1,362	1,497
Sociology.....	NA	NA	NA	NA	NA	353	494	361	360	409	446	530	478
Other social sciences.....	2,590	2,624	2,772	2,510	3,860	2,647	2,810	4,053	4,071	4,392	4,450	4,683	5,022
Non-S&E.....	427,320	414,572	415,388	460,534	487,593	510,659	510,420	501,155	503,931	500,864	531,905	543,363	582,826
Engineering technologies.....	50,899	46,859	45,647	42,069	38,093	38,764	34,761	35,215	34,742	31,136	33,572	29,202	28,422
White													
All fields.....	355,422	345,546	330,557	376,869	392,637	408,126	400,307	380,777	378,041	372,372	393,947	393,977	417,202
S&E.....	18,133	16,169	13,898	13,842	15,631	16,392	16,835	20,982	23,970	26,204	31,433	29,640	27,588
Engineering.....	2,260	3,235	1,986	1,867	1,886	1,658	1,363	1,126	1,202	1,171	1,250	1,370	1,342

## Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Aerospace .....	NA	NA	NA	NA	NA	0	1	1	0	0	0	0	0
Chemical .....	NA	NA	NA	NA	NA	14	5	11	17	22	6	175	2
Civil .....	NA	NA	NA	NA	NA	53	77	31	40	24	43	27	26
Electrical.....	NA	NA	NA	NA	NA	186	143	122	100	49	164	164	167
Industrial.....	NA	NA	NA	NA	NA	85	67	58	92	59	57	25	72
Materials .....	NA	NA	NA	NA	NA	8	5	8	12	8	11	12	13
Mechanical.....	NA	NA	NA	NA	NA	55	44	52	46	40	48	50	43
Other .....	2,260	3,235	1,986	1,867	1,886	1,257	1,021	843	895	969	921	917	1,019
Science.....	15,873	12,934	11,912	11,975	13,745	14,734	15,472	19,856	22,768	25,033	30,183	28,270	26,246
Natural sciences.....	13,803	10,438	9,275	9,628	10,504	10,960	11,693	15,797	18,508	20,495	25,674	23,483	21,186
Agricultural sciences.....	2,138	1,571	1,705	1,847	2,017	1,633	1,680	1,718	1,824	1,715	1,788	1,681	1,703
Biological sciences.....	676	590	685	759	977	1,197	1,310	930	979	1,013	1,132	1,083	1,222
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	156	160	150	156	54	146	34	143
Atmospheric sciences.....	NA	NA	NA	NA	NA	82	83	74	85	0	99	2	106
Earth sciences.....	NA	NA	NA	NA	NA	23	40	24	29	25	30	20	18
Oceanography.....	NA	NA	NA	NA	NA	51	37	52	42	29	17	12	19
Mathematics/computer sciences.....	10,255	7,360	6,044	6,054	6,515	6,950	7,544	12,200	14,796	16,827	21,922	19,765	17,182
Computer sciences.....	9,730	6,879	5,583	5,577	6,006	6,471	7,052	11,821	14,438	16,446	21,550	19,329	16,774
Mathematics.....	525	481	461	477	509	479	492	379	358	381	372	436	408
Physical sciences.....	734	917	841	968	995	1,024	999	799	753	886	686	920	936
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	1	2	0	0	2
Chemistry.....	NA	NA	NA	NA	NA	153	153	144	98	133	128	153	155
Physics.....	NA	NA	NA	NA	NA	62	45	65	72	77	80	89	92
Other physical sciences.....	734	917	841	968	995	809	801	590	582	674	478	678	687
Social/behavioral sciences.....	2,070	2,496	2,637	2,347	3,241	3,774	3,779	4,059	4,260	4,538	4,509	4,787	5,060
Psychology.....	680	781	845	738	894	1,146	1,087	952	1,005	1,111	1,111	1,141	1,124
Social sciences.....	1,390	1,715	1,792	1,609	2,347	2,628	2,692	3,107	3,255	3,427	3,398	3,646	3,936
Anthropology.....	NA	NA	NA	NA	NA	45	44	31	51	62	43	61	74
Area/ethnic studies.....	3	3	3	7	5	14	10	59	208	211	15	15	17
Economics.....	NA	NA	NA	NA	NA	78	67	81	92	87	84	100	115
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	1
Political science/public administration.....	NA	NA	NA	NA	NA	544	593	367	352	337	541	643	722
Sociology.....	NA	NA	NA	NA	NA	223	287	202	187	209	219	234	198
Other social sciences.....	1,387	1,712	1,789	1,602	2,342	1,724	1,691	2,367	2,365	2,521	2,496	2,593	2,809
Non-S&E.....	337,289	329,377	316,659	363,027	377,006	391,734	383,472	359,795	354,071	346,168	362,514	364,337	389,614
Engineering technologies.....	40,934	37,383	33,584	33,792	28,442	29,646	26,522	25,643	24,999	21,971	23,383	20,541	20,787
Asian/Pacific Islander													
All fields.....	10,165	11,329	11,761	15,069	16,280	20,976	23,882	25,654	25,780	28,032	28,929	28,855	29,782
S&E.....	828	1,051	834	842	1,108	1,392	1,700	2,384	2,502	2,877	3,438	3,158	2,749
Engineering.....	184	369	194	146	136	152	148	160	130	97	112	135	136
Aerospace.....	NA	NA	NA	NA	NA	1	0	0	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	2	1	0	0	2	1	8	0

## Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Civil.....	NA	NA	NA	NA	NA	3	4	3	4	5	6	2	1
Electrical.....	NA	NA	NA	NA	NA	6	8	38	17	2	7	7	3
Industrial.....	NA	NA	NA	NA	NA	2	1	2	0	0	2	0	1
Materials.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Mechanical.....	NA	NA	NA	NA	NA	0	4	0	2	0	0	0	2
Other.....	184	369	194	146	136	138	130	117	107	88	96	118	129
Science.....	644	682	640	696	972	1,240	1,552	2,224	2,372	2,780	3,326	3,023	2,613
Natural sciences.....	597	576	521	608	756	935	1,196	1,745	1,941	2,303	2,828	2,460	1,996
Agricultural sciences.....	4	10	6	8	6	10	4	19	9	9	9	18	11
Biological sciences.....	31	59	52	126	146	190	264	109	94	91	142	148	204
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	5	4	1	0	0	5	0	2
Atmospheric sciences.....	NA	NA	NA	NA	NA	4	3	0	0	0	4	0	2
Earth sciences.....	NA	NA	NA	NA	NA	1	0	1	0	0	1	0	0
Oceanography.....	NA	NA	NA	NA	NA	0	1	0	0	0	0	0	0
Mathematics/computer sciences.....	511	464	401	388	528	606	748	1,471	1,757	2,117	2,567	2,104	1,604
Computer sciences.....	448	395	336	323	459	513	661	1,381	1,651	2,026	2,465	2,004	1,509
Mathematics.....	63	69	65	65	69	93	87	90	106	91	102	100	95
Physical sciences.....	51	43	62	86	76	124	176	145	81	86	105	190	175
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	1	0
Chemistry.....	NA	NA	NA	NA	NA	38	51	51	29	15	35	43	45
Physics.....	NA	NA	NA	NA	NA	15	16	15	9	18	17	26	21
Other physical sciences.....	51	43	62	86	76	71	109	79	43	53	53	120	109
Social/behavioral sciences.....	47	106	119	88	216	305	356	479	431	477	498	563	617
Psychology.....	8	19	14	24	33	57	63	51	53	50	74	75	72
Social sciences.....	39	87	105	64	183	248	293	428	378	427	424	488	545
Anthropology.....	NA	NA	NA	NA	NA	3	1	1	4	0	4	2	9
Area/ethnic studies.....	0	0	1	1	7	2	0	3	6	2	3	1	11
Economics.....	NA	NA	NA	NA	NA	13	35	41	32	36	28	24	46
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	1
Political science/public administration.....	NA	NA	NA	NA	NA	64	65	89	71	68	51	97	93
Sociology.....	NA	NA	NA	NA	NA	11	28	24	12	12	17	26	31
Other social sciences.....	39	87	104	63	176	155	164	270	253	309	321	338	354
Non-S&E.....	9,337	10,278	10,927	14,227	15,172	19,584	22,182	23,270	23,278	25,155	25,491	25,697	27,033
Engineering technologies.....	1,570	1,989	1,663	1,496	1,358	1,458	1,586	1,752	1,725	1,711	1,905	1,314	1,083
Black													
All fields.....	35,861	33,858	32,185	37,854	41,260	45,923	51,588	55,154	57,851	58,454	66,047	66,741	72,566
S&E.....	1,653	1,766	1,460	1,631	1,963	2,307	2,577	3,856	4,351	4,859	6,457	5,856	5,379
Engineering.....	148	249	120	126	201	148	131	123	104	118	117	150	162
Aerospace.....	NA	NA	NA	NA	NA	1	0	0	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	14	0
Civil.....	NA	NA	NA	NA	NA	5	12	5	3	3	2	6	7
Electrical.....	NA	NA	NA	NA	NA	38	19	21	17	17	21	24	27

**Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Industrial .....	NA	NA	NA	NA	NA	7	5	1	3	3	3	2	2
Materials .....	NA	NA	NA	NA	NA	0	0	0	0	1	1	0	0
Mechanical .....	NA	NA	NA	NA	NA	0	0	0	0	1	0	0	0
Other .....	148	249	120	126	201	97	95	96	81	93	90	104	126
Science.....	1,505	1,517	1,340	1,505	1,762	2,159	2,446	3,733	4,247	4,741	6,340	5,706	5,217
Natural sciences.....	1,098	1,159	953	1,070	1,182	1,364	1,475	2,734	3,304	3,746	5,229	4,543	4,003
Agricultural sciences .....	19	27	17	14	15	23	11	18	3	14	13	18	8
Biological sciences .....	93	100	63	57	93	147	140	137	127	121	145	135	147
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	10	9	13	9	1	17	0	17
Atmospheric sciences.....	NA	NA	NA	NA	NA	10	9	13	9	0	16	0	16
Earth sciences.....	NA	NA	NA	NA	NA	0	0	0	0	0	1	0	1
Oceanography.....	NA	NA	NA	NA	NA	0	0	0	0	1	0	0	0
Mathematics/computer sciences .....	938	961	828	921	1,004	1,091	1,219	2,481	3,085	3,533	4,991	4,317	3,753
Computer sciences.....	914	923	803	894	978	1,046	1,182	2,445	3,035	3,506	4,950	4,281	3,718
Mathematics .....	24	38	25	27	26	45	37	36	50	27	41	36	35
Physical sciences .....	48	71	45	78	70	93	96	85	80	77	63	73	78
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemistry.....	NA	NA	NA	NA	NA	22	17	17	12	9	15	15	22
Physics.....	NA	NA	NA	NA	NA	5	7	2	1	1	6	5	3
Other physical sciences.....	48	71	45	78	70	66	72	66	67	67	42	53	53
Social/behavioral sciences.....	407	358	387	435	580	795	971	999	943	995	1,111	1,163	1,214
Psychology .....	65	73	83	103	109	126	125	135	142	140	144	158	172
Social sciences.....	342	285	304	332	471	669	846	864	801	855	967	1,005	1,042
Anthropology.....	NA	NA	NA	NA	NA	3	4	3	1	1	1	0	6
Area/ethnic studies.....	1	3	5	6	10	9	19	16	7	13	24	17	23
Economics.....	NA	NA	NA	NA	NA	5	11	7	5	9	9	19	14
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Political science/public administration .....	NA	NA	NA	NA	NA	264	347	275	254	248	325	311	347
Sociology .....	NA	NA	NA	NA	NA	50	63	55	66	73	76	100	76
Other social sciences.....	341	282	299	326	461	338	402	508	468	511	532	558	576
Non-S&E.....	34,208	32,092	30,725	36,223	39,297	43,616	49,011	51,298	53,500	53,595	59,590	60,885	67,187
Engineering technologies .....	3,395	3,100	2,829	3,030	2,698	3,015	2,982	3,321	3,372	2,795	3,280	2,536	2,602
Hispanic													
All fields.....	22,783	22,804	23,475	29,019	33,015	38,499	42,784	50,488	54,333	55,900	59,942	63,669	68,205
S&E.....	1,380	1,635	1,453	1,463	2,152	2,498	2,773	3,868	4,131	4,531	5,539	5,374	5,205
Engineering.....	126	369	176	153	153	161	112	178	186	129	151	268	201
Aerospace .....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemical .....	NA	NA	NA	NA	NA	0	0	0	0	2	0	89	0
Civil .....	NA	NA	NA	NA	NA	7	6	5	2	6	2	5	2
Electrical.....	NA	NA	NA	NA	NA	8	2	48	48	0	9	30	27
Industrial .....	NA	NA	NA	NA	NA	6	1	7	33	11	7	3	0
Materials .....	NA	NA	NA	NA	NA	0	0	0	0	1	0	0	0

## Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Mechanical.....	NA	NA	NA	NA	NA	44	12	21	19	23	18	17	14
Other.....	126	369	176	153	153	96	91	97	84	86	115	124	158
Science.....	1,254	1,266	1,277	1,310	1,999	2,337	2,661	3,690	3,945	4,402	5,388	5,106	5,004
Natural sciences.....	924	901	845	909	1,386	1,558	1,636	2,497	2,696	3,045	3,895	3,534	3,274
Agricultural sciences.....	53	91	114	57	88	136	75	77	109	86	68	54	43
Biological sciences.....	135	153	88	130	160	208	276	183	220	188	216	207	227
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	10	8	1	1	1	1	2	5
Atmospheric sciences.....	NA	NA	NA	NA	NA	9	0	0	0	0	0	0	0
Earth sciences.....	NA	NA	NA	NA	NA	1	7	1	1	1	1	1	4
Oceanography.....	NA	NA	NA	NA	NA	0	1	0	0	0	0	1	1
Mathematics/computer sciences.....	676	620	609	677	1,086	1,134	1,175	2,130	2,253	2,672	3,515	3,138	2,862
Computer sciences.....	638	581	562	622	1,019	1,035	1,065	2,033	2,154	2,567	3,391	3,007	2,708
Mathematics.....	38	39	47	55	67	99	110	97	99	105	124	131	154
Physical sciences.....	60	37	34	45	52	70	102	106	113	98	95	133	137
Astronomy.....	NA	NA	NA	NA	NA	0	1	1	0	0	2	0	0
Chemistry.....	NA	NA	NA	NA	NA	20	23	42	27	24	40	37	48
Physics.....	NA	NA	NA	NA	NA	5	11	11	22	16	13	24	28
Other physical sciences.....	60	37	34	45	52	45	67	52	64	58	40	72	61
Social/behavioral sciences.....	330	365	432	401	613	779	1,025	1,193	1,249	1,357	1,493	1,572	1,730
Psychology.....	43	64	123	88	141	193	209	192	218	259	293	333	379
Social sciences.....	287	301	309	313	472	586	816	1,001	1,031	1,098	1,200	1,239	1,351
Anthropology.....	NA	NA	NA	NA	NA	4	12	8	10	13	16	17	13
Area/ethnic studies.....	1	2	0	0	2	8	23	17	7	15	24	12	20
Economics.....	NA	NA	NA	NA	NA	20	26	50	43	55	50	58	63
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Political science/public administration.....	NA	NA	NA	NA	NA	214	277	249	195	219	244	220	234
Sociology.....	NA	NA	NA	NA	NA	54	90	63	78	92	108	124	123
Other social sciences.....	286	299	309	313	470	286	388	614	698	704	758	808	898
Non-S&E.....	21,403	21,169	22,022	27,556	30,863	36,001	40,011	46,620	50,202	51,369	54,403	58,295	63,000
Engineering technologies.....	2,084	2,359	2,232	2,411	2,398	2,777	2,728	3,283	3,369	3,069	2,829	2,863	2,405
American Indian/Alaska Native													
All fields.....	2,953	3,049	3,102	3,772	4,213	5,352	5,520	5,697	5,758	5,965	6,515	6,886	7,059
S&E.....	163	195	182	257	315	419	455	525	501	577	679	709	686
Engineering.....	11	27	12	21	8	22	25	17	16	15	19	34	28
Aerospace.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	9	0
Civil.....	NA	NA	NA	NA	NA	1	3	2	1	1	1	4	2
Electrical.....	NA	NA	NA	NA	NA	1	1	0	0	0	0	0	5
Industrial.....	NA	NA	NA	NA	NA	1	1	0	0	0	2	0	1
Materials.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Mechanical.....	NA	NA	NA	NA	NA	0	0	0	1	0	0	0	0
Other.....	11	27	12	21	8	19	20	15	14	14	16	21	20



**Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Science.....	152	168	170	236	307	397	430	508	485	562	660	675	658
Natural sciences.....	101	98	111	157	189	241	243	312	317	331	437	426	373
Agricultural sciences.....	29	28	23	37	41	54	54	67	48	49	53	58	55
Biological sciences.....	8	17	19	22	25	40	46	37	32	41	27	45	44
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	1	1	0	0	0	2	0	0
Atmospheric sciences.....	NA	NA	NA	NA	NA	0	0	0	0	0	1	0	0
Earth sciences.....	NA	NA	NA	NA	NA	1	1	0	0	0	0	0	0
Oceanography.....	NA	NA	NA	NA	NA	0	0	0	0	0	1	0	0
Mathematics/computer sciences.....	56	49	67	91	116	124	122	195	220	224	339	299	250
Computer sciences.....	52	45	58	78	101	111	120	188	208	217	326	289	237
Mathematics.....	4	4	9	13	15	13	2	7	12	7	13	10	13
Physical sciences.....	8	4	2	7	7	22	20	13	17	17	16	24	24
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	1
Chemistry.....	NA	NA	NA	NA	NA	4	1	1	4	4	2	2	3
Physics.....	NA	NA	NA	NA	NA	0	1	0	2	0	3	0	2
Other physical sciences.....	8	4	2	7	7	18	18	12	11	13	11	22	18
Social/behavioral sciences.....	51	70	59	79	118	156	187	196	168	231	223	249	285
Psychology.....	11	16	13	16	18	35	38	38	34	32	31	36	56
Social sciences.....	40	54	46	63	100	121	149	158	134	199	192	213	229
Anthropology.....	NA	NA	NA	NA	NA	2	1	1	2	0	1	0	2
Area/ethnic studies.....	5	6	6	4	7	16	29	26	22	21	31	34	24
Economics.....	NA	NA	NA	NA	NA	1	1	2	1	3	2	1	1
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Political science/public administration.....	NA	NA	NA	NA	NA	13	17	16	4	8	21	32	29
Sociology.....	NA	NA	NA	NA	NA	7	9	1	4	4	6	5	17
Other social sciences.....	35	48	40	59	93	82	92	112	101	163	131	141	156
Non-S&E.....	2,790	2,854	2,920	3,515	3,898	4,933	5,065	5,172	5,257	5,388	5,836	6,177	6,373
Engineering technologies.....	267	219	257	232	210	286	236	273	253	239	314	341	278
Other/unknown race/ethnicity													
All fields.....	25,477	19,745	33,326	16,737	22,669	15,307	11,351	16,212	19,148	20,966	26,768	31,094	32,380
S&E.....	3,184	943	1,191	751	1,312	516	672	1,212	1,525	1,777	2,697	3,122	2,761
Engineering.....	1,038	219	161	129	63	67	42	58	57	60	87	75	83
Aerospace.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemical.....	NA	NA	NA	NA	NA	0	1	0	0	0	0	7	0
Civil.....	NA	NA	NA	NA	NA	9	3	8	3	4	2	3	3
Electrical.....	NA	NA	NA	NA	NA	12	0	7	5	1	22	7	7
Industrial.....	NA	NA	NA	NA	NA	4	2	0	0	5	1	0	0
Materials.....	NA	NA	NA	NA	NA	0	0	3	2	0	0	0	0
Mechanical.....	NA	NA	NA	NA	NA	1	0	1	1	0	0	2	4
Other.....	1,038	219	161	129	63	41	36	39	46	50	62	56	69
Science.....	2,146	724	1,030	622	1,249	449	630	1,154	1,468	1,717	2,610	3,047	2,678
Natural sciences.....	1,460	473	791	454	906	335	462	764	1,145	1,376	2,242	2,576	2,221

**Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Agricultural sciences .....	116	85	5	55	27	36	22	21	44	58	51	69	41
Biological sciences .....	270	41	57	26	32	42	67	45	32	35	72	74	83
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	2	7	8	11	1	15	2	15
Atmospheric sciences.....	NA	NA	NA	NA	NA	0	0	5	9	0	15	0	15
Earth sciences.....	NA	NA	NA	NA	NA	2	1	1	1	1	0	1	0
Oceanography.....	NA	NA	NA	NA	NA	0	6	2	1	0	0	1	0
Mathematics/computer sciences .....	930	322	692	338	722	206	311	622	999	1,206	2,042	2,311	1,992
Computer sciences.....	834	298	663	321	712	191	290	594	974	1,170	2,007	2,274	1,956
Mathematics .....	96	24	29	17	10	15	21	28	25	36	35	37	36
Physical sciences .....	144	25	37	35	125	49	55	68	59	76	62	120	90
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemistry.....	NA	NA	NA	NA	NA	10	8	14	4	11	16	16	9
Physics.....	NA	NA	NA	NA	NA	2	2	5	9	8	9	13	5
Other physical sciences.....	144	25	37	35	125	37	45	49	46	57	37	91	76
Social/behavioral sciences.....	686	251	239	168	343	114	168	390	323	341	368	471	457
Psychology .....	162	55	8	20	25	24	45	55	61	63	70	83	86
Social sciences.....	524	196	231	148	318	90	123	335	262	278	298	388	371
Anthropology.....	NA	NA	NA	NA	NA	1	4	4	7	5	10	12	13
Area/ethnic studies.....	22	0	0	1	0	0	1	107	26	28	0	8	3
Economics.....	NA	NA	NA	NA	NA	3	10	11	9	10	16	23	21
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Political science/public administration .....	NA	NA	NA	NA	NA	16	18	15	21	32	40	59	72
Sociology .....	NA	NA	NA	NA	NA	8	17	16	13	19	20	41	33
Other social sciences.....	502	196	231	147	318	62	73	182	186	184	212	245	229
Non-S&E.....	22,293	18,802	32,135	15,986	21,357	14,791	10,679	15,000	17,623	19,189	24,071	27,972	29,619
Engineering technologies .....	2,649	1,809	5,082	1,108	2,987	1,582	707	943	1,024	1,351	1,861	1,607	1,267
Temporary resident													
All fields.....	6,426	4,485	5,969	6,977	9,024	9,911	10,599	9,894	11,135	12,046	13,075	14,181	13,716
S&E.....	616	408	461	368	637	704	759	824	1,083	1,375	1,539	1,561	1,318
Engineering.....	156	120	83	68	78	77	67	68	96	57	80	108	120
Aerospace.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemical .....	NA	NA	NA	NA	NA	0	0	2	1	2	0	3	0
Civil .....	NA	NA	NA	NA	NA	2	5	4	0	2	6	1	0
Electrical.....	NA	NA	NA	NA	NA	6	6	3	37	1	3	4	8
Industrial.....	NA	NA	NA	NA	NA	0	1	1	2	2	1	0	2
Materials .....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Mechanical .....	NA	NA	NA	NA	NA	2	1	1	0	1	1	1	2
Other .....	156	120	83	68	78	67	54	57	56	49	69	99	108
Science.....	460	288	378	300	559	627	692	756	987	1,318	1,459	1,453	1,198
Natural sciences .....	387	258	302	244	422	473	497	605	806	1,147	1,264	1,226	987
Agricultural sciences.....	34	12	23	21	33	18	19	23	46	52	11	43	14
Biological sciences .....	20	35	35	22	38	77	78	27	35	30	49	57	58

**Earned associate's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	2	2	1	4	1	0	2	0
Atmospheric sciences.....	NA	NA	NA	NA	NA	2	0	0	0	0	0	0	0
Earth sciences.....	NA	NA	NA	NA	NA	0	2	1	4	1	0	2	0
Oceanography.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Mathematics/computer sciences .....	313	177	205	171	284	299	306	499	688	1,020	1,146	1,039	799
Computer sciences.....	274	165	187	155	237	260	262	466	646	984	1,100	992	739
Mathematics.....	39	12	18	16	47	39	44	33	42	36	46	47	60
Physical sciences .....	20	34	39	30	67	77	92	55	33	44	58	85	116
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Chemistry.....	NA	NA	NA	NA	NA	46	61	32	9	5	13	13	19
Physics.....	NA	NA	NA	NA	NA	9	10	8	3	5	16	9	11
Other physical sciences.....	20	34	39	30	67	22	21	15	21	34	29	63	86
Social/behavioral sciences.....	73	30	76	56	137	154	195	151	181	171	195	227	211
Psychology.....	14	8	27	8	17	19	39	22	25	36	43	43	38
Social sciences.....	59	22	49	48	120	135	156	129	156	135	152	184	173
Anthropology.....	NA	NA	NA	NA	NA	8	11	3	2	1	0	2	1
Area/ethnic studies.....	0	0	0	0	2	14	5	16	21	15	6	3	2
Economics.....	NA	NA	NA	NA	NA	22	38	18	27	20	31	37	32
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	4
Political science/public administration.....	NA	NA	NA	NA	NA	17	27	12	14	11	10	23	13
Sociology.....	NA	NA	NA	NA	NA	11	10	4	10	6	6	21	19
Other social sciences.....	59	22	49	48	118	63	65	76	82	82	99	98	102
Non-S&E.....	5,810	4,077	5,508	6,609	8,387	9,207	9,840	9,070	10,052	10,671	11,536	12,620	12,398
Engineering technologies.....	680	575	533	526	380	426	460	329	671	421	435	479	347

NA = not available

NOTES: Race/ethnicity data collected on broad fields of study only until 1994. Field taxonomies for data through 1994 do not exactly match field taxonomies used in tables by sex or race/ethnicity data after 1994. Primary difference between taxonomies: history included in social sciences before 1995 but in non-S&E from 1995 on. Racial/ethnic breakouts for U.S. citizens and permanent residents only; temporary resident includes all races/ethnicities. Engineering technologies focused more on applied skills than on fundamental science and mathematics.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Science and Engineering Indicators 2008

**Earned bachelor's degrees, by sex and field: Selected years, 1985–2005**

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Both sexes</b>													
All fields .....	990,877	1,003,532	1,030,171	1,107,997	1,179,278	1,174,436	1,186,589	1,253,121	1,257,648	1,305,730	1,359,843	1,407,009	1,437,200
S&E.....	332,273	331,526	322,821	337,675	366,035	378,148	388,482	398,622	400,206	415,611	441,087	455,848	466,003
Engineering.....	77,572	74,425	66,947	62,187	62,705	63,371	62,352	59,536	59,258	60,639	63,773	64,675	66,133
Aerospace.....	2,854	2,989	2,944	2,869	2,735	1,771	1,290	1,267	1,498	1,747	2,017	2,318	2,384
Chemical.....	8,941	6,114	4,187	3,728	4,899	6,391	6,977	6,219	6,088	5,946	5,545	5,185	4,889
Civil.....	9,730	8,746	8,015	8,083	9,788	11,329	12,010	9,596	8,949	8,891	9,367	9,399	9,797
Electrical.....	23,668	26,791	24,318	21,520	19,598	17,579	16,434	17,672	18,371	18,977	20,729	21,342	21,412
Industrial.....	4,009	4,313	4,121	3,820	3,584	3,519	3,997	3,937	3,818	3,976	3,939	3,807	3,938
Materials.....	1,276	1,152	1,114	1,166	1,216	1,046	1,063	972	930	933	950	865	906
Mechanical.....	17,200	15,723	15,217	14,263	14,708	15,141	13,806	13,109	13,160	13,377	14,044	14,368	14,908
Other.....	9,894	8,597	7,031	6,738	6,177	6,595	6,775	6,764	6,444	6,792	7,182	7,391	7,899
Science.....	254,701	257,101	255,874	275,488	303,330	314,777	326,130	339,086	340,948	354,972	377,314	391,173	399,870
Natural sciences.....	129,668	125,166	109,137	105,383	116,745	129,465	140,346	150,898	152,326	158,536	168,557	171,106	169,486
Agricultural sciences.....	11,907	9,524	8,582	8,432	11,632	14,580	17,361	18,244	17,467	17,360	17,693	17,041	17,111
Biological sciences.....	39,405	39,047	36,949	40,351	47,989	56,890	65,139	64,904	62,089	61,768	63,582	64,762	67,982
Earth, atmospheric, and ocean sciences.....	7,576	4,689	3,181	2,728	3,503	4,478	4,466	4,047	3,968	3,984	3,949	3,903	3,959
Atmospheric sciences.....	414	345	330	360	369	444	431	490	456	525	562	572	677
Earth sciences.....	7,001	4,189	2,707	2,214	2,901	3,820	3,830	3,359	3,334	3,234	3,252	3,170	3,146
Oceanography.....	161	155	144	154	233	214	205	198	178	225	135	161	136
Mathematics/computer sciences.....	54,510	56,442	46,277	40,194	39,433	38,620	38,116	49,123	54,639	61,408	69,211	71,160	65,404
Computer sciences.....	39,121	39,927	30,963	25,410	24,580	24,769	25,393	37,388	43,184	49,135	56,329	57,405	50,564
Mathematics/statistics.....	15,389	16,515	15,314	14,784	14,853	13,851	12,723	11,735	11,455	12,273	12,882	13,755	14,840
Physical sciences.....	16,270	15,464	14,148	13,678	14,188	14,897	15,264	14,580	14,163	14,016	14,122	14,240	15,030
Astronomy.....	119	130	164	151	167	169	140	160	240	276	271	292	331
Chemistry.....	10,701	9,830	8,822	8,461	9,109	10,016	10,926	10,390	9,822	9,448	9,332	9,305	9,937
Physics.....	4,111	4,324	4,347	4,245	4,080	3,836	3,393	3,362	3,457	3,651	3,922	4,156	4,210
Other physical sciences.....	1,339	1,180	815	821	832	876	805	668	644	641	597	487	552
Social/behavioral sciences.....	125,033	131,935	146,737	170,105	186,585	185,312	185,784	188,188	188,622	196,436	208,757	220,067	230,384
Psychology.....	40,237	43,195	48,954	58,893	67,251	72,601	74,734	74,654	74,168	77,323	79,115	82,510	85,936
Social sciences.....	84,796	88,740	97,783	111,212	119,334	112,711	111,050	113,534	114,454	119,113	129,642	137,557	144,448
Anthropology.....	2,684	2,802	3,135	4,212	5,203	5,806	6,759	7,057	6,898	7,198	7,542	7,629	7,739
Area/ethnic studies.....	2,872	3,313	3,950	4,625	5,073	5,176	5,257	5,617	5,561	5,844	5,745	6,242	6,611
Economics.....	23,073	24,402	25,301	25,302	22,973	19,083	17,701	19,400	20,377	21,827	23,871	24,933	25,164
History of science.....	0	0	0	0	9	29	31	92	101	103	103	140	117
Linguistics.....	490	477	447	572	553	564	577	727	757	861	920	1,047	1,053
Political science/public administration.....	32,378	33,876	38,246	44,257	47,936	41,978	37,807	36,439	36,651	38,573	43,735	47,353	51,417
Sociology.....	12,165	12,359	14,393	17,632	21,007	22,974	24,750	25,685	25,363	25,318	26,191	27,030	28,576
Other social sciences.....	11,134	11,511	12,311	14,612	16,580	17,101	18,168	18,517	18,746	19,389	21,535	23,183	23,771
Non-S&E.....	658,604	672,006	707,350	770,322	813,243	796,288	798,107	854,499	857,442	890,119	918,756	951,161	971,197
Engineering technologies.....	20,476	20,577	20,098	18,294	17,022	16,607	14,631	15,238	15,127	15,406	15,336	15,119	15,247

## Earned bachelor's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Male</b>													
All fields .....	486,660	485,003	487,566	508,952	537,536	531,146	525,282	536,158	536,023	553,957	575,977	596,192	608,262
S&E.....	203,402	199,981	189,338	189,328	200,315	202,217	201,471	197,669	197,623	204,408	218,698	225,909	230,806
Engineering.....	66,326	63,021	56,759	52,522	52,724	52,421	50,882	47,320	47,344	47,952	50,803	51,418	52,936
Aerospace.....	2,613	2,741	2,643	2,545	2,419	1,541	1,088	1,029	1,194	1,435	1,633	1,905	1,980
Chemical .....	6,848	4,574	3,017	2,564	3,335	4,367	4,701	4,016	4,033	3,823	3,532	3,352	3,113
Civil .....	8,388	7,550	6,841	6,803	8,009	9,031	9,441	7,263	6,908	6,667	7,118	7,120	7,448
Electrical.....	20,936	23,227	21,130	18,757	17,339	15,409	14,416	15,322	15,829	16,257	17,820	18,310	18,579
Industrial.....	2,842	2,929	2,860	2,723	2,547	2,493	2,918	2,630	2,594	2,635	2,627	2,542	2,669
Materials .....	990	854	853	912	956	799	804	704	667	648	674	595	624
Mechanical .....	15,399	13,996	13,537	12,673	13,076	13,441	12,171	11,325	11,421	11,594	12,183	12,416	12,955
Other .....	8,310	7,150	5,878	5,545	5,043	5,340	5,343	5,031	4,698	4,893	5,216	5,178	5,568
Science.....	137,076	136,960	132,579	136,806	147,591	149,796	150,589	150,349	150,279	156,456	167,895	174,491	177,870
Natural sciences.....	78,306	75,460	65,691	61,906	67,799	73,540	77,597	80,791	81,821	85,257	91,461	93,579	92,532
Agricultural sciences.....	7,737	6,129	5,557	5,292	7,294	8,943	10,094	9,780	8,976	8,726	8,734	8,327	8,380
Biological sciences .....	20,435	20,039	18,295	19,715	23,145	26,972	29,873	26,946	25,005	24,073	24,049	24,322	25,699
Earth, atmospheric, and ocean sciences .....	5,715	3,629	2,380	1,946	2,453	2,954	2,924	2,430	2,346	2,282	2,298	2,256	2,299
Atmospheric sciences.....	346	284	278	303	305	362	348	376	324	374	386	369	436
Earth sciences.....	5,244	3,218	1,995	1,530	1,978	2,456	2,445	1,950	1,934	1,788	1,846	1,812	1,795
Oceanography .....	125	127	107	113	170	136	131	104	88	120	66	75	68
Mathematics/computer sciences .....	32,985	34,871	29,682	25,700	25,483	25,066	25,324	33,045	37,242	42,142	48,142	50,436	47,544
Computer sciences.....	24,690	26,038	21,418	17,896	17,629	17,706	18,490	26,914	31,284	35,631	41,139	42,999	39,329
Mathematics/statistics.....	8,295	8,833	8,264	7,804	7,854	7,360	6,834	6,131	5,958	6,511	7,003	7,437	8,215
Physical sciences .....	11,434	10,792	9,777	9,253	9,424	9,605	9,382	8,590	8,252	8,034	8,238	8,238	8,610
Astronomy.....	89	107	127	112	120	117	94	106	145	160	161	169	188
Chemistry.....	6,807	6,156	5,391	5,046	5,365	5,783	6,043	5,483	5,047	4,719	4,650	4,550	4,791
Physics.....	3,550	3,629	3,705	3,575	3,403	3,161	2,741	2,638	2,701	2,825	3,082	3,248	3,307
Other physical sciences.....	988	900	554	520	536	544	504	363	359	330	345	271	324
Social/behavioral sciences.....	58,770	61,500	66,888	74,900	79,792	76,256	72,992	69,558	68,458	71,199	76,434	80,912	85,338
Psychology .....	12,815	13,399	14,291	16,155	18,029	19,638	19,491	17,540	16,701	17,397	17,616	18,302	19,103
Social sciences.....	45,955	48,101	52,597	58,745	61,763	56,618	53,501	52,018	51,757	53,802	58,818	62,610	66,235
Anthropology .....	1,021	1,003	1,155	1,486	1,863	2,117	2,446	2,315	2,192	2,272	2,313	2,349	2,360
Area/ethnic studies.....	1,101	1,251	1,613	1,858	1,967	2,082	2,001	2,045	1,904	2,036	2,055	2,162	2,345
Economics.....	15,400	16,335	17,224	17,725	16,161	13,235	12,253	13,016	13,453	14,438	15,775	16,652	17,023
History of science .....	0	0	0	0	4	14	14	40	45	40	49	67	53
Linguistics.....	140	140	134	179	159	153	184	229	245	249	294	330	324
Political science/public administration .....	18,799	19,365	21,622	24,648	26,701	23,010	19,953	18,092	18,014	18,830	21,269	23,065	25,092
Sociology.....	3,767	3,897	4,488	5,427	6,638	7,435	7,846	7,657	7,440	7,307	7,553	7,720	8,438
Other social sciences.....	5,727	6,110	6,361	7,422	8,270	8,572	8,804	8,624	8,464	8,630	9,510	10,265	10,600
Non-S&E.....	283,258	285,022	298,228	319,624	337,221	328,929	323,811	338,489	338,400	349,549	357,279	370,283	377,456
Engineering technologies .....	18,224	18,429	17,999	16,329	15,114	14,704	12,925	13,291	13,072	13,267	13,050	13,003	13,096

**Earned bachelor's degrees, by sex and field: Selected years, 1985–2005**

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Female</b>													
All fields .....	504,217	518,529	542,605	599,045	641,742	643,290	661,307	716,963	721,625	751,773	783,866	810,817	828,938
S&E.....	128,871	131,545	133,483	148,347	165,720	175,931	187,011	200,953	202,583	211,203	222,389	229,939	235,197
Engineering.....	11,246	11,404	10,188	9,665	9,981	10,950	11,470	12,216	11,914	12,687	12,970	13,257	13,197
Aerospace.....	241	248	301	324	316	230	202	238	304	312	384	413	404
Chemical .....	2,093	1,540	1,170	1,164	1,564	2,024	2,276	2,203	2,055	2,123	2,013	1,833	1,776
Civil .....	1,342	1,196	1,174	1,280	1,779	2,298	2,569	2,333	2,041	2,224	2,249	2,279	2,349
Electrical.....	2,732	3,564	3,188	2,763	2,259	2,170	2,018	2,350	2,542	2,720	2,909	3,032	2,833
Industrial.....	1,167	1,384	1,261	1,097	1,037	1,026	1,079	1,307	1,224	1,341	1,312	1,265	1,269
Materials .....	286	298	261	254	260	247	259	268	263	285	276	270	282
Mechanical .....	1,801	1,727	1,680	1,590	1,632	1,700	1,635	1,784	1,739	1,783	1,861	1,952	1,953
Other .....	1,584	1,447	1,153	1,193	1,134	1,255	1,432	1,733	1,746	1,899	1,966	2,213	2,331
Science.....	117,625	120,141	123,295	138,682	155,739	164,981	175,541	188,737	190,669	198,516	209,419	216,682	222,000
Natural sciences.....	51,362	49,706	43,446	43,477	48,946	55,925	62,749	70,107	70,505	73,279	77,096	77,527	76,954
Agricultural sciences.....	4,170	3,395	3,025	3,140	4,338	5,637	7,267	8,464	8,491	8,634	8,959	8,714	8,731
Biological sciences .....	18,970	19,008	18,654	20,636	24,844	29,918	35,266	37,958	37,084	37,695	39,533	40,440	42,283
Earth, atmospheric, and ocean sciences .....	1,861	1,060	801	782	1,050	1,524	1,542	1,617	1,622	1,702	1,651	1,647	1,660
Atmospheric sciences.....	68	61	52	57	64	82	83	114	132	151	176	203	241
Earth sciences.....	1,757	971	712	684	923	1,364	1,385	1,409	1,400	1,446	1,406	1,358	1,351
Oceanography.....	36	28	37	41	63	78	74	94	90	105	69	86	68
Mathematics/computer sciences .....	21,525	21,571	16,595	14,494	13,950	13,554	12,792	16,078	17,397	19,266	21,069	20,724	17,860
Computer sciences.....	14,431	13,889	9,545	7,514	6,951	7,063	6,903	10,474	11,900	13,504	15,190	14,406	11,235
Mathematics/statistics.....	7,094	7,682	7,050	6,980	6,999	6,491	5,889	5,604	5,497	5,762	5,879	6,318	6,625
Physical sciences .....	4,836	4,672	4,371	4,425	4,764	5,292	5,882	5,990	5,911	5,982	5,884	6,002	6,420
Astronomy.....	30	23	37	39	47	52	46	54	95	116	110	123	143
Chemistry.....	3,894	3,674	3,431	3,415	3,744	4,233	4,883	4,907	4,775	4,729	4,682	4,755	5,146
Physics.....	561	695	642	670	677	675	652	724	756	826	840	908	903
Other physical sciences.....	351	280	261	301	296	332	301	305	285	311	252	216	228
Social/behavioral sciences.....	66,263	70,435	79,849	95,205	106,793	109,056	112,792	118,630	120,164	125,237	132,323	139,155	145,046
Psychology .....	27,422	29,796	34,663	42,738	49,222	52,963	55,243	57,114	57,467	59,926	61,499	64,208	66,833
Social sciences.....	38,841	40,639	45,186	52,467	57,571	56,093	57,549	61,516	62,697	65,311	70,824	74,947	78,213
Anthropology .....	1,663	1,799	1,980	2,726	3,340	3,689	4,313	4,742	4,706	4,926	5,229	5,280	5,379
Area/ethnic studies.....	1,771	2,062	2,337	2,767	3,106	3,094	3,256	3,572	3,657	3,808	3,690	4,080	4,266
Economics.....	7,673	8,067	8,077	7,577	6,812	5,848	5,448	6,384	6,924	7,389	8,096	8,281	8,141
History of science.....	0	0	0	0	5	15	17	52	56	63	54	73	64
Linguistics.....	350	337	313	393	394	411	393	498	512	612	626	717	729
Political science/public administration .....	13,579	14,511	16,624	19,609	21,235	18,968	17,854	18,347	18,637	19,743	22,466	24,288	26,325
Sociology.....	8,398	8,462	9,905	12,205	14,369	15,539	16,904	18,028	17,923	18,011	18,638	19,310	20,138
Other social sciences.....	5,407	5,401	5,950	7,190	8,310	8,529	9,364	9,893	10,282	10,759	12,025	12,918	13,171
Non-S&E.....	375,346	386,984	409,122	450,698	476,022	467,359	474,296	516,010	519,042	540,570	561,477	580,878	593,741
Engineering technologies .....	2,252	2,148	2,099	1,965	1,908	1,903	1,706	1,947	2,055	2,139	2,286	2,116	2,151

NOTE: Engineering technologies focused more on applied skills than on fundamental science and mathematics.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>All races/ethnicities and citizenships</b>													
All fields .....	990,877	1,003,532	1,030,171	1,107,997	1,179,278	1,174,436	1,186,589	1,253,121	1,257,648	1,305,730	1,359,843	1,407,009	1,437,200
S&E.....	342,970	343,070	337,431	356,785	388,435	378,148	388,482	398,622	400,206	415,611	441,087	455,848	466,003
Engineering.....	77,571	74,423	66,947	62,186	62,670	63,371	62,352	59,536	59,258	60,639	63,773	64,675	66,133
Aerospace.....	NA	NA	NA	NA	NA	1,771	1,290	1,267	1,498	1,747	2,017	2,318	2,384
Chemical.....	NA	NA	NA	NA	NA	6,391	6,977	6,219	6,088	5,946	5,545	5,185	4,889
Civil.....	NA	NA	NA	NA	NA	11,329	12,010	9,596	8,949	8,891	9,367	9,399	9,797
Electrical.....	NA	NA	NA	NA	NA	17,579	16,434	17,672	18,371	18,977	20,729	21,342	21,412
Industrial.....	NA	NA	NA	NA	NA	3,519	3,997	3,937	3,818	3,976	3,939	3,807	3,938
Materials.....	NA	NA	NA	NA	NA	1,046	1,063	972	930	933	950	865	906
Mechanical.....	NA	NA	NA	NA	NA	15,141	13,806	13,109	13,160	13,377	14,044	14,368	14,908
Other.....	77,571	74,423	66,947	62,186	62,670	6,595	6,775	6,764	6,444	6,792	7,182	7,391	7,899
Science.....	265,399	268,647	270,484	294,599	325,765	314,777	326,130	339,086	340,948	354,972	377,314	391,173	399,870
Natural sciences.....	130,058	125,371	109,350	105,595	116,742	129,465	140,346	150,898	152,326	158,536	168,557	171,106	169,486
Agricultural sciences.....	12,418	9,727	8,795	8,643	11,827	14,580	17,361	18,244	17,467	17,360	17,693	17,041	17,111
Biological sciences.....	39,405	39,047	36,949	40,351	47,877	56,890	65,139	64,904	62,089	61,768	63,582	64,762	67,982
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	4,478	4,466	4,047	3,968	3,984	3,949	3,903	3,959
Atmospheric sciences.....	NA	NA	NA	NA	NA	444	431	490	456	525	562	572	677
Earth sciences.....	NA	NA	NA	NA	NA	3,820	3,830	3,359	3,334	3,234	3,252	3,170	3,146
Oceanography.....	NA	NA	NA	NA	NA	214	205	198	178	225	135	161	136
Mathematics/computer sciences.....	54,388	56,442	46,277	40,194	39,347	38,620	38,116	49,123	54,639	61,408	69,211	71,160	65,404
Computer sciences.....	39,121	39,927	30,963	25,410	24,477	24,769	25,393	37,388	43,184	49,135	56,329	57,405	50,564
Mathematics.....	15,267	16,515	15,314	14,784	14,870	13,851	12,723	11,735	11,455	12,273	12,882	13,755	14,840
Physical sciences.....	23,847	20,155	17,329	16,407	17,691	14,897	15,264	14,580	14,163	14,016	14,122	14,240	15,030
Astronomy.....	NA	NA	NA	NA	NA	169	140	160	240	276	271	292	331
Chemistry.....	NA	NA	NA	NA	NA	10,016	10,926	10,390	9,822	9,448	9,332	9,305	9,937
Physics.....	NA	NA	NA	NA	NA	3,836	3,393	3,362	3,457	3,651	3,922	4,156	4,210
Other physical sciences.....	23,847	20,155	17,329	16,407	17,691	876	805	668	644	641	597	487	552
Social/behavioral sciences.....	135,341	143,276	161,134	189,004	209,023	185,312	185,784	188,188	188,622	196,436	208,757	220,067	230,384
Psychology.....	40,237	43,195	48,954	58,893	67,251	72,601	74,734	74,654	74,168	77,323	79,115	82,510	85,936
Social sciences.....	95,104	100,081	112,180	130,111	141,772	112,711	111,050	113,534	114,454	119,113	129,642	137,557	144,448
Anthropology.....	NA	NA	NA	NA	NA	5,806	6,759	7,057	6,898	7,198	7,542	7,629	7,739
Area/ethnic studies.....	2,872	3,313	3,950	4,625	5,484	5,176	5,257	5,617	5,561	5,844	5,745	6,242	6,611
Economics.....	NA	NA	NA	NA	NA	19,083	17,701	19,400	20,377	21,827	23,871	24,933	25,164
History of science.....	NA	NA	NA	NA	NA	29	31	92	101	103	103	140	117
Linguistics.....	NA	NA	NA	NA	NA	564	577	727	757	861	920	1,047	1,053
Political science/public administration.....	NA	NA	NA	NA	NA	41,978	37,807	36,439	36,651	38,573	43,735	47,353	51,417
Sociology.....	NA	NA	NA	NA	NA	22,974	24,750	25,685	25,363	25,318	26,191	27,030	28,576
Other social sciences.....	92,232	96,768	108,230	125,486	136,288	17,101	18,168	18,517	18,746	19,389	21,535	23,183	23,771
Non-S&E.....	647,907	660,462	692,740	751,212	790,843	796,288	798,107	854,499	857,442	890,119	918,756	951,161	971,197
Engineering technologies.....	20,533	20,577	20,098	18,294	16,987	16,607	14,631	15,238	15,127	15,406	15,336	15,119	15,247
<b>U.S. citizen/permanent resident</b>													
All fields.....	961,619	974,940	1,003,714	1,078,340	1,146,907	1,137,424	1,147,815	1,214,326	1,218,169	1,264,606	1,317,020	1,362,834	1,392,752

## Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
S&E.....	328,899	329,393	325,108	344,061	374,633	363,463	373,745	383,438	384,492	399,288	423,358	437,228	447,559
Engineering.....	71,381	68,534	61,875	57,604	58,165	58,561	57,555	55,003	54,839	56,372	59,498	60,128	61,396
Aerospace.....	NA	NA	NA	NA	NA	1,655	1,161	1,146	1,350	1,625	1,857	2,144	2,213
Chemical.....	NA	NA	NA	NA	NA	5,867	6,406	5,774	5,664	5,499	5,186	4,817	4,478
Civil.....	NA	NA	NA	NA	NA	10,892	11,536	9,137	8,537	8,520	9,018	9,084	9,471
Electrical.....	NA	NA	NA	NA	NA	15,462	14,564	15,836	16,529	17,108	18,677	19,069	19,093
Industrial.....	NA	NA	NA	NA	NA	3,095	3,517	3,456	3,343	3,534	3,537	3,426	3,543
Materials.....	NA	NA	NA	NA	NA	1,016	1,035	935	888	904	919	836	866
Mechanical.....	NA	NA	NA	NA	NA	14,360	12,898	12,320	12,416	12,694	13,448	13,754	14,261
Other.....	71,381	68,534	61,875	57,604	58,165	6,214	6,438	6,399	6,112	6,488	6,856	6,998	7,471
Science.....	257,518	260,859	263,233	286,457	316,468	304,902	316,190	328,435	329,653	342,916	363,860	377,100	386,163
Natural sciences.....	125,047	120,352	104,928	101,039	111,656	124,311	135,412	145,321	146,216	151,871	160,862	163,020	161,859
Agricultural sciences.....	11,981	9,438	8,529	8,373	11,478	14,322	17,108	17,986	17,219	17,098	17,423	16,792	16,837
Biological sciences.....	38,490	38,185	36,076	39,288	46,660	55,607	63,677	63,528	60,652	60,311	62,045	63,109	66,016
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	4,405	4,388	4,001	3,919	3,925	3,892	3,853	3,879
Atmospheric sciences.....	NA	NA	NA	NA	NA	440	420	482	454	519	554	569	667
Earth sciences.....	NA	NA	NA	NA	NA	3,761	3,770	3,326	3,288	3,185	3,204	3,125	3,081
Oceanography.....	NA	NA	NA	NA	NA	204	198	193	177	221	134	159	131
Mathematics/computer sciences.....	51,509	53,209	43,599	37,579	36,591	35,730	35,568	45,758	50,821	57,066	63,903	65,617	60,767
Computer sciences.....	37,005	37,349	28,828	23,373	22,273	22,472	23,378	34,502	39,792	45,247	51,643	52,544	46,688
Mathematics.....	14,504	15,860	14,771	14,206	14,318	13,258	12,190	11,256	11,029	11,819	12,260	13,073	14,079
Physical sciences.....	23,067	19,520	16,724	15,799	16,927	14,247	14,671	14,048	13,605	13,471	13,599	13,649	14,360
Astronomy.....	NA	NA	NA	NA	NA	159	132	156	227	260	256	282	311
Chemistry.....	NA	NA	NA	NA	NA	9,620	10,530	10,046	9,487	9,105	9,006	8,955	9,539
Physics.....	NA	NA	NA	NA	NA	3,613	3,217	3,202	3,275	3,484	3,754	3,967	4,009
Other physical sciences.....	23,067	19,520	16,724	15,799	16,927	855	792	644	616	622	583	445	501
Social/behavioral sciences.....	132,471	140,507	158,305	185,418	204,812	180,591	180,778	183,114	183,437	191,045	202,998	214,080	224,304
Psychology.....	39,694	42,701	48,443	58,202	66,421	71,659	73,685	73,390	72,885	75,956	77,721	81,039	84,432
Social sciences.....	92,777	97,806	109,862	127,216	138,391	108,932	107,093	109,724	110,552	115,089	125,277	133,041	139,872
Anthropology.....	NA	NA	NA	NA	NA	5,691	6,586	6,941	6,778	7,084	7,448	7,523	7,624
Area/ethnic studies.....	2,800	3,246	3,824	4,491	5,348	4,951	5,059	5,439	5,394	5,684	5,585	6,078	6,448
Economics.....	NA	NA	NA	NA	NA	17,393	15,877	17,709	18,553	19,923	21,823	22,763	22,964
History of science.....	NA	NA	NA	NA	NA	28	31	91	98	101	100	140	116
Linguistics.....	NA	NA	NA	NA	NA	484	491	644	680	780	840	973	976
Political science/public administration.....	NA	NA	NA	NA	NA	40,890	36,755	35,285	35,504	37,411	42,451	46,046	50,151
Sociology.....	NA	NA	NA	NA	NA	22,642	24,451	25,386	25,105	25,023	25,842	26,704	28,247
Other social sciences.....	89,977	94,560	106,038	122,725	133,043	16,853	17,843	18,229	18,440	19,083	21,188	22,814	23,346
Non-S&E.....	632,720	645,547	678,606	734,279	772,274	773,961	774,070	830,888	833,677	865,318	893,662	925,606	945,193
Engineering technologies.....	19,256	19,591	19,439	17,582	16,546	16,057	14,074	14,797	14,609	14,947	14,883	14,613	14,764
White													
All fields.....	826,356	819,477	840,326	892,363	931,603	892,785	877,759	895,129	888,412	912,956	940,495	962,887	977,279
S&E.....	281,394	272,090	266,862	278,190	297,171	275,819	274,800	270,416	267,848	276,379	290,306	296,576	301,172
Engineering.....	60,992	56,491	50,081	45,162	44,853	43,766	41,666	39,067	38,767	39,723	41,825	41,857	42,208



## Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Aerospace .....	NA	NA	NA	NA	NA	1,301	869	899	1,058	1,279	1,447	1,629	1,723
Chemical .....	NA	NA	NA	NA	NA	4,417	4,631	4,062	4,061	3,976	3,746	3,483	3,203
Civil .....	NA	NA	NA	NA	NA	8,646	8,940	7,003	6,615	6,624	7,032	7,011	7,194
Electrical.....	NA	NA	NA	NA	NA	10,079	9,293	9,715	9,891	9,975	10,957	10,934	10,856
Industrial.....	NA	NA	NA	NA	NA	2,220	2,271	2,385	2,330	2,428	2,392	2,352	2,356
Materials .....	NA	NA	NA	NA	NA	851	813	741	708	712	701	614	633
Mechanical.....	NA	NA	NA	NA	NA	11,332	9,919	9,467	9,541	9,876	10,516	10,756	10,961
Other .....	60,992	56,491	50,081	45,162	44,853	4,920	4,930	4,795	4,563	4,853	5,034	5,078	5,282
Science.....	220,402	215,599	216,781	233,028	252,318	232,053	233,134	231,349	229,081	236,656	248,481	254,719	258,964
Natural sciences.....	107,076	98,344	84,578	80,111	87,401	94,609	100,831	103,333	102,187	105,430	109,684	109,980	109,569
Agricultural sciences.....	11,233	8,696	7,938	7,704	10,556	12,873	15,246	15,655	14,950	14,729	14,925	14,353	14,347
Biological sciences.....	31,818	30,549	28,404	30,264	35,080	40,697	45,387	43,907	41,325	41,288	41,949	42,460	43,774
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	4,012	3,986	3,561	3,436	3,450	3,442	3,338	3,366
Atmospheric sciences.....	NA	NA	NA	NA	NA	401	390	437	395	467	493	508	597
Earth sciences.....	NA	NA	NA	NA	NA	3,430	3,429	2,959	2,888	2,806	2,837	2,691	2,663
Oceanography.....	NA	NA	NA	NA	NA	181	167	165	153	177	112	139	106
Mathematics/computer sciences.....	43,484	42,446	33,998	28,998	27,824	26,087	25,278	30,114	32,664	36,262	39,434	39,996	37,786
Computer sciences.....	31,321	29,181	21,711	17,349	16,155	15,601	15,846	21,719	24,491	27,506	30,458	30,357	27,615
Mathematics.....	12,163	13,265	12,287	11,649	11,669	10,486	9,432	8,395	8,173	8,756	8,976	9,639	10,171
Physical sciences.....	20,541	16,653	14,238	13,145	13,941	10,940	10,934	10,096	9,812	9,701	9,934	9,833	10,296
Astronomy.....	NA	NA	NA	NA	NA	132	112	131	185	204	212	220	234
Chemistry.....	NA	NA	NA	NA	NA	7,112	7,537	6,900	6,505	6,268	6,281	6,153	6,595
Physics.....	NA	NA	NA	NA	NA	3,004	2,623	2,543	2,625	2,742	2,970	3,128	3,101
Other physical sciences.....	20,541	16,653	14,238	13,145	13,941	692	662	522	497	487	471	332	366
Social/behavioral sciences.....	113,326	117,255	132,203	152,917	164,917	137,444	132,303	128,016	126,894	131,226	138,797	144,739	149,395
Psychology.....	33,959	35,761	40,506	48,134	53,763	55,914	55,346	52,397	51,562	53,324	54,676	56,515	58,043
Social sciences.....	79,367	81,494	91,697	104,783	111,154	81,530	76,957	75,619	75,332	77,902	84,121	88,224	91,352
Anthropology.....	NA	NA	NA	NA	NA	4,696	5,225	5,378	5,222	5,380	5,592	5,496	5,583
Area/ethnic studies.....	2,242	2,554	2,998	3,414	3,759	3,156	3,026	2,943	2,938	3,076	2,948	3,178	3,239
Economics.....	NA	NA	NA	NA	NA	12,869	11,437	12,102	12,419	13,374	14,302	14,662	14,723
History of science.....	NA	NA	NA	NA	NA	26	24	58	57	60	68	100	86
Linguistics.....	NA	NA	NA	NA	NA	339	359	450	499	585	603	652	637
Political science/public administration.....	NA	NA	NA	NA	NA	30,907	26,770	24,976	24,963	26,162	29,547	31,681	33,838
Sociology.....	NA	NA	NA	NA	NA	16,170	16,661	16,561	16,105	15,838	16,275	16,681	17,247
Other social sciences.....	77,125	78,940	88,699	101,369	107,395	13,367	13,455	13,151	13,129	13,427	14,786	15,774	15,999
Non-S&E.....	544,962	547,387	573,464	614,173	634,432	616,966	602,959	624,713	620,564	636,577	650,189	666,311	676,107
Engineering technologies.....	16,673	16,541	16,156	14,279	13,245	12,675	10,988	10,871	10,698	10,885	10,672	10,405	10,525
Asian/Pacific Islander													
All fields.....	25,562	31,921	37,573	41,725	50,587	59,295	67,358	75,265	75,496	79,149	83,049	86,030	90,562
S&E.....	13,323	16,934	19,138	20,552	24,504	28,604	32,568	35,553	36,398	37,452	39,738	41,178	43,030
Engineering.....	4,482	5,590	6,075	6,220	6,407	6,785	7,085	6,854	7,025	7,121	7,412	7,625	8,208
Aerospace.....	NA	NA	NA	NA	NA	159	118	98	103	128	145	186	184
Chemical.....	NA	NA	NA	NA	NA	652	874	788	702	636	563	527	486

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Civil .....	NA	NA	NA	NA	NA	942	1,017	646	521	482	500	493	585
Electrical.....	NA	NA	NA	NA	NA	2,769	2,663	3,143	3,522	3,774	3,966	4,083	4,290
Industrial .....	NA	NA	NA	NA	NA	1,249	1,135	1,002	998	892	939	928	1,082
Materials .....	NA	NA	NA	NA	NA	93	84	91	88	85	91	95	101
Mechanical.....	NA	NA	NA	NA	NA	287	437	332	319	356	386	376	352
Other .....	4,482	5,590	6,075	6,220	6,407	634	757	754	772	768	822	937	1,128
Science.....	8,841	11,344	13,063	14,332	18,097	21,819	25,483	28,699	29,373	30,331	32,326	33,553	34,822
Natural sciences.....	5,809	7,130	7,260	7,595	9,524	12,009	14,212	16,331	16,564	17,129	18,300	18,221	18,175
Agricultural sciences .....	165	182	144	128	163	282	396	454	399	411	459	415	446
Biological sciences.....	1,952	2,565	2,907	3,559	5,103	7,045	8,541	8,025	7,493	7,209	7,399	7,786	8,832
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	102	95	98	86	85	73	85	86
Atmospheric sciences.....	NA	NA	NA	NA	NA	12	7	14	14	8	9	11	15
Earth sciences.....	NA	NA	NA	NA	NA	77	77	77	64	65	58	65	69
Oceanography.....	NA	NA	NA	NA	NA	13	11	7	8	12	6	9	2
Mathematics/computer sciences.....	2,929	3,489	3,287	2,925	3,160	3,335	3,655	6,292	7,242	8,207	9,226	8,706	7,495
Computer sciences.....	2,044	2,455	2,268	2,010	2,245	2,371	2,803	5,401	6,326	7,207	8,073	7,462	6,075
Mathematics .....	885	1,034	1,019	915	915	964	852	891	916	1,000	1,153	1,244	1,420
Physical sciences .....	763	894	922	983	1,098	1,245	1,525	1,462	1,344	1,217	1,143	1,229	1,316
Astronomy.....	NA	NA	NA	NA	NA	13	7	9	12	24	16	18	21
Chemistry.....	NA	NA	NA	NA	NA	986	1,280	1,208	1,126	978	893	960	1,024
Physics.....	NA	NA	NA	NA	NA	214	204	218	184	184	204	223	236
Other physical sciences.....	763	894	922	983	1,098	32	34	27	22	31	30	28	35
Social/behavioral sciences.....	3,032	4,214	5,803	6,737	8,573	9,810	11,271	12,368	12,809	13,202	14,026	15,332	16,647
Psychology .....	845	1,154	1,575	1,885	2,538	3,331	4,067	4,188	4,150	4,241	4,060	4,345	4,799
Social sciences.....	2,187	3,060	4,228	4,852	6,035	6,479	7,204	8,180	8,659	8,961	9,966	10,987	11,848
Anthropology .....	NA	NA	NA	NA	NA	259	363	340	332	377	396	398	424
Area/ethnic studies.....	137	207	327	345	450	510	574	737	714	686	671	758	875
Economics.....	NA	NA	NA	NA	NA	1,995	2,154	2,774	3,082	3,235	3,708	4,007	4,003
History of science.....	NA	NA	NA	NA	NA	2	4	12	15	20	16	14	11
Linguistics.....	NA	NA	NA	NA	NA	51	62	72	69	73	84	105	112
Political science/public administration .....	NA	NA	NA	NA	NA	2,088	2,100	2,077	2,228	2,325	2,645	2,900	3,266
Sociology .....	NA	NA	NA	NA	NA	989	1,228	1,324	1,300	1,325	1,372	1,596	1,853
Other social sciences.....	2,050	2,853	3,901	4,507	5,585	585	719	844	919	920	1,074	1,209	1,304
Non-S&E.....	12,239	14,987	18,435	21,173	26,083	30,691	34,790	39,712	39,098	41,697	43,311	44,852	47,532
Engineering technologies.....	542	807	839	768	768	730	474	738	672	710	657	631	721
Black													
All fields.....	57,563	55,103	56,837	65,009	76,667	85,287	92,067	104,212	106,648	111,032	117,257	122,618	125,678
S&E.....	17,040	17,230	17,385	19,987	24,421	26,911	29,825	32,924	33,290	34,796	36,711	38,369	39,283
Engineering.....	2,039	2,315	2,067	2,229	2,577	2,845	3,077	3,063	2,884	2,982	3,074	3,212	3,185
Aerospace .....	NA	NA	NA	NA	NA	64	50	40	39	43	65	70	71
Chemical .....	NA	NA	NA	NA	NA	305	373	383	373	346	317	303	273
Civil .....	NA	NA	NA	NA	NA	326	403	403	329	317	292	320	342
Electrical.....	NA	NA	NA	NA	NA	1,048	1,067	1,049	1,082	1,103	1,284	1,393	1,311

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Industrial .....	NA	NA	NA	NA	NA	236	245	256	237	256	274	251	296
Materials .....	NA	NA	NA	NA	NA	22	20	24	27	32	22	22	19
Mechanical .....	NA	NA	NA	NA	NA	604	642	594	515	561	471	504	537
Other .....	2,039	2,315	2,067	2,229	2,577	240	277	314	282	324	349	349	336
Science.....	15,001	14,915	15,318	17,758	21,844	24,066	26,748	29,861	30,406	31,814	33,637	35,157	36,098
Natural sciences.....	6,009	6,524	6,005	5,834	6,972	7,994	9,049	10,732	11,272	11,965	12,975	13,229	12,687
Agricultural sciences.....	219	157	143	162	219	253	367	450	428	454	452	450	444
Biological sciences.....	2,047	1,890	1,916	2,111	2,739	3,232	4,124	4,739	4,693	4,634	4,878	5,038	5,051
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	64	57	51	56	62	60	65	68
Atmospheric sciences.....	NA	NA	NA	NA	NA	11	8	10	2	10	12	20	8
Earth sciences.....	NA	NA	NA	NA	NA	49	41	40	52	42	43	43	54
Oceanography.....	NA	NA	NA	NA	NA	4	8	1	2	10	5	2	6
Mathematics/computer sciences.....	2,913	3,654	3,249	2,808	3,178	3,475	3,448	4,402	5,099	5,797	6,657	6,718	6,158
Computer sciences.....	2,143	2,820	2,457	1,997	2,213	2,517	2,432	3,497	4,291	4,954	5,867	5,934	5,303
Mathematics.....	770	834	792	811	965	958	1,016	905	808	843	790	784	855
Physical sciences.....	830	823	697	753	836	970	1,053	1,090	996	1,018	928	958	966
Astronomy.....	NA	NA	NA	NA	NA	3	0	1	2	3	1	3	4
Chemistry.....	NA	NA	NA	NA	NA	738	861	888	827	796	744	756	761
Physics.....	NA	NA	NA	NA	NA	172	148	152	133	182	147	166	166
Other physical sciences.....	830	823	697	753	836	57	44	49	34	37	36	33	35
Social/behavioral sciences.....	8,992	8,391	9,313	11,924	14,872	16,072	17,699	19,129	19,134	19,849	20,662	21,928	23,411
Psychology.....	2,667	2,451	2,743	3,688	4,618	5,741	6,647	7,572	7,562	7,747	8,011	8,479	9,130
Social sciences.....	6,325	5,940	6,570	8,236	10,254	10,331	11,052	11,557	11,572	12,102	12,651	13,449	14,281
Anthropology.....	NA	NA	NA	NA	NA	145	220	268	242	253	258	338	320
Area/ethnic studies.....	219	194	233	354	516	607	653	738	691	784	749	805	905
Economics.....	NA	NA	NA	NA	NA	1,156	925	1,044	1,089	1,221	1,326	1,409	1,377
History of science.....	NA	NA	NA	NA	NA	0	2	6	6	4	6	8	5
Linguistics.....	NA	NA	NA	NA	NA	17	8	14	24	25	17	32	33
Political science/public administration.....	NA	NA	NA	NA	NA	3,859	3,761	3,602	3,554	3,737	4,048	4,423	4,844
Sociology.....	NA	NA	NA	NA	NA	3,208	3,851	4,097	4,200	4,168	4,214	4,227	4,542
Other social sciences.....	6,106	5,746	6,337	7,882	9,738	1,339	1,632	1,788	1,766	1,910	2,033	2,207	2,255
Non-S&E.....	40,523	37,873	39,452	45,022	52,246	58,376	62,242	71,288	73,358	76,236	80,546	84,249	86,395
Engineering technologies.....	1,277	1,269	1,208	1,227	1,132	1,321	1,424	1,431	1,389	1,430	1,482	1,539	1,533
Hispanic													
All fields.....	36,391	38,196	41,361	49,027	57,845	66,691	74,938	88,324	89,972	95,104	100,352	105,165	109,643
S&E.....	12,031	12,419	13,327	15,351	18,442	21,359	24,445	27,984	28,321	29,871	32,331	33,437	35,202
Engineering.....	2,187	2,554	2,561	2,566	2,961	3,651	4,125	4,075	4,016	4,136	4,357	4,470	4,614
Aerospace.....	NA	NA	NA	NA	NA	93	93	67	92	97	110	121	139
Chemical.....	NA	NA	NA	NA	NA	345	379	380	341	353	320	313	333
Civil.....	NA	NA	NA	NA	NA	693	874	762	742	761	798	836	888
Electrical.....	NA	NA	NA	NA	NA	1,101	1,123	1,283	1,302	1,411	1,428	1,551	1,521
Industrial.....	NA	NA	NA	NA	NA	302	451	391	356	372	364	332	364
Materials.....	NA	NA	NA	NA	NA	26	89	38	34	33	50	52	59

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Mechanical.....	NA	NA	NA	NA	NA	827	832	846	880	819	950	935	962
Other.....	2,187	2,554	2,561	2,566	2,961	264	284	308	269	290	337	330	348
Science.....	9,844	9,865	10,766	12,785	15,481	17,708	20,320	23,909	24,305	25,735	27,974	28,967	30,588
Natural sciences.....	4,359	4,660	4,417	4,705	5,034	6,120	7,094	8,844	9,160	9,415	10,620	10,501	10,607
Agricultural sciences.....	250	233	196	213	217	383	559	634	607	662	686	673	710
Biological sciences.....	2,069	2,146	2,090	2,264	2,652	3,101	3,795	4,446	4,547	4,367	4,840	4,601	4,814
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	84	113	127	157	136	119	131	151
Atmospheric sciences.....	NA	NA	NA	NA	NA	5	8	9	15	10	10	13	20
Earth sciences.....	NA	NA	NA	NA	NA	74	100	105	130	109	103	112	121
Oceanography.....	NA	NA	NA	NA	NA	5	5	13	12	17	6	6	10
Mathematics/computer sciences.....	1,380	1,696	1,568	1,695	1,566	1,836	1,887	2,754	2,979	3,386	4,114	4,211	3,994
Computer sciences.....	1,045	1,375	1,195	1,215	1,096	1,314	1,327	2,155	2,354	2,714	3,445	3,535	3,179
Mathematics.....	335	321	373	480	470	522	560	599	625	672	669	676	815
Physical sciences.....	660	585	563	533	599	716	740	883	870	864	861	885	938
Astronomy.....	NA	NA	NA	NA	NA	6	4	7	16	10	12	23	17
Chemistry.....	NA	NA	NA	NA	NA	553	593	719	669	666	669	651	704
Physics.....	NA	NA	NA	NA	NA	105	119	125	151	157	164	187	183
Other physical sciences.....	660	585	563	533	599	52	24	32	34	31	16	24	34
Social/behavioral sciences.....	5,485	5,205	6,349	8,080	10,447	11,588	13,226	15,065	15,145	16,320	17,354	18,466	19,981
Psychology.....	1,734	1,702	2,152	2,746	3,587	4,543	5,282	6,127	6,178	6,692	6,807	7,252	7,654
Social sciences.....	3,751	3,503	4,197	5,334	6,860	7,045	7,944	8,938	8,967	9,628	10,547	11,214	12,327
Anthropology.....	NA	NA	NA	NA	NA	308	445	462	465	494	533	568	578
Area/ethnic studies.....	168	144	169	259	428	476	570	659	648	688	717	756	827
Economics.....	NA	NA	NA	NA	NA	844	829	976	1,030	1,068	1,188	1,289	1,352
History of science.....	NA	NA	NA	NA	NA	0	1	3	5	7	4	7	6
Linguistics.....	NA	NA	NA	NA	NA	40	24	42	45	39	48	71	68
Political science/public administration.....	NA	NA	NA	NA	NA	2,866	2,912	2,975	2,925	3,135	3,568	3,857	4,562
Sociology.....	NA	NA	NA	NA	NA	1,567	1,908	2,317	2,291	2,440	2,555	2,665	2,874
Other social sciences.....	3,583	3,359	4,028	5,075	6,432	944	1,255	1,504	1,558	1,757	1,934	2,001	2,060
Non-S&E.....	24,360	25,777	28,034	33,676	39,403	45,332	50,493	60,340	61,651	65,233	68,021	71,728	74,441
Engineering technologies.....	525	664	634	731	853	884	723	1,068	1,108	1,112	1,244	1,170	1,144
American Indian/Alaska Native													
All fields.....	4,246	3,866	3,967	4,486	5,574	6,454	7,238	8,431	8,664	8,668	9,242	9,914	9,556
S&E.....	1,384	1,290	1,238	1,344	1,819	1,995	2,298	2,611	2,796	2,642	2,892	3,231	3,167
Engineering.....	209	210	177	158	176	221	263	328	256	308	320	333	349
Aerospace.....	NA	NA	NA	NA	NA	3	3	7	8	17	10	23	16
Chemical.....	NA	NA	NA	NA	NA	31	29	42	31	33	34	29	30
Civil.....	NA	NA	NA	NA	NA	58	71	84	65	67	67	64	73
Electrical.....	NA	NA	NA	NA	NA	43	50	81	56	70	99	88	84
Industrial.....	NA	NA	NA	NA	NA	4	19	23	17	21	12	15	27
Materials.....	NA	NA	NA	NA	NA	2	6	5	4	6	3	6	5
Mechanical.....	NA	NA	NA	NA	NA	55	45	53	51	61	58	73	72
Other.....	209	210	177	158	176	25	40	33	24	33	37	35	42

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Science.....	1,175	1,080	1,061	1,186	1,643	1,774	2,035	2,283	2,540	2,334	2,572	2,898	2,818
Natural sciences.....	511	423	408	421	504	675	743	918	1,076	963	989	1,186	1,109
Agricultural sciences.....	54	43	58	53	64	124	146	190	215	158	163	187	160
Biological sciences.....	161	144	145	176	211	285	341	379	431	410	380	417	496
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	26	31	43	35	26	24	31	25
Atmospheric sciences.....	NA	NA	NA	NA	NA	0	1	4	5	1	4	1	1
Earth sciences.....	NA	NA	NA	NA	NA	25	26	35	29	23	18	30	23
Oceanography.....	NA	NA	NA	NA	NA	1	4	4	1	2	2	0	1
Mathematics/computer sciences.....	198	164	143	123	136	168	156	241	322	286	328	475	325
Computer sciences.....	139	112	90	80	81	110	99	172	271	229	263	416	249
Mathematics.....	59	52	53	43	55	58	57	69	51	57	65	59	76
Physical sciences.....	98	72	62	69	93	72	69	65	73	83	94	76	103
Astronomy.....	NA	NA	NA	NA	NA	0	0	2	2	2	4	1	3
Chemistry.....	NA	NA	NA	NA	NA	57	54	49	47	57	71	50	65
Physics.....	NA	NA	NA	NA	NA	13	11	12	19	21	17	20	33
Other physical sciences.....	98	72	62	69	93	2	4	2	5	3	2	5	2
Social/behavioral sciences.....	664	657	653	765	1,139	1,099	1,292	1,365	1,464	1,371	1,583	1,712	1,709
Psychology.....	201	180	208	235	335	407	496	518	561	542	544	596	552
Social sciences.....	463	477	445	530	804	692	796	847	903	829	1,039	1,116	1,157
Anthropology.....	NA	NA	NA	NA	NA	69	86	89	93	85	111	103	98
Area/ethnic studies.....	16	28	25	24	50	40	62	80	106	121	128	145	134
Economics.....	NA	NA	NA	NA	NA	73	68	71	68	65	95	108	95
History of science.....	NA	NA	NA	NA	NA	0	0	1	0	0	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	6	5	10	2	2	9	4	12
Political science/public administration.....	NA	NA	NA	NA	NA	218	253	231	234	241	286	352	342
Sociology.....	NA	NA	NA	NA	NA	176	192	220	225	184	244	228	259
Other social sciences.....	447	449	420	506	754	110	130	145	175	131	166	176	217
Non-S&E.....	2,862	2,576	2,729	3,142	3,755	4,459	4,940	5,820	5,868	6,026	6,350	6,683	6,389
Engineering technologies.....	103	78	105	75	111	115	101	109	128	101	124	193	96
Other/unknown race/ethnicity													
All fields.....	11,501	26,377	23,650	25,730	24,631	26,912	28,455	42,965	48,977	57,697	66,625	76,220	80,034
S&E.....	3,727	9,430	7,158	8,637	8,276	8,775	9,809	13,950	15,839	18,148	21,380	24,437	25,705
Engineering.....	1,472	1,374	914	1,269	1,191	1,293	1,339	1,616	1,891	2,102	2,510	2,631	2,832
Aerospace.....	NA	NA	NA	NA	NA	35	28	35	50	61	80	115	80
Chemical.....	NA	NA	NA	NA	NA	117	120	119	156	155	206	162	153
Civil.....	NA	NA	NA	NA	NA	227	231	239	265	269	329	360	389
Electrical.....	NA	NA	NA	NA	NA	422	368	565	676	775	943	1,020	1,031
Industrial.....	NA	NA	NA	NA	NA	46	94	69	84	101	109	100	148
Materials.....	NA	NA	NA	NA	NA	22	23	36	27	36	52	47	49
Mechanical.....	NA	NA	NA	NA	NA	293	325	358	431	485	514	558	647
Other.....	1,472	1,374	914	1,269	1,191	131	150	195	202	220	277	269	335
Science.....	2,255	8,056	6,244	7,368	7,085	7,482	8,470	12,334	13,948	16,046	18,870	21,806	22,873
Natural sciences.....	1,283	3,271	2,260	2,373	2,221	2,904	3,483	5,163	5,957	6,969	8,294	9,903	9,712

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Agricultural sciences .....	60	127	50	113	259	407	394	603	620	684	738	714	730
Biological sciences .....	443	891	614	914	875	1,247	1,489	2,032	2,163	2,403	2,599	2,807	3,049
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	117	106	121	149	166	174	203	183
Atmospheric sciences.....	NA	NA	NA	NA	NA	11	6	8	23	23	26	16	26
Earth sciences.....	NA	NA	NA	NA	NA	106	97	110	125	140	145	184	151
Oceanography.....	NA	NA	NA	NA	NA	0	3	3	1	3	3	3	6
Mathematics/computer sciences .....	605	1,760	1,354	1,030	727	829	1,144	1,955	2,515	3,128	4,144	5,511	5,009
Computer sciences.....	313	1,406	1,107	722	483	559	871	1,558	2,059	2,637	3,537	4,840	4,267
Mathematics .....	292	354	247	308	244	270	273	397	456	491	607	671	742
Physical sciences .....	175	493	242	316	360	304	350	452	510	588	639	668	741
Astronomy.....	NA	NA	NA	NA	NA	5	9	6	10	17	11	17	32
Chemistry.....	NA	NA	NA	NA	NA	174	205	282	313	340	348	385	390
Physics.....	NA	NA	NA	NA	NA	105	112	152	163	198	252	243	290
Other physical sciences.....	175	493	242	316	360	20	24	12	24	33	28	23	29
Social/behavioral sciences.....	972	4,785	3,984	4,995	4,864	4,578	4,987	7,171	7,991	9,077	10,576	11,903	13,161
Psychology .....	288	1,453	1,259	1,514	1,580	1,723	1,847	2,588	2,872	3,410	3,623	3,852	4,254
Social sciences.....	684	3,332	2,725	3,481	3,284	2,855	3,140	4,583	5,119	5,667	6,953	8,051	8,907
Anthropology .....	NA	NA	NA	NA	NA	214	247	404	424	495	558	620	621
Area/ethnic studies.....	18	119	72	95	145	162	174	282	297	329	372	436	468
Economics.....	NA	NA	NA	NA	NA	456	464	742	865	960	1,204	1,288	1,414
History of science.....	NA	NA	NA	NA	NA	0	0	11	15	10	6	11	8
Linguistics.....	NA	NA	NA	NA	NA	31	33	56	41	56	79	109	114
Political science/public administration .....	NA	NA	NA	NA	NA	952	959	1,424	1,600	1,811	2,357	2,833	3,299
Sociology .....	NA	NA	NA	NA	NA	532	611	867	984	1,068	1,182	1,307	1,472
Other social sciences.....	666	3,213	2,653	3,386	3,139	508	652	797	893	938	1,195	1,447	1,511
Non-S&E.....	7,774	16,947	16,492	17,093	16,355	18,137	18,646	29,015	33,138	39,549	45,245	51,783	54,329
Engineering technologies .....	136	232	497	502	437	332	364	580	614	709	704	675	745
Temporary resident													
All fields .....	29,258	28,592	26,457	29,657	32,371	37,012	38,774	38,795	39,479	41,124	42,823	44,175	44,448
S&E.....	14,071	13,677	12,323	12,724	13,802	14,685	14,737	15,184	15,714	16,323	17,729	18,620	18,444
Engineering.....	6,190	5,889	5,072	4,582	4,505	4,810	4,797	4,533	4,419	4,267	4,275	4,547	4,737
Aerospace.....	NA	NA	NA	NA	NA	116	129	121	148	122	160	174	171
Chemical .....	NA	NA	NA	NA	NA	524	571	445	424	447	359	368	411
Civil .....	NA	NA	NA	NA	NA	437	474	459	412	371	349	315	326
Electrical.....	NA	NA	NA	NA	NA	2,117	1,870	1,836	1,842	1,869	2,052	2,273	2,319
Industrial.....	NA	NA	NA	NA	NA	424	480	481	475	442	402	381	395
Materials .....	NA	NA	NA	NA	NA	30	28	37	42	29	31	29	40
Mechanical .....	NA	NA	NA	NA	NA	781	908	789	744	683	596	614	647
Other .....	6,190	5,889	5,072	4,582	4,505	381	337	365	332	304	326	393	428
Science.....	7,881	7,788	7,251	8,142	9,297	9,875	9,940	10,651	11,295	12,056	13,454	14,073	13,707
Natural sciences.....	5,011	5,019	4,422	4,556	5,086	5,154	4,934	5,577	6,110	6,665	7,695	8,086	7,627
Agricultural sciences.....	437	289	266	270	349	258	253	258	248	262	270	249	274
Biological sciences .....	915	862	873	1,063	1,217	1,283	1,462	1,376	1,437	1,457	1,537	1,653	1,966

**Earned bachelor's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	73	78	46	49	59	57	50	80
Atmospheric sciences.....	NA	NA	NA	NA	NA	4	11	8	2	6	8	3	10
Earth sciences.....	NA	NA	NA	NA	NA	59	60	33	46	49	48	45	65
Oceanography.....	NA	NA	NA	NA	NA	10	7	5	1	4	1	2	5
Mathematics/computer sciences .....	2,879	3,233	2,678	2,615	2,756	2,890	2,548	3,365	3,818	4,342	5,308	5,543	4,637
Computer sciences.....	2,116	2,578	2,135	2,037	2,204	2,297	2,015	2,886	3,392	3,888	4,686	4,861	3,876
Mathematics.....	763	655	543	578	552	593	533	479	426	454	622	682	761
Physical sciences .....	780	635	605	608	764	650	593	532	558	545	523	591	670
Astronomy.....	NA	NA	NA	NA	NA	10	8	4	13	16	15	10	20
Chemistry.....	NA	NA	NA	NA	NA	396	396	344	335	343	326	350	398
Physics.....	NA	NA	NA	NA	NA	223	176	160	182	167	168	189	201
Other physical sciences.....	780	635	605	608	764	21	13	24	28	19	14	42	51
Social/behavioral sciences.....	2,870	2,769	2,829	3,586	4,211	4,721	5,006	5,074	5,185	5,391	5,759	5,987	6,080
Psychology.....	543	494	511	691	830	942	1,049	1,264	1,283	1,367	1,394	1,471	1,504
Social sciences.....	2,327	2,275	2,318	2,895	3,381	3,779	3,957	3,810	3,902	4,024	4,365	4,516	4,576
Anthropology.....	NA	NA	NA	NA	NA	115	173	116	120	114	94	106	115
Area/ethnic studies.....	72	67	126	134	136	225	198	178	167	160	160	164	163
Economics.....	NA	NA	NA	NA	NA	1,690	1,824	1,691	1,824	1,904	2,048	2,170	2,200
History of science.....	NA	NA	NA	NA	NA	1	0	1	3	2	3	0	1
Linguistics.....	NA	NA	NA	NA	NA	80	86	83	77	81	80	74	77
Political science/public administration.....	NA	NA	NA	NA	NA	1,088	1,052	1,154	1,147	1,162	1,284	1,307	1,266
Sociology.....	NA	NA	NA	NA	NA	332	299	299	258	295	349	326	329
Other social sciences.....	2,255	2,208	2,192	2,761	3,245	248	325	288	306	306	347	369	425
Non-S&E.....	15,187	14,915	14,134	16,933	18,569	22,327	24,037	23,611	23,765	24,801	25,094	25,555	26,004
Engineering technologies.....	1,277	986	659	712	441	550	557	441	518	459	453	506	483

NA = not available

NOTES: Race/ethnicity data collected on broad fields of study only until 1994. Field taxonomies for data through 1994 do not exactly match field taxonomies used in tables by sex or race/ethnicity data after 1994. Primary difference between taxonomies: history included in social sciences before 1995 but in non-S&E from 1995 on. Racial/ethnic breakouts for U.S. citizens and permanent residents only; temporary resident includes all racial/ethnic groups. Engineering technologies focused more on applied skills than on fundamental science and mathematics.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Science and Engineering Indicators 2008

## Earned master's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Both sexes</b>													
All fields .....	287,213	290,532	311,050	338,498	370,973	399,428	420,954	456,260	466,645	481,132	511,603	555,537	567,875
S&E.....	70,578	72,603	76,425	78,368	86,425	94,309	93,485	95,683	98,986	99,173	107,910	118,470	120,025
Engineering.....	20,972	22,070	23,743	24,013	27,664	28,630	25,874	25,736	26,523	26,266	29,704	33,872	34,099
Aerospace.....	605	737	855	941	1,047	821	625	560	611	682	735	870	946
Chemical.....	1,814	1,386	1,321	1,025	1,220	1,369	1,345	1,352	1,368	1,267	1,365	1,506	1,506
Civil.....	3,542	3,267	3,296	3,404	4,438	5,168	4,880	4,140	4,013	3,947	4,190	4,445	4,631
Electrical.....	5,649	6,895	7,849	7,942	8,828	8,743	7,341	8,339	8,630	8,279	10,075	12,173	11,637
Industrial.....	1,463	1,728	1,823	2,039	2,745	2,873	2,935	3,048	3,401	3,388	3,849	4,244	3,937
Materials.....	713	765	815	787	849	852	724	759	709	630	720	800	790
Mechanical.....	3,272	3,380	3,703	3,680	4,169	4,368	3,756	3,378	3,472	3,519	3,839	4,555	4,761
Other.....	3,914	3,912	4,081	4,195	4,368	4,436	4,268	4,160	4,319	4,554	4,931	5,279	5,891
Science.....	49,606	50,533	52,682	54,355	58,761	65,679	67,611	69,947	72,463	72,907	78,206	84,598	85,926
Natural sciences.....	23,977	25,208	26,047	25,638	27,574	29,288	30,185	32,864	34,960	35,373	38,979	41,618	40,489
Agricultural sciences.....	3,113	2,776	2,570	2,600	3,272	3,574	3,927	3,858	3,752	4,019	3,955	4,221	4,171
Biological sciences.....	5,095	4,999	4,953	4,806	4,840	5,495	6,594	6,325	6,487	6,334	6,877	7,647	8,099
Earth, atmospheric, and ocean sciences.....	2,160	2,051	1,819	1,499	1,397	1,483	1,435	1,345	1,363	1,406	1,491	1,570	1,685
Atmospheric sciences.....	236	216	206	172	202	203	177	156	140	141	167	179	255
Earth sciences.....	1,806	1,729	1,511	1,195	1,052	1,142	1,145	1,104	1,121	1,151	1,203	1,248	1,314
Oceanography.....	118	106	102	132	143	138	113	85	102	114	121	143	116
Mathematics/computer sciences.....	10,004	11,808	12,829	12,956	14,100	14,495	14,088	17,824	19,621	19,990	22,954	24,150	22,418
Computer sciences.....	7,101	8,481	9,399	9,324	10,349	10,563	10,489	14,529	16,341	16,582	19,248	19,853	17,820
Mathematics/statistics.....	2,903	3,327	3,430	3,632	3,751	3,932	3,599	3,295	3,280	3,408	3,706	4,297	4,598
Physical sciences.....	3,605	3,574	3,876	3,777	3,965	4,241	4,141	3,512	3,737	3,624	3,702	4,030	4,116
Astronomy.....	91	71	100	98	135	119	93	102	93	112	123	150	159
Chemistry.....	1,734	1,750	1,800	1,676	1,853	2,105	2,268	1,908	2,009	1,866	1,830	2,056	1,912
Physics.....	1,523	1,543	1,739	1,725	1,781	1,826	1,497	1,244	1,376	1,353	1,453	1,637	1,846
Other physical sciences.....	257	210	237	278	196	191	283	258	259	293	296	187	199
Social/behavioral sciences.....	25,629	25,325	26,635	28,717	31,187	36,391	37,426	37,083	37,503	37,534	39,227	42,980	45,437
Psychology.....	8,481	8,165	8,652	9,802	10,412	13,132	13,633	13,708	14,335	14,041	14,469	15,298	16,076
Social sciences.....	17,148	17,160	17,983	18,915	20,775	23,259	23,793	23,375	23,168	23,493	24,758	27,682	29,361
Anthropology.....	771	746	725	851	927	1,053	1,111	950	1,092	1,017	1,043	1,098	1,107
Area/ethnic studies.....	884	876	990	1,262	1,501	1,584	1,587	1,529	1,515	1,497	1,514	1,617	1,681
Economics.....	2,532	2,321	2,333	2,411	2,725	2,838	2,804	2,515	2,492	2,651	2,951	3,201	3,504
History of science.....	0	0	0	0	9	13	18	24	26	35	25	25	29
Linguistics.....	633	542	579	606	610	603	642	553	552	520	525	574	611
Political science/public administration.....	9,481	9,933	10,314	10,392	11,310	12,802	13,368	13,035	12,929	13,183	14,115	15,766	17,354
Sociology.....	1,045	970	1,169	1,293	1,564	1,790	1,752	2,036	1,901	1,957	1,929	2,031	1,518
Other social sciences.....	1,802	1,772	1,873	2,100	2,129	2,576	2,511	2,733	2,661	2,633	2,656	3,370	3,557
Non-S&E.....	216,635	217,929	234,625	260,130	284,548	305,119	327,469	360,577	367,659	381,959	403,693	437,067	447,850



## Earned master's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Male</b>													
All fields .....	143,716	141,655	149,399	156,895	169,753	179,198	181,457	191,234	193,006	198,097	210,758	227,335	230,057
S&E.....	48,247	48,759	50,845	50,441	55,454	58,518	55,223	54,213	55,593	55,701	61,199	66,798	66,974
Engineering.....	18,728	19,300	20,661	20,656	23,570	23,998	21,179	20,396	20,895	20,692	23,520	26,737	26,492
Aerospace.....	574	682	791	855	941	722	550	484	521	557	628	721	782
Chemical .....	1,529	1,143	1,092	852	996	1,063	1,013	1,008	1,016	932	1,022	1,089	1,081
Civil .....	3,128	2,792	2,851	2,864	3,607	4,123	3,781	3,065	2,952	2,884	3,042	3,234	3,309
Electrical.....	5,154	6,178	6,933	7,008	7,777	7,539	6,197	6,781	6,957	6,718	8,173	9,788	9,167
Industrial.....	1,236	1,409	1,465	1,603	2,190	2,361	2,331	2,400	2,612	2,593	3,005	3,338	3,018
Materials .....	600	600	634	607	682	668	550	558	536	459	537	601	586
Mechanical .....	3,044	3,133	3,377	3,320	3,769	3,918	3,337	2,923	3,024	3,051	3,380	3,992	4,163
Other .....	3,463	3,363	3,518	3,547	3,608	3,604	3,420	3,177	3,277	3,498	3,733	3,974	4,386
Science.....	29,519	29,459	30,184	29,785	31,884	34,520	34,044	33,817	34,698	35,009	37,679	40,061	40,482
Natural sciences.....	16,246	16,663	17,216	16,503	17,954	18,860	18,684	19,441	20,606	20,839	23,198	24,516	24,069
Agricultural sciences.....	2,215	1,882	1,719	1,660	2,007	2,103	2,232	2,039	1,915	2,022	1,896	1,965	1,951
Biological sciences .....	2,666	2,555	2,491	2,315	2,374	2,637	3,076	2,815	2,732	2,665	2,859	3,160	3,229
Earth, atmospheric, and ocean sciences .....	1,639	1,531	1,337	1,116	1,006	1,032	948	832	799	834	879	869	973
Atmospheric sciences.....	196	187	174	138	161	152	135	119	100	95	112	112	185
Earth sciences .....	1,361	1,272	1,099	887	756	789	752	670	649	678	702	682	737
Oceanography .....	82	72	64	91	89	91	61	43	50	61	65	75	51
Mathematics/computer sciences.....	6,951	8,011	8,833	8,709	9,773	10,130	9,620	11,458	12,724	13,020	15,186	16,005	15,329
Computer sciences.....	5,064	5,985	6,773	6,563	7,554	7,777	7,510	9,661	10,833	11,083	13,157	13,658	12,742
Mathematics/statistics.....	1,887	2,026	2,060	2,146	2,219	2,353	2,110	1,797	1,891	1,937	2,029	2,347	2,587
Physical sciences.....	2,775	2,684	2,836	2,703	2,794	2,958	2,808	2,297	2,436	2,298	2,378	2,517	2,587
Astronomy .....	76	55	85	79	106	88	61	77	57	85	81	97	97
Chemistry.....	1,166	1,181	1,131	993	1,110	1,220	1,341	1,085	1,184	1,014	1,001	1,106	973
Physics.....	1,333	1,300	1,448	1,441	1,463	1,535	1,242	1,000	1,090	1,067	1,140	1,224	1,419
Other physical sciences.....	200	148	172	190	115	115	164	135	105	132	156	90	98
Social/behavioral sciences .....	13,273	12,796	12,968	13,282	13,930	15,660	15,360	14,376	14,092	14,170	14,481	15,545	16,413
Psychology .....	3,064	2,838	2,814	2,994	2,928	3,735	3,715	3,415	3,477	3,369	3,369	3,348	3,444
Social sciences.....	10,209	9,958	10,154	10,288	11,002	11,925	11,645	10,961	10,615	10,801	11,112	12,197	12,969
Anthropology .....	325	305	290	350	393	385	399	363	403	375	388	377	370
Area/ethnic studies.....	467	467	503	639	740	766	742	650	619	618	626	656	693
Economics.....	1,920	1,739	1,699	1,711	1,909	1,944	1,851	1,563	1,519	1,601	1,790	1,949	2,113
History of science.....	0	0	0	0	5	9	11	18	16	18	15	11	17
Linguistics.....	224	196	211	218	218	187	224	146	172	160	145	164	178
Political science/public administration .....	5,785	5,830	5,917	5,752	6,069	6,678	6,677	6,315	6,088	6,205	6,392	6,938	7,598
Sociology.....	470	425	507	514	604	678	610	649	643	642	633	673	485
Other social sciences.....	1,018	996	1,027	1,104	1,064	1,278	1,131	1,257	1,155	1,182	1,123	1,429	1,515
Non-S&E.....	95,469	92,896	98,554	106,454	114,299	120,680	126,234	137,021	137,413	142,396	149,559	160,537	163,083

## Earned master's degrees, by sex and field: Selected years, 1985–2005

Sex/field	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>Female</b>													
All fields .....	143,497	148,877	161,651	181,603	201,220	220,230	239,497	265,026	273,639	283,035	300,845	328,202	337,818
S&E.....	22,331	23,844	25,580	27,927	30,971	35,791	38,262	41,470	43,393	43,472	46,711	51,672	53,051
Engineering.....	2,244	2,770	3,082	3,357	4,094	4,632	4,695	5,340	5,628	5,574	6,184	7,135	7,607
Aerospace.....	31	55	64	86	106	99	75	76	90	125	107	149	164
Chemical .....	285	243	229	173	224	306	332	344	352	335	343	417	425
Civil .....	414	475	445	540	831	1,045	1,099	1,075	1,061	1,063	1,148	1,211	1,322
Electrical.....	495	717	916	934	1,051	1,204	1,144	1,558	1,673	1,561	1,902	2,385	2,470
Industrial.....	227	319	358	436	555	512	604	648	789	795	844	906	919
Materials .....	113	165	181	180	167	184	174	201	173	171	183	199	204
Mechanical .....	228	247	326	360	400	450	419	455	448	468	459	563	598
Other .....	451	549	563	648	760	832	848	983	1,042	1,056	1,198	1,305	1,505
Science.....	20,087	21,074	22,498	24,570	26,877	31,159	33,567	36,130	37,765	37,898	40,527	44,537	45,444
Natural sciences.....	7,731	8,545	8,831	9,135	9,620	10,428	11,501	13,423	14,354	14,534	15,781	17,102	16,420
Agricultural sciences.....	898	894	851	940	1,265	1,471	1,695	1,819	1,837	1,997	2,059	2,256	2,220
Biological sciences .....	2,429	2,444	2,462	2,491	2,466	2,858	3,518	3,510	3,755	3,669	4,018	4,487	4,870
Earth, atmospheric, and ocean sciences .....	521	520	482	383	391	451	487	513	564	572	612	701	712
Atmospheric sciences.....	40	29	32	34	41	51	42	37	40	46	55	67	70
Earth sciences.....	445	457	412	308	296	353	393	434	472	473	501	566	577
Oceanography .....	36	34	38	41	54	47	52	42	52	53	56	68	65
Mathematics/computer sciences .....	3,053	3,797	3,996	4,247	4,327	4,365	4,468	6,366	6,897	6,970	7,768	8,145	7,089
Computer sciences.....	2,037	2,496	2,626	2,761	2,795	2,786	2,979	4,868	5,508	5,499	6,091	6,195	5,078
Mathematics/statistics.....	1,016	1,301	1,370	1,486	1,532	1,579	1,489	1,498	1,389	1,471	1,677	1,950	2,011
Physical sciences.....	830	890	1,040	1,074	1,171	1,283	1,333	1,215	1,301	1,326	1,324	1,513	1,529
Astronomy .....	15	16	15	19	29	31	32	25	36	27	42	53	62
Chemistry.....	568	569	669	683	743	885	927	823	825	852	829	950	939
Physics.....	190	243	291	284	318	291	255	244	286	286	313	413	427
Other physical sciences.....	57	62	65	88	81	76	119	123	154	161	140	97	101
Social/behavioral sciences .....	12,356	12,529	13,667	15,435	17,257	20,731	22,066	22,707	23,411	23,364	24,746	27,435	29,024
Psychology .....	5,417	5,327	5,838	6,808	7,484	9,397	9,918	10,293	10,858	10,672	11,100	11,950	12,632
Social sciences.....	6,939	7,202	7,829	8,627	9,773	11,334	12,148	12,414	12,553	12,692	13,646	15,485	16,392
Anthropology .....	446	441	435	501	534	668	712	587	689	642	655	721	737
Area/ethnic studies.....	417	409	487	623	761	818	845	879	896	879	888	961	988
Economics.....	612	582	634	700	816	894	953	952	973	1,050	1,161	1,252	1,391
History of science.....	0	0	0	0	4	4	7	6	10	17	10	14	12
Linguistics.....	409	346	368	388	392	416	418	407	380	360	380	410	433
Political science/public administration .....	3,696	4,103	4,397	4,640	5,241	6,124	6,691	6,720	6,841	6,978	7,723	8,828	9,756
Sociology.....	575	545	662	779	960	1,112	1,142	1,387	1,258	1,315	1,296	1,358	1,033
Other social sciences.....	784	776	846	996	1,065	1,298	1,380	1,476	1,506	1,451	1,533	1,941	2,042
Non-S&E .....	121,166	125,033	136,071	153,676	170,249	184,439	201,235	223,556	230,246	239,563	254,134	276,530	284,767

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
<b>All races/ethnicities and citizenships</b>													
All fields .....	287,213	290,532	311,050	338,498	370,973	399,428	420,954	456,260	466,645	481,132	511,603	555,537	567,875
S&E.....	64,726	66,774	70,333	72,828	81,415	94,309	93,485	95,683	98,986	99,173	107,910	118,470	120,025
Engineering.....	20,935	22,057	23,735	24,007	27,658	28,630	25,874	25,736	26,523	26,266	29,704	33,872	34,099
Aerospace.....	NA	NA	NA	NA	NA	821	625	560	611	682	735	870	946
Chemical.....	NA	NA	NA	NA	NA	1,369	1,345	1,352	1,368	1,267	1,365	1,506	1,506
Civil.....	NA	NA	NA	NA	NA	5,168	4,880	4,140	4,013	3,947	4,190	4,445	4,631
Electrical.....	NA	NA	NA	NA	NA	8,743	7,341	8,339	8,630	8,279	10,075	12,173	11,637
Industrial.....	NA	NA	NA	NA	NA	2,873	2,935	3,048	3,401	3,388	3,849	4,244	3,937
Materials.....	NA	NA	NA	NA	NA	852	724	759	709	630	720	800	790
Mechanical.....	NA	NA	NA	NA	NA	4,368	3,756	3,378	3,472	3,519	3,839	4,555	4,761
Other.....	20,935	22,057	23,735	24,007	27,658	4,436	4,268	4,160	4,319	4,554	4,931	5,279	5,891
Science.....	43,791	44,717	46,598	48,821	53,757	65,679	67,611	69,947	72,463	72,907	78,206	84,598	85,926
Natural sciences.....	24,034	25,269	26,089	25,669	27,713	29,288	30,185	32,864	34,960	35,373	38,979	41,618	40,489
Agricultural sciences.....	3,152	2,824	2,604	2,625	3,299	3,574	3,927	3,858	3,752	4,019	3,955	4,221	4,171
Biological sciences.....	5,091	4,999	4,953	4,806	4,798	5,495	6,594	6,325	6,487	6,334	6,877	7,647	8,099
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	1,483	1,435	1,345	1,363	1,406	1,491	1,570	1,685
Atmospheric sciences.....	NA	NA	NA	NA	NA	203	177	156	140	141	167	179	255
Earth sciences.....	NA	NA	NA	NA	NA	1,142	1,145	1,104	1,121	1,151	1,203	1,248	1,314
Oceanography.....	NA	NA	NA	NA	NA	138	113	85	102	114	121	143	116
Mathematics/computer sciences.....	9,989	11,808	12,829	12,956	14,251	14,495	14,088	17,824	19,621	19,990	22,954	24,150	22,418
Computer sciences.....	7,101	8,481	9,399	9,324	10,167	10,563	10,489	14,529	16,341	16,582	19,248	19,853	17,820
Mathematics/statistics.....	2,888	3,327	3,430	3,632	4,084	3,932	3,599	3,295	3,280	3,408	3,706	4,297	4,598
Physical sciences.....	5,802	5,638	5,703	5,282	5,365	4,241	4,141	3,512	3,737	3,624	3,702	4,030	4,116
Astronomy.....	NA	NA	NA	NA	NA	119	93	102	93	112	123	150	159
Chemistry.....	NA	NA	NA	NA	NA	2,105	2,268	1,908	2,009	1,866	1,830	2,056	1,912
Physics.....	NA	NA	NA	NA	NA	1,826	1,497	1,244	1,376	1,353	1,453	1,637	1,846
Other physical sciences.....	5,802	5,638	5,703	5,282	5,365	191	283	258	259	293	296	187	199
Social/behavioral sciences.....	19,757	19,448	20,509	23,152	26,044	36,391	37,426	37,083	37,503	37,534	39,227	42,980	45,437
Psychology.....	8,481	8,165	8,652	9,802	11,020	13,132	13,633	13,708	14,335	14,041	14,469	15,298	16,076
Social sciences.....	11,276	11,283	11,857	13,350	15,024	23,259	23,793	23,375	23,168	23,493	24,758	27,682	29,361
Anthropology.....	NA	NA	NA	NA	NA	1,053	1,111	950	1,092	1,017	1,043	1,098	1,107
Area/ethnic studies.....	884	876	990	1,262	1,534	1,584	1,587	1,529	1,515	1,497	1,514	1,617	1,681
Economics.....	NA	NA	NA	NA	NA	2,838	2,804	2,515	2,492	2,651	2,951	3,201	3,504
History of science.....	NA	NA	NA	NA	NA	13	18	24	26	35	25	25	29
Linguistics.....	NA	NA	NA	NA	NA	603	642	553	552	520	525	574	611
Political science/public administration.....	NA	NA	NA	NA	NA	12,802	13,368	13,035	12,929	13,183	14,115	15,766	17,354
Sociology.....	NA	NA	NA	NA	NA	1,790	1,752	2,036	1,901	1,957	1,929	2,031	1,518
Other social sciences.....	10,392	10,407	10,867	12,088	13,490	2,576	2,511	2,733	2,661	2,633	2,656	3,370	3,557
Non-S&E.....	222,487	223,758	240,717	265,670	289,558	305,119	327,469	360,577	367,659	381,959	403,693	437,067	447,850
<b>U.S. citizen/permanent resident</b>													
All fields.....	260,261	262,268	278,927	300,887	326,864	350,672	371,477	400,689	405,455	417,821	440,227	481,135	495,470
S&E.....	52,220	53,729	55,190	55,779	61,265	72,092	72,220	70,933	71,564	71,623	75,542	83,120	86,563

## Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Engineering.....	15,241	16,276	16,988	16,487	18,539	18,931	17,238	15,913	15,522	15,463	16,330	18,252	19,219
Aerospace.....	NA	NA	NA	NA	NA	615	441	339	360	395	447	579	656
Chemical.....	NA	NA	NA	NA	NA	685	748	721	726	662	657	704	739
Civil.....	NA	NA	NA	NA	NA	3,712	3,664	3,048	2,780	2,593	2,686	2,782	3,080
Electrical.....	NA	NA	NA	NA	NA	5,375	4,265	4,231	3,959	4,036	4,403	5,276	5,229
Industrial.....	NA	NA	NA	NA	NA	1,874	1,872	1,872	1,992	1,958	2,084	2,268	2,178
Materials.....	NA	NA	NA	NA	NA	535	472	483	409	386	381	417	451
Mechanical.....	NA	NA	NA	NA	NA	2,939	2,602	2,212	2,222	2,214	2,239	2,630	2,847
Other.....	15,241	16,276	16,988	16,487	18,539	3,196	3,174	3,007	3,074	3,219	3,433	3,596	4,039
Science.....	36,979	37,453	38,202	39,292	42,726	53,161	54,982	55,020	56,042	56,160	59,212	64,868	67,344
Natural sciences.....	19,462	20,234	20,167	18,935	19,651	20,986	21,994	22,589	23,230	23,721	25,466	27,626	27,788
Agricultural sciences.....	2,546	2,257	1,974	2,022	2,605	2,921	3,269	3,342	3,281	3,540	3,440	3,575	3,575
Biological sciences.....	4,617	4,490	4,317	4,057	3,949	4,610	5,671	5,575	5,614	5,529	5,876	6,532	6,886
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	1,198	1,198	1,150	1,191	1,207	1,285	1,312	1,431
Atmospheric sciences.....	NA	NA	NA	NA	NA	151	143	118	116	113	128	135	206
Earth sciences.....	NA	NA	NA	NA	NA	938	959	962	987	1,001	1,046	1,058	1,132
Oceanography.....	NA	NA	NA	NA	NA	109	96	70	88	93	111	119	93
Mathematics/computer sciences.....	7,595	8,905	9,411	9,078	9,334	9,483	9,122	10,150	10,646	11,009	12,352	13,545	13,161
Computer sciences.....	5,392	6,414	6,957	6,505	6,388	6,667	6,516	7,966	8,596	8,895	10,159	11,033	10,340
Mathematics/statistics.....	2,203	2,491	2,454	2,573	2,946	2,816	2,606	2,184	2,050	2,114	2,193	2,512	2,821
Physical sciences.....	4,704	4,582	4,465	3,778	3,763	2,774	2,734	2,372	2,498	2,436	2,513	2,662	2,735
Astronomy.....	NA	NA	NA	NA	NA	94	74	80	65	77	94	102	122
Chemistry.....	NA	NA	NA	NA	NA	1,366	1,501	1,309	1,388	1,260	1,297	1,384	1,289
Physics.....	NA	NA	NA	NA	NA	1,144	938	761	808	829	851	1,010	1,148
Other physical sciences.....	4,704	4,582	4,465	3,778	3,763	170	221	222	237	270	271	166	176
Social/behavioral sciences.....	17,517	17,219	18,035	20,357	23,075	32,175	32,988	32,431	32,812	32,439	33,746	37,242	39,556
Psychology.....	8,185	7,945	8,393	9,485	10,688	12,659	13,231	13,241	13,871	13,562	13,804	14,695	15,446
Social sciences.....	9,332	9,274	9,642	10,872	12,387	19,516	19,757	19,190	18,941	18,877	19,942	22,547	24,110
Anthropology.....	NA	NA	NA	NA	NA	958	1,020	864	1,004	918	960	993	1,034
Area/ethnic studies.....	765	764	836	1,074	1,355	1,401	1,397	1,300	1,287	1,269	1,266	1,364	1,445
Economics.....	NA	NA	NA	NA	NA	1,561	1,456	1,209	1,172	1,191	1,337	1,493	1,774
History of science.....	NA	NA	NA	NA	NA	13	16	22	21	33	18	22	23
Linguistics.....	NA	NA	NA	NA	NA	412	473	380	394	351	353	398	422
Political science/public administration.....	NA	NA	NA	NA	NA	11,217	11,517	11,111	10,946	11,037	11,893	13,401	14,860
Sociology.....	NA	NA	NA	NA	NA	1,614	1,580	1,845	1,744	1,766	1,744	1,832	1,349
Other social sciences.....	8,567	8,510	8,806	9,798	11,032	2,340	2,298	2,459	2,373	2,312	2,371	3,044	3,203
Non-S&E.....	208,041	208,539	223,737	245,108	265,599	278,580	299,257	329,756	333,891	346,198	364,685	398,015	408,907
White													
All fields.....	223,649	216,807	230,322	247,524	265,668	277,437	288,353	297,226	293,390	296,978	306,552	326,932	336,718
S&E.....	43,982	43,360	43,945	44,513	47,975	54,610	53,769	49,850	48,792	48,410	49,936	54,339	56,082
Engineering.....	12,186	12,837	12,832	12,635	13,920	13,831	12,492	11,020	10,466	10,404	10,726	11,757	12,267
Aerospace.....	NA	NA	NA	NA	NA	451	345	284	277	310	347	444	500
Chemical.....	NA	NA	NA	NA	NA	494	541	501	487	435	431	455	452

**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Civil .....	NA	NA	NA	NA	NA	2,913	2,842	2,337	2,130	1,931	1,995	2,089	2,245
Electrical.....	NA	NA	NA	NA	NA	3,473	2,737	2,474	2,244	2,308	2,433	2,812	2,806
Industrial .....	NA	NA	NA	NA	NA	1,342	1,360	1,238	1,290	1,261	1,302	1,361	1,226
Materials .....	NA	NA	NA	NA	NA	447	350	373	295	287	282	304	314
Mechanical.....	NA	NA	NA	NA	NA	2,237	1,967	1,630	1,558	1,584	1,618	1,840	2,045
Other .....	12,186	12,837	12,832	12,635	13,920	2,474	2,350	2,183	2,185	2,288	2,318	2,452	2,679
Science.....	31,796	30,523	31,113	31,878	34,055	40,779	41,277	38,830	38,326	38,006	39,210	42,582	43,815
Natural sciences.....	16,735	16,352	16,080	15,005	15,322	15,836	16,486	15,943	15,879	16,176	16,909	18,219	18,577
Agricultural sciences .....	2,345	2,044	1,817	1,818	2,282	2,447	2,809	2,864	2,782	2,951	2,898	2,953	2,930
Biological sciences.....	4,081	3,745	3,679	3,353	3,144	3,642	4,395	4,179	4,124	4,085	4,290	4,618	4,862
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	1,019	1,084	1,036	1,043	1,065	1,125	1,144	1,234
Atmospheric sciences.....	NA	NA	NA	NA	NA	133	128	111	99	98	117	120	185
Earth sciences.....	NA	NA	NA	NA	NA	819	873	861	876	890	914	921	963
Oceanography.....	NA	NA	NA	NA	NA	67	83	64	68	77	94	103	86
Mathematics/computer sciences.....	6,176	6,729	6,818	6,705	6,818	6,576	6,110	6,090	6,056	6,293	6,748	7,481	7,538
Computer sciences.....	4,303	4,717	4,786	4,637	4,464	4,354	4,105	4,435	4,541	4,738	5,125	5,686	5,556
Mathematics/statistics .....	1,873	2,012	2,032	2,068	2,354	2,222	2,005	1,655	1,515	1,555	1,623	1,795	1,982
Physical sciences .....	4,133	3,834	3,766	3,129	3,078	2,152	2,088	1,774	1,874	1,782	1,848	2,023	2,013
Astronomy.....	NA	NA	NA	NA	NA	77	67	65	47	59	67	76	98
Chemistry.....	NA	NA	NA	NA	NA	1,007	1,068	929	992	876	905	1,012	886
Physics.....	NA	NA	NA	NA	NA	924	755	585	627	613	642	790	873
Other physical sciences.....	4,133	3,834	3,766	3,129	3,078	144	198	195	208	234	234	145	156
Social/behavioral sciences.....	15,061	14,171	15,033	16,873	18,733	24,943	24,791	22,887	22,447	21,830	22,301	24,363	25,238
Psychology .....	7,220	6,698	7,075	7,973	8,810	10,367	10,444	9,646	9,798	9,315	9,356	9,901	10,141
Social sciences.....	7,841	7,473	7,958	8,900	9,923	14,576	14,347	13,241	12,649	12,515	12,945	14,462	15,097
Anthropology .....	NA	NA	NA	NA	NA	774	862	686	800	705	743	770	779
Area/ethnic studies.....	508	494	601	782	896	947	992	898	794	769	720	838	809
Economics.....	NA	NA	NA	NA	NA	1,161	1,047	839	840	827	828	927	1,097
History of science.....	NA	NA	NA	NA	NA	11	12	20	18	23	13	17	20
Linguistics.....	NA	NA	NA	NA	NA	317	364	295	284	270	258	290	300
Political science/public administration .....	NA	NA	NA	NA	NA	8,320	8,185	7,427	7,005	7,051	7,503	8,353	9,077
Sociology .....	NA	NA	NA	NA	NA	1,165	1,130	1,254	1,178	1,183	1,177	1,202	858
Other social sciences.....	7,333	6,979	7,357	8,118	9,027	1,881	1,755	1,822	1,730	1,687	1,703	2,065	2,157
Non-S&E.....	179,667	173,447	186,377	203,011	217,693	222,827	234,584	247,376	244,598	248,568	256,616	272,593	280,636
Asian/Pacific Islander													
All fields.....	7,805	8,129	10,174	11,070	13,169	15,906	17,912	21,412	21,946	22,610	24,184	26,990	28,659
S&E.....	3,285	3,455	4,100	4,310	4,846	5,989	6,180	6,990	7,045	6,814	7,589	8,567	8,823
Engineering.....	1,551	1,650	1,992	2,008	2,260	2,572	2,319	2,379	2,414	2,201	2,444	3,002	3,094
Aerospace .....	NA	NA	NA	NA	NA	44	42	26	37	29	42	51	55
Chemical .....	NA	NA	NA	NA	NA	100	87	114	120	96	96	135	106
Civil .....	NA	NA	NA	NA	NA	369	386	283	220	204	241	254	298
Electrical.....	NA	NA	NA	NA	NA	1,117	911	1,061	1,026	919	1,049	1,421	1,379
Industrial .....	NA	NA	NA	NA	NA	344	293	265	358	315	262	347	326

## Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Materials .....	NA	NA	NA	NA	NA	42	62	54	55	43	53	53	64
Mechanical .....	NA	NA	NA	NA	NA	221	153	192	212	190	275	284	332
Other .....	1,551	1,650	1,992	2,008	2,260	335	385	384	386	405	426	457	534
Science.....	1,734	1,805	2,108	2,302	2,586	3,417	3,861	4,611	4,631	4,613	5,145	5,565	5,729
Natural sciences .....	1,229	1,426	1,617	1,735	1,918	2,305	2,546	3,159	3,143	3,131	3,509	3,714	3,696
Agricultural sciences .....	58	47	44	50	61	97	103	94	97	126	99	111	111
Biological sciences .....	179	190	223	231	305	426	575	595	540	537	646	763	793
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	50	30	22	28	37	28	39	31
Atmospheric sciences.....	NA	NA	NA	NA	NA	6	4	4	5	7	4	5	4
Earth sciences.....	NA	NA	NA	NA	NA	37	19	17	17	25	18	28	26
Oceanography .....	NA	NA	NA	NA	NA	7	7	1	6	5	6	6	1
Mathematics/computer sciences .....	779	962	1,072	1,203	1,303	1,494	1,560	2,208	2,258	2,218	2,505	2,605	2,517
Computer sciences.....	615	779	894	1,014	1,106	1,266	1,322	2,028	2,053	2,004	2,284	2,330	2,193
Mathematics/statistics .....	164	183	178	189	197	228	238	180	205	214	221	275	324
Physical sciences .....	213	227	278	251	249	238	278	240	220	213	231	196	244
Astronomy.....	NA	NA	NA	NA	NA	8	2	5	5	4	7	6	7
Chemistry.....	NA	NA	NA	NA	NA	136	197	172	153	125	157	128	154
Physics.....	NA	NA	NA	NA	NA	91	73	53	56	66	57	60	75
Other physical sciences.....	213	227	278	251	249	3	6	10	6	18	10	2	8
Social/behavioral sciences.....	505	379	491	567	668	1,112	1,315	1,452	1,488	1,482	1,636	1,851	2,033
Psychology .....	129	113	131	170	191	289	364	472	498	526	525	580	582
Social sciences.....	376	266	360	397	477	823	951	980	990	956	1,111	1,271	1,451
Anthropology .....	NA	NA	NA	NA	NA	25	25	39	39	34	42	43	44
Area/ethnic studies.....	48	32	44	56	75	75	91	78	101	92	101	93	111
Economics.....	NA	NA	NA	NA	NA	138	155	132	113	119	156	157	185
History of science.....	NA	NA	NA	NA	NA	0	0	0	0	2	2	3	1
Linguistics.....	NA	NA	NA	NA	NA	47	37	42	43	26	32	37	41
Political science/public administration .....	NA	NA	NA	NA	NA	405	478	516	534	512	600	715	854
Sociology .....	NA	NA	NA	NA	NA	74	69	66	70	86	95	106	78
Other social sciences.....	328	234	316	341	402	59	96	107	90	85	83	117	137
Non-S&E.....	4,520	4,674	6,074	6,760	8,323	9,917	11,732	14,422	14,901	15,796	16,595	18,423	19,836
Black													
All fields .....	13,960	13,173	13,455	15,857	18,897	22,954	26,948	33,305	35,059	36,524	39,582	44,375	46,901
S&E.....	1,742	1,784	1,652	2,090	2,554	4,210	4,870	5,492	6,117	6,133	6,800	7,459	7,607
Engineering.....	330	403	355	398	564	665	674	658	700	738	827	853	874
Aerospace .....	NA	NA	NA	NA	NA	13	9	7	10	14	8	11	19
Chemical .....	NA	NA	NA	NA	NA	28	35	34	34	31	43	31	56
Civil .....	NA	NA	NA	NA	NA	105	109	93	102	101	96	76	100
Electrical.....	NA	NA	NA	NA	NA	228	168	183	188	189	226	238	229
Industrial .....	NA	NA	NA	NA	NA	80	89	90	119	142	158	170	152
Materials .....	NA	NA	NA	NA	NA	12	18	15	9	19	14	21	19
Mechanical.....	NA	NA	NA	NA	NA	91	110	91	89	71	79	85	82
Other .....	330	403	355	398	564	108	136	145	149	171	203	221	217

## Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Science.....	1,412	1,381	1,297	1,692	1,990	3,545	4,196	4,834	5,417	5,395	5,973	6,606	6,733
Natural sciences.....	523	581	495	644	716	897	1,041	1,109	1,327	1,287	1,511	1,646	1,455
Agricultural sciences.....	50	55	36	51	70	74	96	84	96	88	103	102	85
Biological sciences.....	151	167	124	137	135	163	236	223	313	288	298	385	375
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	15	12	7	21	18	18	22	19
Atmospheric sciences.....	NA	NA	NA	NA	NA	2	2	0	4	2	2	3	5
Earth sciences.....	NA	NA	NA	NA	NA	13	10	6	15	15	13	16	13
Oceanography.....	NA	NA	NA	NA	NA	0	0	1	2	1	3	3	1
Mathematics/computer sciences.....	233	280	257	383	406	513	565	678	767	772	979	1,017	875
Computer sciences.....	180	207	198	283	308	373	411	580	654	659	881	902	740
Mathematics/statistics.....	53	73	59	100	98	140	154	98	113	113	98	115	135
Physical sciences.....	89	79	78	73	105	132	132	117	130	121	113	120	101
Astronomy.....	NA	NA	NA	NA	NA	4	2	0	0	2	1	1	2
Chemistry.....	NA	NA	NA	NA	NA	77	84	65	82	74	76	87	55
Physics.....	NA	NA	NA	NA	NA	41	39	44	41	37	32	27	39
Other physical sciences.....	89	79	78	73	105	10	7	8	7	8	4	5	5
Social/behavioral sciences.....	889	800	802	1,048	1,274	2,648	3,155	3,725	4,090	4,108	4,462	4,960	5,278
Psychology.....	426	376	395	454	544	802	1,059	1,346	1,598	1,631	1,801	1,923	2,135
Social sciences.....	463	424	407	594	730	1,846	2,096	2,379	2,492	2,477	2,661	3,037	3,143
Anthropology.....	NA	NA	NA	NA	NA	38	29	33	37	32	33	31	30
Area/ethnic studies.....	41	34	27	52	116	101	109	91	86	108	122	127	135
Economics.....	NA	NA	NA	NA	NA	95	96	71	66	76	67	70	96
History of science.....	NA	NA	NA	NA	NA	1	1	0	1	2	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	12	12	4	14	5	7	3	9
Political science/public administration.....	NA	NA	NA	NA	NA	1,176	1,386	1,585	1,754	1,717	1,861	2,057	2,235
Sociology.....	NA	NA	NA	NA	NA	229	247	344	294	285	274	301	205
Other social sciences.....	422	390	380	542	614	194	216	251	240	252	297	448	433
Non-S&E.....	12,218	11,389	11,803	13,767	16,343	18,744	22,078	27,813	28,942	30,391	32,782	36,916	39,294
Hispanic													
All fields.....	7,730	7,781	8,133	9,684	11,371	13,905	16,360	20,803	22,163	23,165	25,257	29,498	31,815
S&E.....	1,514	1,584	1,585	1,736	2,092	2,945	3,220	3,746	4,077	4,089	4,381	5,078	5,365
Engineering.....	346	512	468	468	581	711	765	852	838	855	876	1,130	1,152
Aerospace.....	NA	NA	NA	NA	NA	22	20	13	11	19	14	21	39
Chemical.....	NA	NA	NA	NA	NA	30	51	39	40	45	39	40	41
Civil.....	NA	NA	NA	NA	NA	151	159	180	168	187	152	163	208
Electrical.....	NA	NA	NA	NA	NA	197	187	211	172	180	242	340	276
Industrial.....	NA	NA	NA	NA	NA	95	108	172	192	204	163	229	239
Materials.....	NA	NA	NA	NA	NA	11	22	15	22	16	6	16	26
Mechanical.....	NA	NA	NA	NA	NA	100	113	99	93	87	117	157	153
Other.....	346	512	468	468	581	105	105	123	140	117	143	164	170
Science.....	1,168	1,072	1,117	1,268	1,511	2,234	2,455	2,894	3,239	3,234	3,505	3,948	4,213
Natural sciences.....	481	493	444	494	574	674	732	915	1,092	1,028	1,234	1,379	1,327
Agricultural sciences.....	66	62	48	49	69	96	105	133	123	175	132	171	185

**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Biological sciences .....	139	126	126	136	151	167	214	268	310	267	267	330	359
Earth, atmospheric, and ocean sciences .....	NA	NA	NA	NA	NA	34	23	30	28	35	28	36	47
Atmospheric sciences.....	NA	NA	NA	NA	NA	6	3	2	0	1	2	2	3
Earth sciences.....	NA	NA	NA	NA	NA	28	18	26	25	31	24	32	43
Oceanography .....	NA	NA	NA	NA	NA	0	2	2	3	3	2	2	1
Mathematics/computer sciences .....	149	183	178	213	240	282	274	388	512	415	663	715	592
Computer sciences.....	94	123	144	128	162	210	211	288	440	333	555	602	462
Mathematics/statistics .....	55	60	34	85	78	72	63	100	72	82	108	113	130
Physical sciences .....	127	122	92	96	114	95	116	96	119	136	144	127	144
Astronomy.....	NA	NA	NA	NA	NA	2	2	2	1	2	2	3	2
Chemistry.....	NA	NA	NA	NA	NA	51	72	56	74	72	90	70	84
Physics.....	NA	NA	NA	NA	NA	37	36	34	37	56	41	44	53
Other physical sciences.....	127	122	92	96	114	5	6	4	7	6	11	10	5
Social/behavioral sciences.....	687	579	673	774	937	1,560	1,723	1,979	2,147	2,206	2,271	2,569	2,886
Psychology .....	344	271	360	391	463	622	718	837	937	953	957	1,085	1,219
Social sciences.....	343	308	313	383	474	938	1,005	1,142	1,210	1,253	1,314	1,484	1,667
Anthropology .....	NA	NA	NA	NA	NA	45	37	37	45	59	48	58	62
Area/ethnic studies.....	59	66	64	79	78	88	91	107	113	121	139	117	151
Economics.....	NA	NA	NA	NA	NA	53	71	67	53	57	79	80	111
History of science.....	NA	NA	NA	NA	NA	0	1	0	1	0	1	0	0
Linguistics.....	NA	NA	NA	NA	NA	17	24	18	27	19	23	26	26
Political science/public administration .....	NA	NA	NA	NA	NA	573	634	701	736	743	800	905	1,023
Sociology .....	NA	NA	NA	NA	NA	85	69	110	116	140	117	139	111
Other social sciences.....	284	242	249	304	396	77	78	102	119	114	107	159	183
Non-S&E.....	6,216	6,197	6,548	7,948	9,279	10,960	13,140	17,057	18,086	19,076	20,876	24,420	26,450
American Indian/Alaska Native													
All fields .....	1,257	1,049	1,082	1,125	1,344	1,542	1,844	2,099	2,274	2,382	2,546	2,826	2,892
S&E.....	228	147	209	200	253	307	370	383	472	420	452	535	486
Engineering.....	47	38	33	40	50	43	53	64	60	57	70	85	82
Aerospace .....	NA	NA	NA	NA	NA	2	2	0	2	4	2	6	2
Chemical .....	NA	NA	NA	NA	NA	3	5	3	4	2	2	0	4
Civil .....	NA	NA	NA	NA	NA	10	10	14	10	11	13	16	13
Electrical.....	NA	NA	NA	NA	NA	10	8	14	10	13	18	10	20
Industrial .....	NA	NA	NA	NA	NA	5	6	8	15	8	8	19	18
Materials .....	NA	NA	NA	NA	NA	1	0	4	1	2	1	1	1
Mechanical .....	NA	NA	NA	NA	NA	7	10	7	7	6	9	21	6
Other .....	47	38	33	40	50	5	12	14	11	11	17	12	18
Science.....	181	109	176	160	203	264	317	319	412	363	382	450	404
Natural sciences.....	93	48	86	57	68	79	98	108	144	118	126	135	122
Agricultural sciences .....	6	3	6	8	8	13	18	23	18	25	24	23	27
Biological sciences.....	18	11	17	13	26	20	25	26	29	34	31	33	29
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	4	5	9	11	4	9	7	11
Atmospheric sciences.....	NA	NA	NA	NA	NA	0	0	0	0	0	0	0	1



**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Earth sciences.....	NA	NA	NA	NA	NA	4	5	9	8	4	9	7	10
Oceanography.....	NA	NA	NA	NA	NA	0	0	0	3	0	0	0	0
Mathematics/computer sciences.....	48	25	45	23	22	27	39	41	77	40	50	64	44
Computer sciences.....	41	22	39	14	14	16	25	32	68	32	42	57	35
Mathematics/statistics.....	7	3	6	9	8	11	14	9	9	8	8	7	9
Physical sciences.....	21	9	18	13	12	15	11	9	9	15	12	8	11
Astronomy.....	NA	NA	NA	NA	NA	0	0	0	0	0	1	0	1
Chemistry.....	NA	NA	NA	NA	NA	11	8	5	7	11	5	3	6
Physics.....	NA	NA	NA	NA	NA	4	2	3	2	4	5	5	3
Other physical sciences.....	21	9	18	13	12	0	1	1	0	0	1	0	1
Social/behavioral sciences.....	88	61	90	103	135	185	219	211	268	245	256	315	282
Psychology.....	37	35	33	49	57	81	97	69	106	96	104	108	115
Social sciences.....	51	26	57	54	78	104	122	142	162	149	152	207	167
Anthropology.....	NA	NA	NA	NA	NA	16	10	14	17	12	11	19	14
Area/ethnic studies.....	8	4	6	11	9	10	21	16	20	20	33	27	27
Economics.....	NA	NA	NA	NA	NA	5	8	3	7	10	6	6	10
History of science.....	NA	NA	NA	NA	NA	0	0	0	1	1	0	0	0
Linguistics.....	NA	NA	NA	NA	NA	0	2	1	1	4	1	2	6
Political science/public administration.....	NA	NA	NA	NA	NA	46	55	62	70	74	77	118	90
Sociology.....	NA	NA	NA	NA	NA	14	16	30	28	17	17	17	7
Other social sciences.....	43	22	51	43	69	13	10	16	18	11	7	18	13
Non-S&E.....	1,029	902	873	925	1,091	1,235	1,474	1,716	1,802	1,962	2,094	2,291	2,406
Other/unknown race/ethnicity													
All fields.....	5,860	15,329	15,761	15,627	16,415	18,928	20,060	25,844	30,623	36,162	42,106	50,514	48,485
S&E.....	1,469	3,399	3,699	2,930	3,545	4,031	3,811	4,472	5,061	5,757	6,384	7,142	8,200
Engineering.....	781	836	1,308	938	1,164	1,109	935	940	1,044	1,208	1,387	1,425	1,750
Aerospace.....	NA	NA	NA	NA	NA	83	23	9	23	19	34	46	41
Chemical.....	NA	NA	NA	NA	NA	30	29	30	41	53	46	43	80
Civil.....	NA	NA	NA	NA	NA	164	158	141	150	159	189	184	216
Electrical.....	NA	NA	NA	NA	NA	350	254	288	319	427	435	455	519
Industrial.....	NA	NA	NA	NA	NA	131	156	172	164	153	178	205	211
Materials.....	NA	NA	NA	NA	NA	22	20	22	27	19	25	22	27
Mechanical.....	NA	NA	NA	NA	NA	160	109	120	117	151	154	180	235
Other.....	781	836	1,308	938	1,164	169	186	158	203	227	326	290	421
Science.....	688	2,563	2,391	1,992	2,381	2,922	2,876	3,532	4,017	4,549	4,997	5,717	6,450
Natural sciences.....	401	1,334	1,445	1,000	1,053	1,195	1,091	1,355	1,645	1,981	2,177	2,533	2,611
Agricultural sciences.....	21	46	23	46	115	194	138	144	165	175	184	215	237
Biological sciences.....	49	251	148	187	188	192	226	284	298	318	344	403	468
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	76	44	46	60	48	77	64	89
Atmospheric sciences.....	NA	NA	NA	NA	NA	4	6	1	8	5	3	5	8
Earth sciences.....	NA	NA	NA	NA	NA	37	34	43	46	36	68	54	77
Oceanography.....	NA	NA	NA	NA	NA	35	4	2	6	7	6	5	4
Mathematics/computer sciences.....	210	726	1,041	551	545	591	574	745	976	1,271	1,407	1,663	1,595

**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Computer sciences.....	159	566	896	429	334	448	442	603	840	1,129	1,272	1,456	1,354
Mathematics/statistics.....	51	160	145	122	211	143	132	142	136	142	135	207	241
Physical sciences.....	121	311	233	216	205	142	109	136	146	169	165	188	222
Astronomy.....	NA	NA	NA	NA	NA	3	1	8	12	10	16	16	12
Chemistry.....	NA	NA	NA	NA	NA	84	72	82	80	102	64	84	104
Physics.....	NA	NA	NA	NA	NA	47	33	42	45	53	74	84	105
Other physical sciences.....	121	311	233	216	205	8	3	4	9	4	11	4	1
Social/behavioral sciences.....	287	1,229	946	992	1,328	1,727	1,785	2,177	2,372	2,568	2,820	3,184	3,839
Psychology.....	29	452	399	448	623	498	549	871	934	1,041	1,061	1,098	1,254
Social sciences.....	258	777	547	544	705	1,229	1,236	1,306	1,438	1,527	1,759	2,086	2,585
Anthropology.....	NA	NA	NA	NA	NA	60	57	55	66	76	83	72	105
Area/ethnic studies.....	101	134	94	94	181	180	93	110	173	159	151	162	212
Economics.....	NA	NA	NA	NA	NA	109	79	97	93	102	201	253	275
History of science.....	NA	NA	NA	NA	NA	1	2	2	0	5	2	2	2
Linguistics.....	NA	NA	NA	NA	NA	19	34	20	25	27	32	40	40
Political science/public administration.....	NA	NA	NA	NA	NA	697	779	820	847	940	1,052	1,253	1,581
Sociology.....	NA	NA	NA	NA	NA	47	49	41	58	55	64	67	90
Other social sciences.....	157	643	453	450	524	116	143	161	176	163	174	237	280
Non-S&E.....	4,391	11,930	12,062	12,697	12,870	14,897	16,249	21,372	25,562	30,405	35,722	43,372	40,285
Temporary resident													
All fields.....	26,952	28,264	32,123	37,611	44,109	48,756	49,477	55,571	61,190	63,311	71,376	74,402	72,405
S&E.....	12,506	13,045	15,143	17,049	20,150	22,217	21,265	24,750	27,422	27,550	32,368	35,350	33,462
Engineering.....	5,694	5,781	6,747	7,520	9,119	9,699	8,636	9,823	11,001	10,803	13,374	15,620	14,880
Aerospace.....	NA	NA	NA	NA	NA	206	184	221	251	287	288	291	290
Chemical.....	NA	NA	NA	NA	NA	684	597	631	642	605	708	802	767
Civil.....	NA	NA	NA	NA	NA	1,456	1,216	1,092	1,233	1,354	1,504	1,663	1,551
Electrical.....	NA	NA	NA	NA	NA	3,368	3,076	4,108	4,671	4,243	5,672	6,897	6,408
Industrial.....	NA	NA	NA	NA	NA	999	1,063	1,176	1,409	1,430	1,765	1,976	1,759
Materials.....	NA	NA	NA	NA	NA	317	252	276	300	244	339	383	339
Mechanical.....	NA	NA	NA	NA	NA	1,429	1,154	1,166	1,250	1,305	1,600	1,925	1,914
Other.....	5,694	5,781	6,747	7,520	9,119	1,240	1,094	1,153	1,245	1,335	1,498	1,683	1,852
Science.....	6,812	7,264	8,396	9,529	11,031	12,518	12,629	14,927	16,421	16,747	18,994	19,730	18,582
Natural sciences.....	4,572	5,035	5,922	6,734	8,062	8,302	8,191	10,275	11,730	11,652	13,513	13,992	12,701
Agricultural sciences.....	606	567	630	603	694	653	658	516	471	479	515	646	596
Biological sciences.....	474	509	636	749	849	885	923	750	873	805	1,001	1,115	1,213
Earth, atmospheric, and ocean sciences.....	NA	NA	NA	NA	NA	285	237	195	172	199	206	258	254
Atmospheric sciences.....	NA	NA	NA	NA	NA	52	34	38	24	28	39	44	49
Earth sciences.....	NA	NA	NA	NA	NA	204	186	142	134	150	157	190	182
Oceanography.....	NA	NA	NA	NA	NA	29	17	15	14	21	10	24	23
Mathematics/computer sciences.....	2,394	2,903	3,418	3,878	4,917	5,012	4,966	7,674	8,975	8,981	10,602	10,605	9,257
Computer sciences.....	1,709	2,067	2,442	2,819	3,779	3,896	3,973	6,563	7,745	7,687	9,089	8,820	7,480
Mathematics/statistics.....	685	836	976	1,059	1,138	1,116	993	1,111	1,230	1,294	1,513	1,785	1,777
Physical sciences.....	1,098	1,056	1,238	1,504	1,602	1,467	1,407	1,140	1,239	1,188	1,189	1,368	1,381

**Earned master's degrees, by field, race/ethnicity, and citizenship: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	2000	2001	2002	2003	2004	2005
Astronomy .....	NA	NA	NA	NA	NA	25	19	22	28	35	29	48	37
Chemistry .....	NA	NA	NA	NA	NA	739	767	599	621	606	533	672	623
Physics .....	NA	NA	NA	NA	NA	682	559	483	568	524	602	627	698
Other physical sciences .....	1,098	1,056	1,238	1,504	1,602	21	62	36	22	23	25	21	23
Social/behavioral sciences .....	2,240	2,229	2,474	2,795	2,969	4,216	4,438	4,652	4,691	5,095	5,481	5,738	5,881
Psychology .....	296	220	259	317	332	473	402	467	464	479	665	603	630
Social sciences .....	1,944	2,009	2,215	2,478	2,637	3,743	4,036	4,185	4,227	4,616	4,816	5,135	5,251
Anthropology .....	NA	NA	NA	NA	NA	95	91	86	88	99	83	105	73
Area/ethnic studies .....	119	112	154	188	179	183	190	229	228	228	248	253	236
Economics .....	NA	NA	NA	NA	NA	1,277	1,348	1,306	1,320	1,460	1,614	1,708	1,730
History of science .....	NA	NA	NA	NA	NA	0	2	2	5	2	7	3	6
Linguistics .....	NA	NA	NA	NA	NA	191	169	173	158	169	172	176	189
Political science/public administration .....	NA	NA	NA	NA	NA	1,585	1,851	1,924	1,983	2,146	2,222	2,365	2,494
Sociology .....	NA	NA	NA	NA	NA	176	172	191	157	191	185	199	169
Other social sciences .....	1,825	1,897	2,061	2,290	2,458	236	213	274	288	321	285	326	354
Non-S&E .....	14,446	15,219	16,980	20,562	23,959	26,539	28,212	30,821	33,768	35,761	39,008	39,052	38,943

NA = not available

NOTES: Race/ethnicity data collected on broad fields of study only until 1994. Field taxonomies for data through 1994 do not exactly match field taxonomies used in tables by sex or race/ethnicity data after 1994. Primary difference between taxonomies: history included in social sciences before 1995 but in non-S&E from 1995 on. Racial/ethnic breakouts for U.S. citizens and permanent residents only; temporary resident includes all racial/ethnic groups.

SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Science and Engineering Indicators 2008

**Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005**

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>Both sexes</b>														
All fields .....	31,295	32,365	34,325	37,530	39,800	41,747	42,535	41,092	41,361	40,651	39,953	40,740	42,117	43,354
S&E .....	19,663	20,692	22,706	25,060	26,640	27,864	28,650	27,338	27,557	27,037	26,235	26,907	27,991	29,751
Engineering.....	3,166	3,712	4,543	5,213	5,698	6,008	6,114	5,330	5,323	5,508	5,077	5,279	5,775	6,404
Aerospace.....	124	142	178	206	228	252	273	206	214	203	209	200	201	219
Chemical.....	504	584	712	691	737	708	767	674	726	730	705	648	725	875
Civil .....	391	477	538	575	624	656	655	584	556	595	627	673	673	757
Electrical.....	716	779	1,137	1,405	1,543	1,731	1,720	1,478	1,543	1,577	1,393	1,465	1,650	1,852
Industrial.....	92	120	162	165	236	284	246	211	176	206	230	214	217	222
Materials.....	303	392	380	489	535	588	582	469	451	497	396	474	511	540
Mechanical .....	513	657	760	875	1,030	1,025	1,022	855	864	953	827	814	852	978
Other .....	523	561	676	807	765	764	849	853	793	747	690	791	946	961
Science.....	16,497	16,980	18,163	19,847	20,942	21,856	22,536	22,008	22,234	21,529	21,158	21,628	22,216	23,347
Natural sciences .....	10,163	10,644	11,631	13,042	13,753	14,549	14,869	14,277	14,463	14,065	13,952	14,217	14,751	15,882
Agricultural sciences.....	1,152	1,005	1,154	1,108	1,036	1,117	1,078	1,065	1,037	975	1,009	1,060	1,045	1,038
Biological sciences .....	3,793	3,839	4,116	4,649	5,092	5,376	5,788	5,581	5,853	5,693	5,690	5,693	5,939	6,368
Earth, atmospheric, and ocean sciences.....	575	599	672	801	721	726	804	723	694	660	689	683	686	713
Atmospheric sciences.....	80	87	87	108	99	130	149	124	143	116	117	139	126	144
Earth sciences .....	385	375	455	560	479	454	489	452	387	393	426	374	420	420
Oceanography .....	110	137	130	133	143	142	166	147	164	151	146	170	140	149
Mathematics/computer sciences.....	998	1,189	1,471	1,838	2,026	2,187	2,032	1,939	1,910	1,832	1,726	1,859	2,024	2,339
Computer sciences.....	310	450	612	800	880	997	909	856	860	825	807	866	948	1,136
Mathematics/statistics.....	688	739	859	1,038	1,146	1,190	1,123	1,083	1,050	1,007	919	993	1,076	1,203
Medical/other life sciences.....	729	800	974	1,041	1,197	1,329	1,421	1,407	1,591	1,541	1,653	1,633	1,719	1,777
Medical sciences .....	367	375	430	456	518	555	545	607	664	648	682	655	776	807
Other life sciences .....	362	425	544	585	679	774	876	800	927	893	971	978	943	970
Physical sciences.....	2,916	3,212	3,244	3,605	3,681	3,814	3,746	3,562	3,378	3,364	3,185	3,289	3,338	3,647
Astronomy .....	100	100	113	125	145	173	198	159	185	186	141	167	165	186
Chemistry .....	1,836	1,975	1,970	2,194	2,137	2,162	2,147	2,132	1,989	1,981	1,921	2,041	1,987	2,127
Physics .....	980	1,137	1,161	1,286	1,399	1,479	1,401	1,271	1,204	1,197	1,123	1,081	1,186	1,334
Social/behavioral sciences .....	6,334	6,336	6,532	6,805	7,189	7,307	7,667	7,731	7,771	7,464	7,206	7,411	7,465	7,465
Psychology .....	3,117	3,172	3,208	3,250	3,420	3,429	3,557	3,668	3,616	3,385	3,197	3,273	3,327	3,327
Social sciences .....	3,217	3,164	3,324	3,555	3,769	3,878	4,110	4,063	4,155	4,079	4,009	4,138	4,138	4,138
Anthropology .....	377	383	351	374	380	410	469	488	482	450	521	505	565	499
Area/ethnic studies.....	106	92	93	116	137	121	94	109	127	146	122	106	133	110
Economics.....	959	960	1,062	1,053	1,067	1,152	1,163	1,075	1,086	1,081	1,026	1,050	1,069	1,184
History of science .....	23	25	20	27	37	41	35	50	42	40	47	46	48	43
Linguistics .....	176	199	188	227	214	201	244	251	230	230	193	224	254	211
Political science/public administration ...	666	647	700	740	824	894	975	1,016	986	984	938	1,024	946	990
Sociology.....	486	449	458	493	535	555	601	572	637	577	566	612	599	555
Other social sciences.....	424	409	452	525	575	504	529	502	565	571	596	571	524	546
Non-S&E .....	11,632	11,673	11,619	12,470	13,160	13,883	13,885	13,754	13,804	13,614	13,718	13,833	14,126	13,603
<b>Male</b>														
All fields .....	20,552	20,934	21,812	23,521	24,384	25,160	24,937	23,434	23,161	22,719	21,750	22,244	22,959	23,731

## Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
S&E.....	14,332	14,905	15,968	17,351	17,976	18,594	18,549	17,233	17,041	16,708	15,895	16,301	16,955	17,970
Engineering.....	2,968	3,470	4,168	4,702	5,097	5,270	5,315	4,504	4,459	4,568	4,172	4,368	4,754	5,215
Aerospace.....	119	132	170	197	218	237	254	188	191	174	185	173	177	190
Chemical.....	463	524	632	605	638	597	641	550	571	547	527	494	552	662
Civil.....	371	459	484	529	558	575	571	495	466	483	505	547	539	580
Electrical.....	681	747	1,070	1,312	1,403	1,545	1,560	1,310	1,338	1,372	1,223	1,284	1,423	1,598
Industrial.....	86	107	144	146	207	231	205	169	140	160	162	159	174	178
Materials.....	271	347	335	412	449	489	470	376	367	392	315	373	420	419
Mechanical.....	487	640	731	810	955	954	928	751	767	860	729	726	757	858
Other.....	490	514	602	691	669	642	686	665	619	580	526	612	712	730
Science.....	11,364	11,435	11,800	12,649	12,879	13,324	13,234	12,729	12,582	12,140	11,723	11,933	12,201	12,755
Natural sciences.....	7,600	7,808	8,203	9,171	9,242	9,692	9,594	9,170	9,013	8,696	8,452	8,606	8,809	9,407
Agricultural sciences.....	975	828	907	880	786	857	783	749	718	629	683	686	646	659
Biological sciences.....	2,555	2,479	2,574	2,863	3,014	3,132	3,261	3,170	3,225	3,134	3,143	3,089	3,183	3,257
Earth, atmospheric, and ocean sciences...	470	491	542	626	566	577	608	535	495	461	478	470	448	470
Atmospheric sciences.....	76	73	77	89	79	106	124	101	108	87	86	100	80	93
Earth sciences.....	310	299	363	436	384	362	366	338	278	278	305	270	288	293
Oceanography.....	84	119	102	101	103	109	118	96	109	96	87	100	80	84
Mathematics/computer sciences.....	859	999	1,208	1,514	1,602	1,727	1,594	1,495	1,507	1,399	1,288	1,419	1,520	1,784
Computer sciences.....	277	385	504	679	737	808	743	692	717	668	638	690	749	909
Mathematics/statistics.....	582	614	704	835	865	919	851	803	790	731	650	729	771	875
Medical/other life sciences.....	289	325	345	369	408	477	469	499	522	542	526	544	540	565
Medical sciences.....	204	233	224	245	268	264	257	273	278	275	284	257	294	299
Other life sciences.....	85	92	121	124	140	213	212	226	244	267	242	287	246	266
Physical sciences.....	2,452	2,686	2,627	2,919	2,866	2,922	2,879	2,722	2,546	2,531	2,334	2,398	2,472	2,672
Astronomy.....	89	87	96	110	120	143	161	126	145	145	114	127	119	137
Chemistry.....	1,474	1,569	1,471	1,672	1,530	1,488	1,522	1,493	1,361	1,350	1,276	1,386	1,350	1,403
Physics.....	889	1,030	1,060	1,137	1,216	1,291	1,196	1,103	1,040	1,036	944	885	1,003	1,132
Social/behavioral sciences.....	3,764	3,627	3,597	3,478	3,637	3,632	3,640	3,559	3,569	3,444	3,271	3,327	3,392	3,348
Psychology.....	1,576	1,474	1,408	1,249	1,322	1,245	1,162	1,209	1,203	1,121	1,060	1,042	1,081	1,062
Social sciences.....	2,188	2,153	2,189	2,229	2,315	2,387	2,478	2,350	2,366	2,323	2,211	2,285	2,311	2,286
Anthropology.....	187	185	189	143	149	172	203	214	206	187	216	197	254	213
Area/ethnic studies.....	59	48	40	55	68	55	42	48	60	49	52	33	55	51
Economics.....	814	797	864	833	808	864	876	781	790	773	738	747	754	827
History of science.....	21	15	11	15	21	24	21	32	25	32	35	23	36	27
Linguistics.....	85	93	82	112	89	98	107	99	95	94	78	91	104	73
Political science/public administration....	491	472	499	527	569	620	674	655	620	650	540	626	600	581
Sociology.....	243	274	226	247	279	258	265	228	260	240	221	251	246	211
Other social sciences.....	288	269	278	297	332	296	290	293	310	298	331	317	262	303
Non-S&E.....	6,220	6,029	5,844	6,170	6,408	6,566	6,388	6,201	6,120	6,011	5,855	5,943	6,004	5,761
Female														
All fields.....	10,743	11,431	12,513	13,873	15,121	16,416	17,241	17,481	18,126	17,855	18,117	18,496	19,157	19,564
S&E.....	5,331	5,787	6,738	7,600	8,429	9,129	9,870	9,980	10,459	10,275	10,288	10,606	11,035	11,742
Engineering.....	198	242	375	467	522	696	750	788	838	930	891	911	1,021	1,174

**Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005**

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Aerospace.....	5	10	8	7	8	14	16	17	21	28	24	27	24	29
Chemical.....	41	60	80	83	94	109	122	123	152	180	176	154	173	210
Civil.....	20	18	54	41	54	76	80	89	88	111	121	126	134	176
Electrical.....	35	32	67	79	125	173	150	155	195	204	163	181	227	249
Industrial.....	6	13	18	17	27	50	40	42	35	45	67	55	43	41
Materials.....	32	45	45	77	78	95	106	88	83	105	80	101	91	120
Mechanical.....	26	17	29	57	57	64	88	96	96	91	96	88	95	120
Other.....	33	47	74	106	79	115	148	178	168	166	164	179	234	229
Science.....	5,133	5,545	6,363	7,133	7,907	8,433	9,120	9,192	9,621	9,345	9,397	9,695	10,014	10,568
Natural sciences.....	2,563	2,836	3,428	3,824	4,397	4,787	5,165	5,048	5,428	5,335	5,479	5,611	5,941	6,456
Agricultural sciences.....	177	177	247	222	246	256	287	311	317	339	319	374	399	376
Biological sciences.....	1,238	1,360	1,542	1,773	2,050	2,217	2,495	2,394	2,622	2,550	2,545	2,604	2,756	3,105
Earth, atmospheric, and ocean sciences.....	105	108	130	172	146	147	191	185	196	198	211	213	238	243
Atmospheric sciences.....	4	14	10	16	18	23	25	22	33	28	31	39	46	51
Earth sciences.....	75	76	92	124	89	91	119	112	108	115	121	104	132	127
Oceanography.....	26	18	28	32	39	33	47	51	55	55	59	70	60	65
Mathematics/computer sciences.....	139	190	263	316	402	451	413	434	400	431	432	440	504	551
Computer sciences.....	33	65	108	117	138	186	150	157	141	155	166	176	199	225
Mathematics/statistics.....	106	125	155	199	264	265	263	277	259	276	266	264	305	326
Medical/other life sciences.....	440	475	629	668	777	843	936	899	1,066	989	1,125	1,089	1,179	1,209
Medical sciences.....	163	142	206	208	241	285	280	329	386	367	397	398	482	506
Other life sciences.....	277	333	423	460	536	558	656	570	680	622	728	691	697	703
Physical sciences.....	464	526	617	673	776	873	843	825	827	828	847	891	865	972
Astronomy.....	11	13	17	14	25	30	37	33	40	41	27	40	46	49
Chemistry.....	362	406	499	517	582	661	613	632	624	627	644	655	636	723
Physics.....	91	107	101	142	169	182	193	160	163	160	176	196	183	200
Social/behavioral sciences.....	2,570	2,709	2,935	3,309	3,510	3,646	3,955	4,144	4,193	4,010	3,918	4,084	4,073	4,112
Psychology.....	1,541	1,698	1,800	1,996	2,088	2,181	2,363	2,449	2,410	2,260	2,132	2,231	2,246	2,264
Social sciences.....	1,029	1,011	1,135	1,313	1,422	1,465	1,592	1,695	1,783	1,750	1,786	1,853	1,827	1,848
Anthropology.....	190	198	162	230	231	237	261	274	276	263	305	308	311	285
Area/ethnic studies.....	47	44	53	61	68	65	52	59	67	97	70	73	78	59
Economics.....	145	163	198	217	246	279	266	291	293	306	281	303	315	355
History of science.....	2	10	9	11	16	17	13	18	17	8	12	23	12	16
Linguistics.....	91	106	106	112	118	102	135	148	135	136	115	133	150	137
Political science/public administration.....	175	175	201	211	246	265	298	356	364	330	395	398	346	409
Sociology.....	243	175	232	246	255	294	334	342	376	337	345	361	353	344
Other social sciences.....	136	140	174	225	242	206	233	207	255	273	263	254	262	243
Non-S&E.....	5,412	5,644	5,775	6,273	6,692	7,287	7,371	7,501	7,667	7,580	7,829	7,890	8,122	7,822
U.S. Citizens														
All fields.....	23,388	22,997	23,413	25,583	26,462	27,740	28,151	27,992	27,986	26,975	25,998	26,499	26,466	26,312
S&E.....	13,691	13,580	14,207	15,412	15,820	16,425	17,071	16,887	16,826	16,112	15,466	15,799	15,933	16,118
Engineering.....	1,279	1,559	1,866	2,087	2,229	2,386	2,739	2,487	2,223	2,153	1,893	1,912	1,945	1,999
Aerospace.....	53	64	75	103	114	140	155	103	117	94	82	70	71	93
Chemical.....	240	294	383	348	324	291	321	333	340	333	301	272	292	294

## Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Civil .....	130	162	188	173	169	206	249	261	221	223	211	239	190	211
Electrical.....	270	321	440	555	630	683	753	639	533	469	422	410	421	466
Industrial.....	29	44	51	50	89	108	102	86	67	74	71	55	63	59
Materials .....	144	176	173	211	228	238	271	225	221	202	164	176	192	177
Mechanical .....	193	241	259	297	347	383	456	399	341	386	286	288	270	292
Other .....	220	257	297	350	328	337	432	441	383	372	356	402	446	407
Science.....	12,412	12,021	12,341	13,325	13,591	14,039	14,332	14,400	14,603	13,959	13,573	13,887	13,988	14,119
Natural sciences .....	7,436	7,266	7,691	8,220	8,266	8,577	8,724	8,544	8,743	8,517	8,310	8,560	8,694	8,948
Agricultural sciences.....	715	606	660	591	506	554	532	506	498	469	460	521	531	527
Biological sciences .....	3,150	2,982	3,119	3,313	3,449	3,494	3,670	3,659	3,904	3,909	3,798	3,796	3,963	4,141
Earth, atmospheric, and ocean sciences...	411	403	477	580	426	431	488	423	444	382	397	419	415	421
Atmospheric sciences.....	54	51	55	56	42	64	83	61	76	55	61	66	67	82
Earth sciences .....	278	261	335	431	303	284	310	273	256	245	246	244	255	242
Oceanography .....	79	91	87	93	81	83	95	89	112	82	90	109	93	97
Mathematics/computer sciences .....	566	589	732	850	923	1,038	960	960	907	840	768	860	853	885
Computer sciences.....	189	244	339	388	427	484	430	421	389	369	356	389	397	405
Mathematics/statistics.....	377	345	393	462	496	554	530	539	518	471	412	471	456	480
Medical/other life sciences .....	550	606	730	779	879	938	959	972	1,119	1,063	1,125	1,164	1,192	1,206
Medical sciences.....	236	249	279	286	310	324	308	374	411	389	384	428	468	484
Other life sciences.....	314	357	451	493	569	614	651	598	708	674	741	736	724	722
Physical sciences .....	2,044	2,080	1,973	2,107	2,083	2,122	2,115	2,024	1,871	1,854	1,762	1,800	1,740	1,768
Astronomy.....	82	72	78	84	106	120	151	111	127	120	101	125	113	120
Chemistry.....	1,345	1,381	1,298	1,351	1,273	1,238	1,233	1,256	1,119	1,131	1,135	1,172	1,112	1,131
Physics.....	617	627	597	672	704	764	731	657	625	603	526	503	515	517
Social/behavioral sciences .....	4,976	4,755	4,650	5,105	5,325	5,462	5,608	5,856	5,860	5,442	5,263	5,327	5,294	5,171
Psychology .....	2,804	2,749	2,685	2,954	3,071	3,083	3,036	3,223	3,155	2,902	2,722	2,786	2,723	2,811
Social sciences.....	2,172	2,006	1,965	2,151	2,254	2,379	2,572	2,633	2,705	2,540	2,541	2,541	2,571	2,360
Anthropology .....	322	312	279	315	312	330	356	374	387	348	405	407	449	375
Area/ethnic studies.....	90	81	77	92	105	96	86	91	116	129	97	89	116	96
Economics.....	523	488	509	452	437	492	487	463	443	403	371	349	357	331
History of science .....	17	24	16	18	28	31	32	40	32	36	40	35	39	32
Linguistics .....	107	107	88	117	91	98	126	136	105	108	90	95	111	98
Political science/public administration ...	473	422	439	502	563	636	730	756	763	711	704	736	691	681
Sociology.....	375	318	300	324	359	378	415	429	478	448	455	466	452	398
Other social sciences.....	265	254	257	331	359	318	340	344	381	357	379	364	356	349
Non-S&E.....	9,697	9,417	9,206	10,171	10,642	11,315	11,080	11,105	11,160	10,863	10,532	10,700	10,533	10,194
Male														
All fields.....	14,236	13,581	13,402	14,391	14,518	14,964	15,044	14,518	14,157	13,630	12,845	13,085	12,993	12,791
S&E.....	9,312	9,012	9,034	9,612	9,656	9,859	10,137	9,729	9,389	9,006	8,456	8,639	8,660	8,624
Engineering.....	1,160	1,410	1,617	1,808	1,933	2,012	2,324	2,060	1,802	1,741	1,526	1,538	1,532	1,602
Aerospace .....	50	58	71	98	108	128	143	93	103	77	72	61	61	82
Chemical .....	211	250	323	297	265	221	260	268	248	251	228	204	221	227
Civil .....	121	153	151	152	139	170	204	207	179	164	162	176	134	147
Electrical.....	250	307	411	511	573	604	679	577	464	425	377	364	368	410

## Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Industrial .....	25	36	41	39	69	82	77	58	50	51	43	38	45	45
Materials .....	125	144	138	164	186	185	213	176	174	155	122	141	160	133
Mechanical .....	178	231	240	263	314	355	409	347	294	352	252	257	228	256
Other .....	200	231	242	284	279	267	339	334	290	266	270	297	315	302
Science.....	8,152	7,602	7,417	7,804	7,723	7,847	7,813	7,669	7,587	7,265	6,930	7,101	7,128	7,022
Natural sciences.....	5,400	5,114	5,140	5,506	5,274	5,422	5,398	5,199	5,121	4,974	4,762	4,933	4,906	4,968
Agricultural sciences .....	590	485	488	453	368	419	377	338	324	292	291	346	325	319
Biological sciences .....	2,118	1,905	1,928	2,023	2,000	2,006	2,031	2,010	2,096	2,120	2,064	2,029	2,086	2,116
Earth, atmospheric, and ocean sciences.....	328	325	378	438	324	340	356	303	309	254	246	276	252	267
Atmospheric sciences.....	51	43	52	50	32	56	72	52	61	42	44	50	46	59
Earth sciences.....	216	202	260	319	238	219	221	195	182	161	153	169	158	155
Oceanography.....	61	80	66	69	54	65	63	56	66	51	49	57	48	53
Mathematics/computer sciences .....	472	473	566	674	716	790	734	704	689	617	567	650	633	676
Computer sciences.....	165	193	266	305	345	368	347	330	316	284	278	310	309	316
Mathematics/statistics .....	307	280	300	369	371	422	387	374	373	333	289	340	324	360
Medical/other life sciences .....	171	207	208	221	226	263	254	285	308	302	312	326	323	338
Medical sciences.....	106	143	121	135	128	120	120	142	143	126	135	143	142	158
Other life sciences.....	65	64	87	86	98	143	134	143	165	176	177	183	181	180
Physical sciences .....	1,721	1,719	1,572	1,697	1,640	1,604	1,646	1,559	1,395	1,389	1,282	1,306	1,287	1,252
Astronomy.....	73	63	67	77	86	99	126	87	95	93	80	97	81	86
Chemistry.....	1,084	1,085	956	1,014	921	829	881	894	744	766	753	805	766	719
Physics.....	564	571	549	606	633	676	639	578	556	530	449	404	440	447
Social/behavioral sciences.....	2,752	2,488	2,277	2,298	2,449	2,425	2,415	2,470	2,466	2,291	2,168	2,168	2,222	2,054
Psychology .....	1,395	1,260	1,147	1,106	1,200	1,092	987	1,043	1,021	949	888	869	878	883
Social sciences.....	1,357	1,228	1,130	1,192	1,249	1,333	1,428	1,427	1,445	1,342	1,280	1,299	1,344	1,171
Anthropology.....	156	141	148	119	119	134	146	164	153	142	163	155	210	147
Area/ethnic studies.....	49	42	30	39	47	42	37	41	53	45	40	25	47	44
Economics.....	428	382	375	335	312	344	363	329	318	277	264	252	245	221
History of science.....	16	14	8	12	15	15	20	25	19	29	29	17	29	21
Linguistics.....	46	44	32	49	36	45	46	52	43	44	31	41	44	32
Political science/public administration .....	333	283	274	327	368	427	488	472	475	454	389	438	433	381
Sociology .....	166	171	124	147	171	156	163	154	187	173	175	181	170	144
Other social sciences.....	163	151	139	164	181	170	165	190	197	178	189	190	166	181
Non-S&E.....	4,924	4,569	4,368	4,779	4,862	5,105	4,907	4,789	4,768	4,624	4,389	4,446	4,333	4,167
Female														
All fields.....	9,152	9,416	10,011	11,189	11,939	12,774	13,075	13,474	13,826	13,345	13,152	13,414	13,473	13,519
S&E.....	4,379	4,568	5,173	5,798	6,160	6,564	6,920	7,158	7,436	7,106	7,009	7,160	7,273	7,492
Engineering.....	119	149	249	279	296	374	414	427	421	412	367	374	413	396
Aerospace .....	3	6	4	5	6	12	12	10	14	17	10	9	10	11
Chemical .....	29	44	60	51	59	70	61	65	92	82	73	68	71	67
Civil .....	9	9	37	21	30	36	45	54	42	59	49	63	56	64
Electrical.....	20	14	29	44	57	79	74	62	69	44	45	46	53	55



Appendix table 2-31

**Earned doctoral degrees, by field, sex, and citizenship: Selected years, 1985–2005**

Field/sex/citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Industrial .....	4	8	10	11	20	26	25	28	17	23	28	17	18	14
Materials .....	19	32	35	47	42	53	58	49	47	47	42	35	32	44
Mechanical .....	15	10	19	34	33	28	46	52	47	34	34	31	42	36
Other .....	20	26	55	66	49	70	93	107	93	106	86	105	131	105
Science.....	4,260	4,419	4,924	5,519	5,864	6,190	6,506	6,731	7,015	6,694	6,642	6,786	6,860	7,096
Natural sciences.....	2,036	2,152	2,551	2,713	2,991	3,153	3,319	3,345	3,622	3,543	3,547	3,627	3,788	3,979
Agricultural sciences .....	125	121	172	138	138	135	154	168	174	177	168	175	206	208
Biological sciences .....	1,032	1,077	1,191	1,290	1,449	1,487	1,637	1,649	1,808	1,789	1,734	1,767	1,877	2,024
Earth, atmospheric, and ocean sciences.....	83	78	99	142	102	91	131	120	135	128	151	143	163	154
Atmospheric sciences.....	3	8	3	6	10	8	11	9	15	13	17	16	21	23
Earth sciences.....	62	59	75	112	65	65	88	78	74	84	93	75	97	87
Oceanography.....	18	11	21	24	27	18	32	33	46	31	41	52	45	44
Mathematics/computer sciences.....	94	116	166	176	206	248	225	256	218	223	201	210	220	209
Computer sciences.....	24	51	73	83	82	116	82	91	73	85	78	79	88	89
Mathematics/statistics .....	70	65	93	93	124	132	143	165	145	138	123	131	132	120
Medical/other life sciences .....	379	399	522	558	653	675	704	687	811	761	813	838	869	868
Medical sciences.....	130	106	158	151	182	204	187	232	268	263	249	285	326	326
Other life sciences.....	249	293	364	407	471	471	517	455	543	498	564	553	543	542
Physical sciences .....	323	361	401	409	443	517	468	465	476	465	480	494	453	516
Astronomy.....	9	9	11	7	20	21	25	24	32	27	21	28	32	34
Chemistry.....	261	296	342	336	352	409	351	362	375	365	382	367	346	412
Physics.....	53	56	48	66	71	87	92	79	69	73	77	99	75	70
Social/behavioral sciences.....	2,224	2,267	2,373	2,806	2,873	3,037	3,187	3,386	3,393	3,151	3,095	3,159	3,072	3,117
Psychology .....	1,409	1,489	1,538	1,847	1,869	1,991	2,044	2,180	2,133	1,953	1,834	1,917	1,845	1,928
Social sciences.....	815	778	835	959	1,004	1,046	1,143	1,206	1,260	1,198	1,261	1,242	1,227	1,189
Anthropology.....	166	171	131	196	193	196	210	210	234	206	242	252	239	228
Area/ethnic studies.....	41	39	47	53	58	54	49	50	63	84	57	64	69	52
Economics.....	95	106	134	117	125	148	124	134	125	126	107	97	112	110
History of science.....	1	10	8	6	13	16	12	15	13	7	11	18	10	11
Linguistics.....	61	63	56	68	55	53	80	84	62	64	59	54	67	66
Political science/public administration .....	140	139	165	175	195	209	241	284	288	257	315	298	258	300
Sociology .....	209	147	176	177	188	222	252	275	291	275	280	285	282	254
Other social sciences.....	102	103	118	167	177	148	175	154	184	179	190	174	190	168
Non-S&E.....	4,773	4,848	4,838	5,391	5,779	6,210	6,155	6,316	6,390	6,239	6,143	6,254	6,200	6,027

NOTES: Total includes unknown sex not shown separately. Medical/other life sciences reported separately from S&E fields in National Science Foundation, Division of Science Resources Statistics (NSF/SRS) higher education publications. For detailed fields, see NSF/SRS, Science and Engineering Doctorate Awards annual series, <http://www.nsf.gov/statistics/doctorates/>.

SOURCE: NSF/SRS, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>All races/ethnicities and citizenships</b>														
All fields .....	31,295	32,365	34,325	37,530	39,800	41,747	42,535	41,092	41,361	40,651	39,953	40,740	42,117	43,354
S&E.....	19,663	20,692	22,706	25,060	26,640	27,864	28,650	27,338	27,557	27,037	26,235	26,907	27,991	29,751
Engineering.....	3,166	3,712	4,543	5,213	5,698	6,008	6,114	5,330	5,323	5,508	5,077	5,279	5,775	6,404
Aerospace.....	124	142	178	206	228	252	273	206	214	203	209	200	201	219
Chemical.....	504	584	712	691	737	708	767	674	726	730	705	648	725	875
Civil.....	391	477	538	575	624	656	655	584	556	595	627	673	673	757
Electrical.....	716	779	1,137	1,405	1,543	1,731	1,720	1,478	1,543	1,577	1,393	1,465	1,650	1,852
Industrial.....	92	120	162	165	236	284	246	211	176	206	230	214	217	222
Materials.....	303	392	380	489	535	588	582	469	451	497	396	474	511	540
Mechanical.....	513	657	760	875	1,030	1,025	1,022	855	864	953	827	814	852	978
Other.....	523	561	676	807	765	764	849	853	793	747	690	791	946	961
Science.....	16,497	16,980	18,163	19,847	20,942	21,856	22,536	22,008	22,234	21,529	21,158	21,628	22,216	23,347
Natural sciences.....	10,163	10,644	11,631	13,042	13,753	14,549	14,869	14,277	14,463	14,065	13,952	14,217	14,751	15,882
Agricultural sciences.....	1,152	1,005	1,154	1,108	1,036	1,117	1,078	1,065	1,037	975	1,009	1,060	1,045	1,038
Biological sciences.....	3,793	3,839	4,116	4,649	5,092	5,376	5,788	5,581	5,853	5,693	5,690	5,693	5,939	6,368
Earth, atmospheric, and ocean sciences.....	575	599	672	801	721	726	804	723	694	660	689	683	686	713
Atmospheric sciences.....	80	87	87	108	99	130	149	124	143	116	117	139	126	144
Earth sciences.....	385	375	455	560	479	454	489	452	387	393	426	374	420	420
Oceanography.....	110	137	130	133	143	142	166	147	164	151	146	170	140	149
Mathematics/computer sciences.....	998	1,189	1,471	1,838	2,026	2,187	2,032	1,939	1,910	1,832	1,726	1,859	2,024	2,339
Computer sciences.....	310	450	612	800	880	997	909	856	860	825	807	866	948	1,136
Mathematics/statistics.....	688	739	859	1,038	1,146	1,190	1,123	1,083	1,050	1,007	919	993	1,076	1,203
Medical/other life sciences.....	729	800	974	1,041	1,197	1,329	1,421	1,407	1,591	1,541	1,653	1,633	1,719	1,777
Medical sciences.....	367	375	430	456	518	555	545	607	664	648	682	655	776	807
Other life sciences.....	362	425	544	585	679	774	876	800	927	893	971	978	943	970
Physical sciences.....	2,916	3,212	3,244	3,605	3,681	3,814	3,746	3,562	3,378	3,364	3,185	3,289	3,338	3,647
Astronomy.....	100	100	113	125	145	173	198	159	185	186	141	167	165	186
Chemistry.....	1,836	1,975	1,970	2,194	2,137	2,162	2,147	2,132	1,989	1,981	1,921	2,041	1,987	2,127
Physics.....	980	1,137	1,161	1,286	1,399	1,479	1,401	1,271	1,204	1,197	1,123	1,081	1,186	1,334
Social/behavioral sciences.....	6,334	6,336	6,532	6,805	7,189	7,307	7,667	7,731	7,771	7,464	7,206	7,411	7,465	7,465
Psychology.....	3,117	3,172	3,208	3,250	3,420	3,429	3,557	3,668	3,616	3,385	3,197	3,273	3,327	3,327
Social sciences.....	3,217	3,164	3,324	3,555	3,769	3,878	4,110	4,063	4,155	4,079	4,009	4,138	4,138	4,138
Anthropology.....	377	383	351	374	380	410	469	488	482	450	521	505	565	499
Area/ethnic studies.....	106	92	93	116	137	121	94	109	127	146	122	106	133	110
Economics.....	959	960	1,062	1,053	1,067	1,152	1,163	1,075	1,086	1,081	1,026	1,050	1,069	1,184
History of science.....	23	25	20	27	37	41	35	50	42	40	47	46	48	43
Linguistics.....	176	199	188	227	214	201	244	251	230	230	193	224	254	211
Political science/public administration.....	666	647	700	740	824	894	975	1,016	986	984	938	1,024	946	990
Sociology.....	486	449	458	493	535	555	601	572	637	577	566	612	599	555
Other social sciences.....	424	409	452	525	575	504	529	502	565	571	596	571	524	546
Non-S&E.....	11,632	11,673	11,619	12,470	13,160	13,883	13,885	13,754	13,804	13,614	13,718	13,833	14,126	13,603

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>U.S. citizen</b>														
All fields .....	23,388	22,997	23,413	25,583	26,462	27,740	28,151	27,992	27,986	26,975	25,998	26,499	26,466	26,312
S&E.....	13,691	13,580	14,207	15,412	15,820	16,425	17,071	16,887	16,826	16,112	15,466	15,799	15,933	16,118
Engineering.....	1,279	1,559	1,866	2,087	2,229	2,386	2,739	2,487	2,223	2,153	1,893	1,912	1,945	1,999
Aerospace.....	53	64	75	103	114	140	155	103	117	94	82	70	71	93
Chemical .....	240	294	383	348	324	291	321	333	340	333	301	272	292	294
Civil .....	130	162	188	173	169	206	249	261	221	223	211	239	190	211
Electrical.....	270	321	440	555	630	683	753	639	533	469	422	410	421	466
Industrial.....	29	44	51	50	89	108	102	86	67	74	71	55	63	59
Materials .....	144	176	173	211	228	238	271	225	221	202	164	176	192	177
Mechanical.....	193	241	259	297	347	383	456	399	341	386	286	288	270	292
Other .....	220	257	297	350	328	337	432	441	383	372	356	402	446	407
Science.....	12,412	12,021	12,341	13,325	13,591	14,039	14,332	14,400	14,603	13,959	13,573	13,887	13,988	14,119
Natural sciences.....	7,436	7,266	7,691	8,220	8,266	8,577	8,724	8,544	8,743	8,517	8,310	8,560	8,694	8,948
Agricultural sciences.....	715	606	660	591	506	554	532	506	498	469	460	521	531	527
Biological sciences.....	3,150	2,982	3,119	3,313	3,449	3,494	3,670	3,659	3,904	3,909	3,798	3,796	3,963	4,141
Earth, atmospheric, and ocean sciences .....	411	403	477	580	426	431	488	423	444	382	397	419	415	421
Atmospheric sciences.....	54	51	55	56	42	64	83	61	76	55	61	66	67	82
Earth sciences.....	278	261	335	431	303	284	310	273	256	245	246	244	255	242
Oceanography .....	79	91	87	93	81	83	95	89	112	82	90	109	93	97
Mathematics/computer sciences .....	566	589	732	850	923	1,038	960	960	907	840	768	860	853	885
Computer sciences.....	189	244	339	388	427	484	430	421	389	369	356	389	397	405
Mathematics/statistics.....	377	345	393	462	496	554	530	539	518	471	412	471	456	480
Medical/other life sciences .....	550	606	730	779	879	938	959	972	1,119	1,063	1,125	1,164	1,192	1,206
Medical sciences.....	236	249	279	286	310	324	308	374	411	389	384	428	468	484
Other life sciences.....	314	357	451	493	569	614	651	598	708	674	741	736	724	722
Physical sciences .....	2,044	2,080	1,973	2,107	2,083	2,122	2,115	2,024	1,871	1,854	1,762	1,800	1,740	1,768
Astronomy.....	82	72	78	84	106	120	151	111	127	120	101	125	113	120
Chemistry.....	1,345	1,381	1,298	1,351	1,273	1,238	1,233	1,256	1,119	1,131	1,135	1,172	1,112	1,131
Physics.....	617	627	597	672	704	764	731	657	625	603	526	503	515	517
Social/behavioral sciences.....	4,976	4,755	4,650	5,105	5,325	5,462	5,608	5,856	5,860	5,442	5,263	5,327	5,294	5,171
Psychology .....	2,804	2,749	2,685	2,954	3,071	3,083	3,036	3,223	3,155	2,902	2,722	2,786	2,723	2,811
Social sciences.....	2,172	2,006	1,965	2,151	2,254	2,379	2,572	2,633	2,705	2,540	2,541	2,541	2,571	2,360
Anthropology .....	322	312	279	315	312	330	356	374	387	348	405	407	449	375
Area/ethnic studies.....	90	81	77	92	105	96	86	91	116	129	97	89	116	96
Economics.....	523	488	509	452	437	492	487	463	443	403	371	349	357	331
History of science.....	17	24	16	18	28	31	32	40	32	36	40	35	39	32
Linguistics.....	107	107	88	117	91	98	126	136	105	108	90	95	111	98
Political science/public administration .....	473	422	439	502	563	636	730	756	763	711	704	736	691	681
Sociology.....	375	318	300	324	359	378	415	429	478	448	455	466	452	398
Other social sciences.....	265	254	257	331	359	318	340	344	381	357	379	364	356	349
Non-S&E.....	9,697	9,417	9,206	10,171	10,642	11,315	11,080	11,105	11,160	10,863	10,532	10,700	10,533	10,194
<b>White</b>														
All fields.....	20,778	20,469	20,900	22,428	23,251	23,888	23,181	23,098	22,970	21,869	20,757	20,872	20,762	20,845

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
S&E.....	12,324	12,150	12,731	13,530	13,988	14,165	14,106	14,012	13,861	13,110	12,430	12,546	12,568	12,777
Engineering.....	1,098	1,331	1,585	1,708	1,891	1,958	2,151	1,991	1,765	1,650	1,395	1,457	1,462	1,521
Aerospace .....	48	55	67	89	99	116	133	92	103	75	70	56	56	71
Chemical .....	199	252	329	300	282	242	269	279	268	263	214	203	212	223
Civil .....	115	140	163	143	147	175	206	219	181	176	170	203	150	174
Electrical.....	232	256	360	431	507	540	529	472	398	337	278	264	290	332
Industrial .....	28	39	41	42	67	85	78	74	56	49	53	43	51	46
Materials .....	127	151	147	179	198	189	226	177	180	158	121	143	150	145
Mechanical.....	160	203	218	244	303	320	361	323	262	292	213	228	196	228
Other .....	189	235	260	280	288	291	349	355	317	300	276	317	357	302
Science.....	11,226	10,819	11,146	11,822	12,097	12,207	11,955	12,021	12,096	11,460	11,035	11,089	11,106	11,256
Natural sciences .....	6,786	6,565	6,978	7,358	7,374	7,504	7,339	7,190	7,308	7,033	6,824	6,887	6,957	7,158
Agricultural sciences .....	675	563	612	551	473	511	452	442	433	417	407	452	457	473
Biological sciences .....	2,872	2,696	2,833	2,964	3,054	3,020	3,068	3,017	3,195	3,143	3,028	2,978	3,104	3,248
Earth, atmospheric, and ocean sciences .....	387	373	444	536	403	410	436	365	398	345	361	369	364	374
Atmospheric sciences.....	50	42	52	53	40	62	76	56	70	49	57	62	59	73
Earth sciences.....	262	247	313	398	286	270	279	233	228	219	225	217	216	215
Oceanography .....	75	84	79	85	77	78	81	76	100	77	79	90	89	86
Mathematics/computer sciences .....	507	509	647	732	823	923	790	810	748	696	620	673	684	692
Computer sciences.....	170	215	296	330	378	416	341	336	311	300	267	294	308	305
Mathematics/statistics .....	337	294	351	402	445	507	449	474	437	396	353	379	376	387
Medical/other life sciences .....	494	536	676	691	782	806	813	816	940	885	944	934	938	929
Medical sciences.....	207	216	251	247	275	266	244	300	325	294	292	320	350	343
Other life sciences.....	287	320	425	444	507	540	569	516	615	591	652	614	588	586
Physical sciences .....	1,851	1,888	1,766	1,884	1,839	1,834	1,780	1,740	1,594	1,547	1,464	1,481	1,410	1,442
Astronomy .....	76	68	73	81	97	109	129	104	111	100	85	99	92	100
Chemistry.....	1,219	1,243	1,167	1,201	1,119	1,065	1,040	1,054	952	937	951	974	894	925
Physics.....	556	577	526	602	623	660	611	582	531	510	428	408	424	417
Social/behavioral sciences.....	4,440	4,254	4,168	4,464	4,723	4,703	4,616	4,831	4,788	4,427	4,211	4,202	4,149	4,098
Psychology .....	2,552	2,478	2,424	2,616	2,747	2,674	2,481	2,667	2,569	2,372	2,188	2,222	2,105	2,243
Social sciences.....	1,888	1,776	1,744	1,848	1,976	2,029	2,135	2,164	2,219	2,055	2,023	1,980	2,044	1,855
Anthropology .....	273	269	250	289	286	284	290	319	328	283	321	304	358	300
Area/ethnic studies.....	82	74	64	75	90	77	69	68	91	97	71	60	75	63
Economics.....	469	439	461	394	391	426	402	393	374	338	305	290	288	267
History of science.....	16	22	15	16	23	30	25	35	30	30	38	31	32	25
Linguistics.....	90	94	82	102	76	87	107	114	93	89	77	79	96	85
Political science/public administration .....	397	369	394	427	492	546	630	625	620	569	561	582	554	550
Sociology .....	326	282	245	268	303	318	332	334	368	343	343	338	354	293
Other social sciences.....	235	227	233	277	315	261	280	276	315	306	307	296	287	272
Non-S&E .....	8,454	8,319	8,169	8,898	9,263	9,723	9,075	9,086	9,109	8,759	8,327	8,326	8,194	8,068
Asian/Pacific Islander														
All fields.....	516	545	627	787	881	1,129	1,295	1,305	1,365	1,456	1,439	1,438	1,511	1,560
S&E.....	388	468	501	620	722	906	1,041	1,032	1,047	1,152	1,136	1,123	1,176	1,244

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Engineering.....	90	136	173	187	217	254	290	263	241	268	250	213	229	246
Aerospace .....	3	6	5	9	9	14	8	9	5	10	6	7	7	7
Chemical .....	22	24	40	27	26	27	17	32	44	37	49	37	47	33
Civil .....	5	14	14	11	11	15	13	20	18	16	14	10	12	13
Electrical.....	15	42	48	67	85	92	128	92	79	83	81	80	63	80
Industrial .....	0	2	8	3	10	10	11	2	5	13	4	4	4	3
Materials .....	11	15	18	21	18	33	25	27	23	24	24	15	23	16
Mechanical.....	21	25	25	26	34	37	50	42	39	49	32	27	37	32
Other .....	13	8	15	23	24	26	38	39	28	36	40	33	36	62
Science.....	298	332	328	433	505	652	751	769	806	884	886	910	947	998
Natural sciences.....	228	248	256	338	392	477	554	564	582	660	665	685	690	776
Agricultural sciences .....	9	17	8	11	9	11	22	22	15	11	14	10	14	13
Biological sciences .....	106	107	120	159	186	225	255	288	318	373	392	395	400	423
Earth, atmospheric, and ocean sciences .....	7	9	11	5	6	7	10	14	8	13	6	9	7	12
Atmospheric sciences.....	2	4	0	0	0	1	3	1	0	2	1	0	4	2
Earth sciences.....	4	5	9	4	4	4	5	10	5	11	4	6	3	6
Oceanography .....	1	0	2	1	2	2	2	3	3	0	1	3	0	4
Mathematics/computer sciences .....	16	29	31	55	57	66	75	72	85	68	70	84	72	93
Computer sciences.....	2	11	18	32	29	42	42	43	41	36	50	46	43	53
Mathematics/statistics .....	14	18	13	23	28	24	33	29	44	32	20	38	29	40
Medical/other life sciences .....	14	19	11	23	17	22	42	45	55	67	59	73	68	92
Medical sciences.....	9	13	7	9	11	14	23	27	33	47	41	45	46	61
Other life sciences.....	5	6	4	14	6	8	19	18	22	20	18	28	22	31
Physical sciences .....	76	67	75	85	117	146	150	123	101	128	124	114	129	143
Astronomy.....	1	1	0	0	2	4	6	2	8	6	8	8	7	7
Chemistry.....	57	49	42	62	75	90	81	88	49	76	78	66	88	88
Physics.....	18	17	33	23	40	52	63	33	44	46	38	40	34	48
Social/behavioral sciences.....	70	84	72	95	113	175	197	205	224	224	221	225	257	222
Psychology .....	34	38	38	46	52	83	101	110	121	105	114	111	143	117
Social sciences.....	36	46	34	49	61	92	96	95	103	119	107	114	114	105
Anthropology .....	7	8	3	2	3	9	8	8	9	14	10	16	19	17
Area/ethnic studies.....	1	1	1	3	4	2	2	3	5	4	2	5	7	4
Economics.....	8	18	15	21	18	32	34	20	27	32	28	28	27	27
History of science.....	0	0	0	0	1	0	1	2	0	1	0	0	1	2
Linguistics.....	7	3	0	2	5	4	8	5	3	5	5	4	3	2
Political science/public administration .....	7	4	6	11	12	22	23	24	24	24	28	23	28	25
Sociology .....	2	8	7	6	10	15	8	19	19	24	21	16	21	16
Other social sciences.....	4	4	2	4	8	8	12	14	16	15	13	22	8	12
Non-S&E.....	128	77	126	167	159	223	254	273	318	304	303	315	335	316
Black														
All fields.....	911	769	822	1,011	1,109	1,293	1,336	1,630	1,631	1,611	1,665	1,708	1,881	1,688
S&E.....	310	271	322	403	427	516	581	689	713	690	704	689	790	754
Engineering.....	19	12	24	43	41	53	83	85	74	82	76	71	84	85

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Aerospace .....	1	1	1	1	3	1	3	1	4	0	2	1	1	2
Chemical .....	4	4	2	4	4	2	12	9	8	16	10	8	9	11
Civil .....	2	1	2	8	3	7	9	5	5	7	10	6	5	7
Electrical.....	6	0	8	16	13	20	27	26	19	20	15	21	31	28
Industrial .....	1	0	2	1	9	7	7	7	4	6	4	2	3	7
Materials .....	1	2	0	1	3	5	3	5	4	5	5	3	5	4
Mechanical.....	1	2	5	3	2	7	10	10	17	17	16	9	14	8
Other .....	3	2	4	9	4	4	12	22	13	11	14	21	16	18
Science.....	291	259	298	360	386	463	498	604	639	608	628	618	706	669
Natural sciences.....	96	106	111	134	162	205	225	268	271	275	287	282	333	353
Agricultural sciences.....	6	7	7	6	5	11	15	19	12	9	9	18	18	13
Biological sciences.....	44	45	46	51	64	90	101	109	110	125	114	100	136	142
Earth, atmospheric, and ocean sciences.....	1	1	2	2	3	0	3	8	3	5	4	11	6	6
Atmospheric sciences.....	1	1	0	0	0	0	0	1	1	0	1	1	1	3
Earth sciences.....	0	0	1	1	2	0	2	4	1	2	2	4	4	2
Oceanography.....	0	0	1	1	1	0	1	3	1	3	1	6	1	1
Mathematics/computer sciences.....	5	12	7	14	10	13	10	27	27	30	30	31	23	31
Computer sciences.....	2	2	1	5	5	9	4	17	13	13	17	17	15	15
Mathematics/statistics.....	3	10	6	9	5	4	6	10	14	17	13	14	8	16
Medical/other life sciences.....	17	25	24	35	52	55	51	51	67	60	68	74	101	114
Medical sciences.....	7	9	9	16	18	23	16	17	29	27	26	26	44	49
Other life sciences.....	10	16	15	19	34	32	35	34	38	33	42	48	57	65
Physical sciences.....	23	16	25	26	28	36	45	54	52	46	62	48	49	47
Astronomy.....	0	2	0	0	2	1	2	2	1	1	1	1	0	2
Chemistry.....	19	11	20	19	19	27	31	46	36	36	41	35	40	35
Physics.....	4	3	5	7	7	8	12	6	15	9	20	12	9	10
Social/behavioral sciences.....	195	153	187	226	224	258	273	336	368	333	341	336	373	316
Psychology.....	100	88	96	125	116	143	142	168	184	167	162	163	204	159
Social sciences.....	95	65	91	101	108	115	131	168	184	166	179	173	169	157
Anthropology.....	9	8	7	6	8	5	11	12	19	10	21	21	15	22
Area/ethnic studies.....	2	5	6	8	7	9	9	12	11	17	11	10	10	11
Economics.....	9	8	8	11	15	14	14	22	14	8	13	9	21	7
History of science.....	0	2	0	0	1	0	3	1	1	1	0	0	1	1
Linguistics.....	2	2	3	3	5	1	2	3	1	4	1	0	3	1
Political science/public administration.....	34	21	26	29	32	39	31	52	58	65	62	67	57	51
Sociology.....	24	10	26	20	23	25	37	40	52	40	45	46	36	38
Other social sciences.....	15	9	15	24	17	22	24	26	28	21	26	20	26	26
Non-S&E.....	601	498	500	608	682	777	755	941	918	921	961	1,019	1,091	934
Hispanic														
All fields.....	563	619	583	733	835	922	1,064	1,184	1,182	1,122	1,237	1,280	1,178	1,294
S&E.....	263	320	323	424	465	517	604	685	684	603	682	697	688	763
Engineering.....	16	24	33	49	56	61	82	71	69	74	88	91	73	73
Aerospace.....	0	1	1	0	3	7	4	0	3	5	2	4	3	6

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Chemical .....	2	7	5	10	10	12	6	5	13	5	16	14	9	15
Civil .....	6	1	4	5	7	7	10	11	8	8	8	11	16	10
Electrical.....	1	4	10	12	16	14	23	28	19	15	28	21	12	11
Industrial .....	0	1	0	3	3	4	4	2	0	3	5	3	1	1
Materials .....	0	2	1	5	6	5	10	7	7	8	7	9	7	10
Mechanical.....	3	4	3	8	3	5	13	8	10	17	10	12	9	12
Other .....	4	4	9	6	8	7	12	10	9	13	12	17	16	8
Science.....	247	296	290	375	409	456	522	614	615	529	594	606	615	690
Natural sciences.....	114	140	150	181	213	229	281	302	319	278	301	310	332	378
Agricultural sciences .....	11	12	12	8	15	12	15	11	20	21	20	19	15	14
Biological sciences .....	49	52	58	79	93	104	132	154	155	149	161	158	175	207
Earth, atmospheric, and ocean sciences .....	3	3	6	11	7	5	15	18	16	5	11	10	10	15
Atmospheric sciences.....	0	1	1	0	2	0	1	3	2	0	1	0	0	3
Earth sciences.....	3	1	4	10	5	4	10	8	5	4	3	9	7	7
Oceanography .....	0	1	1	1	0	1	4	5	6	0	6	7	1	5
Mathematics/computer sciences .....	12	14	12	17	14	18	32	24	24	20	24	24	33	32
Computer sciences.....	5	4	4	11	5	6	15	12	11	6	13	9	12	9
Mathematics/statistics .....	7	10	8	6	9	12	17	12	13	14	11	15	21	23
Medical/other life sciences .....	13	11	10	12	19	29	29	39	33	22	30	38	43	41
Medical sciences.....	5	5	6	3	3	12	14	22	18	12	14	18	16	17
Other life sciences.....	8	6	4	9	16	17	15	17	15	10	16	20	27	24
Physical sciences .....	26	48	52	54	65	61	58	56	71	61	55	61	56	69
Astronomy.....	0	0	1	1	1	3	3	1	1	7	3	3	6	3
Chemistry.....	14	40	40	39	43	38	36	41	49	39	35	38	38	52
Physics.....	12	8	11	14	21	20	19	14	21	15	17	20	12	14
Social/behavioral sciences.....	133	156	140	194	196	227	241	312	296	251	293	296	283	312
Psychology .....	64	92	87	113	120	138	161	206	203	155	179	162	164	178
Social sciences.....	69	64	53	81	76	89	80	106	93	96	114	134	119	134
Anthropology.....	14	14	8	10	12	19	16	10	10	17	22	32	31	17
Area/ethnic studies.....	2	0	3	4	2	2	1	3	5	4	5	7	12	11
Economics.....	14	11	12	10	11	12	18	18	16	11	13	12	8	19
History of science.....	0	0	1	0	3	1	0	0	1	2	1	1	2	2
Linguistics.....	3	5	2	7	2	5	5	11	5	3	4	5	5	4
Political science/public administration .....	13	16	7	18	19	21	14	27	25	19	33	29	29	32
Sociology .....	16	9	17	21	16	13	17	24	24	33	21	39	25	33
Other social sciences.....	7	9	3	11	11	16	9	13	7	7	15	9	7	16
Non-S&E.....	300	299	260	309	370	405	460	499	498	519	555	583	490	531
American Indian/Alaska Native														
All fields.....	96	115	94	130	120	148	167	214	169	148	146	134	129	139
S&E.....	43	56	56	61	49	77	85	120	92	77	69	74	62	70
Engineering.....	1	7	7	6	2	9	17	12	8	6	6	11	5	8
Aerospace .....	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Chemical .....	0	1	1	1	1	2	4	2	1	1	1	1	2	0

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Civil .....	0	1	1	1	0	0	2	2	1	0	0	1	3	0
Electrical.....	1	3	0	2	0	1	5	1	0	1	0	5	0	2
Industrial .....	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Materials .....	0	0	4	1	0	0	0	2	0	1	1	0	0	0
Mechanical.....	0	1	0	1	0	2	6	2	3	1	1	0	0	4
Other .....	0	1	1	0	1	3	0	3	3	2	2	4	0	1
Science.....	42	49	49	55	47	68	68	108	84	71	63	63	57	62
Natural sciences.....	23	26	30	33	25	36	32	44	42	34	28	25	32	28
Agricultural sciences .....	4	2	2	4	2	2	5	1	5	0	2	4	4	3
Biological sciences .....	13	11	7	10	7	15	7	20	17	15	12	11	14	12
Earth, atmospheric, and ocean sciences .....	1	0	6	3	3	0	3	6	4	0	0	2	4	4
Atmospheric sciences.....	0	0	1	0	0	0	0	0	0	0	0	0	1	1
Earth sciences.....	1	0	3	2	3	0	0	6	4	0	0	1	3	3
Oceanography .....	0	0	2	1	0	0	3	0	0	0	0	1	0	0
Mathematics/computer sciences .....	0	3	2	1	2	2	2	2	3	1	4	4	2	1
Computer sciences.....	0	3	2	1	1	0	1	1	1	0	1	2	2	1
Mathematics/statistics .....	0	0	0	0	1	2	1	1	2	1	3	2	0	0
Medical/other life sciences .....	2	3	3	5	6	9	6	6	4	6	3	2	3	4
Medical sciences.....	2	1	2	3	1	1	2	0	2	2	1	1	0	1
Other life sciences.....	0	2	1	2	5	8	4	6	2	4	2	1	3	3
Physical sciences .....	3	7	10	10	5	8	9	9	9	12	7	2	5	4
Astronomy.....	0	0	2	0	1	0	1	1	1	1	0	0	0	0
Chemistry.....	2	6	5	9	2	6	6	5	7	11	5	2	4	2
Physics.....	1	1	3	1	2	2	2	3	1	0	2	0	1	2
Social/behavioral sciences.....	19	23	19	22	22	32	36	64	42	37	35	38	25	34
Psychology .....	10	16	11	13	15	14	18	35	22	17	15	22	12	15
Social sciences.....	9	7	8	9	7	18	18	29	20	20	20	16	13	19
Anthropology .....	3	1	1	1	3	5	3	8	5	8	6	2	2	3
Area/ethnic studies.....	0	1	1	0	1	1	4	3	1	2	2	2	3	2
Economics.....	2	0	1	1	0	2	1	1	1	2	0	1	0	1
History of science.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Linguistics.....	1	0	0	0	1	0	1	1	0	0	0	1	0	0
Political science/public administration .....	1	2	2	3	0	2	4	7	4	5	3	7	2	4
Sociology .....	1	2	1	2	0	1	4	4	6	2	7	0	2	4
Other social sciences.....	1	1	2	2	2	7	1	5	3	1	2	3	4	5
Non-S&E.....	53	59	38	69	71	71	82	94	77	71	77	60	67	69
Other/unknown race/ethnicity														
All fields.....	524	480	387	494	266	360	1,108	561	669	769	754	1,067	1,005	786
S&E.....	363	315	274	374	169	244	654	349	429	480	445	670	649	510
Engineering.....	55	49	44	94	22	51	116	65	66	73	78	69	92	66
Aerospace .....	1	1	1	4	0	2	7	1	2	4	2	2	4	6
Chemical .....	13	6	6	6	1	6	13	6	6	11	11	9	13	12
Civil .....	2	5	4	5	1	2	9	4	8	16	9	8	4	7



**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Electrical.....	15	16	14	27	9	16	41	20	18	13	20	19	25	13
Industrial .....	0	2	0	1	0	1	2	1	2	3	4	3	4	2
Materials .....	5	6	3	4	3	6	7	7	7	6	6	6	7	2
Mechanical .....	8	6	8	15	5	12	16	14	10	10	14	12	14	8
Other .....	11	7	8	32	3	6	21	12	13	10	12	10	21	16
Science.....	308	266	230	280	147	193	538	284	363	407	367	601	557	444
Natural sciences.....	189	181	166	176	100	126	293	176	221	237	205	371	350	255
Agricultural sciences.....	10	5	19	11	2	7	23	11	13	11	8	18	23	11
Biological sciences.....	66	71	55	50	45	40	107	71	109	104	91	154	134	109
Earth, atmospheric, and ocean sciences.....	12	17	8	23	4	9	21	12	15	14	15	18	24	10
Atmospheric sciences.....	1	3	1	3	0	1	3	0	3	4	1	3	2	0
Earth sciences.....	8	8	5	16	3	6	14	10	10	8	11	13	20	9
Oceanography.....	3	6	2	4	1	2	4	2	2	2	3	2	2	1
Mathematics/computer sciences.....	26	22	33	31	17	16	51	25	20	25	20	44	39	36
Computer sciences.....	10	9	18	9	9	11	27	12	12	14	8	21	17	22
Mathematics/statistics.....	16	13	15	22	8	5	24	13	8	11	12	23	22	14
Medical/other life sciences.....	10	12	6	13	3	17	18	15	20	23	21	43	39	26
Medical sciences.....	6	5	4	8	2	8	9	8	4	7	10	18	12	13
Other life sciences.....	4	7	2	5	1	9	9	7	16	16	11	25	27	13
Physical sciences.....	65	54	45	48	29	37	73	42	44	60	50	94	91	63
Astronomy.....	5	1	2	2	3	3	10	1	5	5	4	14	8	8
Chemistry.....	34	32	24	21	15	12	39	22	26	32	25	57	48	29
Physics.....	26	21	19	25	11	22	24	19	13	23	21	23	35	26
Social/behavioral sciences.....	119	85	64	104	47	67	245	108	142	170	162	230	207	189
Psychology.....	44	37	29	41	21	31	133	37	56	86	64	106	95	99
Social sciences.....	75	48	35	63	26	36	112	71	86	84	98	124	112	90
Anthropology.....	16	12	10	7	0	8	28	17	16	16	25	32	24	16
Area/ethnic studies.....	3	0	2	2	1	5	1	2	3	5	6	5	9	5
Economics.....	21	12	12	15	2	6	18	9	11	12	12	9	13	10
History of science.....	1	0	0	2	0	0	3	2	0	2	1	3	3	2
Linguistics.....	4	3	1	3	2	1	3	2	3	7	3	6	4	6
Political science/public administration.....	21	10	4	14	8	6	28	21	32	29	17	28	21	19
Sociology.....	6	7	4	7	7	6	17	8	9	6	18	27	14	14
Other social sciences.....	3	4	2	13	6	4	14	10	12	7	16	14	24	18
Non-S&E.....	161	165	113	120	97	116	454	212	240	289	309	397	356	276
U.S. permanent resident														
All fields.....	1,319	1,571	1,625	1,851	2,255	4,317	2,932	2,310	1,950	1,825	1,652	1,630	1,538	1,600
S&E.....	964	1,126	1,150	1,343	1,699	3,614	2,350	1,731	1,484	1,338	1,238	1,157	1,076	1,189
Engineering.....	315	355	365	388	469	956	593	404	350	299	272	266	242	285
Aerospace.....	17	8	8	11	6	13	13	9	10	8	10	10	6	5
Chemical.....	52	56	62	51	53	90	88	38	43	29	34	20	22	37
Civil.....	40	41	59	40	59	103	78	51	40	47	37	30	34	41
Electrical.....	83	73	99	132	165	288	187	127	116	95	84	92	79	100

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Industrial.....	9	13	8	18	16	41	17	13	10	15	10	16	14	17
Materials .....	21	38	21	29	39	114	44	36	23	23	11	24	19	17
Mechanical .....	58	67	66	62	87	180	82	65	55	42	57	45	28	31
Other .....	35	59	42	45	44	127	84	65	53	40	29	29	40	37
Science.....	649	771	785	955	1,230	2,658	1,757	1,327	1,134	1,039	966	891	834	904
Natural sciences.....	418	503	522	649	866	2,215	1,363	1,023	856	764	707	649	587	644
Agricultural sciences.....	46	50	49	57	55	112	88	55	61	37	32	41	35	30
Biological sciences.....	108	160	181	211	303	835	586	464	364	339	315	263	233	255
Earth, atmospheric, and ocean sciences.....	29	23	26	24	37	112	67	48	30	29	36	32	23	21
Atmospheric sciences.....	5	2	5	4	8	29	19	16	10	6	7	12	4	4
Earth sciences.....	21	17	11	17	19	64	39	22	15	15	17	12	16	14
Oceanography.....	3	4	10	3	10	19	9	10	5	8	12	8	3	3
Mathematics/computer sciences.....	66	83	93	118	177	349	189	138	125	110	95	103	105	129
Computer sciences.....	24	32	58	63	83	132	90	72	69	55	64	57	50	68
Mathematics/statistics.....	42	51	35	55	94	217	99	66	56	55	31	46	55	61
Medical/other life sciences.....	35	40	27	60	60	105	69	77	75	68	68	59	73	77
Medical sciences.....	28	25	20	45	34	59	35	38	40	43	39	26	41	41
Other life sciences.....	7	15	7	15	26	46	34	39	35	25	29	33	32	36
Physical sciences.....	134	147	146	179	234	702	364	241	201	181	161	151	118	132
Astronomy.....	2	1	4	2	5	21	7	6	12	4	5	5	2	0
Chemistry.....	87	91	85	110	127	386	205	150	122	102	93	94	72	82
Physics.....	45	55	57	67	102	295	152	85	67	75	63	52	44	50
Social/behavioral sciences.....	231	268	263	306	364	443	394	304	278	275	259	242	247	260
Psychology.....	59	58	54	65	90	101	89	70	75	75	71	69	65	80
Social sciences.....	172	210	209	241	274	342	305	234	203	200	188	173	182	180
Anthropology.....	15	18	14	16	23	28	20	26	24	21	25	15	22	17
Area/ethnic studies.....	4	2	2	4	4	10	2	3	2	3	6	4	3	2
Economics.....	64	85	66	77	77	134	103	80	58	61	55	59	44	54
History of science.....	1	0	0	1	0	2	1	2	3	3	0	1	3	1
Linguistics.....	15	10	23	19	26	20	33	20	14	16	18	19	25	17
Political science/public administration.....	28	39	49	50	55	53	59	50	39	40	28	30	41	42
Sociology.....	17	28	26	41	36	51	46	30	37	23	23	21	15	27
Other social sciences.....	28	28	29	33	53	44	41	23	26	33	33	24	29	20
Non-S&E.....	355	445	475	508	556	703	582	579	466	487	414	473	462	411
Temporary resident														
All fields.....	5,247	5,659	6,678	9,374	9,964	8,831	9,191	9,057	9,660	9,800	9,731	10,589	11,617	12,824
S&E.....	4,159	4,595	5,546	7,853	8,347	7,253	7,780	7,524	7,964	8,260	8,015	8,711	9,516	10,792
Engineering.....	1,423	1,539	1,946	2,644	2,791	2,527	2,555	2,191	2,451	2,787	2,649	2,910	3,308	3,754
Aerospace.....	51	59	83	90	99	94	97	82	74	87	106	111	116	115
Chemical.....	201	217	237	283	338	318	343	282	307	335	327	341	367	474
Civil.....	207	237	263	355	379	337	310	253	280	300	349	388	422	475
Electrical.....	312	311	499	693	705	712	712	637	784	930	824	915	1,057	1,189
Industrial.....	48	57	91	94	125	131	118	108	94	110	134	137	134	128

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Materials .....	127	159	155	241	251	224	244	193	181	250	196	260	280	317
Mechanical .....	239	303	359	496	554	439	449	354	433	494	446	446	525	606
Other .....	238	196	259	392	340	272	282	282	298	281	267	312	407	450
Science.....	2,736	3,056	3,600	5,209	5,556	4,726	5,225	5,333	5,513	5,473	5,366	5,801	6,208	7,038
Natural sciences.....	1,948	2,266	2,641	3,979	4,279	3,499	4,071	4,176	4,270	4,175	4,166	4,389	4,810	5,464
Agricultural sciences.....	361	298	369	448	460	442	411	486	443	400	433	427	418	415
Biological sciences.....	425	497	609	1,065	1,249	971	1,321	1,287	1,385	1,242	1,292	1,398	1,470	1,677
Earth, atmospheric, and ocean sciences.....	112	124	115	187	228	170	213	220	182	219	223	201	224	233
Atmospheric sciences.....	20	26	23	41	44	35	42	42	47	49	45	57	51	52
Earth sciences.....	72	75	72	110	141	97	122	142	99	125	145	107	131	137
Oceanography.....	20	23	20	36	43	38	49	36	36	45	33	37	42	44
Mathematics/computer sciences.....	329	444	524	849	866	749	771	775	806	792	788	818	987	1,201
Computer sciences.....	89	143	178	340	348	365	330	330	363	358	348	378	459	599
Mathematics/statistics.....	240	301	346	509	518	384	441	445	443	434	440	440	528	602
Medical/other life sciences.....	99	98	133	172	215	246	273	286	306	317	324	329	365	388
Medical sciences.....	75	71	95	115	153	153	158	160	164	172	199	170	217	227
Other life sciences.....	24	27	38	57	62	93	115	126	142	145	125	159	148	161
Physical sciences.....	622	805	891	1,258	1,261	921	1,082	1,122	1,148	1,205	1,106	1,216	1,346	1,550
Astronomy.....	14	24	26	37	34	28	37	37	42	52	31	34	47	63
Chemistry.....	331	401	462	694	676	493	599	622	648	672	596	689	722	797
Physics.....	277	380	403	527	551	400	446	463	458	481	479	493	577	690
Social/behavioral sciences.....	788	790	959	1,230	1,277	1,227	1,154	1,157	1,243	1,298	1,200	1,412	1,398	1,574
Psychology.....	81	85	106	133	150	165	137	153	164	152	156	195	188	210
Social sciences.....	707	705	853	1,097	1,127	1,062	1,017	1,004	1,079	1,146	1,044	1,217	1,210	1,364
Anthropology.....	26	26	32	38	40	41	67	62	62	68	71	61	69	74
Area/ethnic studies.....	9	4	4	18	22	11	3	8	6	11	10	10	12	8
Economics.....	328	312	388	511	519	500	494	492	537	575	531	597	613	738
History of science.....	4	1	3	7	8	7	1	4	4	1	5	9	5	8
Linguistics.....	47	67	57	85	86	78	79	86	101	101	73	101	110	82
Political science/public administration.....	114	127	144	177	166	172	134	157	138	172	145	203	173	222
Sociology.....	73	69	105	119	133	116	114	77	95	80	68	88	110	95
Other social sciences.....	106	99	120	142	153	137	125	118	136	138	141	148	118	137
Non-S&E.....	1,088	1,064	1,132	1,521	1,617	1,578	1,411	1,533	1,696	1,540	1,716	1,878	2,101	2,032
Unknown citizenship														
All fields.....	1,341	2,138	2,609	722	1,119	859	2,261	1,733	1,765	2,051	2,572	2,022	2,496	2,618
S&E.....	849	1,391	1,803	452	774	572	1,449	1,196	1,283	1,327	1,516	1,240	1,466	1,652
Engineering.....	149	259	366	94	209	139	227	248	299	269	263	191	280	366
Aerospace.....	3	11	12	2	9	5	8	12	13	14	11	9	8	6
Chemical.....	11	17	30	9	22	9	15	21	36	33	43	15	44	70
Civil.....	14	37	28	7	17	10	18	19	15	25	30	16	27	30
Electrical.....	51	74	99	25	43	48	68	75	110	83	63	48	93	97
Industrial.....	6	6	12	3	6	4	9	4	5	7	15	6	6	18
Materials.....	11	19	31	8	17	12	23	15	26	22	25	14	20	29

**Earned doctoral degrees, by field, citizenship, and race/ethnicity: Selected years, 1985–2005**

Field, race/ethnicity, and citizenship	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Mechanical .....	23	46	76	20	42	23	35	37	35	31	38	35	29	49
Other .....	30	49	78	20	53	28	51	65	59	54	38	48	53	67
Science.....	700	1,132	1,437	358	565	433	1,222	948	984	1,058	1,253	1,049	1,186	1,286
Natural sciences.....	361	609	777	194	342	258	711	534	594	609	769	619	660	826
Agricultural sciences.....	30	51	76	12	15	9	47	18	35	69	84	71	61	66
Biological sciences .....	110	200	207	60	91	76	211	171	200	203	285	236	273	295
Earth, atmospheric, and ocean sciences .....	23	49	54	10	30	13	36	32	38	30	33	31	24	38
Atmospheric sciences.....	1	8	4	7	5	2	5	5	10	6	4	4	4	6
Earth sciences.....	14	22	37	2	16	9	18	15	17	8	18	11	18	27
Oceanography.....	8	19	13	1	9	2	13	12	11	16	11	16	2	5
Mathematics/computer sciences .....	37	73	122	21	60	51	112	66	72	90	75	78	79	124
Computer sciences.....	8	31	37	9	22	16	59	33	39	43	39	42	42	64
Mathematics/statistics.....	29	42	85	12	38	35	53	33	33	47	36	36	37	60
Medical/other life sciences .....	45	56	84	30	43	40	120	72	91	93	136	81	89	106
Medical sciences.....	28	30	36	10	21	19	44	35	49	44	60	31	50	55
Other life sciences.....	17	26	48	20	22	21	76	37	42	49	76	50	39	51
Physical sciences .....	116	180	234	61	103	69	185	175	158	124	156	122	134	197
Astronomy.....	2	3	5	2	0	4	3	5	4	10	4	3	3	3
Chemistry.....	73	102	125	39	61	45	110	104	100	76	97	86	81	117
Physics.....	41	75	104	20	42	20	72	66	54	38	55	33	50	77
Social/behavioral sciences.....	339	523	660	164	223	175	511	414	390	449	484	430	526	460
Psychology .....	173	280	363	98	109	80	295	222	222	256	248	223	351	226
Social sciences.....	166	243	297	66	114	95	216	192	168	193	236	207	175	234
Anthropology .....	14	27	26	5	5	11	26	26	9	13	20	22	25	33
Area/ethnic studies.....	3	5	10	2	6	4	3	7	3	3	9	3	2	4
Economics.....	44	75	99	13	34	26	79	40	48	42	69	45	55	61
History of science.....	1	0	1	1	1	1	1	4	3	0	2	1	1	2
Linguistics.....	7	15	20	6	11	5	6	9	10	5	12	9	8	14
Political science/public administration .....	51	59	68	11	40	33	52	53	46	61	61	55	41	45
Sociology.....	21	34	27	9	7	10	26	36	27	26	20	37	22	35
Other social sciences.....	25	28	46	19	10	5	23	17	22	43	43	35	21	40
Non-S&E.....	492	747	806	270	345	287	812	537	482	724	1,056	782	1,030	966

NOTES: Medical/other life sciences reported separately from S&E fields in National Science Foundation, Division of Science Resources Statistics (NSF/SRS), higher education publications. For detailed fields, see NSF/SRS, Science and Engineering Doctorate Awards annual series, <http://www.nsf.gov/statistics/doctorates/>.

SOURCE: NSF/SRS, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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**Plans of foreign recipients of U.S. S&E doctorates to stay in United States, by field and place of origin: 1994–2005**

Field/place of origin	Foreign S&E doctorate recipients			Plans to stay (%)			Definite plans to stay (%)		
	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05
<b>All S&amp;E fields</b>									
All non-U.S. citizens.....	42,490	37,825	41,071	70.9	72.0	73.8	39.1	49.7	49.3
East/South Asia .....	26,827	21,765	23,564	76.7	78.5	79.8	42.0	53.8	52.3
China <sup>a</sup> .....	11,297	9,947	11,594	95.9	90.9	91.6	51.5	62.1	60.2
Taiwan .....	4,977	3,043	1,889	56.0	63.7	65.3	26.7	38.3	38.6
Japan.....	614	596	713	43.8	54.9	58.8	27.7	35.9	40.8
South Korea .....	4,017	3,218	4,062	45.4	62.5	69.8	23.9	41.9	43.0
India.....	5,014	3,855	3,587	90.5	88.2	88.2	56.3	66.5	62.7
Other.....	908	1,106	1,719	35.5	33.1	31.1	17.3	21.1	19.2
West Asia .....	3,718	3,113	3,706	62.1	61.2	61.2	29.2	40.6	40.6
Iran .....	620	371	327	84.2	85.2	88.7	34.5	53.1	57.2
Israel.....	323	164	227	62.2	56.1	72.7	41.5	36.6	52.4
Turkey.....	635	950	1,411	58.4	58.4	60.2	30.1	40.6	42.0
Other.....	2,140	1,628	1,741	56.8	57.9	55.3	25.5	38.1	34.9
Pacific/Australasia .....	945	736	660	51.9	56.4	64.2	27.6	39.7	42.7
Australia.....	227	197	164	55.1	64.5	67.7	38.8	46.7	51.2
Indonesia .....	310	223	237	29.0	41.7	55.3	10.6	28.3	31.6
New Zealand .....	96	94	90	64.6	60.6	61.1	46.9	47.9	46.7
Other.....	312	222	169	68.3	62.2	75.1	30.4	41.4	47.9
Africa .....	1,894	1,480	1,487	59.5	63.6	65.9	22.2	34.9	39.6
Egypt.....	365	327	487	54.0	55.7	62.2	22.5	36.7	40.7
Nigeria .....	194	115	77	90.2	86.1	88.3	26.3	37.4	42.9
South Africa .....	144	161	126	51.4	63.4	46.8	34.7	39.1	35.7
Other.....	1,191	877	797	57.2	63.6	69.0	19.9	33.2	39.3
Europe .....	5,004	6,171	6,571	67.9	72.5	74.6	44.7	53.7	54.0
Greece .....	586	399	348	61.3	68.7	67.2	37.9	51.9	46.6
United Kingdom.....	485	516	480	77.7	77.3	78.8	53.6	58.5	57.9
Germany .....	757	838	750	65.3	63.0	67.3	43.9	48.7	51.3
Italy.....	328	366	494	51.2	58.2	66.0	29.0	45.6	49.0
France.....	320	327	389	55.3	68.2	67.4	31.6	45.3	46.0
Spain.....	224	240	258	58.0	54.6	59.7	39.7	38.3	42.6
Other.....	2,304	3,485	3,852	73.6	77.7	79.0	49.4	57.1	56.9
North/South America .....	3,875	4,232	4,664	53.0	53.4	58.3	33.0	38.9	41.5
Canada .....	1,180	1,259	1,458	65.0	68.7	66.9	45.8	52.7	51.1
Mexico .....	599	781	789	40.2	36.7	46.6	21.5	26.4	31.3
Argentina .....	244	273	321	65.2	61.2	70.7	43.4	47.6	54.2
Brazil .....	681	612	567	32.2	34.3	42.9	18.5	23.7	31.0
Chile .....	147	126	200	38.8	53.2	37.5	23.1	42.1	28.0
Colombia.....	178	206	322	54.5	56.8	57.5	29.2	40.8	35.4
Peru .....	128	111	140	71.9	62.2	71.4	42.2	38.7	45.0
Other.....	718	864	867	58.9	55.6	63.2	32.7	37.3	41.8
Country unknown .....	227	328	419	81.9	46.6	49.2	37.4	23.2	15.3
<b>Physical/earth, atmospheric, and ocean sciences</b>									
All non-U.S. citizens.....	7,522	6,585	6,773	79.0	78.2	80.3	44.7	56.5	56.9
East/South Asia .....	4,937	3,718	3,661	85.1	84.0	86.8	46.8	59.0	61.3
China <sup>a</sup> .....	2,911	2,212	2,237	96.2	90.9	92.4	51.1	62.8	63.7
Taiwan .....	599	352	194	65.8	70.7	75.8	34.2	46.9	52.1
Japan.....	89	84	102	55.1	63.1	66.7	37.1	39.3	46.1
South Korea .....	647	450	512	58.7	71.3	83.2	35.7	54.4	62.3
India .....	620	502	459	88.7	86.5	86.1	55.3	64.1	66.4
Other .....	71	118	157	40.8	48.3	47.8	15.5	31.4	31.2
West Asia .....	453	368	465	69.1	67.1	68.0	33.1	48.4	47.3
Iran .....	81	57	42	90.1	78.9	83.3	30.9	57.9	64.3
Israel.....	41	16	26	65.9	62.5	73.1	48.8	43.8	50.0
Turkey.....	75	92	151	57.3	57.6	68.2	32.0	41.3	50.3
Other .....	256	203	246	66.4	68.5	64.6	31.6	49.3	42.3
Pacific/Australasia .....	147	113	100	66.7	62.8	76.0	33.3	43.4	52.0
Australia .....	27	18	27	63.0	66.7	63.0	37.0	55.6	51.9
Indonesia .....	26	29	17	46.2	55.2	64.7	23.1	37.9	52.9

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**Plans of foreign recipients of U.S. S&E doctorates to stay in United States, by field and place of origin: 1994–2005**

Field/place of origin	Foreign S&E doctorate recipients			Plans to stay (%)			Definite plans to stay (%)		
	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05
New Zealand.....	14	14	13	71.4	57.1	76.9	57.1	35.7	69.2
Other .....	80	52	43	73.8	67.3	88.4	31.3	44.2	46.5
Africa .....	195	168	177	71.8	75.6	80.8	26.2	45.8	50.3
Egypt.....	18	25	43	61.1	64.0	67.4	16.7	52.0	44.2
Nigeria.....	25	14	9	100.0	78.6	88.9	32.0	35.7	33.3
South Africa.....	17	21	12	58.8	57.1	58.3	41.2	42.9	50.0
Other .....	135	108	113	69.6	81.5	87.6	24.4	46.3	54.0
Europe .....	1,202	1,629	1,705	67.1	73.5	76.7	45.9	56.7	55.1
Greece.....	112	66	57	52.7	62.1	61.4	29.5	50.0	42.1
United Kingdom.....	104	134	98	72.1	71.6	80.6	49.0	58.2	63.3
Germany.....	208	225	181	58.2	58.7	67.4	39.9	45.8	51.9
Italy.....	64	77	126	53.1	50.6	61.1	32.8	40.3	42.1
France.....	91	74	106	47.3	62.2	67.9	31.9	44.6	46.2
Spain.....	35	26	48	48.6	61.5	54.2	37.1	42.3	35.4
Other .....	588	1027	1,089	77.7	80.5	82.4	54.8	61.7	58.8
North/South America.....	545	522	599	64.4	67.4	65.8	43.1	54.0	50.1
Canada.....	181	193	230	74.6	80.3	67.8	56.9	66.8	57.0
Mexico.....	73	79	92	52.1	41.8	58.7	28.8	34.2	41.3
Argentina.....	61	39	40	72.1	74.4	82.5	50.8	56.4	57.5
Brazil.....	83	54	41	49.4	44.4	39.0	36.1	29.6	29.3
Chile.....	22	12	16	45.5	66.7	62.5	18.2	58.3	43.8
Colombia.....	12	34	49	25.0	79.4	59.2	8.3	70.6	40.8
Peru.....	17	14	17	76.5	64.3	76.5	47.1	35.7	47.1
Other .....	96	97	114	69.8	69.1	72.8	38.5	53.6	53.5
Country unknown.....	43	67	66	76.7	50.7	40.9	39.5	28.4	16.7
Biological/agricultural sciences									
All non-U.S. citizens.....	11,460	10,859	10,710	72.8	72.4	75.0	43.9	49.2	50.8
East/South Asia.....	7,041	6,435	6,125	82.9	81.4	83.5	51.2	55.5	56.0
China <sup>a</sup> .....	3,647	3,391	3,085	96.7	92.0	93.6	59.7	62.2	62.8
Taiwan.....	1,180	856	578	61.1	64.5	68.3	35.3	41.5	44.1
Japan.....	122	136	178	59.8	66.9	66.9	41.8	47.8	44.9
South Korea.....	805	714	798	59.8	74.4	86.6	41.2	55.3	59.1
India.....	988	941	979	93.3	89.1	91.9	56.9	61.4	62.8
Other .....	299	397	507	37.5	26.4	24.1	22.7	17.6	14.4
West Asia.....	842	720	802	56.9	56.8	54.4	28.5	36.9	35.0
Iran.....	132	74	40	81.1	85.1	92.5	37.1	47.3	50.0
Israel.....	59	42	33	71.2	61.9	78.8	52.5	33.3	48.5
Turkey.....	82	178	262	48.8	44.9	51.5	23.2	31.5	35.1
Other .....	569	426	467	51.0	56.3	51.0	24.8	37.8	32.8
Pacific/Australasia.....	300	228	194	48.7	52.6	60.8	28.0	34.6	41.8
Australia.....	82	63	40	51.2	68.3	80.0	37.8	49.2	55.0
Indonesia.....	94	50	51	22.3	32.0	43.1	12.8	22.0	27.5
New Zealand.....	27	32	34	59.3	46.9	50.0	40.7	37.5	38.2
Other .....	97	83	69	69.1	55.4	68.1	30.9	30.1	46.4
Africa.....	681	511	515	52.7	56.0	61.6	17.8	28.8	35.7
Egypt.....	62	44	118	45.2	59.1	59.3	14.5	38.6	40.7
Nigeria.....	59	39	34	91.5	94.9	94.1	28.8	41.0	47.1
South Africa.....	41	57	39	53.7	59.6	33.3	34.1	36.8	20.5
Other .....	519	371	324	49.1	50.9	62.3	15.6	25.1	34.6
Europe.....	1106	1,337	1,368	69.1	74.9	77.6	45.7	53.7	56.2
Greece.....	84	77	72	54.8	67.5	65.3	36.9	55.8	48.6
United Kingdom.....	137	154	146	82.5	82.5	82.9	60.6	61.7	56.2
Germany.....	193	203	164	69.9	69.0	73.2	46.6	54.7	53.7
Italy.....	55	47	81	61.8	57.4	70.4	30.9	42.6	44.4
France.....	73	68	79	63.0	67.6	77.2	37.0	32.4	53.2
Spain.....	92	72	53	62.0	56.9	77.4	39.1	36.1	49.1
Other .....	472	716	773	70.6	79.3	79.4	46.8	56.0	59.5
North/South America.....	1,436	1,545	1,609	50.2	49.4	58.2	31.2	35.0	42.4
Canada.....	425	435	485	62.6	68.5	72.2	44.5	52.2	57.5

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**Plans of foreign recipients of U.S. S&E doctorates to stay in United States, by field and place of origin: 1994–2005**

Field/place of origin	Foreign S&E doctorate recipients			Plans to stay (%)			Definite plans to stay (%)		
	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05
Mexico.....	250	315	255	38.8	30.2	44.3	20.8	20.0	30.2
Argentina.....	76	96	100	55.3	60.4	65.0	40.8	44.8	49.0
Brazil.....	251	217	217	25.9	27.2	38.7	13.1	19.8	29.0
Chile.....	57	46	71	47.4	65.2	43.7	33.3	50.0	35.2
Colombia.....	69	78	102	69.6	53.8	54.9	39.1	35.9	33.3
Peru.....	35	36	52	60.0	66.7	73.1	40.0	41.7	40.4
Other.....	273	322	327	56.8	49.1	61.2	30.4	30.7	41.0
Country unknown.....	54	83	97	79.6	55.4	52.6	51.9	24.1	16.5
<b>Mathematics/computer sciences</b>									
All non-U.S. citizens.....	4,200	3,692	4,226	72.3	74.4	75.6	41.1	53.4	55.1
East/South Asia.....	2,545	1,909	2,210	77.1	80.7	81.9	41.6	56.9	58.2
China <sup>a</sup> .....	1,020	805	1,157	96.0	89.8	90.1	47.0	64.5	65.5
Taiwan.....	429	282	161	53.8	66.0	62.7	23.8	36.9	35.4
Japan.....	32	47	46	43.8	78.7	71.7	18.8	57.4	52.2
South Korea.....	358	306	360	41.1	66.7	77.2	18.7	39.9	50.0
India.....	636	398	363	89.0	90.2	86.5	61.3	74.1	64.7
Other.....	70	71	123	34.3	43.7	33.3	21.4	28.2	26.8
West Asia.....	324	296	379	63.0	57.1	63.6	35.8	40.2	48.0
Iran.....	49	30	43	79.6	83.3	81.4	44.9	56.7	60.5
Israel.....	63	21	32	77.8	66.7	59.4	60.3	52.4	46.9
Turkey.....	68	88	131	58.8	65.9	71.0	32.4	47.7	57.3
Other.....	144	157	173	52.8	45.9	54.3	23.6	31.2	38.2
Pacific/Australasia.....	89	71	57	68.5	74.6	71.9	40.4	54.9	57.9
Australia.....	30	28	26	70.0	71.4	57.7	50.0	53.6	53.8
Indonesia.....	20	11	9	45.0	45.5	88.9	0.0	18.2	55.6
New Zealand.....	17	17	14	76.5	82.4	71.4	64.7	64.7	57.1
Other.....	22	15	8	81.8	93.3	100.0	45.5	73.3	75.0
Africa.....	110	95	126	66.4	76.8	72.2	28.2	46.3	51.6
Egypt.....	35	17	51	68.6	64.7	66.7	28.6	52.9	39.2
Nigeria.....	5	S	S	100.0	S	S	40.0	S	S
South Africa.....	9	15	8	66.7	86.7	62.5	44.4	53.3	62.5
Other.....	61	59	65	62.3	76.3	76.9	24.6	44.1	60.0
Europe.....	810	955	1,018	69.8	75.3	74.7	47.0	57.1	57.1
Greece.....	114	49	64	63.2	69.4	65.6	41.2	49.0	51.6
United Kingdom.....	37	53	49	75.7	77.4	69.4	48.6	66.0	57.1
Germany.....	104	107	110	64.4	62.6	64.5	43.3	48.6	50.9
Italy.....	67	51	54	40.3	64.7	64.8	25.4	54.9	53.7
France.....	23	24	35	65.2	75.0	71.4	39.1	37.5	57.1
Spain.....	20	28	19	55.0	46.4	52.6	45.0	39.3	42.1
Other.....	445	643	687	77.5	79.8	79.0	53.0	60.0	59.2
North/South America.....	294	334	394	51.0	54.2	58.1	31.0	39.5	43.7
Canada.....	82	99	127	68.3	65.7	63.8	47.6	49.5	51.2
Mexico.....	52	61	61	36.5	39.3	45.9	17.3	29.5	29.5
Argentina.....	18	20	30	61.1	75.0	83.3	27.8	60.0	73.3
Brazil.....	61	59	73	34.4	44.1	49.3	19.7	28.8	38.4
Chile.....	11	10	12	36.4	40.0	58.3	9.1	30.0	33.3
Colombia.....	24	20	24	50.0	50.0	50.0	33.3	40.0	25.0
Peru.....	6	S	9	66.7	S	66.7	33.3	S	55.6
Other.....	40	63	58	57.5	55.6	58.6	37.5	38.1	41.4
Country unknown.....	28	32	42	78.6	40.6	54.8	42.9	21.9	16.7
<b>Social/behavioral sciences</b>									
All non-U.S. citizens.....	5,632	5,150	5,676	53.0	55.0	57.6	27.8	37.4	40.5
East/South Asia.....	2,772	2,219	2,230	52.1	54.3	57.8	25.6	35.9	38.9
China <sup>a</sup> .....	701	577	584	86.2	79.5	78.8	42.4	56.7	56.8
Taiwan.....	430	328	238	30.9	34.5	42.9	8.6	17.7	24.8
Japan.....	226	231	257	41.6	46.8	47.9	26.5	27.3	35.0
South Korea.....	788	559	612	26.3	34.9	44.3	10.4	20.2	27.5
India.....	458	377	330	77.7	78.2	80.3	46.7	57.0	53.9
Other.....	169	147	209	29.6	24.5	32.5	11.8	14.3	19.6

Appendix table 2-33

(Page 4 of 5)

**Plans of foreign recipients of U.S. S&E doctorates to stay in United States, by field and place of origin: 1994–2005**

Field/place of origin	Foreign S&E doctorate recipients			Plans to stay (%)			Definite plans to stay (%)		
	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05
West Asia .....	554	435	587	47.1	50.6	53.2	22.6	35.2	35.3
Iran .....	50	24	16	84.0	70.8	87.5	32.0	29.2	50.0
Israel.....	100	60	106	56.0	46.7	69.8	30.0	38.3	51.9
Turkey.....	99	131	254	38.4	50.4	44.9	24.2	39.7	30.3
Other .....	305	220	211	41.0	49.5	52.1	18.0	32.3	31.8
Pacific/Australasia.....	229	165	135	40.2	43.6	51.1	19.7	31.5	34.8
Australia .....	56	61	51	46.4	54.1	62.7	35.7	37.7	45.1
Indonesia.....	75	41	45	16.0	14.6	31.1	2.7	4.9	15.6
New Zealand.....	26	21	12	57.7	52.4	58.3	42.3	47.6	33.3
Other .....	72	42	27	54.2	52.4	59.3	16.7	40.5	48.1
Africa .....	363	278	243	56.2	63.3	56.8	17.1	28.4	32.9
Egypt .....	30	19	37	46.7	31.6	35.1	20.0	21.1	29.7
Nigeria.....	66	35	12	81.8	74.3	66.7	10.6	37.1	41.7
South Africa .....	39	36	36	41.0	58.3	38.9	25.6	27.8	27.8
Other .....	228	188	158	52.6	65.4	65.2	17.1	27.7	34.2
Europe .....	841	1037	1,245	62.9	63.9	67.5	41.0	48.7	53.0
Greece.....	76	59	37	61.8	64.4	67.6	36.8	44.1	45.9
United Kingdom.....	150	127	133	74.0	74.8	77.4	50.7	52.8	60.2
Germany.....	142	142	162	67.6	69.7	67.3	49.3	52.1	55.6
Italy.....	103	117	133	51.5	59.0	62.4	32.0	50.4	54.9
France .....	39	68	63	51.3	70.6	61.9	20.5	51.5	46.0
Spain .....	44	70	82	54.5	45.7	53.7	45.5	34.3	45.1
Other .....	287	454	635	62.0	62.1	68.8	38.3	48.5	52.6
North/South America .....	830	978	1,162	51.2	48.9	50.9	32.3	34.3	36.7
Canada .....	326	349	437	58.9	59.3	58.8	39.3	43.6	43.2
Mexico.....	106	145	160	33.0	36.6	33.1	17.9	23.4	24.4
Argentina.....	51	70	107	54.9	45.7	64.5	31.4	34.3	53.3
Brazil .....	80	114	114	36.3	37.7	37.7	26.3	27.2	29.8
Chile .....	32	34	64	31.3	41.2	26.6	18.8	29.4	18.8
Colombia.....	40	27	58	37.5	37.0	41.4	17.5	25.9	25.9
Peru.....	41	36	33	63.4	50.0	63.6	41.5	38.9	36.4
Other .....	154	203	189	58.4	49.8	57.1	35.1	31.0	36.0
Country unknown.....	43	38	74	74.4	47.4	39.2	20.9	18.4	16.2
Engineering									
All non-U.S. citizens.....	13,676	11,539	13,686	71.9	74.9	75.7	36.1	50.7	46.2
East/South Asia .....	9,532	7,484	9,338	74.8	79.9	79.4	37.5	54.2	48.1
China <sup>a</sup> .....	3,018	2,962	4,531	97.0	92.2	91.7	45.6	61.8	55.8
Taiwan.....	2,339	1,225	718	55.8	68.3	68.1	24.3	39.5	35.9
Japan.....	145	98	130	26.9	38.8	58.5	13.8	26.5	38.5
South Korea .....	1,419	1,189	1,780	42.8	63.9	65.7	17.6	39.9	34.2
India .....	2,312	1,637	1,456	92.8	90.0	88.5	56.8	70.4	62.8
Other .....	299	373	723	35.8	36.7	31.7	14.4	22.8	18.5
West Asia .....	1,545	1,294	1,473	68.2	66.5	65.3	29.3	42.3	41.8
Iran .....	308	186	186	84.7	89.2	90.9	33.1	56.5	57.0
Israel.....	60	25	30	45.0	56.0	90.0	25.0	20.0	66.7
Turkey.....	311	461	613	67.5	64.6	65.9	32.8	43.0	44.4
Other .....	866	622	644	64.1	61.6	56.2	27.0	38.6	33.7
Pacific/Australasia.....	180	159	174	51.7	62.3	69.0	26.1	45.9	39.7
Australia .....	32	27	20	59.4	70.4	75.0	37.5	48.1	55.0
Indonesia.....	95	92	115	37.9	54.3	66.1	13.7	40.2	34.8
New Zealand.....	12	10	17	66.7	90.0	64.7	33.3	70.0	47.1
Other .....	41	30	22	73.2	70.0	81.8	43.9	53.3	45.5
Africa .....	545	428	426	64.4	65.2	68.3	28.4	39.7	40.1
Egypt .....	220	222	238	54.5	55.4	66.0	24.5	34.7	42.0
Nigeria.....	39	23	20	94.9	91.3	90.0	43.6	34.8	40.0
South Africa .....	38	32	31	52.6	68.8	64.5	39.5	46.9	51.6
Other .....	248	151	137	70.2	74.8	70.1	27.8	46.4	34.3
Europe .....	1,045	1,213	1,235	70.4	73.8	75.5	43.4	51.4	48.5
Greece.....	200	148	118	67.5	73.6	72.0	41.5	54.7	44.9



Appendix table 2-33

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**Plans of foreign recipients of U.S. S&E doctorates to stay in United States, by field and place of origin: 1994–2005**

Field/place of origin	Foreign S&E doctorate recipients			Plans to stay (%)			Definite plans to stay (%)		
	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05	1994–97	1998–2001	2002–05
United Kingdom.....	57	48	54	87.7	83.3	75.9	56.1	56.3	48.1
Germany.....	110	161	133	68.2	55.9	62.4	40.0	42.2	42.9
Italy.....	39	74	100	51.3	60.8	74.0	17.9	39.2	51.0
France.....	94	93	106	56.4	69.9	61.3	29.8	52.7	36.8
Spain.....	33	44	56	63.6	65.9	58.9	33.3	45.5	39.3
Other.....	512	645	668	74.6	80.2	82.5	48.6	54.1	52.5
North/South America.....	770	853	900	53.0	57.1	63.2	30.5	41.9	39.7
Canada.....	166	183	179	71.1	76.5	73.2	49.4	58.5	45.3
Mexico.....	118	181	221	44.1	45.3	54.3	23.7	35.4	33.9
Argentina.....	38	48	44	89.5	68.8	79.5	60.5	60.4	52.3
Brazil.....	206	168	122	30.6	34.5	52.5	14.6	22.6	32.0
Chile.....	25	24	37	24.0	45.8	27.0	16.0	41.7	21.6
Colombia.....	33	47	89	57.6	59.6	71.9	27.3	36.2	43.8
Peru.....	29	23	29	96.6	69.6	75.9	44.8	34.8	58.6
Other.....	155	179	179	56.8	66.5	68.7	29.7	46.9	41.9
Country unknown.....	59	108	140	94.9	38.9	54.3	32.2	21.3	12.9

S = suppressed for reasons of confidentiality

\*Includes Hong Kong.

NOTES: Data include permanent and temporary residents. Recipients who plan to stay report plan to locate in United States; those with definite plans report postdoctoral research appointment or definite employment plans in United States.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, special tabulations (2006).

## Postdocs at U.S. universities, by field and citizenship status: 1985–2005

Citizenship	All S&E fields	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Engineering	Mathematics	Medical/ other life sciences	Physical sciences	Psychology	Social sciences
All postdocs											
1985 .....	22,387	374	9,128	70	379	1,356	226	5,455	4,539	510	350
1986 .....	23,721	421	9,692	75	420	1,405	201	5,804	4,860	521	322
1987 .....	24,881	453	10,353	103	424	1,446	229	6,066	4,968	460	379
1988 .....	26,123	476	10,653	96	496	1,690	284	6,409	5,201	498	320
1989 .....	27,932	522	11,425	84	453	1,928	225	7,026	5,366	536	367
1990 .....	29,565	536	11,909	71	594	1,950	249	7,762	5,592	464	438
1991 .....	30,865	580	12,455	120	625	2,262	206	8,008	5,722	508	379
1992 .....	32,747	640	13,158	145	692	2,369	201	8,864	5,792	525	361
1993 .....	34,322	720	13,778	164	765	2,446	224	9,657	5,669	521	378
1994 .....	36,377	729	14,379	185	824	2,606	239	10,590	5,884	551	390
1995 .....	35,926	724	14,659	213	845	2,648	262	9,766	5,851	582	376
1996 .....	37,107	699	14,890	250	861	2,677	326	10,538	5,828	594	444
1997 .....	38,481	724	15,082	322	942	2,971	308	11,217	5,968	586	361
1998 .....	40,086	695	15,761	374	902	2,853	279	12,210	6,004	617	391
1999 .....	40,800	750	16,097	334	925	3,196	351	11,820	6,157	716	454
2000 .....	43,115	822	16,734	344	1,155	3,313	385	12,891	6,270	730	471
2001 .....	43,315	835	17,029	338	1,036	3,166	353	13,121	6,218	809	410
2002 .....	45,007	945	17,648	361	1,114	3,568	393	13,099	6,610	815	454
2003 .....	46,613	1,052	18,615	360	1,166	3,820	447	13,067	6,724	960	402
2004 .....	47,087	942	18,696	384	1,253	3,965	466	13,150	6,956	910	365
2005 .....	48,653	989	19,003	406	1,364	4,163	500	14,069	6,896	892	371
U.S. citizen/permanent resident											
1985 .....	13,528	227	5,952	45	253	443	112	3,785	2,026	456	229
1986 .....	14,041	250	6,095	48	278	460	100	3,921	2,213	471	205
1987 .....	14,133	281	6,248	69	261	497	119	3,801	2,178	387	292
1988 .....	14,420	321	6,093	57	307	588	151	3,976	2,260	425	242
1989 .....	14,863	316	6,344	47	271	657	95	4,178	2,267	434	254
1990 .....	15,115	328	6,371	40	377	613	99	4,446	2,213	381	247
1991 .....	15,135	330	6,400	84	389	655	92	4,328	2,202	407	248
1992 .....	15,800	360	6,577	98	415	767	92	4,616	2,248	401	226
1993 .....	16,727	378	6,924	89	460	843	107	5,092	2,213	386	235
1994 .....	17,986	363	7,251	96	514	1,018	131	5,517	2,421	426	249
1995 .....	18,142	392	7,396	113	502	999	117	5,319	2,578	465	261
1996 .....	18,412	355	7,483	121	504	1,050	137	5,482	2,489	483	308
1997 .....	18,916	370	7,300	146	573	1,089	138	6,081	2,512	453	254
1998 .....	19,710	364	7,684	188	530	950	127	6,744	2,371	487	265
1999 .....	18,884	376	7,360	144	535	1,018	152	6,159	2,259	535	346
2000 .....	19,452	331	7,078	129	705	1,069	149	6,825	2,271	561	334
2001 .....	18,397	328	7,009	113	599	976	154	6,309	2,032	594	283

## Postdocs at U.S. universities, by field and citizenship status: 1985–2005

Citizenship	All S&E fields	Agricultural sciences	Biological sciences	Computer sciences	Earth, atmospheric, and ocean sciences	Engineering	Mathematics	Medical/other life sciences	Physical sciences	Psychology	Social sciences
2002 .....	19,663	395	7,804	175	651	1,125	189	6,139	2,227	612	346
2003 .....	19,645	462	7,762	159	610	1,145	215	6,121	2,266	632	273
2004 .....	20,118	419	7,803	162	689	1,308	212	6,173	2,471	634	247
2005 .....	21,678	423	7,851	164	746	1,419	263	7,503	2,458	593	258
Foreign citizen											
1985 .....	8,859	147	3,176	25	126	913	114	1,670	2,513	54	121
1986 .....	9,680	171	3,597	27	142	945	101	1,883	2,647	50	117
1987 .....	10,748	172	4,105	34	163	949	110	2,265	2,790	73	87
1988 .....	11,703	155	4,560	39	189	1,102	133	2,433	2,941	73	78
1989 .....	13,069	206	5,081	37	182	1,271	130	2,848	3,099	102	113
1990 .....	14,450	208	5,538	31	217	1,337	150	3,316	3,379	83	191
1991 .....	15,730	250	6,055	36	236	1,607	114	3,680	3,520	101	131
1992 .....	16,947	280	6,581	47	277	1,602	109	4,248	3,544	124	135
1993 .....	17,595	342	6,854	75	305	1,603	117	4,565	3,456	135	143
1994 .....	18,391	366	7,128	89	310	1,588	108	5,073	3,463	125	141
1995 .....	17,784	332	7,263	100	343	1,649	145	4,447	3,273	117	115
1996 .....	18,695	344	7,407	129	357	1,627	189	5,056	3,339	111	136
1997 .....	19,565	354	7,782	176	369	1,882	170	5,136	3,456	133	107
1998 .....	20,376	331	8,077	186	372	1,903	152	5,466	3,633	130	126
1999 .....	21,916	374	8,737	190	390	2,178	199	5,661	3,898	181	108
2000 .....	23,663	491	9,656	215	450	2,244	236	6,066	3,999	169	137
2001 .....	24,918	507	10,020	225	437	2,190	199	6,812	4,186	215	127
2002 .....	25,344	550	9,844	186	463	2,443	204	6,960	4,383	203	108
2003 .....	26,968	590	10,853	201	556	2,675	232	6,946	4,458	328	129
2004 .....	26,969	523	10,893	222	564	2,657	254	6,977	4,485	276	118
2005 .....	26,975	566	11,152	242	618	2,744	237	6,566	4,438	299	113

NOTES: Medical/other life sciences reported separately from S&E fields in National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Graduate Students and Postdoctorates in Science and Engineering. Foreign citizen includes temporary residents only.

SOURCE: NSF/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Science and Engineering Indicators 2008

Appendix table 2-35

**Tertiary-type A, advanced research programs, and tertiary education, by age group and region/country: 2004**

(Percent)

Region/country	Tertiary-type A and advanced research programs		All tertiary	
	25–64 years	25–34 years	25–64 years	25–34 years
OECD average .....	19.0	23.7	25.2	31.0
United States .....	29.7	30.2	39.1	39.0
Norway .....	29.4	37.0	31.8	39.2
Israel .....	29.4	34.2	45.4	49.3
Netherlands .....	26.9	31.8	29.3	34.2
Denmark .....	25.2	27.2	32.4	34.9
Iceland .....	23.5	28.2	27.8	31.3
Canada .....	22.2	27.5	44.6	53.3
Korea .....	22.0	30.8	30.5	49.1
Australia .....	21.9	27.0	30.8	36.2
Japan (2003) .....	20.9	26.4	37.4	51.6
Russian Federation (2003) .....	20.8	21.5	54.6	56.1
United Kingdom .....	20.2	25.9	29.0	34.6
Sweden .....	19.3	25.9	34.5	42.3
Spain .....	18.9	26.6	26.4	38.1
Switzerland .....	18.1	20.2	28.2	30.4
Ireland .....	17.8	25.8	28.3	40.4
New Zealand .....	17.6	22.8	25.3	28.0
Finland .....	17.1	23.8	34.0	38.0
Germany .....	14.7	14.8	24.9	22.9
Greece .....	14.6	17.2	20.6	24.6
Mexico .....	14.4	16.3	16.4	19.3
France .....	14.3	22.0	23.9	38.1
Belgium .....	13.6	19.1	29.8	40.7
Luxembourg .....	13.5	17.5	22.9	30.9
Slovak Republic .....	11.8	13.6	12.4	14.3
Chile .....	10.3	14.2	13.2	18.3
Austria .....	9.2	11.1	18.3	20.3
Poland .....	NA	NA	15.7	23.2
Hungary .....	NA	NA	16.7	18.9
Portugal .....	NA	NA	12.5	18.6
Italy .....	NA	NA	11.4	14.6
Czech Republic .....	NA	NA	12.3	13.0
Turkey .....	NA	NA	9.1	10.8
Brazil .....	NA	NA	7.8	7.9

NA = not available

OECD = Organisation for Economic Co-operation and Development

NOTES: Tertiary education includes International Standard Classification of Education (ISCED) levels 5A, 5B, and 6 programs. ISCED 5A programs largely theory-based and designed to provide sufficient qualifications for entry into advanced research programs and professions with high skill requirements. ISCED 5B programs focus on practical, technical, or occupational skills for direct entry into labor market. ISCED 6 programs devoted to advanced studies and original research leading to award of an advanced research qualification. In United States, ISCED 5B corresponds to associate's, ISCED 5A corresponds to bachelor's and master's, and ISCED 6 corresponds to doctoral degrees.

SOURCE: OECD, Education at a Glance: OECD Indicators 2006 (2006).

Appendix table 2-36

**Tertiary education of population ages 25–34, by country: 1991–2004**

(Percent)

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
OECD average .....	20.5	21.9	NA	22.2	22.4	23.8	24.9	24.8	25.3	26.4	27.3	28.4	29.5	31.0
Australia .....	22.8	NA	22.8	23.6	24.7	25.3	25.7	28.1	29.0	31.4	33.5	35.8	36.3	36.2
Austria .....	7.9	7.9	NA	8.8	8.7	9.2	12.4	12.5	12.7	15.0	14.3	14.8	15.4	20.3
Belgium .....	26.8	27.2	NA	30.0	32.9	32.2	33.1	33.8	34.4	36.0	37.5	37.6	38.9	40.7
Canada .....	32.9	34.2	NA	37.8	39.3	40.6	44.1	45.5	46.8	48.3	50.5	51.2	52.8	53.3
Czech Republic .....	NA	NA	NA	12.5	11.8	11.2	10.9	10.5	10.9	11.2	11.3	12.3	12.1	13.0
Denmark .....	18.7	19.5	NA	19.7	20.3	20.7	NA	26.8	28.6	29.3	29.1	30.6	35.1	34.9
Finland .....	33.3	33.5	NA	34.1	35.0	35.2	36.4	36.0	37.4	37.6	38.2	39.2	39.8	38.0
France .....	20.1	21.6	23.1	24.3	25.4	26.0	27.8	29.6	30.9	32.4	34.2	36.1	37.4	38.1
Germany .....	19.6	18.8	NA	18.7	20.8	20.3	21.0	21.5	21.5	22.3	21.8	21.7	21.8	22.9
Greece .....	NA	NA	NA	25.0	26.0	28.2	22.3	24.3	24.6	24.3	24.0	24.1	23.7	24.6
Hungary .....	NA	NA	NA	NA	NA	14.3	12.4	13.9	13.7	14.7	14.8	15.0	16.8	18.9
Iceland .....	NA	NA	NA	NA	NA	23.7	23.0	24.2	27.6	27.8	26.5	29.1	29.1	31.3
Ireland .....	19.7	21.2	NA	24.4	27.2	31.3	32.5	29.5	28.1	30.3	33.4	36.3	37.1	40.4
Italy .....	6.6	6.8	NA	7.9	8.2	8.3	NA	9.0	10.0	10.4	11.8	12.5	12.5	14.6
Japan .....	NA	NA	NA	NA	NA	NA	45.2	45.4	45.1	47.2	47.7	50.3	51.6	51.6
Korea .....	21.0	23.9	26.8	27.7	29.2	30.6	30.9	33.8	34.8	36.9	39.2	41.2	46.6	49.1
Luxembourg .....	NA	NA	NA	NA	NA	NA	NA	NA	21.2	22.9	23.4	22.6	18.7	30.9
Mexico .....	NA	NA	NA	NA	16.3	17.1	17.3	16.7	16.6	17.4	18.0	18.4	18.7	19.3
Netherlands .....	22.2	23.6	NA	23.9	24.5	25.1	NA	27.5	25.1	26.6	26.5	27.7	27.7	34.2
New Zealand .....	23.2	23.2	NA	21.1	24.2	NA	25.4	26.4	26.0	27.2	28.5	29.3	32.4	28.0
Norway .....	27.1	28.2	NA	30.7	32.1	30.0	29.9	32.8	34.7	34.9	37.9	39.7	39.8	39.2
Poland .....	NA	NA	NA	NA	9.9	NA	10.3	11.8	12.3	14.2	15.2	16.8	20.4	23.2
Portugal .....	8.5	NA	NA	13.2	13.5	14.4	NA	11.5	12.2	13.0	14.0	15.0	16.3	18.6
Slovak Republic .....	NA	NA	NA	12.5	11.6	12.4	10.4	11.3	11.1	11.2	11.9	11.9	13.2	14.3
Spain .....	16.3	22.5	NA	25.2	26.6	28.6	30.3	32.0	33.5	34.1	35.5	36.7	37.5	38.1
Sweden .....	27.0	26.5	NA	27.3	28.6	28.4	29.3	30.7	31.7	33.6	36.9	39.2	40.4	42.3
Switzerland .....	21.3	21.3	NA	22.0	21.5	22.5	24.7	25.0	25.9	25.6	25.6	26.5	29.4	30.4
Turkey .....	6.1	5.6	NA	6.6	7.5	NA	7.3	7.8	8.7	8.9	9.1	10.5	11.4	10.8
United Kingdom .....	18.5	20.6	NA	23.1	23.3	24.3	24.7	25.9	27.3	28.6	29.5	31.2	33.1	34.6
United States .....	30.2	30.2	NA	32.0	33.6	35.2	35.7	36.2	37.4	38.1	39.1	39.3	38.7	39.0

NA = not available

OECD = Organisation for Economic Co-operation and Development

NOTES: Tertiary education includes International Standard Classification of Education (ISCED) levels 5A, 5B, and 6 programs. ISCED 5A programs largely theory-based and designed to provide sufficient qualifications for entry into advanced research programs and professions with high skill requirements. ISCED 5B programs focus on practical, technical, or occupational skills for direct entry into labor market. ISCED 6 programs devoted to advanced studies and original research leading to award of an advanced research qualification. In United States, ISCED 5B corresponds to associate's, ISCED 5A corresponds to bachelor's and master's, and ISCED 6 corresponds to doctoral degrees.

SOURCE: OECD, *OECD Factbook 2006: Economic, Environmental and Social Statistics*; and Education at a Glance: OECD Indicators 2006 (2006).

## First university degrees, by selected region and country/economy: 2004 or most recent year

Region/location	Field of first university degree								Degrees in (%)		
	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E	S&E	Natural sciences	Engineering
All regions <sup>a</sup> .....	10,926,433	3,888,857	685,973	422,284	204,982	1,117,061	1,458,547	7,068,388	35.6	12.0	13.3
Asia <sup>a</sup> .....	3,698,652	1,662,138	357,788	73,956	77,736	411,116	741,542	2,067,665	44.9	13.8	20.1
Bangladesh (2003) .....	180,258	74,844	18,905	5,598	1,469	48,002	870	105,414	41.5	14.4	0.5
Brunei .....	724	47	18	13	0	16	0	677	6.5	4.3	0.0
Cambodia .....	8,544	1,751	129	1,070	165	209	178	6,793	20.5	16.0	2.1
China .....	1,196,290	672,463	134,164	NA	34,078	61,758	442,463	523,827	56.2	14.1	37.0
Hong Kong .....	27,329	10,313	1,550	2,438	0	2,382	3,943	17,016	37.7	14.6	14.4
India (1990) .....	750,000	176,036	147,036	NA	NA	NA	29,000	573,964	23.5	19.6	3.9
Japan <sup>b</sup> (2005) .....	551,016	349,015	19,260	NA	16,015	215,809	97,931	202,001	63.3	6.4	17.8
Kyrgyzstan .....	31,115	6,790	678	1,233	402	2,487	1,990	24,325	21.8	7.4	6.4
Laos .....	1,833	1,044	41	41	120	630	212	789	57.0	11.0	11.6
Mongolia .....	19,264	4,812	429	510	476	1,264	2,133	14,452	25.0	7.3	11.1
Philippines <sup>c</sup> .....	350,529	89,241	4,860	26,321	11,764	15,145	31,151	292,439	25.5	12.3	8.9
Singapore <sup>d</sup> .....	10,165	5,947	1,277	1,161	NA	NA	3,509	4,218	58.5	24.0	34.5
South Korea (short) .....	261,754	119,338	15,811	14,287	3,228	15,638	70,374	142,416	45.6	12.7	26.9
South Korea (long) .....	5,304	0	0	0	0	0	0	5,304	0.0	0.0	0.0
Taiwan (2005) .....	210,763	85,891	4,953	21,284	5,024	7,760	46,870	124,872	40.8	14.8	22.2
Thailand (2001) .....	93,764	64,606	8,677	NA	4,995	40,016	10,918	29,158	68.9	14.6	11.6
Middle East <sup>a</sup> .....	623,780	212,555	36,407	32,404	16,805	56,628	70,311	411,225	34.1	13.7	11.3
Bahrain (2003) .....	1,434	419	54	159	0	96	110	1,015	29.2	14.9	7.7
Iran .....	183,770	90,055	15,397	12,330	10,076	18,566	33,686	93,715	49.0	20.6	18.3
Iraq .....	54,396	11,629	1,606	1,289	1,185	570	6,979	42,767	21.4	7.5	12.8
Israel .....	46,307	20,143	2,391	3,371	276	9,111	4,994	26,164	43.5	13.0	10.8
Jordan .....	28,195	10,746	1,621	4,214	635	1,486	2,790	17,449	38.1	22.9	9.9
Lebanon .....	19,590	6,572	1,089	882	108	2,273	2,220	13,018	33.5	10.6	11.3
Morocco .....	23,653	7,263	2,455	882	0	3,413	513	16,390	30.7	14.1	2.2
Oman .....	5,028	662	79	252	11	35	285	4,366	13.2	6.8	5.7
Palestine .....	10,226	2,425	385	589	59	555	837	7,801	23.7	10.1	8.2
Qatar .....	668	156	41	57	3	30	25	512	23.4	15.1	3.7
Saudi Arabia .....	62,379	8,692	2,065	2,724	154	2,878	871	53,687	13.9	7.9	1.4
Turkey (short) .....	188,134	53,793	9,224	5,655	4,298	17,615	17,001	134,341	28.6	10.2	9.0
Africa <sup>a</sup> .....	174,915	51,231	8,262	8,744	5,857	15,618	12,750	123,684	29.3	13.1	7.3
Burundi .....	680	207	0	74	51	70	12	473	30.4	18.4	1.8
Eritrea .....	1,254	501	71	85	104	159	82	753	40.0	20.7	6.5
Ethiopia <sup>a</sup> .....	41,363	7,812	782	2,088	1,697	734	2,511	33,551	18.9	11.0	6.1
Gambia .....	470	94	94	0	0	0	0	376	20.0	20.0	0.0
Ghana (2001) .....	7,122	2,951	916	0	362	1,177	496	4,171	41.4	17.9	7.0
Kenya <sup>a</sup> (2000) .....	10,587	3,812	1,068	63	1,440	433	808	6,775	36.0	24.3	7.6
Lesotho (2003) .....	475	190	40	0	30	120	0	285	40.0	14.7	0.0
Madagascar <sup>a</sup> .....	5,947	2,079	771	190	53	836	229	3,868	35.0	17.1	3.9

## First university degrees, by selected region and country/economy: 2004 or most recent year

Region/location	Field of first university degree								Degrees in (%)		
	All fields	All S&E fields	Physical/biological sciences	Mathematics/computer sciences	Agricultural sciences	Social/behavioral sciences	Engineering	Non-S&E	S&E	Natural sciences	Engineering
Mauritius.....	1,681	1,054	219	92	10	224	509	627	62.7	19.1	30.3
Mozambique.....	2,878	1,298	245	91	133	724	105	1,580	45.1	16.3	3.6
Namibia (2003).....	1541	186	76	0	87	23	0	1355	12.1	10.6	0.0
South Africa (2003).....	90,270	27,747	3,621	5,911	1,554	9,421	7,240	62,523	30.7	12.3	8.0
Swaziland.....	1,026	147	55	0	30	57	5	879	14.3	8.3	0.5
Uganda.....	9,621	3,153	304	150	306	1,640	753	6,468	32.8	7.9	7.8
Europe <sup>a</sup> .....	3,624,246	1,137,210	151,886	157,269	68,249	320,944	438,852	2,486,697	31.4	10.4	12.1
European Union.....	1,636,402	617,469	107,739	89,963	21,493	185,997	212,267	1,018,594	37.7	13.4	13.0
Austria (short).....	4,450	2,040	114	595	1	34	1,296	2,410	45.8	16.0	29.1
Austria (long).....	15,838	5,502	866	532	207	2,021	1,876	10,336	34.7	10.1	11.8
Belgium (short).....	14,882	5,657	1,479	661	164	1,313	2,040	9,225	38.0	15.5	13.7
Belgium (long).....	9,992	3,608	234	105	298	1,724	1,247	6,045	39.5	6.4	12.5
Denmark (short).....	26,476	5,462	746	973	143	1,758	1,842	21,014	20.6	7.0	7.0
Denmark (long).....	3,042	1,307	63	37	1	22	1,184	1,735	43.0	3.3	38.9
Finland (short).....	23,896	7,823	302	1,290	673	213	5,345	16,073	32.7	9.5	22.4
Finland (long).....	12,412	5,462	885	676	133	1,384	2,384	6,950	44.0	13.6	19.2
France (short).....	268,716	90,399	29,472	15,406	171	29,635	15,715	178,317	33.6	16.8	5.8
France (long).....	52,722	28,555	0	207	156	0	28,192	24,167	54.2	0.7	53.5
Germany (short).....	82,149	51,003	1,024	6,713	3,138	22,158	17,970	31,146	62.1	13.2	21.9
Germany (long).....	125,653	57,730	10,453	7,472	2,450	27,663	9,692	67,923	45.9	16.2	7.7
Greece (short).....	22,700	7,997	1,952	1,631	16	4,303	95	14,703	35.2	15.9	0.4
Greece (long).....	6,774	3,655	1,342	784	243	332	954	3,119	54.0	35.0	14.1
Iceland (short).....	2,189	589	89	155	20	191	134	1,600	26.9	12.1	6.1
Iceland (long).....	106	20	15	0	0	5	0	86	18.9	14.2	0.0
Ireland (short).....	25,193	8,012	1,955	2,218	208	1,123	2,508	17,181	31.8	17.4	10.0
Ireland (long).....	672	36	0	0	0	0	36	636	5.4	0.0	5.4
Italy (short).....	96,260	38,390	4,929	3,535	1,525	9,761	18,640	57,870	39.9	10.4	19.4
Italy (long).....	168,314	60,377	8,540	2,957	1,815	19,806	27,259	107,937	35.9	7.9	16.2
Netherlands (short).....	84,194	21,553	2,104	3,783	1,644	7,159	6,863	62,641	25.6	8.9	8.2
Portugal.....	52,550	17,759	3,020	2,900	769	4,555	6,515	34,791	33.8	12.7	12.4
Spain (short).....	88,504	24,475	0	5,539	2,564	0	16,372	64,029	27.7	9.2	18.5
Spain (long).....	113,931	42,841	8,872	4,390	1,837	13,326	14,416	71,090	37.6	13.3	12.7
Sweden (short).....	41,133	16,847	1,743	1,804	201	3,228	9,871	24,286	41.0	9.1	24.0
Sweden (long).....	1,564	430	0	0	46	343	41	1,134	27.5	2.9	2.6
United Kingdom <sup>f</sup> .....	292,090	109,940	27,540	25,600	3,070	33,940	19,780	182,150	37.6	19.2	6.8
European Free Trade Association.....	42,798	12,710	1,535	2,561	331	3,448	4,835	30,088	29.7	10.3	11.3
Norway (short).....	20,277	4,717	151	1,309	110	1,860	1,287	15,560	23.3	7.7	6.3
Norway (long).....	3,416	1,374	51	245	30	59	989	2,042	40.2	9.5	29.0
Switzerland (short).....	10,172	2,801	242	638	129	135	1,657	7,371	27.5	9.9	16.3

## First university degrees, by selected region and country/economy: 2004 or most recent year

Region/location	Field of first university degree								Degrees in (%)		
	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E	S&E	Natural sciences	Engineering
Switzerland (long).....	8,933	3,818	1,091	369	62	1,394	902	5,115	42.7	17.0	10.1
Central/Eastern Europe.....	1,945,046	507,031	42,612	64,745	46,425	131,499	221,750	1,438,015	26.1	7.9	11.4
Albania (2003).....	4,916	790	38	63	339	132	218	4,126	16.1	9.0	4.4
Armenia .....	11,698	941	0	0	198	0	743	10,757	8.0	1.7	6.4
Bulgaria .....	41,721	15,616	1,007	1,151	556	6,461	6,441	26,105	37.4	6.5	15.4
Croatia (2003) .....	10,192	3,136	538	414	277	452	1,455	7,056	30.8	12.1	14.3
Czech Republic (short).....	12,539	3,740	625	560	353	845	1,357	8,799	29.8	12.3	10.8
Czech Republic (long).....	20,587	8,566	951	765	929	412	5,509	12,021	41.6	12.8	26.8
Estonia.....	5,544	1,660	305	287	126	399	543	3,884	29.9	13.0	9.8
Georgia .....	23,545	6,428	1,013	309	578	289	4,239	17,117	27.3	8.1	18.0
Hungary (short) .....	53,514	11,640	742	1,306	1,740	3,518	4,334	41,874	21.8	7.1	8.1
Latvia.....	20,273	5,872	352	797	164	2,997	1,562	14,401	29.0	6.5	7.7
Lithuania.....	23,707	7,170	571	948	370	1,185	4,096	16,537	30.2	8.0	17.3
Macedonia <sup>a</sup> .....	4,835	1,308	204	162	129	128	685	3,527	27.1	10.2	14.2
Poland (short).....	172,537	49,871	2,857	8,677	2,575	23,820	11,942	122,666	28.9	8.2	6.9
Poland (long) .....	105,972	40,716	3,522	4,108	2,184	13,569	17,333	65,256	38.4	9.3	16.4
Romania .....	131,828	40,328	5,070	2,089	2,708	8,492	21,969	91,500	30.6	7.5	16.7
Russia (2006).....	1,254,987	293,729	22,883	41,308	31,641	66,209	131,688	961,258	23.4	7.6	10.5
Serbia-Montenegro <sup>a</sup> (2001) .....	13,925	5,043	773	396	642	342	2,890	8,882	36.2	13.0	20.8
Slovak Republic (short).....	10,119	3,414	576	568	127	341	1,802	6,705	33.7	12.6	17.8
Slovak Republic (long).....	15,762	4,739	359	690	684	830	2,176	11,023	30.1	11.0	13.8
Slovenia .....	6,845	2,324	226	147	105	1,078	768	4,521	34.0	7.0	11.2
America <sup>a</sup> .....	2,646,268	774,817	120,408	135,114	34,855	300,899	183,541	1,871,451	29.3	11.0	6.9
North/Central America .....	1,897,772	616,999	100,212	105,113	23,920	262,898	124,856	1,280,773	32.5	12.1	6.6
Canada .....	137,296	53,201	9,894	7,267	1,537	23,845	10,658	84,095	38.7	13.6	7.8
Belize.....	150	9	4	5	0	0	0	141	6.0	6.0	0.0
Costa Rica .....	26,315	5,585	332	1,065	208	1,857	2,123	20,730	21.2	6.1	8.1
Cuba (2001).....	16,769	2,760	395	219	384	408	1,354	14,009	16.5	6.0	8.1
El Salvador (2003).....	8,651	1,365	178	202	173	27	785	7,286	15.8	6.4	9.1
Guatemala (2002) .....	3,865	882	82	0	134	254	412	2,983	22.8	5.6	10.7
Honduras (2003) .....	4,386	1,391	25	103	414	57	792	2,995	31.7	12.4	18.1
Mexico.....	276,690	93,858	7,093	24,584	3,912	15,423	42,846	182,832	33.9	12.9	15.5
Panama.....	16,641	2,970	174	508	117	960	1,211	13,671	17.8	4.8	7.3
United States.....	1,407,009	455,848	82,905	71,160	17,041	220,067	64,675	951,161	32.4	12.2	4.6
South America .....	748,496	157,818	20,196	30,001	10,935	38,001	58,685	590,678	21.1	8.2	7.8
Argentina (2003) .....	79,227	22,318	2,474	3,867	1,950	6,644	7,383	56,909	28.2	10.5	9.3
Bolivia (2000).....	15,341	5,115	563	392	1,006	997	2,157	10,226	33.3	12.8	14.1
Brazil (2002).....	466,260	92,040	14,539	21,131	4,912	23,434	28,024	374,220	19.7	8.7	6.0
Chile.....	71,502	22,770	2,095	2,948	2,094	4,906	10,727	48,732	31.8	10.0	15.0
Colombia.....	60,574	1,919	0	1,123	796	0	0	58,655	3.2	3.2	0.0



Appendix table 2-37

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## First university degrees, by selected region and country/economy: 2004 or most recent year

Region/location	Field of first university degree								Degrees in (%)		
	All fields	All S&E fields	Physical/biological sciences	Mathematics/computer sciences	Agricultural sciences	Social/behavioral sciences	Engineering	Non-S&E	S&E	Natural sciences	Engineering
Guyana.....	942	332	33	104	22	72	101	610	35.2	16.9	10.7
Venezuela (2002).....	54,650	13,324	492	436	155	1,948	10,293	41,326	24.4	2.0	18.8
Oceania <sup>a</sup> .....	158,572	50,906	11,222	14,797	1,480	11,856	11,551	107,666	32.1	17.3	7.3
Australia (short).....	125,038	41,071	8,858	12,317	1,244	9,223	9,429	83,967	32.8	17.9	7.5
Australia (long).....	5,171	1,907	525	257	2	509	614	3,264	36.9	15.2	11.9
New Zealand (short).....	27,782	7,834	1,839	2,223	232	2,124	1,416	19,948	28.2	15.5	5.1
New Zealand (long).....	581	94	0	0	2	0	92	487	16.2	0.3	15.8

NA = not available

<sup>a</sup>Includes only locations for which relatively recent data available.<sup>b</sup>Japanese social science data also include business administration.<sup>c</sup>Engineering data for 2003.<sup>d</sup>Singapore data include social sciences in humanities (non-S&E).<sup>e</sup>Engineering degrees are long.<sup>f</sup>Includes former colleges and polytechnical institutions. Data for United Kingdom rounded to nearest 10. Detail may not add to total because of rounding. Ratios based on unrounded data.

NOTES: Physical/biological sciences include physical, biological, earth, atmospheric, and ocean sciences. Natural sciences include physical, biological, agricultural, and computer sciences and mathematics. Data for first university degrees use International Standard Classification of Education (ISCED 97), level 5A. First university degree programs in most countries <5 years; however, in some countries, especially European, some level 5A degree programs >5 years and noted as long. When country has first university degrees <5 years and some >5 years, such as Germany, duration noted as short or long. Unspecified duration means <5 years. Data for some countries not in Organisation for Economic Co-operation and Development include degrees comparable with U.S. master's or first professional degrees.

SOURCES: Organisation for Economic Co-operation and Development, Education Online Database, <http://www.oecd.org/education/database/>; United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Statistics, special tabulations (2006); Canada—Statistics Canada, special tabulations (2007); China—National Bureau of Statistics of China, *China Statistical Yearbook, 2005* (Beijing); Germany—Federal Statistical Office, Prüfungen an Hochschulen 2004 (2005); Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, Monbusho Survey of Education, special tabulations (2007); Russia—State University Higher School of Economics, special tabulations (2007); Singapore—Ministry of Education, Education Statistics Digest: 2004; Taiwan—Ministry of Education, Educational Statistics of the Republic of China: 2006 (2006); Thailand—National Statistical Office, Ministry of Information and Communication Technology, *Statistical Yearbook: 2004*; United Kingdom—Higher Education Statistics Agency, special tabulations (2007); and United States—National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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**S&E first university degrees, by selected Western or Asian country and field: Selected years, 1985–2005**

Country/field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
<b>China</b>														
All fields .....	183,241	225,312	275,056	262,088	347,068	325,484	381,647	440,935	495,624	567,839	655,763	929,598	1,196,290	NA
S&E fields.....	115,287	138,724	175,584	181,770	193,088	235,313	281,245	322,769	359,478	337,352	384,529	533,582	672,463	NA
Physical/biological sciences .....	8,686	9,115	8,153	6,598	11,087	25,509	39,113	42,351	49,214	63,517	72,526	103,409	134,164	NA
Mathematics/computer sciences.....	7,764	8,974	13,079	13,847	12,520	12,520	NA	NA	NA	NA	NA	NA	NA	NA
Agricultural sciences.....	11,907	13,850	14,531	14,542	16,994	16,365	16,559	17,453	19,154	19,005	22,462	29,758	34,078	NA
Social/behavioral sciences .....	13,855	19,619	27,713	32,163	31,656	32,075	50,134	67,611	78,205	35,267	37,517	48,878	61,758	NA
Engineering.....	73,075	87,166	112,108	114,620	120,831	148,844	175,439	195,354	212,905	219,563	252,024	351,537	442,463	NA
<b>Japan</b>														
All fields .....	373,302	382,655	376,688	428,079	445,774	493,277	524,512	532,436	538,683	545,512	547,711	544,894	548,897	551,016
S&E fields.....	247,258	252,688	247,643	284,617	295,743	330,210	348,897	350,535	353,465	359,019	357,282	352,088	351,299	349,015
Physical/biological sciences .....	9,166	9,817	9,900	10,452	10,757	12,089	13,386	13,662	13,300	14,192	19,369	19,549	19,727	19,260
Mathematics/computer sciences.....	3,532	3,572	3,395	3,765	4,221	4,884	5,103	4,906	4,941	4,965	NA	NA	NA	NA
Agricultural sciences.....	10,928	11,266	10,252	12,282	13,021	14,970	13,838	14,150	15,562	14,084	16,393	15,933	15,865	16,015
Social/behavioral sciences .....	151,072	150,956	147,087	170,721	179,338	200,875	213,619	214,377	216,506	221,300	217,838	215,205	217,276	215,809
Engineering.....	72,560	77,077	77,009	87,397	88,406	97,392	102,951	103,440	103,156	104,478	103,682	101,401	98,431	97,931
<b>South Korea</b>														
All fields .....	118,584	149,582	166,845	175,586	208,834	184,214	196,566	209,444	214,498	234,540	239,793	252,777	261,754	NA
S&E fields.....	45,079	53,093	58,789	73,011	78,830	84,350	91,278	94,078	96,859	111,060	113,097	115,770	119,338	NA
Physical/biological sciences .....	8,112	7,082	8,249	9,703	11,634	11,828	12,532	13,865	13,427	13,915	12,864	17,035	15,811	NA
Mathematics/computer sciences.....	2,888	3,149	6,274	7,547	8,502	12,351	14,151	9,847	9,299	14,510	13,591	10,131	14,287	NA
Agricultural sciences.....	4,068	6,395	8,027	6,586	7,843	7,767	6,662	5,345	5,859	5,555	5,910	2,387	3,228	NA
Social/behavioral sciences .....	6,472	8,867	8,098	18,483	17,808	16,955	16,624	14,195	11,766	14,764	15,790	15,717	15,638	NA
Engineering.....	23,539	27,600	28,141	30,692	33,043	35,449	41,309	50,827	56,508	62,316	64,942	70,500	70,374	NA
<b>United States</b>														
All fields .....	990,877	1,003,532	1,030,171	1,107,997	1,179,278	1,174,436	1,186,589	NA	1,253,121	1,257,648	1,305,730	1,359,843	1,407,009	1,437,200
S&E fields.....	332,273	331,526	322,821	337,675	366,035	378,148	388,482	NA	398,622	400,206	415,611	441,087	455,848	466,003
Physical/biological sciences .....	63,251	59,200	54,278	56,757	65,680	76,265	84,869	NA	83,531	80,220	79,768	81,653	82,905	86,971
Mathematics/computer sciences.....	54,510	56,442	46,277	40,194	39,433	38,620	38,116	NA	49,123	54,639	61,408	69,211	71,160	65,404
Agricultural sciences.....	11,907	9,524	8,582	8,432	11,632	14,580	17,361	NA	18,244	17,467	17,360	17,693	17,041	17,111
Social/behavioral sciences .....	125,033	131,935	146,737	170,105	186,585	185,312	185,784	NA	188,188	188,622	196,436	208,757	220,067	230,384
Engineering.....	77,572	74,425	66,947	62,187	62,705	63,371	62,352	NA	59,536	59,258	60,639	63,773	64,675	66,133
<b>United Kingdom<sup>a</sup></b>														
All fields .....	72,000	70,870	73,660	79,640	196,820	237,800	258,750	263,670	265,270	274,440	272,660	282,380	292,090	306,360
S&E fields.....	40,550	39,870	41,250	40,730	75,290	83,840	90,820	92,380	92,530	95,310	95,180	104,120	109,940	112,500
Physical/biological sciences .....	12,500	12,210	11,510	12,430	21,070	27,610	31,220	32,230	31,630	33,630	32,570	27,300	27,540	28,290
Mathematics/computer sciences.....	4,540	4,540	4,530	5,220	10,580	12,340	13,000	14,630	15,300	17,120	18,420	23,340	25,600	25,370
Agricultural sciences.....	1,450	1,370	1,340	1,210	1,650	2,300	2,800	2,860	2,340	2,910	2,970	2,710	3,070	2,920
Social/behavioral sciences .....	12,430	12,480	14,060	12,120	22,150	19,510	20,780	20,650	22,710	21,170	20,930	31,310	33,940	36,350
Engineering.....	9,630	9,270	9,820	9,740	19,840	22,080	23,020	22,010	20,550	20,490	20,280	19,460	19,780	19,580

Appendix table 2-38

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**S&E first university degrees, by selected Western or Asian country and field: Selected years, 1985–2005**

Country/field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Germany														
All first university degrees														
All fields .....	131,969	138,955	145,087	152,919	180,973	201,667	212,970	197,151	190,076	182,427	184,768	195,103	207,802	226,530
S&E fields .....	71,542	78,233	85,961	92,324	98,304	104,789	111,923	99,079	94,535	89,990	92,829	98,860	108,733	121,356
Physical/biological sciences .....	10,312	10,611	12,473	13,803	14,116	14,507	14,909	12,390	11,467	10,543	10,977	10,938	11,477	12,728
Mathematics/computer sciences.....	4,272	4,729	5,306	6,828	7,718	9,463	11,603	10,541	9,864	9,187	9,570	11,036	14,185	17,698
Agricultural sciences.....	4,390	4,644	4,894	4,953	4,823	4,839	4,855	4,992	4,935	4,878	4,698	5,214	5,588	5,864
Social/behavioral sciences .....	29,236	34,006	37,038	37,552	44,223	48,563	52,855	46,013	43,318	40,622	41,356	44,818	49,821	55,014
Engineering.....	23,332	24,243	26,250	29,188	27,424	27,416	27,701	25,143	24,952	24,760	26,228	26,854	27,662	30,052
Short degree (3–5 yr)														
All fields .....	48,003	52,753	54,631	58,855	63,337	69,216	75,641	70,126	68,139	66,151	66,914	74,722	82,149	91,331
S&E fields .....	34,074	39,080	40,880	40,922	43,618	43,565	43,807	41,092	40,351	39,609	40,977	44,779	51,003	56,739
Physical/biological sciences .....	549	599	689	678	777	710	649	615	539	463	499	681	1,024	1,515
Mathematics/computer sciences.....	1,009	1,336	1,603	2,186	2,488	2,812	3,177	2,881	2,960	3,038	3,537	4,730	6,713	8,504
Agricultural sciences.....	1,474	1,565	2,081	2,230	2,242	2,342	2,447	2,472	2,526	2,580	2,481	2,709	3,138	3,284
Social/behavioral sciences .....	15,061	19,031	20,095	19,034	22,254	23,500	24,815	21,322	19,654	17,985	17,044	19,171	22,158	24,056
Engineering.....	15,981	16,549	16,412	16,794	15,856	14,201	12,719	13,802	14,673	15,543	17,416	17,488	17,970	19,380
Long degree (6–7 yr)														
All fields .....	83,966	86,202	90,456	94,064	117,636	132,451	137,329	127,025	121,937	116,276	117,854	120,381	125,653	135,199
S&E fields .....	37,468	39,153	45,081	51,402	54,686	61,223	68,116	57,987	54,184	50,381	51,852	54,081	57,730	64,617
Physical/biological sciences .....	9,763	10,012	11,784	13,125	13,339	13,797	14,260	11,775	10,928	10,080	10,478	10,257	10,453	11,213
Mathematics/computer sciences.....	3,263	3,393	3,703	4,642	5,229	6,651	8,426	7,660	6,905	6,149	6,033	6,306	7,472	9,194
Agricultural sciences.....	2,916	3,079	2,813	2,723	2,581	2,496	2,408	2,520	2,409	2,298	2,217	2,505	2,450	2,580
Social/behavioral sciences .....	14,175	14,975	16,943	18,518	21,969	25,064	28,040	24,691	23,664	22,637	24,312	25,647	27,663	30,958
Engineering.....	7,351	7,694	9,838	12,394	11,567	13,215	14,982	11,341	10,279	9,217	8,812	9,366	9,692	10,672

NA = not available

\*Beginning in 1992, data include degrees from colleges and polytechnics.

NOTES: Physical/biological sciences include physical, biological, earth, atmospheric, and ocean sciences. Data for first university degrees use International Standard Classification of Education (ISCED 97), level 5A.

SOURCES: China—National Bureau of Statistics of China, *China Statistical Yearbook*, annual series (Beijing) (various years); Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, Monbusho Survey of Education (annual series; various years); South Korea—Organisation for Economic Co-operation and Development, Education Online Database, <http://www.oecd.org/education/database/>; Taiwan—Ministry of Education, Educational Statistics of the Republic of China (annual series; various years); Germany—Federal Statistical Office, Prüfungen an Hochschulen (annual series; various years); United Kingdom—Higher Education Statistics Agency, special tabulations (various years); and United States—National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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Appendix table 2-39

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**First university degrees, by field, sex, country/economy, and region: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological/ sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Male .....	3,582,415	1,625,546	178,451	244,449	78,484	499,556	624,616	1,956,869
Asia .....	1,086,137	580,850	47,602	41,341	27,601	265,861	198,445	505,287
Bangladesh (2003) .....	119,532	51,103	13,861	4,709	1,223	30,532	778	68,429
Brunei .....	249	21	11	4	0	6	0	228
Cambodia .....	6,103	1,503	86	950	142	150	175	4,600
Hong Kong .....	12,849	6,454	825	1,762	0	854	3,013	6,395
Japan <sup>a</sup> .....	548,897	351,299	19,727	NA	15,865	217,276	98,431	197,598
Kyrgyzstan .....	14,014	3,460	131	596	365	957	1,411	10,554
Laos .....	1,096	658	27	18	90	340	183	438
Mongolia .....	6,623	2,079	169	245	173	435	1,057	4,544
Philippines .....	142,102	23,054	1,525	11,254	5,547	4,728	0	119,048
South Korea .....	135,067	78,732	7,911	8,198	1,930	7,962	52,731	56,335
Taiwan (2005) .....	99,605	62,487	3,329	13,605	2,266	2,621	40,666	37,118
Middle East .....	319,339	126,983	15,357	17,841	10,456	25,391	57,938	192,356
Bahrain (2003) .....	384	137	10	42	NA	15	70	247
Iran .....	94,933	54,583	5,474	6,046	6,067	7,460	29,536	40,350
Iraq .....	33,021	8,203	725	680	799	339	5,660	24,818
Israel .....	18,547	10,318	1,031	2,280	127	3,070	3,810	8,229
Jordan .....	14,773	6,016	519	2,627	266	586	2,018	8,757
Lebanon .....	8,922	3,315	405	566	56	579	1,709	5,607
Morocco .....	13,322	4,863	1,509	693	0	2,248	413	8,459
Oman .....	1,903	419	34	101	5	35	244	1,484
Palestine .....	4,792	1,289	129	280	46	292	542	3,503
Qatar .....	157	45	2	13	0	5	25	112
Saudi Arabia .....	24,069	4,327	896	1,140	154	1,343	794	19,742
Turkey .....	104,516	33,468	4,623	3,373	2,936	9,419	13,117	71,048
Africa .....	48,276	14,560	2,590	2,005	2,291	3,642	4,032	33,716
Burundi .....	504	163	0	62	40	49	12	341
Eritrea .....	1,074	450	67	72	94	137	80	624
Ethiopia .....	29,270	6,639	738	1,488	1,456	608	2,349	22,631
Gambia .....	402	86	86	0	0	0	0	316
Ghana (2001) .....	5,232	2,227	694	0	294	801	438	3,005
Madagascar (2002) .....	3,095	1,343	476	151	25	513	178	1,752
Mauritius .....	838	568	99	52	5	69	343	270
Mozambique .....	1,859	891	175	74	95	456	91	968
Swaziland .....	470	94	31	0	20	40	3	376
Uganda .....	5,532	2,099	224	106	262	969	538	3,433
Europe .....	741,110	373,963	51,216	66,069	11,852	76,282	168,554	367,147
Austria .....	9,965	4,762	442	907	103	743	2,567	5,203
Belgium .....	11,910	5,504	860	630	261	817	2,936	6,406
Denmark .....	10,647	4,340	386	811	66	787	2,290	6,307
Finland .....	13,385	8,569	463	1,140	440	478	6,048	4,816
France .....	138,765	67,336	14,058	10,372	156	9,651	33,099	71,429
Germany .....	104,279	68,091	5,412	10,278	2,434	26,519	23,448	36,188
Greece .....	10,738	5,690	1,790	1,443	121	1,762	574	5,048
Hungary .....	19,564	6,801	377	921	904	1,325	3,274	12,763
Iceland .....	725	327	36	113	10	73	95	398
Ireland .....	10,672	4,796	830	1,571	127	303	1,965	5,876
Italy .....	111,217	54,798	5,429	3,731	2,068	10,507	33,063	56,419
Netherlands .....	36,724	14,384	1,229	3,376	928	2,872	5,979	22,340
Norway .....	9,480	4,158	103	1,260	71	889	1,835	5,322
Portugal .....	16,637	8,447	946	1,712	285	1,336	4,168	8,190
Spain .....	80,980	38,805	3,426	7,095	2,549	4,453	21,282	42,175
Sweden .....	16,177	10,004	648	1,063	119	1,162	7,012	6,173
Switzerland .....	10,675	4,591	831	886	150	505	2,219	6,084
United Kingdom <sup>b</sup> .....	128,570	62,560	13,950	18,760	1,060	12,100	16,700	66,010
Central/Eastern Europe .....	247,006	104,391	6,376	14,997	6,271	19,062	57,685	142,615
Albania (2003) .....	1,387	363	7	18	164	21	153	1,024

Appendix table 2-39

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**First university degrees, by field, sex, country/economy, and region: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Armenia .....	5,180	576	0	0	107	0	469	4,604
Bulgaria.....	17,529	7,779	411	529	323	2,518	3,998	9,750
Croatia (2003) .....	4,125	1,765	164	276	141	164	1,020	2,360
Czech Republic.....	15,226	7,891	687	1,011	590	404	5,199	7,335
Estonia .....	1,688	782	95	175	51	104	357	906
Georgia .....	10,972	3,960	241	147	422	78	3,072	7,012
Latvia .....	6,068	2,567	124	563	99	702	1,079	3,501
Lithuania .....	8,623	3,980	238	582	170	312	2,678	4,643
Macedonia .....	1,731	669	59	59	71	38	442	1,062
Poland .....	103,723	46,355	2,018	9,604	1,999	11,501	21,233	57,368
Romania.....	56,775	21,525	1,870	928	1,595	2,447	14,685	35,250
Slovak Republic.....	11,415	5,008	372	990	485	422	2,739	6,407
Slovenia .....	2,564	1,171	90	115	54	351	561	1,393
North/Central America .....	809,121	318,714	42,331	71,989	12,818	94,893	96,683	490,407
Belize.....	53	7	3	4	0	0	0	46
Canada.....	54,122	26,270	4,051	5,119	768	8,126	8,206	27,852
Costa Rica.....	9,986	2,997	150	739	137	406	1,565	6,989
Cuba (2001) .....	5,702	1,802	208	155	267	136	1,036	3,900
El Salvador (2003) .....	3,738	916	73	118	148	15	562	2,822
Guatemala (2002).....	2,105	511	24	0	122	40	325	1,594
Mexico .....	132,341	59,255	3,294	15,160	2,986	4,966	32,849	73,086
Panama.....	4,882	1,390	55	258	63	292	722	3,492
United States.....	596,192	225,909	34,816	50,436	8,327	80,912	51,418	370,283
South America .....	267,307	77,082	8,021	19,492	6,370	10,548	32,651	190,225
Argentina (2003) .....	33,346	11,311	876	2,269	1,097	2,040	5,029	22,035
Brazil (2002).....	172,951	50,025	6,048	14,436	3,344	6,804	19,393	122,926
Chile.....	33,815	14,573	1,082	2,241	1,422	1,687	8,141	19,242
Colombia.....	26,800	972	0	483	489	0	0	25,828
Guyana.....	395	201	15	63	18	17	88	194
Oceania.....	64,119	29,003	4,958	10,715	825	3,877	8,628	35,116
Australia.....	53,426	24,733	4,174	9,148	667	3,138	7,606	28,693
New Zealand .....	10,693	4,270	784	1,567	158	739	1,022	6,423
Female .....	4,081,684	1,058,156	192,677	128,065	57,087	507,175	173,162	3,023,528
Asia.....	786,049	226,337	24,857	31,454	17,683	114,732	37,611	559,712
Bangladesh (2003) .....	60,726	23,741	5,044	889	246	17,470	92	36,985
Brunei .....	475	26	7	9	0	10	0	449
Cambodia.....	2,441	248	43	120	23	59	3	2,193
Hong Kong.....	14,480	3,859	725	676	0	1,528	930	10,621
Japan <sup>a</sup> .....	225,872	92,968	5,358	NA	6,771	69,784	11,055	132,904
Kyrgyzstan .....	17,101	3,330	547	637	37	1,530	579	13,771
Laos.....	737	386	14	23	30	290	29	351
Mongolia .....	12,641	2,733	260	265	303	829	1,076	9,908
Philippines.....	208,427	35,036	3,335	15,067	6,217	10,417		173,391
South Korea.....	131,991	40,606	7,900	6,089	1,298	7,676	17,643	91,385
Taiwan (2005) .....	111,158	23,404	1,624	7,679	2,758	5,139	6,204	87,754
Middle East .....	304,441	85,572	21,050	14,563	6,349	31,237	12,373	218,869
Bahrain (2003) .....	1,050	282	44	117	NA	81	40	768
Iran .....	88,837	35,472	9,923	6,284	4,009	11,106	4,150	53,365
Iraq .....	21,375	3,426	881	609	386	231	1,319	17,949
Israel.....	27,760	9,825	1,360	1,091	149	6,041	1,184	17,935
Jordan.....	13,422	4,730	1,102	1,587	369	900	772	8,692
Lebanon.....	10,668	3,257	684	316	52	1,694	511	7,411
Morocco.....	10,331	2,400	946	189	0	1,165	100	7,931
Oman .....	3,125	243	45	151	6	0	41	2,882
Palestine .....	5,434	1,136	256	309	13	263	295	4,298
Qatar.....	511	111	39	44	3	25	0	400
Saudi Arabia.....	38,310	4,365	1,169	1,584	0	1,535	77	33,945
Turkey.....	83,618	20,325	4,601	2,282	1,362	8,196	3,884	63,293

Appendix table 2-39

(Page 3 of 4)

**First university degrees, by field, sex, country/economy, and region: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Africa.....	23,766	4,736	867	765	455	1,979	670	19,030
Burundi.....	176	44	0	12	11	21	0	132
Eritrea.....	180	51	4	13	10	22	2	129
Ethiopia.....	12,093	1,173	44	600	241	126	162	10,920
Gambia.....	68	8	8	0	0	0	0	60
Ghana (2001).....	1,890	724	222	0	68	376	58	1,166
Madagascar (2002).....	2,852	736	295	39	28	323	51	2,116
Mauritius.....	843	486	120	40	5	155	166	357
Mozambique.....	1,019	407	70	17	38	268	14	612
Swaziland.....	556	53	24	0	10	17	2	503
Uganda.....	4,089	1,054	80	44	44	671	215	3,035
Europe.....	1,001,721	268,182	58,819	27,761	11,722	116,423	53,467	733,539
Austria.....	10,323	2,780	538	220	105	1,312	605	7,543
Belgium.....	12,964	3,761	853	136	201	1,743	828	9,203
Denmark.....	18,871	2,429	423	199	78	993	736	16,442
Finland.....	22,923	4,716	724	826	366	1,119	1,681	18,207
France.....	190,019	51,618	15,414	5,241	171	19,984	10,808	138,401
Germany.....	103,523	40,642	6,065	3,907	3,154	23,302	4,214	62,881
Greece.....	18,736	5,962	1,504	972	138	2,873	475	12,774
Hungary.....	33,950	4,839	365	385	836	2,193	1,060	29,111
Iceland.....	1,570	282	68	42	10	123	39	1,288
Ireland.....	15,193	3,252	1,125	647	81	820	579	11,941
Italy.....	153,357	43,969	8,040	2,761	1,272	19,060	12,836	109,388
Netherlands.....	47,470	7,169	875	407	716	4,287	884	40,301
Norway.....	16,104	2,259	108	294	69	1,249	539	13,845
Portugal.....	35,913	9,312	2,074	1,188	484	3,219	2,347	26,601
Spain.....	121,455	28,511	5,446	2,834	1,852	8,873	9,506	92,944
Sweden.....	26,520	7,273	1,095	741	128	2,409	2,900	19,247
Switzerland.....	9,310	2,028	502	121	41	1,024	340	7,282
United Kingdom <sup>b</sup> .....	163,520	47,380	13,600	6,840	2,020	21,840	3,090	116,140
Central/Eastern Europe.....	375,614	92,228	11,838	6,738	6,131	42,368	25,153	283,386
Albania (2003).....	3,529	427	31	45	175	111	65	3,102
Armenia.....	6,518	365	0	0	91	0	274	6,153
Bulgaria.....	24,192	7,837	596	622	233	3,943	2,443	16,355
Croatia (2003).....	6,067	1,371	374	138	136	288	435	4,696
Czech Republic.....	17,900	4,415	889	314	692	853	1,667	13,485
Estonia.....	3,856	878	210	112	75	295	186	2,978
Georgia.....	12,573	2,468	772	162	156	211	1,167	10,105
Latvia.....	14,205	3,305	228	234	65	2,295	483	10,900
Lithuania.....	15,084	3,190	333	366	200	873	1,418	11,894
Macedonia.....	3,104	639	145	103	58	90	243	2,465
Poland.....	174,786	44,232	4,361	3,181	2,760	25,888	8,042	130,554
Romania.....	75,053	18,803	3,200	1,161	1,113	6,045	7,284	56,250
Slovak Republic.....	14,466	3,145	563	268	326	749	1,239	11,321
Slovenia.....	4,281	1,153	136	32	51	727	207	3,128
North/Central America.....	1,084,265	296,894	57,856	33,021	10,688	167,948	27,381	787,371
Belize.....	97	2	1	1	0	0	0	95
Canada.....	83,174	26,931	5,843	2,148	769	15,719	2,452	56,243
Costa Rica.....	16,329	2,588	182	326	71	1,451	558	13,741
Cuba (2001).....	11,067	958	187	64	117	272	318	10,109
El Salvador (2003).....	4,913	449	105	84	25	12	223	4,464
Guatemala (2002).....	1,760	371	58	0	12	214	87	1,389
Mexico.....	144,349	34,603	3,799	9,424	926	10,457	9,997	109,746
Panama.....	11,759	1,580	119	250	54	668	489	10,179
United States.....	810,817	229,939	48,089	20,724	8,714	139,155	13,257	580,878
South America.....	411,198	62,298	11,120	9,681	3,404	24,509	13,584	348,900
Argentina (2003).....	45,881	11,007	1,598	1,598	853	4,604	2,354	34,874
Brazil (2002).....	293,309	42,016	8,491	6,695	1,568	16,631	8,631	251,293

Appendix table 2-39

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**First university degrees, by field, sex, country/economy, and region: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Chile.....	37,687	8,197	1,013	707	672	3,219	2,586	29,490
Colombia.....	33,774	947	0	640	307	0	NA	32,827
Guyana.....	547	131	18	41	4	55	13	416
Oceania.....	94,630	21,909	6,270	4,082	655	7,979	2,923	72,721
Australia.....	76,872	18,251	5,215	3,426	579	6,594	2,437	58,621
New Zealand.....	17,758	3,658	1,055	656	76	1,385	486	14,100

NA = not available

<sup>a</sup>Japanese social science data include business administration.<sup>b</sup>Includes former colleges and polytechnical institutions. Data for United Kingdom rounded to nearest 10. Detail may not add to total because of rounding. Ratios based on unrounded data.

NOTES: Physical/biological sciences include physical, biological, earth, atmospheric, and ocean sciences. Data for first university degrees use International Standard Classification of Education (ISCED 97), level 5A. Long (>5 years) and short (<5 years) first university degrees combined. Sum of male plus female greater than total in appendix table 2-37 in a few countries because this table includes some degrees (mostly non-S&E) >6 years in duration.

SOURCES: Organisation for Economic Co-operation and Development, Education Online Database, <http://www.oecd.org/education/database/>; United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Statistics, special tabulations (2006); Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, Monbusho Survey of Education, special tabulations (2007); Taiwan—Ministry of Education, Educational Statistics of the Republic of China: 2006 (2006); Germany—Federal Statistical Office, Prüfungen an Hochschulen 2004 (2005); United Kingdom—Higher Education Statistics Agency, special tabulations (2007); and United States—National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-40

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**Earned S&E doctoral degree, by selected region, country/economy, and field: 2004 or most recent year**

Location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
All regions .....	285,447	149,601	55,947	8,565	10,288	29,692	45,109	135,846
Asia <sup>a</sup> .....	66,750	34,322	11,744	427	3,644	2,823	15,684	32,428
Armenia .....	331	216	56	0	9	67	84	115
China .....	23,446	14,858	4,518	NA	977	1,309	8,054	8,588
India (2003) .....	13,733	6,318	4,497	NA	1,042	NA	779	7,415
Japan <sup>b</sup> (2005) .....	16,851	7,658	1,543	NA	1,257	943	3,915	9,193
Kyrgyzstan .....	431	206	52	13	4	89	48	225
Mongolia .....	99	30	8	3	10	3	6	69
Philippines .....	1,748	120	12	13	59	36	0	1,628
South Korea .....	7,946	3,531	788	232	203	268	2,040	4,415
Taiwan (2005) .....	2,165	1,385	270	166	83	108	758	780
Middle East <sup>a</sup> .....	16,076	4,918	1,748	367	485	774	1,544	11,158
Iran .....	2,304	478	117	34	75	94	158	1,826
Iraq .....	5,056	1,335	285	86	132	38	794	3,721
Israel .....	1,135	714	426	57	30	114	87	421
Jordan .....	202	35	7	2	21	5	0	167
Lebanon .....	728	26	4	0	0	22	0	702
Morocco .....	2,155	829	542	70	0	183	34	1,326
Oman .....	31	3	2	0	1	0	0	28
Saudi Arabia .....	1,785	221	88	27	5	48	53	1,564
Turkey .....	2,680	1,277	277	91	221	270	418	1,403
Sub-Saharan Africa <sup>a</sup> .....	3,078	1,050	275	121	199	296	159	2,028
Ghana (2000) .....	733	211	71	NA	29	29	82	522
Kenya (2000) .....	1,331	468	182	NA	113	114	59	863
Uganda .....	1,014	371	22	121	57	153	18	643
Europe <sup>a</sup> .....	137,072	71,273	27,452	5,101	3,348	15,876	19,496	65,799
European Union .....	83,188	45,398	20,433	4,514	1,864	8,166	10,421	37,790
Austria .....	2,443	1,107	326	118	42	224	397	1,336
Belgium .....	1,479	906	546	112	47	112	89	573
Denmark .....	788	531	0	100	0	55	376	257
Finland .....	1,863	956	304	75	36	177	364	907
France .....	8,420	5,585	3,366	676	18	746	779	2,835
Germany (2005) .....	25,952	12,194	5,825	1,023	575	2,560	2,211	13,758
Greece .....	1,295	905	573	138	36	39	119	390
Iceland .....	10	5	4	0	0	1	0	5
Ireland .....	683	411	234	31	14	24	108	272
Italy .....	6,351	3,834	1,650	281	276	450	1,177	2,517
Netherlands .....	2,679	1,498	499	0	205	311	483	1,181
Portugal .....	3,963	2,259	601	432	60	587	579	1,704
Spain .....	8,168	3,672	1,856	393	186	634	603	4,496
Sweden .....	3,834	2,385	689	255	49	296	1,096	1,449
United Kingdom <sup>c</sup> .....	15,260	9,150	3,960	880	320	1,950	2,040	6,110
European Free Trade Association .....	3,708	1,406	697	94	73	217	325	2,302
Norway .....	756	124	0	0	41	77	6	632
Switzerland .....	2,952	1,282	697	94	32	140	319	1,670
Central/Eastern Europe .....	50,176	24,469	6,322	493	1,411	7,493	8,750	25,707
Bulgaria .....	392	172	64	13	9	12	74	220
Croatia (2003) .....	314	177	65	10	10	36	56	137
Czech Republic .....	1,732	1,059	307	103	86	95	468	673
Estonia .....	209	71	42	8	1	4	16	138
Georgia .....	481	246	72	0	20	86	68	235
Hungary .....	893	323	152	19	40	76	36	570
Latvia .....	84	47	9	6	5	14	13	37
Lithuania .....	301	173	60	10	7	34	62	128
Macedonia .....	67	30	8	1	0	4	17	37
Poland .....	5,460	908	0	0	0	0	908	4,552
Romania .....	2,680	1,221	151	0	1	379	690	1,459
Russia .....	29,850	16,003	4,442	NA	893	5,910	4,758	13,847



Appendix table 2-40

(Page 2 of 2)

**Earned S&E doctoral degree, by selected region, country/economy, and field: 2004 or most recent year**

Location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Serbia and Montenegro (2001) .....	419	180	35	9	33	6	97	239
Slovak Republic.....	854	430	156	21	36	62	155	424
Slovenia .....	355	230	75	18	6	45	86	125
Ukraine .....	6,085	3,199	684	275	264	730	1,246	2,886
America <sup>a</sup> .....	57,085	35,131	13,499	2,326	2,421	9,288	7,597	21,954
North/Central America .....	48,381	29,950	11,211	2,288	1,387	8,512	6,552	18,431
Canada .....	3,709	2,175	755	149	127	657	487	1,534
Costa Rica.....	30	7	0	0	5	2	0	23
Cuba.....	162	100	58	0	10	4	28	62
Mexico .....	2,325	1,393	436	115	199	382	261	932
United States .....	42,155	26,275	9,962	2,024	1,046	7,467	5,776	15,880
South America.....	8,704	5,181	2,288	38	1,034	776	1,045	3,523
Argentina (2003) .....	422	297	212	24	5	37	19	125
Brazil (2003) .....	8,094	4,726	1,941	NA	1,026	736	1,023	3,368
Chile .....	188	158	135	14	3	3	3	30
Oceania.....	5,386	2,907	1,229	223	191	635	629	2,479
Australia.....	4,763	2,570	1,046	179	190	569	586	2,193
New Zealand.....	623	337	183	44	1	66	43	286

NA = not available

<sup>a</sup>Includes only locations for which relatively recent data available.<sup>b</sup>Includes thesis doctorates, called ronbun hakase, earned by employees in industry.<sup>c</sup>Data rounded to nearest 10. Detail may not add to total because of rounding.

NOTES: Physical/biological sciences include physical, biological, earth, atmospheric, and ocean sciences. Data for doctoral degrees use International Standard Classification of Education (ISCED 97), level 6. S&amp;E data do not include health fields.

SOURCES: Organisation for Economic Co-operation and Development, Education Online Database, <http://www.oecd.org/education/database/>; United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Statistics, special tabulations (2006); China—*China Statistical Yearbook 2005*; India—Department of Science and Technology; Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, Monbusho Survey of Education, special tabulations (2007), and Division of Higher Education, special tabulations (2007); Taiwan—Ministry of Education, Educational Statistics of the Republic of China: 2006 (2006); Germany—Federal Statistical Office, Prüfungen an Hochschulen 2004 (2005); United Kingdom—Higher Education Statistics Agency, special tabulations (2007); Russia—State University Higher School of Economics, special tabulations (2007); Brazil—Ministry of Science and Technology, Indicadores Nacionais de Ciência e Tecnologia, <http://www.mct.gov.br/index.php/content/view/7787.html>, accessed 3 April 2007; Canada—Statistics Canada, special tabulations (2007); and United States—National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

Appendix table 2-41

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**Earned S&E doctoral degrees, by selected region, country/economy, sex, and field: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Male .....	130,221	74,972	26,106	6,210	4,314	12,179	26,163	55,249
Asia .....	19,927	10,352	2,156	315	1,113	1,193	5,575	9,575
Japan <sup>a</sup> .....	11,384	6,051	1,311	NA	845	878	3,017	5,333
Kyrgyzstan .....	194	94	24	6	2	40	22	100
Philippines .....	677	57	3	11	31	12	0	620
South Korea .....	6,019	2,962	611	158	178	189	1,826	3,057
Taiwan (2005) .....	1,653	1,188	207	140	57	74	710	465
Middle East .....	10,108	3,344	1,059	257	325	496	1,207	6,764
Iran .....	1,744	428	97	26	72	83	150	1,316
Iraq .....	3,434	984	153	50	104	27	650	2,450
Israel .....	566	398	238	41	13	46	60	168
Morocco .....	1,440	553	338	54	0	132	29	887
Saudi Arabia .....	1,263	171	69	21	5	30	46	1,092
Turkey .....	1,661	810	164	65	131	178	272	851
Sub-Saharan Africa .....	2,160	792	214	99	154	183	142	1,368
Ghana (2001) .....	740	194	68	0	28	24	74	546
Kenya (2000) .....	747	341	127	3	88	71	52	406
Uganda .....	673	257	19	96	38	88	16	416
Europe .....	68,383	39,882	15,027	3,628	1,714	6,146	13,367	28,501
European Union .....	47,354	28,547	11,732	3,410	1,073	4,278	8,054	18,807
Austria .....	1,454	737	180	108	24	102	323	717
Belgium .....	978	629	376	92	31	59	71	349
Denmark .....	505	379	0	74	0	34	271	126
Finland .....	947	570	148	58	25	68	271	377
France .....	4,906	3,492	1,957	534	8	416	577	1,414
Germany .....	15,680	8,491	3,736	833	350	1,632	1,940	7,189
Greece .....	801	615	365	116	20	20	94	186
Ireland .....	371	240	120	25	7	11	77	131
Italy .....	3,120	2,038	715	173	132	208	810	1,082
Netherlands .....	1,623	997	311	0	135	181	370	626
Portugal .....	1,797	1,111	236	261	25	216	373	686
Spain .....	4,290	1,997	873	276	115	298	435	2,293
Sweden .....	2,202	1,591	395	180	31	173	812	611
United Kingdom <sup>b</sup> .....	8,680	5,660	2,320	680	170	860	1,630	3,020
European Free Trade Association .....	2,319	939	454	78	42	108	257	1,380
Norway .....	455	64	0	0	23	38	3	391
Switzerland .....	1,864	875	454	78	19	70	254	989
Central/Eastern Europe .....	18,710	10,396	2,841	140	599	1,760	5,056	8,314
Armenia .....	226	157	30	0	3	47	77	69
Bulgaria .....	193	89	28	6	4	6	45	104
Croatia (2003) .....	163	95	26	3	5	17	44	68
Czech Republic .....	1,116	740	181	86	60	44	369	376
Estonia .....	79	39	25	3	1	0	10	40
Georgia .....	225	138	26	0	12	43	57	87
Hungary .....	510	198	101	14	27	32	24	312
Latvia .....	35	21	2	5	0	6	8	14
Lithuania .....	128	81	21	6	3	10	41	47
Poland .....	2,897	689	0	0	0	0	689	2,208
Romania .....	1,359	733	82	0	1	158	492	626
Russia (1998) .....	11,309	7,156	2,241	NA	460	1,364	3,091	4,153
Slovak Republic .....	470	260	78	17	23	33	109	210
America .....	26,764	18,891	6,985	1,746	887	3,884	5,389	7,873
Canada .....	2,124	1,395	503	122	85	273	412	729
Chile .....	125	107	89	13	1	2	2	18
Cuba .....	97	60	35	0	6	2	17	37
Mexico .....	1,442	924	257	92	151	216	208	518
United States .....	22,976	16,405	6,101	1,519	644	3,391	4,750	6,571
Oceania .....	2,879	1,711	665	165	121	277	483	1,168

Appendix table 2-41

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**Earned S&E doctoral degrees, by selected region, country/economy, sex, and field: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
Australia.....	2,561	1,530	570	137	121	256	446	1,031
New Zealand.....	318	181	95	28	0	21	37	137
Female.....	88,661	38,936	16,960	2,117	2,271	11,531	6,057	49,725
Asia.....	7,523	2,186	524	109	365	562	626	5,337
Japan <sup>a</sup> .....	3,776	1,245	247	NA	284	376	338	2,531
Kyrgyzstan.....	237	112	28	7	2	49	26	125
Philippines.....	1,071	63	9	2	28	24	0	1,008
South Korea.....	1,927	569	177	74	25	79	214	1,358
Taiwan (2005).....	512	197	63	26	26	34	48	315
Middle East.....	5,007	1,510	676	108	138	251	337	3,497
Iran.....	560	50	20	8	3	11	8	510
Iraq.....	1,622	351	132	36	28	11	144	1,271
Israel.....	569	316	188	16	17	68	27	253
Morocco.....	715	276	204	16	0	51	5	439
Saudi Arabia.....	522	50	19	6	0	18	7	472
Turkey.....	1,019	467	113	26	90	92	146	552
Sub-Saharan Africa.....	1,432	516	51	121	81	229	34	916
Ghana (2001).....	64	17	3	0	1	5	8	47
Kenya (2000).....	354	128	26	0	23	71	8	226
Uganda.....	1,014	371	22	121	57	153	18	643
Europe.....	50,498	22,369	10,800	1,170	1,123	5,516	3,760	28,129
European Union.....	35,814	16,846	8,697	1,104	791	3,887	2,367	18,968
Austria.....	989	370	146	10	18	122	74	619
Belgium.....	501	277	170	20	16	53	18	224
Denmark.....	283	152	0	26	0	21	105	131
Finland.....	916	386	156	17	11	109	93	530
France.....	3,514	2,093	1,409	142	10	330	202	1,421
Germany.....	10,272	3,703	2,089	190	225	928	271	6,569
Greece.....	494	290	208	22	16	19	25	204
Ireland.....	312	171	114	6	7	13	31	141
Italy.....	3,231	1,796	935	108	144	242	367	1,435
Netherlands.....	1,056	501	188	0	70	130	113	555
Portugal.....	2,166	1,148	365	171	35	371	206	1,018
Spain.....	3,878	1,675	983	117	71	336	168	2,203
Sweden.....	1,632	794	294	75	18	123	284	838
United Kingdom <sup>b</sup> .....	6,570	3,490	1,640	200	150	1,090	410	3,080
European Free Trade Association.....	1,389	467	243	16	31	109	68	922
Norway.....	301	60	0	0	18	39	3	241
Switzerland.....	1,088	407	243	16	13	70	65	681
Central/Eastern Europe.....	13,295	5,056	1,860	50	301	1,520	1,325	8,239
Armenia.....	105	59	26	0	6	20	7	46
Bulgaria.....	199	83	36	7	5	6	29	116
Croatia (2003).....	151	82	39	7	5	19	12	69
Czech Republic.....	616	319	126	17	26	51	99	297
Estonia.....	130	32	17	5	0	4	6	98
Georgia.....	256	108	46	0	8	43	11	148
Hungary.....	383	125	51	5	13	44	12	258
Latvia.....	49	26	7	1	5	8	5	23
Lithuania.....	173	92	39	4	4	24	21	81
Poland.....	2,563	219	0	0	0	0	219	2,344
Romania.....	1,321	488	69	0	0	221	198	833
Russia (1998).....	6,965	3,253	1,326	NA	216	1,051	660	3,712
Slovak Republic.....	384	170	78	4	13	29	46	214
America.....	21,694	11,159	4,345	551	494	4,615	1,154	10,535
Canada.....	1,585	780	252	27	42	384	75	805
Chile.....	63	51	46	1	2	1	1	12
Cuba.....	65	40	23	0	4	2	11	25
Mexico.....	883	469	179	23	48	166	53	414

Appendix table 2-41

(Page 3 of 3)

**Earned S&E doctoral degrees, by selected region, country/economy, sex, and field: 2004 or most recent year**

Sex/location	All fields	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
United States.....	19,098	9,819	3,845	500	398	4,062	1,014	9,279
Oceania.....	2,507	1,196	564	58	70	358	146	1,311
Australia.....	2,202	1,040	476	42	69	313	140	1,162
New Zealand.....	305	156	88	16	1	45	6	149

NA = not available

<sup>a</sup>Male/female breakouts for number completing doctoral degree coursework in S&E field; number very close to conferred degrees.<sup>b</sup>Data rounded to nearest 10.

NOTES: Physical/biological sciences include physical; biological; and earth, atmospheric, and ocean sciences. Data for doctoral degrees use International Standard Classification of Education (ISCED 97), level 6. S&amp;E data do not include health fields.

SOURCES: Organisation for Economic Co-operation and Development, Education Online Database, <http://www.oecd.org/education/database/>; United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Statistics, special tabulations (2006); Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, Monbusho Survey of Education (2006); Taiwan—Ministry of Education, Educational Statistics of the Republic of China: 2005 (2005); Germany—Federal Statistical Office, Prüfungen an Hochschulen 2004 (2005); United Kingdom—Higher Education Statistics Agency, special tabulations (2007); Canada—Statistics Canada, special tabulations (2007); and United States—National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.*Science and Engineering Indicators 2008*

Appendix table 2-42

**S&E doctoral degrees, by selected Western industrialized country and field: Selected years, 1985–2005**

Country/field	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004	2005
Germany.....	14,951	16,064	17,901	22,462	22,000	22,387	24,174	24,545	24,671	24,796	23,838	23,043	23,138	25,952
All S&E.....	5,738	6,576	7,568	10,465	10,200	10,889	11,728	11,984	11,895	11,803	11,017	10,796	10,661	12,194
Physical/biological sciences.....	2,986	3,440	4,095	5,326	5,700	5,868	6,418	6,271	6,123	5,974	5,521	5,251	5,249	5,825
Mathematics/computer sciences.....	274	294	383	418	500	663	785	980	968	956	898	998	936	1,023
Agricultural sciences.....	414	468	518	709	500	507	521	522	497	472	448	501	538	575
Social/behavioral sciences.....	968	1,068	1,200	1,483	1,400	1,741	1,775	1,982	2,082	2,181	1,915	2,013	1,937	2,560
Engineering.....	1,096	1,306	1,372	2,529	2,100	2,110	2,229	2,229	2,225	2,220	2,235	2,033	2,001	2,211
United Kingdom.....	6,210	6,840	7,850	8,390	8,720	7,560	10,210	11,340	11,550	14,120	14,210	14,870	15,260	15,780
All S&E.....	4,610	5,020	5,820	6,300	6,100	5,130	6,770	7,390	7,180	8,520	8,520	8,810	9,150	9,390
Physical/biological sciences.....	2,410	2,580	2,940	3,150	3,030	2,580	3,420	3,670	3,570	4,310	4,380	3,780	3,960	4,040
Mathematics/computer sciences.....	280	320	420	540	530	450	590	680	660	770	760	750	880	960
Agricultural sciences.....	160	190	240	250	280	270	320	330	270	270	340	300	320	310
Social/behavioral sciences.....	690	730	880	910	740	500	680	910	970	1,170	1,180	1,970	1,950	2,070
Engineering.....	1,070	1,190	1,350	1,450	1,520	1,330	1,760	1,810	1,710	2,010	1,860	2,020	2,040	2,020
United States.....	31,295	32,365	34,325	37,530	39,800	41,747	42,535	41,092	41,361	40,651	39,953	40,740	42,117	43,354
All S&E.....	18,934	19,892	21,732	24,019	25,443	26,535	27,229	25,931	25,966	25,496	24,582	25,274	26,272	27,974
Physical/biological sciences.....	7,284	7,650	8,032	9,055	9,494	9,916	10,338	9,866	9,925	9,717	9,564	9,665	9,963	10,728
Mathematics/computer sciences.....	998	1,189	1,471	1,838	2,026	2,187	2,032	1,939	1,910	1,832	1,726	1,859	2,024	2,339
Agricultural sciences.....	1,152	1,005	1,154	1,108	1,036	1,117	1,078	1,065	1,037	975	1,009	1,060	1,045	1,038
Social/behavioral sciences.....	6,334	6,336	6,532	6,805	7,189	7,307	7,667	7,731	7,771	7,464	7,206	7,411	7,465	7,465
Engineering.....	3,166	3,712	4,543	5,213	5,698	6,008	6,114	5,330	5,323	5,508	5,077	5,279	5,775	6,404

NOTES: Physical/biological sciences include physical; biological; and earth, atmospheric, and ocean sciences. Data for doctoral degrees use International Standard Classification of Education (ISCED 97), level 6. S&E data do not include health fields. German doctoral degrees include former East Germany from 1990 and thereafter. Data for United Kingdom rounded to nearest 10.

SOURCES: Germany—Federal Statistical Office, Prüfungen an Hochschulen (annual series); United Kingdom—Higher Education Statistics Agency, special tabulations (2007); United States—National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.

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Appendix table 2-44

**Trends in population ages 20–24 years, by selected country and region: 1980–2050**

(Thousands)

Year	Western Europe	Eastern Europe	Africa	South America	United States	China	India	Japan
1980.....	13,293	25,952	41,724	22,796	21,836	86,837	62,367	7,907
1985.....	14,302	23,191	48,273	26,217	21,711	107,746	70,281	8,190
1990.....	13,897	20,617	55,585	27,593	19,420	128,517	78,331	8,800
1995.....	11,858	22,236	64,834	29,169	18,633	121,960	85,654	9,898
2000.....	10,767	23,572	75,505	32,381	19,119	98,187	89,020	8,597
2005.....	11,308	24,444	87,835	34,659	20,901	100,115	101,182	7,542
2010.....	11,540	23,554	98,302	35,012	22,417	116,599	109,275	6,611
2015.....	10,928	17,321	106,960	35,028	23,151	101,426	114,682	6,072
2020.....	10,650	13,840	115,612	35,745	22,469	94,026	115,922	6,133
2025.....	10,275	13,948	127,375	36,290	23,023	83,266	115,887	5,952
2030.....	9,881	14,470	139,738	36,487	23,732	83,815	116,204	5,809
2035.....	9,849	14,011	150,859	36,008	24,016	88,688	115,797	5,525
2040.....	9,996	12,973	158,960	35,344	24,019	87,163	113,229	5,223
2045.....	10,070	11,735	165,509	34,624	23,890	80,309	108,452	5,067
2050.....	10,041	11,025	171,544	33,772	24,130	74,541	102,484	5,075

SOURCES: United Nations Secretariat, World Population Prospects: The 2004 Revision; Department of Economic and Social Affairs, Population Division; and World Urbanization Prospects: The 2003 Revision, <http://esa.un.org/unpp>, accessed 19 October 2006.

Science and Engineering Indicators 2008

Appendix table 2-45

**Foreign S&E student enrollment in UK universities, by enrollment level, place of origin, and field: Academic years 1995 and 2006**

Enrollment level/place of origin	All S&E fields	Physical/ biological/ agricultural sciences	Mathematics/ computer sciences	Social/ behavioral sciences	Engineering
<b>1995</b>					
All undergraduates .....	393,040	131,370	69,730	79,260	112,690
All foreign.....	34,530	7,770	4,270	6,550	15,940
Greece.....	3,830	720	610	570	1,920
Malaysia.....	3,760	170	490	400	2,700
Irish Republic.....	3,110	1,300	340	220	1,260
Germany.....	2,660	1,010	210	640	800
France.....	2,640	880	270	470	1,010
Hong Kong.....	2,200	220	410	470	1,110
Singapore.....	1,990	140	200	260	1,390
United States.....	1,220	520	50	560	90
Canada.....	160	90	20	40	20
China.....	150	10	20	10	110
Other.....	12,820	2,730	1,660	2,910	5,530
Foreign (%).....	8.8	5.9	6.1	8.3	14.1
All graduates.....	99,980	35,270	15,170	22,890	26,650
All foreign.....	28,850	8,100	3,490	8,010	9,260
Greece.....	2,410	580	460	500	870
Malaysia.....	1,570	320	200	220	820
Irish Republic.....	1,040	490	110	170	280
Germany.....	1,290	390	200	340	360
France.....	950	290	80	190	400
Hong Kong.....	1,030	90	190	400	360
Singapore.....	570	80	150	90	250
United States.....	1,090	240	70	670	110
Canada.....	600	140	40	320	110
China.....	1,330	410	140	120	660
Other.....	16,970	5,070	1,870	4,990	5,040
Foreign (%).....	28.9	23.0	23.0	35.0	34.7
<b>2006</b>					
All undergraduates .....	536,310	149,140	123,410	166,040	97,720
All foreign.....	55,950	8,990	12,560	15,210	19,200
China.....	8,590	890	2,850	2,450	2,400
Malaysia.....	3,380	270	500	320	2,280
France.....	3,080	530	480	620	1,450
Greece.....	2,890	300	650	600	1,330
Irish Republic.....	2,890	930	240	630	1,090
Hong Kong.....	2,680	540	580	770	790
Germany.....	2,160	500	290	950	410
Cyprus.....	1,840	360	590	420	470
Nigeria.....	1,800	170	460	370	800
India.....	1,690	190	360	240	900
Other.....	24,950	4,310	5,560	7,840	7,280
Foreign (%).....	10.4	6.0	10.2	9.2	19.6
All graduates.....	156,020	39,370	29,170	48,500	38,980
All foreign.....	67,630	13,250	14,530	18,460	21,400
China.....	10,090	1,120	2,850	2,010	4,120
India.....	6,410	1,210	2,150	530	2,520
Greece.....	5,260	880	1,090	1,290	2,000
United States.....	3,100	600	240	2,000	270
Pakistan.....	2,670	200	1,060	240	1,170
Nigeria.....	2,530	470	700	440	930
Germany.....	2,370	580	400	860	530
France.....	2,240	660	350	390	840
Irish Republic.....	1,800	540	190	600	470
Malaysia.....	1,740	270	310	170	990
Other.....	29,420	6,720	5,190	9,930	7,560
Foreign (%).....	43.3	33.6	49.8	38.1	54.9

UK = United Kingdom

NOTES: Academic year 1995 is enrollment between 1 August 1994 and 31 July 1995. Academic year 2006 is enrollment between 1 August 2005 and 31 July 2006. Data rounded to nearest 10. Detail may not add to total because of rounding. Percentages based on unrounded data. Physical sciences include earth, atmospheric, and ocean sciences.

SOURCE: Higher Education Statistics Agency, special tabulations (2007).



Appendix table 2-46

**Foreign S&E student enrollment in Japanese universities, by enrollment level, place of origin, and field: 2005**

Enrollment level/place of origin	All fields	All S&E fields	Physical/ biological sciences	Agricultural sciences	Social/ behavioral sciences	Engineering	Non-S&E
All undergraduates.....	2,504,885	1,508,689	85,502	71,664	925,988	425,535	996,196
Foreign.....	68,889	41,171	668	591	33,400	6,512	27,718
China.....	46,196	30,007	396	364	25,676	3,571	16,189
Korea.....	13,081	6,875	208	100	5,313	1,254	6,206
Malaysia.....	1,335	1,190	14	18	156	1,002	145
Vietnam.....	777	540	13	10	321	196	237
Thailand.....	639	380	4	28	267	81	259
Mongolia.....	468	315	0	11	272	32	153
Indonesia.....	462	257	1	11	172	73	205
Sri Lanka.....	229	143	0	1	107	35	86
Nepal.....	198	135	3	4	104	24	63
United States.....	1,555	133	6	0	125	2	1,422
Other.....	3,949	1,196	23	44	887	242	2,753
Foreign (%).....	2.8	2.7	0.8	0.8	3.6	1.5	2.8
All graduates.....	240,890	140,071	20,285	13,021	27,566	79,199	100,819
Master's.....	165,525	107,918	14,007	8,636	20,047	65,228	57,607
Doctoral.....	75,365	32,153	6,278	4,385	7,519	13,971	43,212
Foreign.....	31,915	18,141	917	2,051	8,292	6,881	13,774
China.....	17,566	9,898	325	754	5,702	3,117	7,668
Korea.....	4,322	2,121	101	192	855	973	2,201
Indonesia.....	908	660	70	130	109	351	248
Vietnam.....	778	585	25	92	188	280	193
Bangladesh.....	811	541	67	152	78	244	270
Thailand.....	866	537	22	139	123	253	329
Malaysia.....	433	332	10	26	71	225	101
Philippines.....	393	279	34	60	84	101	114
Myanmar.....	295	185	14	43	74	54	110
India.....	268	179	28	39	35	77	89
Other.....	5,275	2,824	221	424	973	1,206	2,451
Foreign (%).....	13.2	13.0	4.5	15.8	30.1	8.7	13.7

NOTES: Data for students of non-Japanese citizenship, including permanent residents. Undergraduates include 4-year colleges and universities. Engineering includes computer sciences. Physical sciences includes earth, atmospheric, and ocean sciences and mathematics. Business and law included with social and behavioral sciences.

SOURCE: Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, special tabulations.

Appendix table 2-47

**S&E student enrollment in Canadian universities, by enrollment level, top place of origin, and field: 1994 and 2004**

Enrollment level/place of origin	All S&E fields	Physical/ biological sciences	Mathematics/ computer sciences	Agricultural sciences	Social/ behavioral sciences	Engineering
<b>1994</b>						
Undergraduate.....	282,180	63,470	27,120	10,730	130,380	50,490
Foreign.....	13,670	2,530	2,780	340	4,330	3,690
Hong Kong.....	2,270	240	750	40	800	440
United States.....	920	290	50	20	440	120
Malaysia.....	720	90	180	10	140	290
France.....	510	80	50	20	210	160
Lebanon.....	380	50	90	0	70	170
Morocco.....	290	30	60	10	50	140
Singapore.....	260	30	60	0	130	40
Haiti.....	210	20	40	10	80	60
China.....	190	40	90	0	30	20
Tunisia.....	180	20	40	10	50	70
Other.....	7,750	1,640	1,370	230	2,320	2,190
Foreign (%).....	4.8	4.0	10.2	3.2	3.3	7.3
Graduate.....	48,170	12,290	4,800	2,940	15,590	12,550
Foreign.....	10,600	2,790	1,310	760	2,330	3,410
China.....	1,550	530	260	70	170	530
Iran.....	650	120	40	40	40	410
United States.....	520	160	40	20	230	70
France.....	510	140	40	40	180	120
India.....	510	90	90	30	50	260
Morocco.....	330	120	70	10	40	90
Algeria.....	220	60	40	10	30	90
Tunisia.....	190	30	40	0	40	80
Brazil.....	150	40	10	20	30	50
Hong Kong.....	140	20	40	0	40	40
Other.....	5,810	1,490	650	520	1,500	1,670
Foreign (%).....	22.0	22.7	27.3	25.8	14.9	27.1
<b>2004</b>						
Undergraduate.....	344,340	79,560	32,550	10,340	155,120	66,770
Foreign.....	24,290	3,980	4,610	510	8,440	6,750
China.....	3,700	500	1,060	70	1,320	750
United States.....	2,480	600	160	120	1,320	280
France.....	1,130	140	110	30	590	260
Morocco.....	1,070	80	200	10	150	630
India.....	620	90	130	10	110	290
Hong Kong.....	560	90	130	10	230	110
South Korea.....	550	170	80	10	200	90
Lebanon.....	480	70	100	0	80	230
Pakistan.....	470	50	140	0	120	160
Bangladesh.....	380	40	140	10	60	130
Other.....	12,850	2,150	2,360	240	4,260	3,820
Foreign (%).....	7.1	5.0	14.2	4.9	5.4	10.1
Graduate.....	66,880	15,890	7,960	4,080	20,090	18,860
Foreign.....	15,650	3,050	2,330	860	3,340	6,070
China.....	3,010	520	670	70	430	1,310
France.....	1,340	440	100	110	390	300
United States.....	780	230	110	40	280	120
India.....	710	80	110	40	60	420
Iran.....	710	90	80	20	40	490
Morocco.....	550	80	120	20	90	250
Algeria.....	400	50	110	20	30	200
Romania.....	390	100	60	10	80	140
Tunisia.....	340	30	80	10	80	140
Bangladesh.....	330	20	50	0	30	220
Other.....	7,090	1,420	840	520	1,820	2,490
Foreign (%).....	23.4	19.2	29.3	21.2	16.6	32.2

NOTES: Data rounded to nearest 10. Detail may not add to total because of rounding. Physical sciences include earth, atmospheric, and ocean sciences. Engineering includes architecture; social/behavioral sciences include law.

SOURCE: Statistics Canada, Center for Education Statistics, special tabulations (2007).

Appendix table 2-48

**S&E student enrollment in Australian universities, by enrollment level and field: 2005**

Enrollment level/place of origin	All S&E fields	Natural/ physical sciences	Mathematics/ computer sciences	Agricultural sciences	Society/ culture	Engineering
Undergraduate.....	329,643	62,681	44,022	12,319	160,257	50,364
Foreign .....	47,887	7,773	17,488	416	10,217	11,993
Foreign (%).....	14.5	12.4	39.7	3.4	6.4	23.8
Graduate.....	101,644	13,320	20,377	4,929	48,018	15,000
Foreign .....	32,474	3,123	13,513	992	8,042	6,804
Foreign (%).....	31.9	23.4	66.3	20.1	16.7	45.4

NOTES: Natural/physical sciences include mathematics; biological sciences; physical sciences; and earth, atmospheric, and ocean sciences. Society/culture includes social sciences, psychology, social work, law, library science, humanities, and sport and recreation.

SOURCE: Department of Education, Science and Training, Australia, [http://www.dest.gov.au/sectors/higher\\_education/publications\\_resources/statistics/publications\\_higher\\_education\\_statistics\\_collections.htm#studpubs](http://www.dest.gov.au/sectors/higher_education/publications_resources/statistics/publications_higher_education_statistics_collections.htm#studpubs), accessed 6 April 2007.

Appendix table 2-49

**Doctoral degrees earned by foreign students, by selected industrialized country and field:  
2005 or most recent year**

Country and field	All	Foreign	
		Number	Percent
Germany.....	22,402	3,556	15.9
S&E.....	9,778	2,417	24.7
Physical/biological sciences .....	4,481	1,345	30.0
Mathematics/computer sciences.....	836	187	22.4
Agricultural sciences .....	376	199	52.9
Social/behavioral sciences .....	2,290	270	11.8
Engineering.....	1,795	416	23.2
Non-S&E .....	12,624	1,139	9.0
Japan <sup>a</sup> .....	16,851	1,478	8.8
S&E.....	7,658	792	10.3
Physical/biological sciences .....	1,543	87	5.6
Mathematics/computer sciences.....	NA	NA	NA
Agricultural sciences .....	1,257	228	18.1
Social/behavioral sciences .....	943	133	14.1
Engineering.....	3,915	344	8.8
Non-S&E .....	9,193	686	7.5
United Kingdom <sup>b</sup> .....	16,520	6,650	40.2
S&E.....	9,760	4,100	42.0
Physical/biological sciences .....	3,980	1,190	30.0
Mathematics/computer sciences.....	1,160	570	49.4
Agricultural sciences .....	320	150	46.9
Social/behavioral sciences .....	2,100	840	39.9
Engineering.....	2,200	1,340	61.0
Non-S&E .....	6,750	2,550	37.7
United States.....	43,354	14,424	33.3
S&E.....	27,974	11,516	41.2
Physical/biological sciences .....	10,728	3,868	36.1
Mathematics/computer sciences.....	2,339	1,330	56.9
Agricultural sciences .....	1,038	445	42.9
Social/behavioral sciences .....	7,465	1,834	24.6
Engineering.....	6,404	4,039	63.1
Non-S&E .....	15,380	2,908	18.9

NA = not available

<sup>a</sup>University-based doctorates only, excluding *ronbun hakase* doctorates awarded for research within industry. Natural sciences include mathematics; engineering includes computer sciences.<sup>b</sup>Data rounded to nearest 10. Detail may not add to total because of rounding. Percentages based on unrounded data.

NOTES: Physical/biological sciences include physical, biological, earth, atmospheric, and ocean sciences. Data for doctoral degrees use International Standard Classification of Education (ISCED 97), level 6. S&amp;E data do not include health fields. For each country, data for doctoral degree recipients with foreign citizenship, including permanent and temporary residents.

SOURCES: Germany—Federal Statistical Office, *Prüfungen an Hochschulen 2005* (2006); Japan—Government of Japan, Ministry of Education, Culture, Sports, Science and Technology, special tabulations (2007); United Kingdom—Higher Education Statistics Agency, special tabulations (2007); and United States—National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, Integrated Science and Engineering Resources Data System (WebCASPAR), <http://webcaspar.nsf.gov>.