

Appendix table 2-6

Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1983–2004

(Percent distribution)

(Page 1 of 4)

Sex, race/ethnicity, and field	1983	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004
All intending S&E major	35.0	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
Physical sciences	2.2	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
Biological/agricultural sciences.....	5.7	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
Mathematics/statistics.....	1.2	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
Computer sciences.....	7.7	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
Social/behavioral sciences.....	6.7	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
Engineering.....	11.5	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
Male.....	46.2	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
Physical sciences.....	3.1	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
Biological/agricultural sciences.....	6.8	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
Mathematics/statistics.....	1.2	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
Computer sciences.....	9.4	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
Social/behavioral sciences.....	5.8	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
Engineering.....	19.9	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
Female.....	25.0	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
Physical sciences.....	1.3	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
Biological/agricultural sciences.....	4.8	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
Mathematics/statistics.....	1.1	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
Computer sciences.....	6.2	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
Social/behavioral sciences.....	7.8	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
Engineering.....	3.8	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
White.....	34.5	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
Physical sciences.....	2.4	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
Biological/agricultural sciences.....	5.5	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
Mathematics/statistics.....	1.2	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
Computer sciences.....	7.0	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
Social/behavioral sciences.....	6.8	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
Engineering.....	11.6	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
Male.....	45.8	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
Physical sciences.....	3.4	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
Biological/agricultural sciences.....	6.3	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
Mathematics/statistics.....	1.3	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
Computer sciences.....	9.1	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
Social/behavioral sciences.....	5.6	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
Engineering.....	20.1	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
Female.....	23.5	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
Physical sciences.....	1.3	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
Biological/agricultural sciences.....	4.5	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
Mathematics/statistics.....	1.2	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
Computer sciences.....	5.1	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
Social/behavioral sciences.....	7.8	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
Engineering.....	3.6	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

Appendix table 2-6

Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1983–2004

(Percent distribution)

Sex, race/ethnicity, and field	1983	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004
Asian American	52.6	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
Physical sciences	3.9	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
Biological/agricultural sciences	11.0	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
Mathematics/statistics	1.7	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
Computer sciences	8.8	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
Social/behavioral sciences	5.6	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
Engineering	21.6	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
Male	63.6	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
Physical sciences	4.9	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
Biological/agricultural sciences	12.1	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
Mathematics/statistics	1.3	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
Computer sciences	9.0	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
Social/behavioral sciences	3.9	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
Engineering	32.4	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
Female	40.8	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
Physical sciences	2.7	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
Biological/agricultural sciences	10.0	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
Mathematics/statistics	2.0	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
Computer sciences	8.5	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
Social/behavioral sciences	7.6	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
Engineering	10.0	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
Black	35.0	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
Physical sciences	1.1	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
Biological/agricultural sciences	4.2	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
Mathematics/statistics	0.6	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
Computer sciences	13.3	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
Social/behavioral sciences	7.0	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
Engineering	8.8	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
Male	41.3	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
Physical sciences	1.3	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
Biological/agricultural sciences	4.9	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
Mathematics/statistics	0.8	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
Computer sciences	13.5	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
Social/behavioral sciences	5.3	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
Engineering	15.5	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
Female	30.1	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
Physical sciences	0.9	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
Biological/agricultural sciences	3.5	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
Mathematics/statistics	0.4	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
Computer sciences	13.3	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
Social/behavioral sciences	7.9	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
Engineering	4.1	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

Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1983–2004

(Percent distribution)

Sex, race/ethnicity, and field	1983	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004
Mexican American/Chicano and														
Puerto Rican American	37.6	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
Physical sciences	1.5	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
Biological/agricultural sciences	7.3	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
Mathematics/statistics	1.1	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
Computer sciences	6.9	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
Social/behavioral sciences	8.5	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
Engineering	12.3	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
Male	43.0	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
Physical sciences	2.2	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
Biological/agricultural sciences	6.7	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
Mathematics/statistics	1.4	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
Computer sciences	7.2	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
Social/behavioral sciences	6.5	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
Engineering	19.0	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
Female	32.2	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
Physical sciences	0.8	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
Biological/agricultural sciences	7.9	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
Mathematics/statistics	0.8	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
Computer sciences	6.5	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
Social/behavioral sciences	10.2	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
Engineering	6.0	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
Other Latino	NA	NA	NA	NA	NA	38.0	39.5	38.2	37.2	35.2	36.6	35.4	37.6	38.3
Physical sciences	NA	NA	NA	NA	NA	2.0	1.4	1.8	1.3	1.3	1.4	1.6	1.7	1.9
Biological/agricultural sciences	NA	NA	NA	NA	NA	9.5	10.9	9.4	7.6	7.6	7.9	7.8	8.4	9.1
Mathematics/statistics	NA	NA	NA	NA	NA	0.2	0.5	0.4	0.4	0.3	0.4	0.7	0.6	0.9
Computer sciences	NA	NA	NA	NA	NA	2.2	3.5	4.4	5.0	5.7	4.4	2.5	2.4	1.8
Social/behavioral sciences	NA	NA	NA	NA	NA	13.1	12.7	11.9	13.1	12.7	13.4	13.9	14.6	14.4
Engineering	NA	NA	NA	NA	NA	11.0	10.5	10.3	9.8	7.6	9.1	8.9	9.9	10.2
Male	NA	NA	NA	NA	NA	40.4	44.5	43.9	45.4	43.9	45.5	42.2	43.8	45.1
Physical sciences	NA	NA	NA	NA	NA	1.8	2.0	2.2	1.9	1.8	2.1	2.0	2.1	2.7
Biological/agricultural sciences	NA	NA	NA	NA	NA	8.7	8.3	7.9	5.3	6.8	7.1	6.9	6.4	7.4
Mathematics/statistics	NA	NA	NA	NA	NA	0.3	0.6	0.6	0.4	0.3	0.5	0.9	0.8	1.1
Computer sciences	NA	NA	NA	NA	NA	2.9	5.8	7.2	9.4	11.2	8.7	4.8	4.7	3.4
Social/behavioral sciences	NA	NA	NA	NA	NA	9.0	9.0	7.6	9.7	8.5	9.0	10.0	10.6	10.5
Engineering	NA	NA	NA	NA	NA	17.7	18.8	18.4	18.7	15.3	18.1	17.6	19.2	20.0
Female	NA	NA	NA	NA	NA	35.4	35.8	33.3	31.3	29.9	30.3	31.1	33.1	33.8
Physical sciences	NA	NA	NA	NA	NA	2.0	1.2	1.3	1.1	0.9	0.9	1.5	1.4	1.6
Biological/agricultural sciences	NA	NA	NA	NA	NA	9.9	13.2	10.6	9.4	8.5	8.3	8.3	9.7	10.4
Mathematics/statistics	NA	NA	NA	NA	NA	0.2	0.5	0.3	0.3	0.3	0.3	0.6	0.5	0.7
Computer sciences	NA	NA	NA	NA	NA	1.5	1.5	2.1	1.7	2.1	1.6	0.9	0.8	0.7
Social/behavioral sciences	NA	NA	NA	NA	NA	17.0	16.1	15.1	15.5	15.3	16.4	16.6	17.5	17.0
Engineering	NA	NA	NA	NA	NA	4.8	3.3	3.9	3.3	2.8	2.8	3.2	3.2	3.4

Appendix table 2-6

Freshmen intending S&E major, by sex, race/ethnicity, and field: Selected years, 1983–2004

(Percent distribution)

(Page 4 of 4)

Sex, race/ethnicity, and field	1983	1985	1987	1989	1991	1993	1995	1997	1999	2000	2001	2002	2003	2004
American Indian	31.3	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
Physical sciences	2.2	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
Biological/agricultural sciences	4.8	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
Mathematics/statistics	0.6	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
Computer sciences	8.7	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
Social/behavioral sciences	6.0	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
Engineering	9.0	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
Male	35.2	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
Physical sciences	3.6	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
Biological/agricultural sciences	6.2	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
Mathematics/statistics	0.6	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
Computer sciences	4.5	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
Social/behavioral sciences	5.5	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
Engineering	14.8	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
Female	18.9	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
Physical sciences	1.0	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
Biological/agricultural sciences	3.7	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
Mathematics/statistics	0.7	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
Computer sciences	3.7	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
Social/behavioral sciences	6.1	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
Engineering	3.7	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

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 (2005).

Science and Engineering Indicators 2006