

Appendix table 2-16

**Freshmen intending S&E major, by field, sex, and race or ethnicity: 1998–2012**

(Percent)

Field, sex, and race or ethnicity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
All intending S&E major	32.0	33.7	33.1	33.5	33.5	32.6	33.1	30.9	32.0	31.9	34.7	36.2	38.4	40.1	39.2
Physical sciences	1.8	1.9	1.8	1.9	2.0	2.0	2.3	2.8	2.3	2.4	2.4	2.5	2.7	2.8	2.5
Biological/agricultural sciences	8.1	8.2	7.5	7.5	7.8	7.7	8.3	8.1	8.8	9.1	9.8	10.4	11.6	11.4	12.9
Mathematics/statistics/computer sciences	5.2	5.7	5.9	5.4	3.8	3.1	2.7	2.0	2.4	2.5	2.3	2.5	2.4	2.6	3.1
Social/behavioral sciences	8.7	8.9	9.2	9.6	10.4	10.5	10.2	9.6	10.5	10.4	10.9	11.1	11.4	11.3	10.4
Engineering	8.2	9.0	8.7	9.1	9.5	9.3	9.6	8.4	8.0	7.5	9.3	9.7	10.3	12.0	10.3
Male	39.1	42.4	41.4	42.2	41.2	39.6	40.8	37.0	37.9	37.3	41.1	43.4	44.1	47.0	45.8
Physical sciences	2.2	2.4	2.3	2.4	2.4	2.5	2.9	2.7	2.8	2.9	3.1	3.3	3.4	3.4	3.1
Biological/agricultural sciences	7.4	7.3	6.5	6.5	6.6	6.7	7.4	7.2	8.1	8.2	8.8	9.7	10.0	9.9	10.8
Mathematics/statistics/computer sciences	8.6	9.8	10.1	9.5	6.8	5.6	5.1	4.0	3.9	4.4	4.0	4.1	4.0	4.3	5.2
Social/behavioral sciences	6.2	6.4	6.6	7.1	7.5	7.7	7.5	7.5	8.6	8.1	8.2	8.7	8.8	8.4	8.4
Engineering	14.7	16.5	15.9	16.7	17.9	17.1	17.9	15.6	14.5	13.7	17.0	17.6	17.9	21.0	18.3
Female	26.4	26.8	26.2	26.7	26.7	26.2	26.3	27.0	27.2	27.7	29.5	30.3	33.3	34.8	33.5
Physical sciences	1.5	1.5	1.5	1.5	1.6	1.7	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.1	1.9
Biological/agricultural sciences	8.8	9.0	7.9	8.3	8.5	8.5	9.0	8.7	9.6	9.7	10.4	11.0	12.4	12.8	14.3
Mathematics/statistics/computer sciences	2.5	2.4	2.5	2.2	1.6	1.1	1.0	1.5	1.0	1.1	1.1	1.1	1.1	1.2	1.4
Social/behavioral sciences	10.9	11.0	11.3	11.7	12.0	12.0	11.5	12.3	12.1	12.3	12.8	12.8	13.6	14.5	12.0
Engineering	2.7	2.9	3.0	3.0	3.0	2.9	2.9	2.6	2.5	2.6	3.1	3.3	4.0	4.2	3.9
White or Caucasian	30.6	31.8	30.7	31.8	31.3	30.1	30.2	29.1	29.6	29.3	32.9	34.0	37.0	38.3	37.0
Physical sciences	1.9	2.0	2.0	2.1	2.1	2.1	2.3	2.4	2.5	2.5	2.6	2.8	2.8	2.9	2.6
Biological/agricultural sciences	7.9	8.0	6.7	7.1	7.1	6.5	7.1	7.1	7.6	7.7	8.6	9.0	10.8	10.5	11.8
Mathematics/statistics/computer sciences	4.5	4.8	5.0	4.7	3.6	3.1	2.7	2.3	2.3	2.4	2.3	2.4	2.3	2.7	2.8
Social/behavioral sciences	8.4	8.5	8.7	9.0	9.3	9.5	9.1	9.3	9.5	9.5	9.8	10.1	10.6	10.3	9.4
Engineering	7.9	8.5	8.3	8.9	9.2	8.9	9.0	8.0	7.7	7.2	9.6	9.7	10.5	11.9	10.4
Male	38.8	40.1	39.8	41.0	39.8	38.5	38.9	36.1	36.6	35.8	40.2	41.5	43.8	46.6	44.0
Physical sciences	2.5	2.4	2.5	2.5	2.8	2.8	3.0	3.0	3.0	3.3	3.3	3.7	3.6	3.6	3.5
Biological/agricultural sciences	7.7	7.3	6.2	6.3	6.4	6.0	6.7	6.7	7.2	7.3	8.0	8.3	10.0	9.4	9.8
Mathematics/statistics/computer sciences	7.8	8.4	9.1	8.4	6.4	5.6	4.9	4.0	4.0	4.2	3.8	3.9	3.8	4.3	4.5
Social/behavioral sciences	6.0	6.3	6.6	7.0	7.2	7.7	7.3	7.5	8.1	7.9	7.8	8.3	8.4	8.1	8.2
Engineering	14.8	15.7	15.4	16.8	17.0	16.4	17.0	14.9	14.3	13.1	17.3	17.3	18.0	21.2	18.0
Female	24.2	24.8	24.0	24.1	23.8	23.8	23.8	23.1	24.0	24.7	26.2	27.6	31.1	31.5	30.6
Physical sciences	1.5	1.6	1.5	1.5	1.5	1.6	1.9	1.8	1.9	2.0	2.0	2.1	2.4	2.3	2.0
Biological/agricultural sciences	8.4	8.8	7.7	7.6	7.6	7.4	7.7	7.3	8.0	8.3	9.0	9.5	11.2	11.7	13.2
Mathematics/statistics/computer sciences	1.8	1.7	1.7	1.4	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.2	1.1	1.3	1.2
Social/behavioral sciences	10.1	10.3	10.6	11.1	11.0	11.2	10.6	11.0	10.9	11.1	11.3	11.6	12.4	12.2	10.5
Engineering	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.0	2.2	2.3	2.9	3.2	4.0	4.0	3.7
Asian American or Asian <sup>a</sup>	45.4	48.3	45.3	43.2	43.8	44.5	46.1	42.3	45.7	44.7	46.6	50.4	49.0	48.6	52.7
Physical sciences	2.0	1.5	1.4	1.7	1.9	2.2	2.3	2.2	2.7	2.6	2.8	2.9	3.0	2.7	2.8
Biological/agricultural sciences	11.8	11.2	10.5	10.5	12.2	15.0	16.8	15.8	18.5	17.8	17.7	19.5	18.3	17.3	20.3
Mathematics/statistics/computer sciences	10.2	13.8	12.1	10.3	5.6	4.0	3.1	2.4	2.5	3.0	3.0	2.9	3.4	3.9	5.6
Social/behavioral sciences	6.7	6.4	6.9	7.0	7.8	8.4	8.4	8.1	10.0	9.0	9.5	10.0	9.6	9.1	9.0

Appendix table 2-16

**Freshmen intending S&E major, by field, sex, and race or ethnicity: 1998–2012**

(Percent)

Field, sex, and race or ethnicity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Engineering	14.7	15.4	14.4	13.7	16.3	14.9	15.5	13.8	12.0	12.3	13.6	15.1	14.7	15.6	15.0
Male	55.4	60.4	56.8	54.6	55.3	53.6	54.3	49.6	50.8	50.6	52.7	56.7	54.5	55.5	60.0
Physical sciences	2.1	1.7	1.6	1.8	2.1	2.5	2.4	2.7	3.0	2.9	3.1	3.2	3.3	3.2	3.2
Biological/agricultural sciences	10.3	9.0	8.7	8.5	10.5	13.4	14.8	14.4	16.5	16.0	15.6	17.6	16.2	15.3	17.8
Mathematics/statistics/computer sciences	15.1	20.4	18.8	16.4	9.3	6.5	4.7	3.7	3.7	4.8	4.9	4.2	4.8	5.6	8.4
Social/behavioral sciences	4.2	4.5	5.0	5.4	5.7	6.2	6.6	5.9	8.0	7.1	7.2	8.1	7.6	6.7	7.2
Engineering	23.7	24.9	22.8	22.6	27.8	25.2	25.9	23.0	19.7	19.9	22.0	23.6	22.7	24.7	23.4
Female	35.9	35.8	35.1	33.0	33.9	36.6	37.9	36.0	41.0	39.4	40.6	44.1	43.1	42.3	45.4
Physical sciences	1.8	1.2	1.3	1.5	1.6	1.9	2.0	2.2	2.8	2.4	2.3	2.6	2.6	2.5	2.5
Biological/agricultural sciences	13.2	13.4	12.0	12.1	14.0	16.7	18.6	17.4	20.0	19.7	20.0	21.1	19.9	19.0	22.5
Mathematics/statistics/computer sciences	5.6	7.1	6.2	4.9	2.5	1.8	1.4	1.1	1.4	1.5	1.3	1.6	1.9	2.1	2.9
Social/behavioral sciences	9.1	8.1	8.6	8.5	9.6	10.5	10.2	10.2	11.8	10.6	11.5	11.6	11.5	11.3	10.5
Engineering	6.2	6.0	7.0	6.0	6.2	5.7	5.7	5.1	5.0	5.2	5.5	7.2	7.2	7.4	7.0
African American or black	35.1	37.1	37.5	35.0	35.5	33.6	34.4	32.1	33.6	33.8	32.8	35.7	36.5	36.4	36.4
Physical sciences	1.2	1.0	1.2	1.0	1.3	1.3	1.6	1.8	1.6	1.5	1.6	1.8	1.8	2.0	1.6
Biological/agricultural sciences	7.3	8.0	7.8	7.7	8.4	8.6	9.6	8.7	9.3	9.7	9.8	11.2	10.9	10.9	12.5
Mathematics/statistics/computer sciences	9.3	9.1	9.0	7.8	5.3	3.9	3.9	3.2	2.8	3.5	2.8	2.9	3.1	2.2	3.2
Social/behavioral sciences	11.2	11.3	10.9	12.3	11.9	12.1	11.4	11.5	12.7	12.8	12.5	13.3	13.3	11.9	11.6
Engineering	6.1	7.7	8.6	6.2	8.6	7.7	7.9	6.9	7.2	6.3	6.1	6.5	7.4	9.4	7.5
Male	37.4	42.0	42.1	37.5	40.3	36.4	38.1	34.3	35.7	34.6	33.6	37.1	39.4	40.0	37.8
Physical sciences	1.4	1.2	1.3	1.0	1.3	1.3	1.6	1.8	1.6	1.8	1.8	1.5	2.2	2.2	1.7
Biological/agricultural sciences	5.6	6.1	6.0	5.6	5.8	5.5	7.4	6.6	6.9	7.0	7.0	9.0	8.2	8.2	8.6
Mathematics/statistics/computer sciences	13.4	14.0	13.1	12.6	8.6	6.9	6.8	5.5	4.5	5.4	4.9	4.8	5.4	3.6	5.8
Social/behavioral sciences	7.1	7.4	6.4	7.3	8.1	7.8	7.1	7.2	8.4	8.2	8.1	9.4	9.0	8.2	8.1
Engineering	9.9	13.3	15.3	11.0	16.5	14.9	15.2	13.2	14.3	12.2	11.8	12.4	14.6	17.8	13.6
Female	33.6	34.5	34.2	33.3	32.6	31.4	31.9	30.3	31.9	33.8	32.3	34.5	35.3	34.5	35.4
Physical sciences	0.9	1.1	1.1	1.1	1.3	1.4	1.7	1.7	1.6	1.5	1.6	2.0	1.7	2.0	1.5
Biological/agricultural sciences	8.4	9.2	8.7	9.0	10.2	10.2	11.2	10.0	11.1	11.6	11.3	12.7	12.8	12.8	15.0
Mathematics/statistics/computer sciences	6.7	6.0	6.2	4.7	3.1	2.1	2.0	1.6	1.6	2.0	1.4	1.5	1.6	1.3	1.4
Social/behavioral sciences	14.1	13.9	13.8	15.2	14.1	14.5	14.1	14.1	15.3	16.1	15.4	15.9	16.0	14.6	14.3
Engineering	3.5	4.3	4.4	3.3	3.9	3.2	2.9	2.9	2.3	2.6	2.6	2.4	3.2	3.8	3.2
Hispanic or Latino <sup>b</sup>	33.7	37.0	34.1	34.4	36.4	35.8	38.0	34.2	36.8	34.8	38.2	39.7	40.7	43.8	41.6
Physical sciences	1.1	1.0	1.1	1.2	1.6	1.6	1.6	1.4	1.8	1.4	1.6	1.8	1.9	1.9	1.6
Biological/agricultural sciences	8.2	8.3	7.3	7.6	8.2	8.1	9.8	8.0	10.1	9.5	10.0	11.0	11.7	12.7	12.9
Mathematics/statistics/computer sciences	4.8	4.7	4.8	4.6	3.2	3.0	2.8	1.9	2.1	2.2	1.9	1.7	2.2	2.0	2.9
Social/behavioral sciences	10.6	11.1	12.6	11.6	14.0	13.6	13.1	13.5	15.8	14.6	15.6	15.3	15.6	16.2	14.1
Engineering	9.0	11.9	8.3	9.4	9.4	9.5	10.7	9.4	7.0	7.1	9.1	9.9	9.3	11.0	10.1
Male	38.9	45.3	42.5	42.8	42.7	41.8	45.3	39.4	41.3	38.8	41.7	47.2	44.4	48.1	48.4
Physical sciences	1.6	1.0	1.4	1.4	1.8	2.1	1.9	1.4	2.4	1.6	2.1	2.6	2.3	2.3	2.3
Biological/agricultural sciences	7.2	6.7	7.5	6.8	7.2	6.3	8.1	6.6	9.6	9.1	9.0	10.9	9.7	10.9	10.9
Mathematics/statistics/computer sciences	6.3	8.1	8.6	8.5	5.9	5.4	5.1	3.5	4.3	3.6	3.2	2.9	3.5	3.3	5.2

Appendix table 2-16

**Freshmen intending S&E major, by field, sex, and race or ethnicity: 1998–2012**

(Percent)

Field, sex, and race or ethnicity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Social/behavioral sciences	7.1	7.1	7.9	7.9	8.8	8.8	9.0	8.0	10.8	9.8	9.3	11.2	10.7	10.7	9.8
Engineering	16.7	22.4	17.1	18.2	19.0	19.2	21.2	19.9	14.2	14.7	18.1	19.6	18.2	20.9	20.2
Female	29.0	29.8	28.2	28.4	32.0	31.9	33.4	30.6	34.0	32.2	36.1	35.3	38.1	40.7	37.1
Physical sciences	0.7	0.7	1.0	1.1	1.5	1.1	1.3	1.1	1.5	1.3	1.2	1.5	1.7	1.7	1.1
Biological/agricultural sciences	8.7	9.7	7.3	8.1	9.3	9.6	10.9	8.8	10.7	9.8	10.9	11.4	12.9	14.1	14.1
Mathematics/statistics/computer sciences	3.4	2.0	2.1	1.9	1.3	1.2	1.3	0.8	0.8	1.2	1.1	1.0	1.2	1.1	1.3
Social/behavioral sciences	13.4	14.1	15.7	14.6	17.3	17.1	16.6	17.3	18.7	17.9	19.9	18.2	19.1	20.2	17.2
Engineering	2.8	3.3	2.1	2.7	2.6	2.9	3.3	2.6	2.3	2.0	3.0	3.2	3.2	3.6	3.4
American Indian or Alaska Native <sup>c</sup>	28.5	34.6	30.7	34.7	30.6	30.1	28.4	31.8	35.9	36.3	27.6	25.0	26.6	33.6	33.0
Physical sciences	2.4	1.1	3.8	1.8	1.2	1.1	1.2	1.9	2.8	2.0	2.7	1.4	1.9	3.3	1.7
Biological/agricultural sciences	7.1	11.7	6.5	8.2	8.7	7.2	8.3	12.1	13.3	11.1	8.0	8.6	8.9	10.5	12
Mathematics/statistics/computer sciences	5.0	5.5	4.1	6.3	2.9	2.9	3.2	3.3	0.8	4.1	2.0	2.1	0.6	2.3	0.8
Social/behavioral sciences	9.0	11.8	8.7	9.3	8.8	12.5	8.6	8.3	8.6	9.9	6.7	8.1	9.6	11.7	9.9
Engineering	5.0	4.5	7.6	9.1	9.0	6.4	7.1	6.2	10.4	9.2	8.2	4.8	5.6	5.8	8.6
Male	36.8	43.0	36.7	44.3	39.2	35.7	34.5	34.8	44.5	46.8	33.1	30.1	31.4	41.7	37.8
Physical sciences	1.1	1.5	4.7	1.8	2.3	0.4	1.3	2.0	3.2	2.8	1.9	0.6	3.0	4.7	2.9
Biological/agricultural sciences	7.1	11.3	6.3	7.5	7.2	7.1	8.4	13.2	8.2	11.8	6.9	10.4	7.5	13.3	13.0
Mathematics/statistics/computer sciences	8.9	10.1	6.8	11.0	5.7	6.4	5.0	3.9	1.6	7.7	2.6	3.9	1.3	4.2	0.3
Social/behavioral sciences	9.9	11.8	5.1	6.4	7.3	8.0	7.0	4.0	9.5	6.9	6.5	7.2	8.4	10.0	9.0
Engineering	9.8	8.3	13.8	17.6	16.7	13.8	12.8	11.7	22.0	17.6	15.2	8.0	11.2	9.5	12.6
Female	22.0	28.0	24.6	27.5	23.9	25.9	24.0	29.9	29.8	29.0	22.7	21.5	23.6	27.9	28.2
Physical sciences	3.3	0.8	2.6	1.7	0.3	1.6	1.1	1.9	2.6	1.5	3.1	2.0	1.2	2.4	0.5
Biological/agricultural sciences	7.3	11.8	6.3	8.9	10.1	7.5	8.2	11.5	16.7	10.6	8.6	7.5	10.2	8.4	10.9
Mathematics/statistics/computer sciences	1.9	2.0	1.7	2.6	0.6	0.3	1.9	2.8	0.2	1.7	1.6	0.8	0.1	0.9	1.3
Social/behavioral sciences	8.2	11.8	11.5	11.7	10.4	15.4	9.6	12.1	7.9	11.8	6.8	8.9	10.5	13.0	10.6
Engineering	1.3	1.6	2.5	2.6	2.5	1.1	3.2	1.6	2.4	3.4	2.6	2.3	1.6	3.2	4.9

<sup>a</sup> In 1997, the Asian American or Asian category was broken out into six categories: Chinese American or Chinese, Filipino American or Filipino, Japanese American or Japanese, Korean American or Korean, South East Asian American (Vietnamese, Laotian, Cambodian, etc.), and other Asian American or Asian. In 1998, the Asian American or Asian category used in prior years was restored. In 2001, Native Hawaiian or Pacific Islander was added as a category under Asian American or Asian.

<sup>b</sup> Hispanic or Latino includes Mexican American or Chicano, Puerto Rican, and other Latino.

<sup>c</sup> The category American Indian was changed to American Indian or Alaska Native in 2001.

NOTES: Physical sciences include physics; chemistry; astronomy; and earth, atmospheric, and ocean sciences. Detail does not add to total because students may check more than one race or 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 (2013).