

TABLE 2-2b

**Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2020**

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
All surveyed fields	697,813	48.4	414,478	51.2	283,335	44.3	65,681	41.8	29,661	41.8
U.S. citizens and permanent residents <sup>a</sup>	487,051	53.0	314,305	54.9	172,746	49.5	29,890	47.9	na	na
Hispanic or Latino	62,679	56.6	43,750	58.7	18,929	51.9	2,027	52.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	2,042	60.1	1,284	60.1	758	60.0	72	65.3	na	na
Asian	53,094	48.5	35,075	48.5	18,019	48.7	5,696	45.2	na	na
Black or African American	41,916	62.4	30,842	63.0	11,074	60.5	1,081	61.4	na	na
Native Hawaiian or Other Pacific Islander	778	57.7	578	56.9	200	60.0	52	57.7	na	na
White	284,055	51.5	175,090	53.7	108,965	48.1	17,123	47.5	na	na
More than one race	17,579	54.9	11,069	56.4	6,510	52.4	555	53.5	na	na
Unknown ethnicity and race	24,908	51.6	16,617	54.4	8,291	46.0	3,284	45.9	na	na
Temporary visa holders	210,762	37.9	100,173	39.8	110,589	36.2	35,791	36.7	na	na
Engineering	157,729	27.0	86,450	26.5	71,279	27.6	8,462	24.8	3,921	23.0
U.S. citizens and permanent residents <sup>a</sup>	84,403	27.3	53,643	25.6	30,760	30.3	2,793	30.4	na	na
Hispanic or Latino	9,644	28.1	6,704	26.6	2,940	31.6	152	29.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	239	38.1	160	38.1	79	38.0	8	75.0	na	na
Asian	12,020	30.8	7,628	28.8	4,392	34.1	708	29.7	na	na
Black or African American	4,583	31.7	2,952	29.6	1,631	35.4	68	41.2	na	na
Native Hawaiian or Other Pacific Islander	101	26.7	71	21.1	30	40.0	4	25.0	na	na
White	50,847	25.6	31,783	23.9	19,064	28.5	1,513	30.5	na	na
More than one race	3,143	31.8	1,949	29.7	1,194	35.3	59	32.2	na	na
Unknown ethnicity and race	3,826	27.3	2,396	26.0	1,430	29.7	281	27.8	na	na
Temporary visa holders	73,326	26.7	32,807	28.1	40,519	25.5	5,669	22.1	na	na
Aerospace, aeronautical, and astronautical engineering	6,971	17.9	4,326	17.6	2,645	18.6	233	15.5	149	16.8
U.S. citizens and permanent residents <sup>a</sup>	5,300	18.1	3,752	17.6	1,548	19.4	78	21.8	na	na
Hispanic or Latino	532	16.4	416	14.9	116	21.6	4	0.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	14	21.4	10	30.0	4	0.0	0	-	na	na
Asian	608	20.1	425	21.2	183	17.5	17	23.5	na	na
Black or African American	163	25.2	115	25.2	48	25.0	0	-	na	na
Native Hawaiian or Other Pacific Islander	10	20.0	5	20.0	5	20.0	0	-	na	na
White	3,552	17.6	2,479	16.8	1,073	19.5	46	21.7	na	na
More than one race	233	19.7	158	21.5	75	16.0	1	0.0	na	na

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(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Unknown ethnicity and race	188	18.6	144	17.4	44	22.7	10	30.0	na	na
Temporary visa holders	1,671	17.4	574	17.4	1,097	17.3	155	12.3	na	na
Biological, biomedical, and biosystems engineering	12,775	45.0	4,536	47.0	8,239	43.9	1,696	35.8	525	36.8
U.S. citizens and permanent residents <sup>a</sup>	8,890	45.4	3,303	46.2	5,587	44.9	726	39.8	na	na
Hispanic or Latino	956	47.3	383	50.1	573	45.4	39	46.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	22	68.2	7	42.9	15	80.0	3	66.7	na	na
Asian	1,690	46.0	688	47.4	1,002	45.1	201	39.8	na	na
Black or African American	450	51.6	188	52.1	262	51.1	30	46.7	na	na
Native Hawaiian or Other Pacific Islander	14	35.7	4	0.0	10	50.0	0	-	na	na
White	4,953	43.9	1,713	44.0	3,240	43.8	386	38.9	na	na
More than one race	399	50.9	153	47.1	246	53.3	17	64.7	na	na
Unknown ethnicity and race	406	44.1	167	48.5	239	41.0	50	28.0	na	na
Temporary visa holders	3,885	44.2	1,233	49.2	2,652	41.9	970	32.8	na	na
Chemical, petroleum, and chemical-related engineering	10,554	31.8	2,942	30.7	7,612	32.3	1,157	27.7	330	26.4
U.S. citizens and permanent residents <sup>a</sup>	5,285	32.2	1,676	32.0	3,609	32.3	358	33.5	na	na
Hispanic or Latino	506	33.6	199	28.6	307	36.8	20	40.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	16	31.3	4	25.0	12	33.3	1	100.0	na	na
Asian	821	36.5	261	36.8	560	36.4	76	25.0	na	na
Black or African American	255	41.2	112	42.9	143	39.9	7	71.4	na	na
Native Hawaiian or Other Pacific Islander	4	25.0	1	0.0	3	33.3	1	0.0	na	na
White	3,281	30.2	952	30.1	2,329	30.2	209	34.4	na	na
More than one race	205	31.7	69	29.0	136	33.1	10	40.0	na	na
Unknown ethnicity and race	197	34.0	78	34.6	119	33.6	34	32.4	na	na
Temporary visa holders	5,269	31.4	1,266	29.1	4,003	32.2	799	25.2	na	na
Civil, environmental, transportation and related engineering fields	18,304	34.8	10,819	35.3	7,485	34.1	1,006	28.1	488	24.2
U.S. citizens and permanent residents <sup>a</sup>	9,801	38.2	7,339	36.5	2,462	43.3	339	33.3	na	na
Hispanic or Latino	1,391	39.0	1,103	36.6	288	47.9	19	31.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	46	43.5	36	50.0	10	20.0	1	0.0	na	na

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(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Asian	1,060	40.5	817	38.9	243	45.7	76	36.8	na	na
Black or African American	509	35.8	347	34.6	162	38.3	5	40.0	na	na
Native Hawaiian or Other Pacific Islander	17	29.4	14	28.6	3	33.3	2	0.0	na	na
White	5,962	37.7	4,413	36.0	1,549	42.5	189	33.9	na	na
More than one race	347	44.4	261	42.9	86	48.8	9	22.2	na	na
Unknown ethnicity and race	469	35.8	348	33.0	121	43.8	38	28.9	na	na
Temporary visa holders	8,503	30.9	3,480	32.7	5,023	29.6	667	25.5	na	na
Electrical, electronics, communications and computer engineering	43,032	21.9	25,312	23.3	17,720	19.8	1,302	16.7	706	16.1
U.S. citizens and permanent residents <sup>a</sup>	17,078	17.2	11,749	16.8	5,329	17.9	360	19.4	na	na
Hispanic or Latino	1,918	15.6	1,460	16.0	458	14.4	22	13.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	35	31.4	28	35.7	7	14.3	0	-	na	na
Asian	3,302	22.7	2,346	21.9	956	24.8	108	13.0	na	na
Black or African American	974	19.7	674	18.4	300	22.7	6	16.7	na	na
Native Hawaiian or Other Pacific Islander	8	12.5	7	14.3	1	0.0	0	-	na	na
White	9,316	14.6	6,217	14.4	3,099	14.9	167	20.4	na	na
More than one race	595	21.0	434	19.1	161	26.1	6	16.7	na	na
Unknown ethnicity and race	930	20.6	583	19.6	347	22.5	51	33.3	na	na
Temporary visa holders	25,954	24.9	13,563	29.0	12,391	20.5	942	15.6	na	na
Industrial, manufacturing, systems engineering and operations research	14,869	30.1	11,030	29.8	3,839	31.0	194	18.6	155	20.0
U.S. citizens and permanent residents <sup>a</sup>	8,301	29.3	6,877	29.3	1,424	29.5	58	17.2	na	na
Hispanic or Latino	1,120	33.4	1,024	33.3	96	34.4	2	50.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	19	52.6	17	52.9	2	50.0	0	-	na	na
Asian	975	34.1	798	34.6	177	31.6	8	0.0	na	na
Black or African American	623	32.7	488	31.6	135	37.0	2	50.0	na	na
Native Hawaiian or Other Pacific Islander	17	23.5	16	25.0	1	0.0	0	-	na	na
White	4,879	26.8	4,011	26.9	868	26.7	40	15.0	na	na
More than one race	246	33.3	196	31.6	50	40.0	1	0.0	na	na
Unknown ethnicity and race	422	27.7	327	27.2	95	29.5	5	40.0	na	na
Temporary visa holders	6,568	31.1	4,153	30.6	2,415	31.9	136	19.1	na	na

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	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Mechanical engineering	25,782	18.2	14,305	16.8	11,477	20.0	1,149	17.8	469	16.6
U.S. citizens and permanent residents <sup>a</sup>	14,362	20.0	9,557	18.5	4,805	23.0	332	18.7	na	na
Hispanic or Latino	1,818	19.1	1,262	17.4	556	22.8	18	11.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	38	26.3	24	33.3	14	14.3	0	-	na	na
Asian	1,800	23.0	1,220	20.3	580	28.6	99	18.2	na	na
Black or African American	561	24.8	336	22.6	225	28.0	4	25.0	na	na
Native Hawaiian or Other Pacific Islander	9	11.1	8	12.5	1	0.0	0	-	na	na
White	8,990	18.9	5,986	17.7	3,004	21.4	166	18.1	na	na
More than one race	538	25.3	341	23.5	197	28.4	7	0.0	na	na
Unknown ethnicity and race	608	20.4	380	20.3	228	20.6	38	28.9	na	na
Temporary visa holders	11,420	16.0	4,748	13.5	6,672	17.8	817	17.4	na	na
Metallurgical, mining, materials and related engineering fields	7,181	31.9	2,299	32.9	4,882	31.4	630	21.6	299	22.4
U.S. citizens and permanent residents <sup>a</sup>	3,943	34.2	1,494	35.7	2,449	33.2	169	33.1	na	na
Hispanic or Latino	423	36.4	160	43.1	263	32.3	9	33.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	9	33.3	4	25.0	5	40.0	3	100.0	na	na
Asian	536	39.4	198	35.4	338	41.7	48	35.4	na	na
Black or African American	168	44.0	65	53.8	103	37.9	3	66.7	na	na
Native Hawaiian or Other Pacific Islander	4	75.0	2	100.0	2	50.0	0	-	na	na
White	2,502	31.5	945	32.7	1,557	30.8	95	31.6	na	na
More than one race	166	38.6	66	45.5	100	34.0	3	0.0	na	na
Unknown ethnicity and race	135	37.0	54	33.3	81	39.5	8	12.5	na	na
Temporary visa holders	3,238	29.2	805	27.7	2,433	29.6	461	17.4	na	na
Other engineering	18,261	27.3	10,881	27.3	7,380	27.3	1,095	23.9	800	23.4
U.S. citizens and permanent residents <sup>a</sup>	11,443	26.4	7,896	25.8	3,547	28.0	373	30.0	na	na
Hispanic or Latino	980	29.0	697	29.0	283	29.0	19	21.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	40	35.0	30	26.7	10	60.0	0	-	na	na
Asian	1,228	29.6	875	30.1	353	28.3	75	40.0	na	na
Black or African American	880	32.3	627	30.5	253	36.8	11	18.2	na	na
Native Hawaiian or Other Pacific Islander	18	27.8	14	14.3	4	75.0	1	100.0	na	na

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	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
White	7,412	24.8	5,067	23.8	2,345	26.9	215	30.7	na	na
More than one race	414	30.4	271	31.7	143	28.0	5	20.0	na	na
Unknown ethnicity and race	471	24.2	315	24.1	156	24.4	47	17.0	na	na
Temporary visa holders	6,818	28.8	2,985	31.4	3,833	26.8	722	20.8	na	na

- = not calculable. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

<sup>a</sup> Ethnicity and race data are available only for U.S. citizens and permanent residents.

**Note(s):**

"Field" refers to the field of the unit that reports postdoctorates and doctorate-holding nonfaculty researchers to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see technical table A-17.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2020.