

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023

(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	818,095	48.4	510,866	49.4	307,229	46.7	65,850	43.1	34,342	43.2
U.S. citizens and permanent residents ^a	495,808	54.8	313,609	56.1	182,199	52.5	27,701	48.3	na	na
Hispanic or Latino	70,428	58.0	48,099	59.9	22,329	54.1	2,352	53.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	61.7	1,211	62.1	773	61.2	111	55.0	na	na
Asian	62,549	49.9	40,930	49.6	21,619	50.4	5,631	44.3	na	na
Black or African American	46,276	63.4	31,764	63.6	14,512	62.9	1,230	57.7	na	na
Native Hawaiian or Other Pacific Islander	754	55.4	544	56.1	210	53.8	57	47.4	na	na
White	269,477	53.6	163,247	55.4	106,230	51.0	14,585	48.3	na	na
More than one race	20,004	56.1	12,120	56.4	7,884	55.7	694	53.5	na	na
Unknown ethnicity and race	24,336	52.1	15,694	52.8	8,642	50.9	3,041	46.7	na	na
Temporary visa holders	322,287	38.6	197,257	38.7	125,030	38.3	38,149	39.4	na	na
Engineering	175,559	28.2	100,567	26.9	74,992	29.9	9,051	28.0	4,575	24.3
U.S. citizens and permanent residents ^a	83,469	29.1	51,528	26.5	31,941	33.3	2,916	33.1	na	na
Hispanic or Latino	10,604	29.0	7,204	26.7	3,400	33.9	202	37.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	221	35.3	138	33.3	83	38.6	13	30.8	na	na
Asian	13,441	33.3	8,305	31.1	5,136	37.0	790	27.2	na	na
Black or African American	4,730	34.1	2,894	30.5	1,836	39.7	102	49.0	na	na
Native Hawaiian or Other Pacific Islander	80	35.0	50	36.0	30	33.3	1	100.0	na	na
White	46,915	27.2	28,366	24.5	18,549	31.3	1,396	33.4	na	na
More than one race	3,628	33.2	2,191	30.6	1,437	37.2	79	51.9	na	na
Unknown ethnicity and race	3,850	27.4	2,380	25.2	1,470	31.1	333	34.2	na	na
Temporary visa holders	92,090	27.3	49,039	27.3	43,051	27.3	6,135	25.5	na	na
Aerospace, aeronautical, and astronautical engineering	8,264	19.9	5,380	19.9	2,884	19.9	254	18.5	166	17.5
U.S. citizens and permanent residents ^a	6,227	19.4	4,422	19.0	1,805	20.6	80	21.3	na	na
Hispanic or Latino	778	18.6	588	19.7	190	15.3	2	*	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	13	23.1	7	14.3	6	33.3	0	-	na	na
Asian	907	21.6	669	21.5	238	21.8	18	5.6	na	na
Black or African American	181	22.7	117	17.9	64	31.3	1	*	na	na
Native Hawaiian or Other Pacific Islander	8	25.0	6	16.7	2	50.0	0	-	na	na
White	3,873	18.7	2,712	18.0	1,161	20.2	48	27.1	na	na
More than one race	289	25.3	193	25.4	96	25.0	2	*	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	178	15.2	130	14.6	48	16.7	9	33.3	na	na
Temporary visa holders	2,037	21.3	958	23.9	1,079	18.9	174	17.2	na	na
Biological, biomedical, and biosystems engineering	15,203	48.8	5,204	50.4	9,999	47.9	1,594	39.5	674	40.2
U.S. citizens and permanent residents ^a	9,624	49.5	3,395	49.4	6,229	49.5	667	42.3	na	na
Hispanic or Latino	1,220	49.4	459	49.5	761	49.4	59	45.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	20	40.0	8	37.5	12	41.7	1	100.0	na	na
Asian	1,972	49.1	770	50.0	1,202	48.6	162	35.8	na	na
Black or African American	587	56.2	225	57.3	362	55.5	23	47.8	na	na
Native Hawaiian or Other Pacific Islander	9	33.3	3	33.3	6	33.3	1	100.0	na	na
White	4,942	48.7	1,663	47.4	3,279	49.4	329	42.9	na	na
More than one race	440	53.0	156	58.3	284	50.0	18	55.6	na	na
Unknown ethnicity and race	434	47.5	111	47.7	323	47.4	74	44.6	na	na
Temporary visa holders	5,579	47.6	1,809	52.1	3,770	45.4	927	37.5	na	na
Chemical, petroleum, and chemical-related engineering	10,546	34.6	2,658	31.6	7,888	35.6	1,501	28.2	349	25.8
U.S. citizens and permanent residents ^a	4,899	36.0	1,350	33.0	3,549	37.1	437	31.8	na	na
Hispanic or Latino	520	36.2	165	33.3	355	37.5	29	27.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	11	36.4	3	*	8	50.0	0	-	na	na
Asian	920	42.5	277	41.5	643	42.9	124	25.8	na	na
Black or African American	222	44.1	65	38.5	157	46.5	15	46.7	na	na
Native Hawaiian or Other Pacific Islander	5	60.0	2	100.0	3	33.3	0	-	na	na
White	2,846	33.5	723	28.8	2,123	35.1	211	32.2	na	na
More than one race	192	31.8	54	33.3	138	31.2	16	62.5	na	na
Unknown ethnicity and race	183	35.5	61	37.7	122	34.4	42	33.3	na	na
Temporary visa holders	5,647	33.4	1,308	30.2	4,339	34.4	1,064	26.7	na	na
Civil, environmental, transportation and related engineering fields	19,934	33.6	12,082	32.8	7,852	34.9	1,070	33.0	654	25.7
U.S. citizens and permanent residents ^a	8,993	39.2	6,588	37.0	2,405	45.3	321	42.1	na	na
Hispanic or Latino	1,353	39.1	1,081	35.7	272	52.6	20	60.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	54	33.3	39	35.9	15	26.7	2	*	na	na
Asian	1,063	42.1	766	41.3	297	44.1	76	34.2	na	na
Black or African American	500	37.2	338	33.1	162	45.7	9	66.7	na	na
Native Hawaiian or Other Pacific Islander	14	50.0	8	62.5	6	33.3	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				
White	5,331	38.5	3,889	36.5	1,442	43.8	153	40.5	na	na
More than one race	360	47.5	254	44.9	106	53.8	10	70.0	na	na
Unknown ethnicity and race	318	35.8	213	31.9	105	43.8	51	43.1	na	na
Temporary visa holders	10,941	29.0	5,494	27.8	5,447	30.3	749	29.1	na	na
Electrical, electronics, communications and computer engineering	48,799	23.6	31,093	24.9	17,706	21.3	1,339	21.4	799	16.9
U.S. citizens and permanent residents ^a	17,263	18.3	11,853	17.6	5,410	19.9	393	25.2	na	na
Hispanic or Latino	2,124	15.9	1,617	15.0	507	18.9	21	14.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	31	25.8	25	32.0	6	*	1	*	na	na
Asian	3,692	24.2	2,610	24.2	1,082	24.3	108	23.1	na	na
Black or African American	1,067	21.2	756	20.1	311	23.8	10	40.0	na	na
Native Hawaiian or Other Pacific Islander	18	22.2	13	30.8	5	*	0	-	na	na
White	8,610	15.2	5,657	14.4	2,953	16.7	185	28.1	na	na
More than one race	752	22.5	512	19.3	240	29.2	13	38.5	na	na
Unknown ethnicity and race	969	22.5	663	20.8	306	26.1	55	18.2	na	na
Temporary visa holders	31,536	26.4	19,240	29.3	12,296	21.9	946	19.9	na	na
Industrial, manufacturing, systems engineering and operations research	15,762	29.2	11,873	28.0	3,889	33.1	170	28.2	221	26.2
U.S. citizens and permanent residents ^a	7,498	30.8	6,012	30.3	1,486	32.6	55	38.2	na	na
Hispanic or Latino	1,121	34.2	1,006	33.9	115	36.5	0	-	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	13	46.2	10	50.0	3	33.3	0	-	na	na
Asian	970	36.5	756	36.6	214	36.0	11	36.4	na	na
Black or African American	542	35.4	391	34.3	151	38.4	2	50.0	na	na
Native Hawaiian or Other Pacific Islander	4	25.0	3	33.3	1	*	0	-	na	na
White	4,084	28.3	3,220	27.6	864	30.9	30	40.0	na	na
More than one race	280	36.1	222	34.7	58	41.4	2	50.0	na	na
Unknown ethnicity and race	484	24.0	404	24.8	80	20.0	10	30.0	na	na
Temporary visa holders	8,264	27.8	5,861	25.6	2,403	33.4	115	23.5	na	na
Mechanical engineering	27,014	18.8	15,335	16.6	11,679	21.5	1,317	19.1	560	16.8
U.S. citizens and permanent residents ^a	13,744	21.3	9,017	19.1	4,727	25.4	381	21.5	na	na
Hispanic or Latino	1,839	20.2	1,288	18.1	551	25.2	29	17.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	33	33.3	21	28.6	12	41.7	4	*	na	na
Asian	2,045	26.2	1,389	23.8	656	31.3	122	18.9	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				
Black or African American	586	26.6	365	22.2	221	33.9	14	42.9	na	na
Native Hawaiian or Other Pacific Islander	11	27.3	9	22.2	2	50.0	0	-	na	na
White	8,051	19.6	5,193	17.6	2,858	23.2	169	18.9	na	na
More than one race	673	25.9	450	22.4	223	32.7	5	60.0	na	na
Unknown ethnicity and race	506	19.8	302	20.2	204	19.1	38	34.2	na	na
Temporary visa holders	13,270	16.1	6,318	13.1	6,952	18.9	936	18.2	na	na
Metallurgical, mining, materials and related engineering fields	7,244	31.6	2,462	31.3	4,782	31.8	557	23.2	249	19.3
U.S. citizens and permanent residents ^a	3,928	33.9	1,560	34.0	2,368	33.9	150	26.7	na	na
Hispanic or Latino	521	32.1	219	37.0	302	28.5	7	28.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	12	41.7	6	50.0	6	33.3	3	100.0	na	na
Asian	545	37.2	200	32.5	345	40.0	40	22.5	na	na
Black or African American	181	41.4	74	41.9	107	41.1	4	75.0	na	na
Native Hawaiian or Other Pacific Islander	3	66.7	2	50.0	1	100.0	0	-	na	na
White	2,338	32.9	918	33.2	1,420	32.7	72	25.0	na	na
More than one race	186	34.4	70	31.4	116	36.2	5	20.0	na	na
Unknown ethnicity and race	142	33.1	71	31.0	71	35.2	19	21.1	na	na
Temporary visa holders	3,316	28.9	902	26.7	2,414	29.7	407	21.9	na	na
Other engineering	22,793	28.9	14,480	29.0	8,313	28.8	1,249	29.1	903	24.4
U.S. citizens and permanent residents ^a	11,293	29.4	7,331	28.8	3,962	30.4	432	35.0	na	na
Hispanic or Latino	1,128	31.1	781	31.1	347	31.1	35	51.4	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	34	44.1	19	31.6	15	60.0	2	*	na	na
Asian	1,327	37.2	868	37.0	459	37.5	129	28.7	na	na
Black or African American	864	35.8	563	35.3	301	36.5	24	50.0	na	na
Native Hawaiian or Other Pacific Islander	8	37.5	4	25.0	4	50.0	0	-	na	na
White	6,840	26.7	4,391	25.7	2,449	28.4	199	34.2	na	na
More than one race	456	34.9	280	35.4	176	34.1	8	50.0	na	na
Unknown ethnicity and race	636	25.6	425	27.1	211	22.7	35	34.3	na	na
Temporary visa holders	11,500	28.5	7,149	29.2	4,351	27.4	817	25.9	na	na

- = not calculable. * = value < 0.05%. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). 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, 2023.