

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2020

(Number and percent)

Sex, citizenship, ethnicity, race, and broad field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs
All individuals	697,813	0.9	414,478	1.1	283,335	0.7	65,681	0.2	29,661	0.5
Male	359,913	0.7	202,148	0.8	157,765	0.6	38,239	0.2	17,255	0.5
Female	337,900	1.2	212,330	1.3	125,570	0.9	27,442	0.2	12,406	0.5
U.S. citizens and permanent residents ^a	487,051	1.1	314,305	1.3	172,746	0.9	29,890	0.3	na	0.0
Hispanic or Latino	62,679	0.3	43,750	0.3	18,929	0.2	2,027	0.1	na	0.0
Not Hispanic or Latino		0.0		0.0		0.0		0.0		0.0
American Indian or Alaska Native	2,042	1.2	1,284	1.1	758	1.5	72	1.4	na	0.0
Asian	53,094	0.4	35,075	0.4	18,019	0.4	5,696	0.3	na	0.0
Black or African American	41,916	9.7	30,842	9.5	11,074	10.1	1,081	2.9	na	0.0
Native Hawaiian or Other Pacific Islander	778	0.8	578	0.3	200	2.0	52	3.8	na	0.0
White	284,055	0.2	175,090	0.3	108,965	0.1	17,123	0.1	na	0.0
More than one race	17,579	0.7	11,069	0.7	6,510	0.6	555	0.2	na	0.0
Unknown ethnicity and race	24,908	0.9	16,617	1.0	8,291	0.6	3,284	0.2	na	0.0
Temporary visa holders	210,762	0.5	100,173	0.4	110,589	0.5	35,791	0.2	na	0.0
Science	464,646	1.0	267,904	1.2	196,742	0.7	38,741	0.3	18,212	0.6
Agricultural and veterinary sciences	10,800	2.7	6,487	3.8	4,313	0.9	1,678	0.7	964	0.7
Biological and biomedical sciences	94,825	1.1	39,920	1.7	54,905	0.7	21,902	0.2	8,112	0.6
Computer and information sciences	98,864	0.7	80,690	0.8	18,174	0.5	823	0.2	458	0.2
Geosciences, atmospheric sciences, and ocean sciences	11,792	0.6	5,277	1.0	6,515	0.3	1,790	0.1	2,150	1.2
Mathematics and statistics	31,971	0.5	18,284	0.5	13,687	0.4	1,076	0.3	201	1.0
Multidisciplinary and interdisciplinary studies	14,533	0.3	10,980	0.1	3,553	0.8	832	0.5	679	0.1
Natural resources and conservation	12,498	1.3	8,793	0.8	3,705	2.7	845	2.1	573	1.0
Physical sciences	42,616	0.8	6,275	2.3	36,341	0.5	6,937	0.5	2,890	0.2
Psychology	68,394	1.1	47,279	1.2	21,115	1.0	1,312	0.0	749	0.0
Social sciences	78,353	1.1	43,919	1.4	34,434	0.7	1,546	0.1	1,436	0.3
Engineering	157,729	0.6	86,450	0.6	71,279	0.6	8,462	0.2	3,921	0.3
Aerospace, aeronautical, and astronautical engineering	6,971	0.0	4,326	0.0	2,645	0.0	233	0.0	149	0.0
Biological, biomedical, and biosystems engineering	12,775	0.2	4,536	0.5	8,239	*	1,696	0.0	525	0.0
Chemical, petroleum, and chemical-related engineering	10,554	0.2	2,942	0.4	7,612	0.1	1,157	0.2	330	0.0
Civil, environmental, transportation and related engineering fields	18,304	0.2	10,819	0.2	7,485	0.3	1,006	0.1	488	0.4

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	All graduate students		Master's		Doctoral					
	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs
Electrical, electronics, communications and computer engineering	43,032	0.5	25,312	0.4	17,720	0.7	1,302	0.3	706	0.0
Industrial, manufacturing, systems engineering and operations research	14,869	0.5	11,030	0.2	3,839	1.1	194	0.5	155	0.0
Mechanical engineering	25,782	0.3	14,305	0.3	11,477	0.4	1,149	0.1	469	0.0
Metallurgical, mining, materials and related engineering fields	7,181	0.2	2,299	0.3	4,882	0.1	630	0.3	299	0.0
Other engineering	18,261	2.5	10,881	2.3	7,380	2.7	1,095	0.2	800	1.0
Health	75,438	1.4	60,124	1.4	15,314	1.6	18,478	*	7,528	0.4
Clinical medicine ^b	34,544	1.3	29,748	1.1	4,796	2.9	16,287	0.0	6,500	0.3
Other health	40,894	1.5	30,376	1.6	10,518	1.1	2,191	0.4	1,028	1.1
Black or African American individuals		0.0		0.0		0.0		0.0		0.0
Male	15,774	8.8	11,397	8.4	4,377	9.6	417	2.2	na	0.0
Female	26,142	10.2	19,445	10.1	6,697	10.5	664	3.3	na	0.0
Science	29,051	10.1	21,126	10.1	7,925	10.0	578	4.3	na	0.0
Agricultural and veterinary sciences	378	35.7	279	42.3	99	17.2	14	7.1	na	0.0
Biological and biomedical sciences	6,049	11.6	3,834	13.3	2,215	8.5	308	1.6	na	0.0
Computer and information sciences	5,639	7.9	5,171	7.8	468	8.8	6	0.0	na	0.0
Geosciences, atmospheric sciences, and ocean sciences	267	12.4	148	19.6	119	3.4	21	0.0	na	0.0
Mathematics and statistics	777	9.3	573	9.2	204	9.3	11	0.0	na	0.0
Multidisciplinary and interdisciplinary studies	955	1.7	746	1.1	209	3.8	24	4.2	na	0.0
Natural resources and conservation	404	23.0	248	10.5	156	42.9	29	48.3	na	0.0
Physical sciences	1,096	16.0	338	23.4	758	12.7	49	6.1	na	0.0
Psychology	7,044	8.2	5,425	7.9	1,619	8.9	37	0.0	na	0.0
Social sciences	6,442	10.7	4,364	11.0	2,078	10.0	79	1.3	na	0.0
Engineering	4,583	9.3	2,952	9.0	1,631	9.7	68	2.9	na	0.0
Aerospace, aeronautical, and astronautical engineering	163	0.0	115	0.0	48	0.0	0	0.0	na	0.0
Biological, biomedical, and biosystems engineering	450	4.0	188	8.0	262	1.1	30	0.0	na	0.0
Chemical, petroleum, and chemical-related engineering	255	4.7	112	4.5	143	4.9	7	0.0	na	0.0
Civil, environmental, transportation and related engineering fields	509	3.5	347	2.9	162	4.9	5	0.0	na	0.0

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Electrical, electronics, communications and computer engineering	974	7.7	674	5.9	300	11.7	6	0.0	na	0.0
Industrial, manufacturing, systems engineering and operations research	623	5.8	488	3.3	135	14.8	2	50.0	na	0.0
Mechanical engineering	561	5.3	336	3.9	225	7.6	4	0.0	na	0.0
Metallurgical, mining, materials and related engineering fields	168	1.8	65	1.5	103	1.9	3	0.0	na	0.0
Other engineering	880	26.5	627	26.6	253	26.1	11	9.1	na	0.0
Health	8,282	8.3	6,764	7.6	1,518	11.4	435	0.9	na	0.0
Clinical medicine ^b	5,126	7.5	4,511	6.2	615	17.1	382	0.0	na	0.0
Other health	3,156	9.7	2,253	10.6	903	7.5	53	7.5	na	0.0

* = value < 0.05%; - = not calculable; na = not applicable.

HBCU = historically Black college or university.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.^b Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.**Note(s):**

"Field" refers to the field of the unit that reports postdoctoral appointees 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.