

TABLE 3-2

Black or African American U.S. citizen and permanent resident S&E graduate students in all institutions and in HBCUs, by field and sex: 2016

(Number and percent)

Field	All institutions (number)			HBCUs (number)			HBCUs (%)		
	All S&E graduate students	Female	Male	All S&E graduate students	Female	Male	All S&E graduate students	Female	Male
S&E	30,600	17,630	12,970	4,485	2,810	1,675	14.7	15.9	12.9
Science	26,890	16,561	10,329	4,045	2,663	1,382	15.0	16.1	13.4
Agricultural sciences	563	326	237	195	112	83	34.6	34.4	35.0
Biological sciences	4,261	2,850	1,411	599	418	181	14.1	14.7	12.8
Anatomy	21	13	8	8	5	3	38.1	38.5	37.5
Biochemistry	151	84	67	16	7	9	10.6	8.3	13.4
Biology	868	551	317	272	198	74	31.3	35.9	23.3
Biometry and epidemiology	552	381	171	8	4	4	1.4	1.0	2.3
Biophysics	13	10	3	0	0	0	0.0	0.0	0.0
Botany and plant biology	33	19	14	0	0	0	0.0	0.0	0.0
Cell and molecular biology	261	170	91	0	0	0	0.0	0.0	0.0
Ecology	20	15	5	0	0	0	0.0	0.0	0.0
Entomology and parasitology	27	19	8	1	1	0	3.7	5.3	0.0
Genetics	61	44	17	3	3	0	4.9	6.8	0.0
Microbiology, immunology, and virology	232	156	76	33	22	11	14.2	14.1	14.5
Nutrition	240	194	46	65	45	20	27.1	23.2	43.5
Pathology	51	34	17	0	0	0	0.0	0.0	0.0
Pharmacology and toxicology	227	145	82	69	44	25	30.4	30.3	30.5
Physiology	230	148	82	2	1	1	0.9	0.7	1.2
Zoology	9	7	2	0	0	0	0.0	0.0	0.0
Biosciences nec	1,265	860	405	122	88	34	9.6	10.2	8.4
Communication	1,314	952	362	158	112	46	12.0	11.8	12.7
Computer sciences	3,828	1,316	2,512	246	76	170	6.4	5.8	6.8
Earth, atmospheric, and ocean sciences	315	157	158	75	46	29	23.8	29.3	18.4
Atmospheric sciences	40	21	19	26	15	11	65.0	71.4	57.9
Geosciences	162	75	87	10	5	5	6.2	6.7	5.7
Ocean sciences	36	18	18	4	3	1	11.1	16.7	5.6
Earth, atmospheric, and ocean sciences nec	77	43	34	35	23	12	45.5	53.5	35.3
Family and consumer sciences and human sciences	529	441	88	144	118	26	27.2	26.8	29.5
Mathematics and statistics	648	258	390	68	36	32	10.5	14.0	8.2
Mathematics and applied mathematics	494	203	291	68	36	32	13.8	17.7	11.0
Statistics	154	55	99	0	0	0	0.0	0.0	0.0
Multidisciplinary and interdisciplinary studies	587	356	231	91	64	27	15.5	18.0	11.7
Neurobiology and neuroscience	172	104	68	7	3	4	4.1	2.9	5.9
Physical sciences	906	413	493	149	77	72	16.4	18.6	14.6
Astronomy and astrophysics	19	8	11	0	0	0	0.0	0.0	0.0
Chemistry	656	343	313	101	56	45	15.4	16.3	14.4
Physics	196	47	149	48	21	27	24.5	44.7	18.1
Physical sciences nec	35	15	20	0	0	0	0.0	0.0	0.0
Psychology	3,730	2,880	850	483	373	110	12.9	13.0	12.9

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Clinical psychology	549	423	126	50	38	12	9.1	9.0	9.5
Psychology, general	1,000	751	249	310	237	73	31.0	31.6	29.3
Psychology nec	2,181	1,706	475	123	98	25	5.6	5.7	5.3
Social sciences	10,037	6,508	3,529	1,830	1,228	602	18.2	18.9	17.1
Agricultural economics	46	20	26	2	1	1	4.3	5.0	3.8
Anthropology	232	170	62	0	0	0	0.0	0.0	0.0
Economics (except agricultural)	387	141	246	32	13	19	8.3	9.2	7.7
Geography	139	71	68	0	0	0	0.0	0.0	0.0
History and philosophy of science	6	4	2	0	0	0	0.0	0.0	0.0
Linguistics	66	52	14	0	0	0	0.0	0.0	0.0
Political science and government	5,660	3,660	2,000	911	597	314	16.1	16.3	15.7
Sociology	911	612	299	85	58	27	9.3	9.5	9.0
Sociology and anthropology	42	29	13	33	23	10	78.6	79.3	76.9
Social sciences nec	2,548	1,749	799	767	536	231	30.1	30.6	28.9
Engineering	3,710	1,069	2,641	440	147	293	11.9	13.8	11.1
Aerospace engineering	91	17	74	0	0	0	0.0	0.0	0.0
Agricultural engineering	36	23	13	12	8	4	33.3	34.8	30.8
Architecture	92	42	50	45	18	27	48.9	42.9	54.0
Biomedical engineering	294	134	160	2	1	1	0.7	0.7	0.6
Chemical engineering	227	81	146	24	8	16	10.6	9.9	11.0
Civil engineering	441	130	311	27	8	19	6.1	6.2	6.1
Electrical engineering	806	144	662	100	25	75	12.4	17.4	11.3
Engineering science, mechanics, and physics	43	13	30	18	4	14	41.9	30.8	46.7
Industrial and manufacturing engineering	529	176	353	29	11	18	5.5	6.3	5.1
Mechanical engineering	446	91	355	22	9	13	4.9	9.9	3.7
Metallurgical and materials engineering	154	54	100	19	8	11	12.3	14.8	11.0
Mining engineering	7	0	7	0	0	0	0.0	0.0	0.0
Nuclear engineering	22	12	10	0	0	0	0.0	0.0	0.0
Petroleum engineering	34	4	30	0	0	0	0.0	0.0	0.0
Engineering nec	488	148	340	142	47	95	29.1	31.8	27.9

HBCUs = historically black colleges and universities; nec = not elsewhere classified; S&E = science and engineering.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2016.