

TABLE 4-17a

Biological, biomedical, and biosystems engineering master's and doctoral student demographics, enrollment status, and funding: 2022

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	179	25.9	160	23.2	143	20.7
Schools	184	23.7	162	20.9	146	18.8
Units	234	1.0	193	0.9	167	0.7
All graduate students	14,442	100.0	5,177	100.0	9,265	100.0
Male	7,506	52.0	2,543	49.1	4,963	53.6
Female	6,936	48.0	2,634	50.9	4,302	46.4
U.S. citizens and permanent residents ^a	9,419	65.2	3,462	66.9	5,957	64.3
Hispanic or Latino	1,119	7.7	439	8.5	680	7.3
Not Hispanic or Latino						
American Indian or Alaska Native	20	0.1	7	0.1	13	0.1
Asian	1,863	12.9	751	14.5	1,112	12.0
Black or African American	562	3.9	217	4.2	345	3.7
Native Hawaiian or Other Pacific Islander	11	0.1	5	0.1	6	0.1
White	5,010	34.7	1,766	34.1	3,244	35.0
More than one race	411	2.8	153	3.0	258	2.8
Unknown ethnicity and race	423	2.9	124	2.4	299	3.2
Temporary visa holders	5,023	34.8	1,715	33.1	3,308	35.7
Part time	2,026	14.0	1,343	25.9	683	7.4
Full time	12,416	86.0	3,834	74.1	8,582	92.6
First time	3,797	26.3	2,186	42.2	1,611	17.4
Primary source of support for full-time students ^b						
Federal	3,463	24.0	219	4.2	3,244	35.0
DOD	187	1.3	19	0.4	168	1.8
DOE	22	0.2	2	*	20	0.2
HHS	2,257	15.6	68	1.3	2,189	23.6
NIH	2,088	14.5	62	1.2	2,026	21.9
Other HHS	169	1.2	6	0.1	163	1.8
NASA	9	0.1	2	*	7	0.1
NSF	673	4.7	28	0.5	645	7.0
USDA	57	0.4	16	0.3	41	0.4
Other	258	1.8	84	1.6	174	1.9
Nonfederal	6,150	42.6	1,156	22.3	4,994	53.9
Institutional	5,363	37.1	1,050	20.3	4,313	46.6
Domestic	732	5.1	99	1.9	633	6.8
Foreign	55	0.4	7	0.1	48	0.5
Self-support	2,803	19.4	2,459	47.5	344	3.7
Primary mechanism of support for full-time students ^b						
Fellowships	1,812	12.5	133	2.6	1,679	18.1
Research assistantships	5,127	35.5	367	7.1	4,760	51.4
Teaching assistantships	987	6.8	350	6.8	637	6.9
Traineeships	404	2.8	13	0.3	391	4.2
Other types of support	4,086	28.3	2,971	57.4	1,115	12.0
Self-support	2,803	19.4	2,459	47.5	344	3.7
Other	1,283	8.9	512	9.9	771	8.3

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

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

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering 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, 2022.