

TABLE 4-21a

**Industrial, manufacturing, systems engineering and operations research master's and doctoral student demographics, enrollment status, and funding: 2021**

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	146	20.9	141	20.2	86	12.3
Schools	147	18.7	142	18.0	87	11.1
Units	248	1.2	225	1.1	115	0.5
All graduate students	15,870	100.0	11,949	100.0	3,921	100.0
Male	11,132	70.1	8,472	70.9	2,660	67.8
Female	4,738	29.9	3,477	29.1	1,261	32.2
U.S. citizens and permanent residents <sup>a</sup>	8,647	54.5	7,148	59.8	1,499	38.2
Hispanic or Latino	1,182	7.4	1,069	8.9	113	2.9
Not Hispanic or Latino						
American Indian or Alaska Native	27	0.2	21	0.2	6	0.2
Asian	1,112	7.0	919	7.7	193	4.9
Black or African American	642	4.0	506	4.2	136	3.5
Native Hawaiian or Other Pacific Islander	12	0.1	11	0.1	1	*
White	4,961	31.3	4,061	34.0	900	23.0
More than one race	285	1.8	229	1.9	56	1.4
Unknown ethnicity and race	426	2.7	332	2.8	94	2.4
Temporary visa holders	7,223	45.5	4,801	40.2	2,422	61.8
Part time	6,532	41.2	5,642	47.2	890	22.7
Full time	9,338	58.8	6,307	52.8	3,031	77.3
First time	4,056	25.6	3,513	29.4	543	13.8
Primary source of support for full-time students <sup>b</sup>						
Federal	1,206	7.6	544	4.6	662	16.9
DOD	511	3.2	379	3.2	132	3.4
DOE	57	0.4	20	0.2	37	0.9
HHS	81	0.5	15	0.1	66	1.7
NIH	45	0.3	5	*	40	1.0
Other HHS	36	0.2	10	0.1	26	0.7
NASA	20	0.1	1	*	19	0.5
NSF	335	2.1	29	0.2	306	7.8
USDA	10	0.1	6	0.1	4	0.1
Other	192	1.2	94	0.8	98	2.5
Nonfederal	3,208	20.2	1,223	10.2	1,985	50.6
Institutional	2,805	17.7	1,067	8.9	1,738	44.3
Domestic	320	2.0	110	0.9	210	5.4
Foreign	83	0.5	46	0.4	37	0.9
Self-support	4,924	31.0	4,540	38.0	384	9.8
Primary mechanism of support for full-time students <sup>b</sup>						
Fellowships	528	3.3	189	1.6	339	8.6
Research assistantships	1,658	10.4	333	2.8	1,325	33.8
Teaching assistantships	934	5.9	268	2.2	666	17.0
Traineeships	57	0.4	51	0.4	6	0.2
Other types of support	6,161	38.8	5,466	45.7	695	17.7
Self-support	4,924	31.0	4,540	38.0	384	9.8
Other	1,237	7.8	926	7.7	311	7.9

\* = value &lt; 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.

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

<sup>b</sup> 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, 2021.