Table 3

Enrollment of master's students and doctoral students in science, engineering, and health, by field: 2018–22

(Number and percent change)

		Master's							Doctoral						
Characteristic	2018	2019	2020	2021	2022	% change 2018-22	% change 2021-22	2018	2019	2020	2021	2022	% change 2018-22	% change 2021-22	
All graduate students	391,211	408,228	414,478	466,613	501,311	28.1	7.4	277,096	281,889	283,335	293,543	297,223	7.3	1.3	
Science and engineering	334,391	351,734	354,354	400,922	435,003	30.1	8.5	261,165	265,961	268,021	276,912	279,163	6.9	0.8	
Science	241,327	259,795	267,904	305,796	331,983	37.6	8.6	190,928	193,896	196,742	203,988	206,183	8.0	1.1	
Agricultural and veterinary sciences	5,658	5,629	6,487	6,801	6,949	22.8	2.2	3,880	3,889	4,313	4,443	4,647	19.8	4.6	
Biological and biomedical sciences	35,306	38,078	39,920	42,728	43,062	22.0	0.8	52,627	53,915	54,905	58,155	59,638	13.3	2.6	
Computer and information sciences	77,351	84,092	80,690	102,199	129,972	68.0	27.2	16,127	17,192	18,174	19,531	20,583	27.6	5.4	
Geosciences, atmospheric sciences, and ocean sciences	5,629	5,327	5,277	5,520	5,186	-7.9	-6.1	6,704	6,551	6,515	6,770	6,784	1.2	0.2	
Mathematics and statistics	18,073	19,594	18,284	20,639	20,798	15.1	0.8	13,388	13,565	13,687	13,619	13,589	1.5	-0.2	
Multidisciplinary and interdisciplinary studies	7,414	8,203	10,980	11,994	16,931	128.4	41.2	2,924	2,978	3,553	3,774	4,014	37.3	6.4	
Natural resources and conservation	7,691	8,066	8,793	10,012	9,807	27.5	-2.0	3,716	3,677	3,705	3,910	3,955	6.4	1.2	
Physical sciences	6,075	6,361	6,275	6,409	6,256	3.0	-2.4	36,000	36,506	36,341	37,732	37,836	5.1	0.3	
Psychology	35,404	40,838	47,279	51,878	48,321	36.5	-6.9	20,303	20,231	21,115	21,447	21,121	4.0	-1.5	
Social sciences	42,726	43,607	43,919	47,616	44,701	4.6	-6.1	35,259	35,392	34,434	34,607	34,016	-3.5	-1.7	
Engineering	93,064	91,939	86,450	95,126	103,020	10.7	8.3	70,237	72,065	71,279	72,924	72,980	3.9	0.1	
Aerospace, aeronautical, and astronautical engineering	3,342	3,701	4,326	5,065	5,263	57.5	3.9	2,506	2,554	2,645	2,773	2,832	13.0	2.1	
Biological, biomedical, and biosystems engineering	4,282	4,424	4,536	5,192	5,177	20.9	-0.3	7,481	7,934	8,239	8,867	9,265	23.8	4.5	
Chemical, petroleum, and chemical-related engineering	3,815	3,274	2,942	2,983	3,011	-21.1	0.9	7,599	7,664	7,612	7,713	7,590	-0.1	-1.6	
Civil, environmental, transportation and related engineering fields	12,729	11,873	10,819	11,730	12,621	-0.8	7.6	7,732	7,752	7,485	7,878	7,754	0.3	-1.6	
Electrical, electronics, communications and computer engineering	28,108	28,177	25,312	27,695	32,316	15.0	16.7	18,119	18,577	17,720	17,570	17,585	-2.9	0.1	
Industrial, manufacturing, systems engineering and operations research	12,389	11,912	11,030	11,949	12,579	1.5	5.3	3,598	3,762	3,839	3,921	3,856	7.2	-1.7	
Mechanical engineering	15,434	14,861	14,305	15,718	16,029	3.9	2.0	11,159	11,247	11,477	11,540	11,523	3.3	-0.1	
Metallurgical, mining, materials and related engineering fields	2,395	2,266	2,299	2,518	2,545	6.3	1.1	4,821	4,817	4,882	4,904	4,573	-5.1	-6.7	
Other engineering	10,570	11,451	10,881	12,276	13,479	27.5	9.8	7,222	7,758	7,380	7,758	8,002	10.8	3.1	
Health	56,820	56,494	60,124	65,691	66,308	16.7	0.9	15,931	15,928	15,314	16,631	18,060	13.4	8.6	
Clinical medicine	27,494	26,251	29,748	34,021	33,251	20.9	-2.3	4,508	4,571	4,796	5,612	5,966	32.3	6.3	
Other health	29,326	30,243	30,376	31,670	33,057	12.7	4.4	11,423	11,357	10,518	11,019	12,094	5.9	9.8	

## Note(s)

For more information on the mapping of fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see technical table A-17 at https://ncses.nsf.gov/pubs/nsf24319/table/A-17. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other published data from the National Center for Science and Engineering Statistics, see the "Technical Notes" at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2022#technical-notes.

## Source(s):

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