TABLE A-7
Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23

(Number and paraget)

Year and field		Total in survey					imputed		Imputation rate (%)				
	Master's	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
	Full time	Part time	Full time	Part time	Full time	Part time							
Fall 2023, all surveyed fields <sup>a</sup>	329,971	180,895	268,617	38,612	6,135	5,215	5,093	570	1.9	2.9	1.9	1.	
Science	222,976	125,544	188,995	23,974	4,322	4,093	3,257	365	1.9	3.3	1.7	1.	
Agricultural and veterinary sciences	4,186	2,715	4,133	721	35	24	2	17	0.8	0.9	*	2.	
Biological and biomedical sciences	29,180	15,523	56,973	3,890	292	314	800	17	1.0	2.0	1.4	0.	
Computer and information sciences	94,517	49,013	19,116	3,368	1,488	1,398	268	17	1.6	2.9	1.4	0	
Geosciences, atmospheric, and ocean sciences	3,376	1,417	6,143	658	74	21	117	16	2.2	1.5	1.9	2.	
Mathematics and statistics	14,237	5,868	12,595	1,193	151	108	144	8	1.1	1.8	1.1	0.	
Multidisciplinary and interdisciplinary sciences	13,413	8,515	3,774	727	112	892	71	4	0.8	10.5	1.9	0.	
Natural resources and conservation	5,764	3,722	3,264	740	69	31	93	4	1.2	0.8	2.8	0.	
Physical sciences	3,471	2,529	36,004	2,325	71	32	465	5	2.0	1.3	1.3	0.	
Psychology	28,571	20,903	18,908	5,446	1,415	839	839	228	5.0	4.0	4.4	4.	
Social sciences	26,261	15,339	28,085	4,906	615	434	458	49	2.3	2.8	1.6	1.	
Engineering	65,160	35,407	66,447	8,545	925	444	1,555	129	1.4	1.3	2.3	1.	
Aerospace, aeronautical, and astronautical engineering	2,883	2,497	2,564	320	135	33	119	10	4.7	1.3	4.6	3.	
Biological, biomedical, and biosystems engineering	3,961	1,243	9,306	693	14	3	179	1	0.4	0.2	1.9	0.	
Chemical, petroleum, and chemical-related engineering	1,827	831	7,501	387	39	2	259	8	2.1	0.2	3.5	2	
Civil, environmental, transportation and related engineering fields	7,984	4,098	6,946	906	179	20	170	20	2.2	0.5	2.4	2	
Electrical, electronics, communications and computer engineering	21,886	9,207	15,471	2,235	274	140	406	46	1.3	1.5	2.6	2.	
Industrial, manufacturing, systems engineering and operations research	6,287	5,586	3,004	885	134	71	57	8	2.1	1.3	1.9	0	
Mechanical engineering	9,861	5,474	10,462	1,217	102	100	229	32	1.0	1.8	2.2	2	
Metallurgical, mining, materials and related engineering fields	1,619	843	4,371	411	5	2	93	2	0.3	0.2	2.1	0.	
Other engineering	8,852	5,628	6,822	1,491	43	73	43	2	0.5	1.3	0.6	0.	
Health	41,835	19,944	13,175	6,093	888	678	281	76	2.1	3.4	2.1	1	
Clinical medicine	16,700	11,784	3,726	2,448	154	94	19	21	0.9	0.8	0.5	0.	
Other health	25,135	8,160	9,449	3,645	734	584	262	55	2.9	7.2	2.8	1.	
Fall 2022, all surveyed fields	319,618	181,693	259,683	37,540	4,004	2,305	1,444	305	1.3	1.3	0.6	0.	
Science	208,749	123,234	183,443	22,740	2,864	1,870	1,347	206	1.4	1.5	0.7	0.	
Agricultural and veterinary sciences	4,143	2,806	3,892	755	19	15	15	10	0.5	0.5	0.4	1	
Biological and biomedical sciences	27,987	15,075	55,630	4,008	430	262	231	18	1.5	1.7	0.4	0.	
Computer and information sciences	83,708	46,264	17,544	3,039	558	334	111	61	0.7	0.7	0.6	2.	
Geosciences, atmospheric, and ocean sciences	3,621	1,565	6,126	658	34	13	0	0	0.9	0.8	0.0	0	
Mathematics and statistics	14,239	6,559	12,359	1,230	78	100	0	0	0.5	1.5	0.0	0	
Multidisciplinary and interdisciplinary sciences	9,767	7,164	3,281	733	25	29	322	0	0.3	0.4	9.8	0.	
Natural resources and conservation	6,010	3,797	3,151	804	27	24	48	4	0.4	0.6	1.5	0	

TABLE A-7
Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23
(Number and percent)

Year and field		Total in survey					imputed		Imputation rate (%)				
	Master's	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
	Full time	Part time	Full time	Part time	Full time	Part time							
Physical sciences	3,726	2,530	35,286	2,550	84	33	94	22	2.3	1.3	0.3	0.	
Psychology	27,861	20,460	17,335	3,786	1,392	725	517	82	5.0	3.5	3.0	2.	
Social sciences	27,687	17,014	28,839	5,177	217	335	9	9	0.8	2.0	*	0.	
Engineering	66,427	36,593	64,020	8,960	203	224	61	24	0.3	0.6	0.1	0.	
Aerospace, aeronautical, and astronautical engineering	2,937	2,326	2,483	349	0	0	0	0	0.0	0.0	0.0	0	
Biological, biomedical, and biosystems engineering	3,834	1,343	8,582	683	0	0	0	0	0.0	0.0	0.0	0	
Chemical, petroleum, and chemical-related engineering	2,099	912	7,221	369	0	0	0	0	0.0	0.0	0.0	0	
Civil, environmental, transportation and related engineering fields	8,215	4,406	6,705	1,049	5	3	5	0	0.1	0.1	0.1	0.	
Electrical, electronics, communications and computer engineering	22,725	9,591	15,157	2,428	100	54	39	12	0.4	0.6	0.3	0.	
Industrial, manufacturing, systems engineering and operations research	6,920	5,659	2,902	954	2	0	2	0	*	0.0	0.1	0.	
Mechanical engineering	10,423	5,606	10,273	1,250	27	63	4	2	0.3	1.1	*	0.	
Metallurgical, mining, materials and related engineering fields	1,667	878	4,221	352	5	2	0	0	0.3	0.2	0.0	0.	
Other engineering	7,607	5,872	6,476	1,526	64	102	11	10	0.8	1.7	0.2	0.	
Health	44,442	21,866	12,220	5,840	937	211	36	75	2.1	1.0	0.3	1.	
Clinical medicine	19,519	13,732	3,696	2,270	177	87	0	0	0.9	0.6	0.0	0.	
Other health	24,923	8,134	8,524	3,570	760	124	36	75	3.0	1.5	0.4	2.	
Fall 2021, all surveyed fields	286,954	179,659	256,869	36,674	3,539	1,895	3,932	564	1.2	1.1	1.5	1.	
Science	184,719	121,077	181,488	22,500	2,289	1,465	3,341	321	1.2	1.2	1.8	1.	
Agricultural and veterinary sciences	4,034	2,767	3,720	723	43	20	36	11	1.1	0.7	1.0	1.	
Biological and biomedical sciences	27,949	14,779	54,269	3,886	437	287	950	42	1.6	1.9	1.8	1.	
Computer and information sciences	58,913	43,286	16,724	2,807	720	317	329	103	1.2	0.7	2.0	3.	
Geosciences, atmospheric, and ocean sciences	3,731	1,789	6,132	638	24	25	157	0	0.6	1.4	2.6	0.	
Mathematics and statistics	14,157	6,482	12,365	1,254	77	93	177	3	0.5	1.4	1.4	0.	
Multidisciplinary and interdisciplinary sciences	6,602	5,392	3,048	726	43	77	45	18	0.7	1.4	1.5	2.	
Natural resources and conservation	6,343	3,669	3,133	777	18	37	39	19	0.3	1.0	1.2	2.	
Physical sciences	3,834	2,575	35,013	2,719	159	43	727	47	4.1	1.7	2.1	1.	
Psychology	30,052	21,826	17,647	3,800	534	293	204	41	1.8	1.3	1.2	1.	
Social sciences	29,104	18,512	29,437	5,170	234	273	677	37	0.8	1.5	2.3	0.	
Engineering	58,790	36,336	64,063	8,861	346	219	502	58	0.6	0.6	0.8	0.	
Aerospace, aeronautical, and astronautical engineering	2,755	2,310	2,406	367	13	1	36	0	0.5	*	1.5	0.	
Biological, biomedical, and biosystems engineering	3,900	1,292	8,166	701	48	11	95	3	1.2	0.9	1.2	0	
Chemical, petroleum, and chemical-related engineering	2,053	930	7,363	350	1	2	65	3	*	0.2	0.9	0.	
Civil, environmental, transportation and related engineering fields	7,426	4,304	6,792	1,086	6	0	27	0	0.1	0.0	0.4	0.	
Electrical, electronics, communications and computer engineering	18,540	9,155	15,204	2,366	120	67	82	29	0.6	0.7	0.5	1.	

TABLE A-7
Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23
(Number and percent)

		Total in	survey		Number imputed				Imputation rate (%)			
	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
Year and field	Full time	Part time	Full time	Part time	Full time	Part time						
Industrial, manufacturing, systems engineering and operations research	6,307	5,642	3,031	890	9	1	20	0	0.1	*	0.7	0.0
Mechanical engineering	9,930	5,788	10,306	1,234	78	74	79	5	0.8	1.3	0.8	0.4
Metallurgical, mining, materials and related engineering fields	1,662	856	4,509	395	6	4	51	0	0.4	0.5	1.1	0.0
Other engineering	6,217	6,059	6,286	1,472	65	59	47	18	1.0	1.0	0.7	1.2
Health	43,445	22,246	11,318	5,313	904	211	89	185	2.1	0.9	0.8	3.5
Clinical medicine	20,189	13,832	3,699	1,913	150	150	5	66	0.7	1.1	0.1	3.5
Other health	23,256	8,414	7,619	3,400	754	61	84	119	3.2	0.7	1.1	3.5

<sup>\* =</sup> value < 0.05%.

## Note(s):

Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "Technical Notes."

## Source(s):

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

<sup>&</sup>lt;sup>a</sup> For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) fields and codes, see technical table A-17.