

TABLE A-7

**Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2018–20**

(Number and percent)

Year and field	Total in survey				Number imputed				Imputation rate (%)			
	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 2020, all surveyed fields <sup>a</sup>	243,859	170,619	247,656	35,679	6,582	3,837	6,512	993	2.7	2.2	2.6	2.8
Science	155,502	112,402	175,039	21,703	4,867	2,712	5,558	558	3.1	2.4	3.2	2.6
Agricultural and veterinary sciences	3,731	2,756	3,540	773	64	52	40	6	1.7	1.9	1.1	0.8
Biological and biomedical sciences	26,473	13,447	51,107	3,798	618	383	1,650	108	2.3	2.8	3.2	2.8
Computer and information sciences	39,929	40,761	15,473	2,701	1,970	692	560	109	4.9	1.7	3.6	4.0
Geosciences, atmospheric sciences, and ocean sciences	3,649	1,628	5,807	708	90	58	216	16	2.5	3.6	3.7	2.3
Mathematics and statistics	11,622	6,662	12,419	1,268	124	96	316	36	1.1	1.4	2.5	2.8
Multidisciplinary and interdisciplinary studies	6,169	4,811	2,870	683	901	609	53	7	14.6	12.7	1.8	1.0
Natural resources and conservation	5,536	3,257	2,912	793	139	57	107	28	2.5	1.8	3.7	3.5
Physical sciences	3,686	2,589	33,952	2,389	91	48	1,065	27	2.5	1.9	3.1	1.1
Psychology	28,716	18,563	17,452	3,663	559	422	364	131	1.9	2.3	2.1	3.6
Social sciences	25,991	17,928	29,507	4,927	311	295	1,187	90	1.2	1.6	4.0	1.8
Engineering	49,179	37,271	62,061	9,218	640	740	765	149	1.3	2.0	1.2	1.6
Aerospace, aeronautical, and astronautical engineering	2,298	2,028	2,301	344	11	1	37	0	0.5	*	1.6	0.0
Biological, biomedical, and biosystems engineering	3,416	1,120	7,659	580	116	35	105	7	3.4	3.1	1.4	1.2
Chemical, petroleum, and chemical-related engineering	1,898	1,044	7,132	480	24	5	104	9	1.3	0.5	1.5	1.9
Civil, environmental, transportation and related engineering fields	6,487	4,332	6,374	1,111	31	26	48	5	0.5	0.6	0.8	0.5
Electrical, electronics, communications and computer engineering	15,329	9,983	15,174	2,546	262	328	209	54	1.7	3.3	1.4	2.1
Industrial, manufacturing, systems engineering and operations research	4,820	6,210	2,908	931	12	82	22	2	0.2	1.3	0.8	0.2
Mechanical engineering	8,461	5,844	10,219	1,258	132	218	94	42	1.6	3.7	0.9	3.3
Metallurgical, mining, materials and related engineering fields	1,566	733	4,497	385	18	29	58	3	1.1	4.0	1.3	0.8
Other engineering	4,904	5,977	5,797	1,583	34	16	88	27	0.7	0.3	1.5	1.7
Health	39,178	20,946	10,556	4,758	1,075	385	189	286	2.7	1.8	1.8	6.0
Clinical medicine	17,186	12,562	3,342	1,454	414	309	25	94	2.4	2.5	0.7	6.5
Other health	21,992	8,384	7,214	3,304	661	76	164	192	3.0	0.9	2.3	5.8
Fall 2019, all surveyed fields	254,532	153,696	247,910	33,979	7,995	3,251	5,258	527	3.1	2.1	2.1	1.6
Science and engineering	216,427	135,307	236,363	29,598	7,064	3,064	4,841	397	3.3	2.3	2.0	1.3
Science	158,704	101,091	172,969	20,927	6,069	2,496	4,140	299	3.8	2.5	2.4	1.4
Agricultural sciences	3,504	2,125	3,245	644	68	63	9	29	1.9	3.0	0.3	4.5
Biological and biomedical sciences	25,757	12,321	50,476	3,439	536	254	1,392	33	2.1	2.1	2.8	1.0
Computer and information sciences	47,535	36,557	14,585	2,607	3,354	1,170	386	93	7.1	3.2	2.6	3.6
Geosciences, atmospheric sciences, and ocean sciences	3,675	1,652	5,846	705	29	0	197	3	0.8	0.0	3.4	0.4
Mathematics and statistics	13,359	6,235	12,322	1,243	671	73	265	8	5.0	1.2	2.2	0.6
Multidisciplinary and interdisciplinary studies	4,669	3,534	2,364	614	184	63	47	3	3.9	1.8	2.0	0.5
Natural resources and conservation	5,176	2,890	2,925	752	74	30	87	1	1.4	1.0	3.0	0.1

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	Full time	Part time	Full time	Part time	Full time	Part time						
Physical sciences	3,878	2,483	34,284	2,222	113	27	843	30	2.9	1.1	2.5	1.4
Psychology	24,547	16,291	16,546	3,685	743	459	191	50	3.0	2.8	1.2	1.4
Social sciences	26,604	17,003	30,376	5,016	297	357	723	49	1.1	2.1	2.4	1.0
Engineering	57,723	34,216	63,394	8,671	995	568	701	98	1.7	1.7	1.1	1.1
Aerospace, aeronautical, and astronomical engineering	2,197	1,504	2,238	316	13	1	37	0	0.6	0.1	1.7	0.0
Agricultural engineering	393	101	561	101	0	0	0	0	0.0	0.0	0.0	0.0
Bioengineering and biomedical engineering	3,353	982	7,100	615	149	25	157	3	4.4	2.5	2.2	0.5
Biological and biosystems engineering	64	25	167	52	0	0	0	0	0.0	0.0	0.0	0.0
Chemical engineering	1,888	744	6,677	380	1	2	67	3	0.1	0.3	1.0	0.8
Civil engineering	7,576	4,297	6,726	1,026	10	4	28	0	0.1	0.1	0.4	0.0
Electrical, electronics, and communications engineering	19,138	9,039	16,288	2,289	653	253	206	68	3.4	2.8	1.3	3.0
Engineering mechanics, physics, and science	563	289	1,320	127	0	0	0	0	0.0	0.0	0.0	0.0
Industrial and manufacturing engineering	6,247	5,665	2,939	823	16	78	22	2	0.3	1.4	0.7	0.2
Mechanical engineering	9,394	5,467	9,951	1,296	103	170	83	7	1.1	3.1	0.8	0.5
Metallurgical and materials engineering	1,409	565	4,243	373	5	4	50	0	0.4	0.7	1.2	0.0
Mining engineering	202	90	159	42	0	0	0	0	0.0	0.0	0.0	0.0
Nanotechnology	38	11	141	5	0	0	0	0	0.0	0.0	0.0	0.0
Nuclear engineering	307	111	879	152	3	0	25	0	1.0	0.0	2.8	0.0
Petroleum engineering	441	201	543	64	0	0	0	0	0.0	0.0	0.0	0.0
Engineering nec	4,513	5,125	3,462	1,010	42	31	26	15	0.9	0.6	0.8	1.5
Health	38,105	18,389	11,547	4,381	931	187	417	130	2.4	1.0	3.6	3.0
Clinical medicine	15,638	10,613	3,286	1,285	270	127	34	1	1.7	1.2	1.0	0.1
Other health	22,467	7,776	8,261	3,096	661	60	383	129	2.9	0.8	4.6	4.2
Fall 2018, all surveyed fields	248,552	142,659	242,897	34,199	4,090	1,553	2,603	135	1.6	1.1	1.1	0.4
Science and engineering	210,287	124,104	231,297	29,868	3,579	1,285	2,562	125	1.7	1.0	1.1	0.4
Science	151,059	90,268	170,004	20,924	3,212	1,026	1,897	107	2.1	1.1	1.1	0.5
Agricultural sciences	3,626	2,032	3,273	607	0	0	0	0	0.0	0.0	0.0	0.0
Biological and biomedical sciences	24,759	10,547	49,254	3,373	222	102	306	39	0.9	1.0	0.6	1.2
Computer and information sciences	44,193	33,158	13,596	2,531	1,660	313	257	8	3.8	0.9	1.9	0.3
Geosciences, atmospheric sciences, and ocean sciences	3,820	1,809	5,950	754	13	6	56	0	0.3	0.3	0.9	0.0
Mathematics and statistics	12,707	5,366	12,248	1,140	676	98	146	24	5.3	1.8	1.2	2.1
Multidisciplinary and interdisciplinary studies	4,268	3,146	2,388	536	123	159	284	3	2.9	5.1	11.9	0.6
Natural resources and conservation	5,072	2,619	2,962	754	0	0	0	0	0.0	0.0	0.0	0.0
Physical sciences	3,915	2,160	33,756	2,244	76	45	368	2	1.9	2.1	1.1	0.1
Psychology	21,987	13,417	16,538	3,765	332	233	108	15	1.5	1.7	0.7	0.4
Social sciences	26,712	16,014	30,039	5,220	110	70	372	16	0.4	0.4	1.2	0.3
Engineering	59,228	33,836	61,293	8,944	367	259	665	18	0.6	0.8	1.1	0.2

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	Full time	Part time	Full time	Part time	Full time	Part time						
Aerospace, aeronautical, and astronautical engineering	2,128	1,214	2,173	333	13	1	36	0	0.6	0.1	1.7	0.0
Agricultural engineering	286	85	572	89	0	0	0	0	0.0	0.0	0.0	0.0
Bioengineering and biomedical engineering	3,369	833	6,564	714	12	0	51	3	0.4	0.0	0.8	0.4
Biological and biosystems engineering	50	30	149	54	0	0	0	0	0.0	0.0	0.0	0.0
Chemical engineering	2,220	841	6,583	367	51	67	124	9	2.3	8.0	1.9	2.5
Civil engineering	8,289	4,440	6,573	1,159	6	0	27	0	0.1	0.0	0.4	0.0
Electrical, electronics, and communications engineering	19,341	8,767	15,473	2,646	181	96	212	1	0.9	1.1	1.4	*
Engineering mechanics, physics, and science	472	257	1,296	132	0	0	0	0	0.0	0.0	0.0	0.0
Industrial and manufacturing engineering	6,492	5,897	2,901	697	54	36	58	0	0.8	0.6	2.0	0.0
Mechanical engineering	10,178	5,256	9,898	1,261	41	55	79	5	0.4	1.0	0.8	0.4
Metallurgical and materials engineering	1,539	540	4,284	326	6	4	51	0	0.4	0.7	1.2	0.0
Mining engineering	211	105	170	41	0	0	0	0	0.0	0.0	0.0	0.0
Nanotechnology	32	15	71	0	0	0	0	0	0.0	0.0	0.0	-
Nuclear engineering	273	134	935	111	3	0	27	0	1.1	0.0	2.9	0.0
Petroleum engineering	477	277	579	70	0	0	0	0	0.0	0.0	0.0	0.0
Engineering nec	3,871	5,145	3,072	944	0	0	0	0	0.0	0.0	0.0	0.0
Health	38,265	18,555	11,600	4,331	511	268	41	10	1.3	1.4	0.4	0.2
Clinical medicine <sup>b</sup>	16,233	11,261	3,423	1,085	318	199	0	0	2.0	1.8	0.0	0.0
Other health	22,032	7,294	8,177	3,246	193	69	41	10	0.9	0.9	0.5	0.3

- = not calculable; \* = value &lt; 0.05%.

nec = not elsewhere classified.

<sup>a</sup> Several field names changed in 2020; the field names listed in this table are the field names used in the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) collection and reporting for 2020. For a complete list of field names from 2017 to 2020, see <https://nces.nsf.gov/pubs/nsf21318/table/A-17>.

<sup>b</sup> Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

**Note(s):**

For more information on the mapping of GSS fields and codes, see technical table A-17. Several field names changed in 2020; the field names listed in 2020 reflect those field names used in the GSS collection and reporting for 2020. The field names listed in prior years reflect those field names used in the associated data collection years.

**Source(s):**

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