

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
All graduate students	598,588	50,387	8.4	133,930	22.4	85,312	14.3	11,872	2.0	254,087	42.4	63,000	10.5
Science	411,971	36,620	8.9	83,882	20.4	67,383	16.4	9,482	2.3	173,046	42.0	41,558	10.1
Agricultural and veterinary sciences	8,319	409	4.9	4,841	58.2	979	11.8	19	0.2	1,455	17.5	616	7.4
Biological and biomedical sciences	86,153	11,079	12.9	29,416	34.1	10,499	12.2	5,981	6.9	20,767	24.1	8,411	9.8
Computer and information sciences	113,633	3,572	3.1	11,313	10.0	9,443	8.3	551	0.5	76,060	66.9	12,694	11.2
Geosciences, atmospheric, and ocean sciences	9,519	1,060	11.1	4,334	45.5	2,339	24.6	87	0.9	1,156	12.1	543	5.7
Mathematics and statistics	26,832	2,036	7.6	2,762	10.3	8,923	33.3	173	0.6	10,808	40.3	2,130	7.9
Multidisciplinary and interdisciplinary sciences	17,187	1,662	9.7	1,570	9.1	1,336	7.8	125	0.7	10,320	60.0	2,174	12.6
Natural resources and conservation	9,028	883	9.8	2,728	30.2	1,379	15.3	130	1.4	2,762	30.6	1,146	12.7
Physical sciences	39,475	5,101	12.9	15,691	39.7	13,491	34.2	563	1.4	2,776	7.0	1,853	4.7
Psychology	47,479	2,129	4.5	5,105	10.8	5,984	12.6	848	1.8	27,845	58.6	5,568	11.7
Social sciences	54,346	8,689	16.0	6,122	11.3	13,010	23.9	1,005	1.8	19,097	35.1	6,423	11.8
Engineering	131,607	11,315	8.6	44,660	33.9	14,003	10.6	1,229	0.9	47,028	35.7	13,372	10.2
Aerospace, aeronautical, and astronautical engineering	5,447	475	8.7	2,065	37.9	691	12.7	44	0.8	1,484	27.2	688	12.6
Biological, biomedical, and biosystems engineering	13,267	1,899	14.3	5,505	41.5	1,043	7.9	461	3.5	2,854	21.5	1,505	11.3
Chemical, petroleum, and chemical-related engineering	9,328	1,543	16.5	4,689	50.3	1,086	11.6	47	0.5	1,367	14.7	596	6.4
Civil, environmental, transportation and related engineering fields	14,930	1,204	8.1	5,185	34.7	1,789	12.0	72	0.5	5,124	34.3	1,556	10.4
Electrical, electronics, communications and computer engineering	37,357	2,150	5.8	10,202	27.3	3,822	10.2	217	0.6	17,279	46.3	3,687	9.9
Industrial, manufacturing, systems engineering and operations research	9,291	519	5.6	1,703	18.3	916	9.9	45	0.5	4,761	51.2	1,347	14.5
Mechanical engineering	20,323	1,576	7.8	7,320	36.0	2,915	14.3	182	0.9	6,224	30.6	2,106	10.4
Metallurgical, mining, materials and related engineering fields	5,990	732	12.2	3,126	52.2	586	9.8	37	0.6	1,093	18.2	416	6.9
Other engineering	15,674	1,217	7.8	4,865	31.0	1,155	7.4	124	0.8	6,842	43.7	1,471	9.4
Health	55,010	2,452	4.5	5,388	9.8	3,926	7.1	1,161	2.1	34,013	61.8	8,070	14.7
Clinical medicine ^a	20,426	1,273	6.2	1,946	9.5	1,092	5.3	650	3.2	12,308	60.3	3,157	15.5
Other health	34,584	1,179	3.4	3,442	10.0	2,834	8.2	511	1.5	21,705	62.8	4,913	14.2
Master's students	329,971	8,749	2.7	23,225	7.0	23,509	7.1	2,256	0.7	229,119	69.4	43,113	13.1
Science	222,976	5,585	2.5	14,565	6.5	16,743	7.5	1,322	0.6	156,478	70.2	28,283	12.7
Agricultural and veterinary sciences	4,186	104	2.5	2,022	48.3	445	10.6	3	0.1	1,195	28.5	417	10.0
Biological and biomedical sciences	29,180	567	1.9	2,885	9.9	2,967	10.2	163	0.6	18,681	64.0	3,917	13.4
Computer and information sciences	94,517	1,078	1.1	2,926	3.1	4,597	4.9	255	0.3	74,204	78.5	11,457	12.1
Geosciences, atmospheric, and ocean sciences	3,376	108	3.2	1,149	34.0	1,026	30.4	8	0.2	853	25.3	232	6.9
Mathematics and statistics	14,237	269	1.9	453	3.2	1,809	12.7	37	0.3	10,100	70.9	1,569	11.0
Multidisciplinary and interdisciplinary sciences	13,413	773	5.8	484	3.6	555	4.1	40	0.3	9,782	72.9	1,779	13.3
Natural resources and conservation	5,764	396	6.9	1,313	22.8	666	11.6	106	1.8	2,393	41.5	890	15.4

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(Number and percent)

Broad field	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
Physical sciences	3,471	95	2.7	466	13.4	920	26.5	68	2.0	1,549	44.6	373	10.7
Psychology	28,571	255	0.9	1,077	3.8	1,191	4.2	262	0.9	22,150	77.5	3,636	12.7
Social sciences	26,261	1,940	7.4	1,790	6.8	2,567	9.8	380	1.4	15,571	59.3	4,013	15.3
Engineering	65,160	1,902	2.9	6,833	10.5	4,688	7.2	390	0.6	42,838	65.7	8,509	13.1
Aerospace, aeronautical, and astronautical engineering	2,883	91	3.2	604	21.0	349	12.1	34	1.2	1,300	45.1	505	17.5
Biological, biomedical, and biosystems engineering	3,961	164	4.1	442	11.2	367	9.3	8	0.2	2,509	63.3	471	11.9
Chemical, petroleum, and chemical-related engineering	1,827	94	5.1	223	12.2	169	9.3	7	0.4	1,098	60.1	236	12.9
Civil, environmental, transportation and related engineering fields	7,984	358	4.5	1,267	15.9	727	9.1	27	0.3	4,544	56.9	1,061	13.3
Electrical, electronics, communications and computer engineering	21,886	332	1.5	1,406	6.4	1,399	6.4	99	0.5	16,111	73.6	2,539	11.6
Industrial, manufacturing, systems engineering and operations research	6,287	125	2.0	352	5.6	249	4.0	39	0.6	4,456	70.9	1,066	17.0
Mechanical engineering	9,861	290	2.9	1,416	14.4	924	9.4	90	0.9	5,633	57.1	1,508	15.3
Metallurgical, mining, materials and related engineering fields	1,619	85	5.3	385	23.8	129	8.0	2	0.1	850	52.5	168	10.4
Other engineering	8,852	363	4.1	738	8.3	375	4.2	84	0.9	6,337	71.6	955	10.8
Health	41,835	1,262	3.0	1,827	4.4	2,078	5.0	544	1.3	29,803	71.2	6,321	15.1
Clinical medicine ^a	16,700	904	5.4	755	4.5	694	4.2	336	2.0	11,418	68.4	2,593	15.5
Other health	25,135	358	1.4	1,072	4.3	1,384	5.5	208	0.8	18,385	73.1	3,728	14.8
Doctoral students	268,617	41,638	15.5	110,705	41.2	61,803	23.0	9,616	3.6	24,968	9.3	19,887	7.4
Science	188,995	31,035	16.4	69,317	36.7	50,640	26.8	8,160	4.3	16,568	8.8	13,275	7.0
Agricultural and veterinary sciences	4,133	305	7.4	2,819	68.2	534	12.9	16	0.4	260	6.3	199	4.8
Biological and biomedical sciences	56,973	10,512	18.5	26,531	46.6	7,532	13.2	5,818	10.2	2,086	3.7	4,494	7.9
Computer and information sciences	19,116	2,494	13.0	8,387	43.9	4,846	25.4	296	1.5	1,856	9.7	1,237	6.5
Geosciences, atmospheric, and ocean sciences	6,143	952	15.5	3,185	51.8	1,313	21.4	79	1.3	303	4.9	311	5.1
Mathematics and statistics	12,595	1,767	14.0	2,309	18.3	7,114	56.5	136	1.1	708	5.6	561	4.5
Multidisciplinary and interdisciplinary sciences	3,774	889	23.6	1,086	28.8	781	20.7	85	2.3	538	14.3	395	10.5
Natural resources and conservation	3,264	487	14.9	1,415	43.4	713	21.8	24	0.7	369	11.3	256	7.8
Physical sciences	36,004	5,006	13.9	15,225	42.3	12,571	34.9	495	1.4	1,227	3.4	1,480	4.1
Psychology	18,908	1,874	9.9	4,028	21.3	4,793	25.3	586	3.1	5,695	30.1	1,932	10.2
Social sciences	28,085	6,749	24.0	4,332	15.4	10,443	37.2	625	2.2	3,526	12.6	2,410	8.6
Engineering	66,447	9,413	14.2	37,827	56.9	9,315	14.0	839	1.3	4,190	6.3	4,863	7.3
Aerospace, aeronautical, and astronautical engineering	2,564	384	15.0	1,461	57.0	342	13.3	10	0.4	184	7.2	183	7.1
Biological, biomedical, and biosystems engineering	9,306	1,735	18.6	5,063	54.4	676	7.3	453	4.9	345	3.7	1,034	11.1
Chemical, petroleum, and chemical-related engineering	7,501	1,449	19.3	4,466	59.5	917	12.2	40	0.5	269	3.6	360	4.8
Civil, environmental, transportation and related engineering fields	6,946	846	12.2	3,918	56.4	1,062	15.3	45	0.6	580	8.4	495	7.1
Electrical, electronics, communications and computer engineering	15,471	1,818	11.8	8,796	56.9	2,423	15.7	118	0.8	1,168	7.5	1,148	7.4

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		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
Industrial, manufacturing, systems engineering and operations research	3,004	394	13.1	1,351	45.0	667	22.2	6	0.2	305	10.2	281	9.4
Mechanical engineering	10,462	1,286	12.3	5,904	56.4	1,991	19.0	92	0.9	591	5.6	598	5.7
Metallurgical, mining, materials and related engineering fields	4,371	647	14.8	2,741	62.7	457	10.5	35	0.8	243	5.6	248	5.7
Other engineering	6,822	854	12.5	4,127	60.5	780	11.4	40	0.6	505	7.4	516	7.6
Health	13,175	1,190	9.0	3,561	27.0	1,848	14.0	617	4.7	4,210	32.0	1,749	13.3
Clinical medicine ^a	3,726	369	9.9	1,191	32.0	398	10.7	314	8.4	890	23.9	564	15.1
Other health	9,449	821	8.7	2,370	25.1	1,450	15.3	303	3.2	3,320	35.1	1,185	12.5

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

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. 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, 2023.