

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race					
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
All detailed fields	510,866	100.0	48,099	100.0	1,211	100.0	40,930	100.0	31,764	100.0	544	100.0	163,247	100.0	12,120	100.0	15,694	100.0	197,257	100.0
Science	348,520	68.2	32,310	67.2	808	66.7	26,885	65.7	22,048	69.4	413	75.9	105,997	64.9	7,998	66.0	10,264	65.4	141,797	71.9
Agricultural and veterinary sciences	6,901	1.4	653	1.4	27	2.2	236	0.6	323	1.0	16	2.9	3,702	2.3	169	1.4	165	1.1	1,610	0.8
Agricultural sciences	6,218	1.2	586	1.2	27	2.2	203	0.5	290	0.9	15	2.8	3,336	2.0	156	1.3	129	0.8	1,476	0.7
Veterinary biomedical and clinical sciences	683	0.1	67	0.1	0	0.0	33	0.1	33	0.1	1	0.2	366	0.2	13	0.1	36	0.2	134	0.1
Biological and biomedical sciences	44,703	8.8	5,086	10.6	125	10.3	4,966	12.1	3,905	12.3	61	11.2	18,362	11.2	1,525	12.6	1,609	10.3	9,064	4.6
Biochemistry	778	0.2	98	0.2	1	0.1	58	0.1	42	0.1	0	0.0	283	0.2	21	0.2	36	0.2	239	0.1
Biology	7,988	1.6	1,092	2.3	17	1.4	558	1.4	567	1.8	18	3.3	4,298	2.6	297	2.5	236	1.5	905	0.5
Biomedical sciences	6,391	1.3	827	1.7	27	2.2	1,092	2.7	973	3.1	6	1.1	2,043	1.3	221	1.8	214	1.4	988	0.5
Biophysics	9	*	0	0.0	0	0.0	0	0.0	1	*	0	0.0	5	*	0	0.0	0	0.0	3	*
Biostatistics and bioinformatics	4,240	0.8	245	0.5	3	0.2	617	1.5	142	0.4	2	0.4	1,128	0.7	85	0.7	126	0.8	1,892	1.0
Biotechnology	4,420	0.9	434	0.9	14	1.2	595	1.5	367	1.2	4	0.7	1,214	0.7	121	1.0	236	1.5	1,435	0.7
Botany and plant biology	378	0.1	25	0.1	1	0.1	12	*	9	*	0	0.0	195	0.1	23	0.2	8	0.1	105	0.1
Cell, cellular biology, and anatomical sciences	1,031	0.2	132	0.3	8	0.7	123	0.3	78	0.2	2	0.4	421	0.3	39	0.3	48	0.3	180	0.1
Ecology and population biology	1,035	0.2	81	0.2	7	0.6	27	0.1	27	0.1	3	0.6	764	0.5	46	0.4	21	0.1	59	*
Epidemiology	3,837	0.8	398	0.8	13	1.1	539	1.3	355	1.1	5	0.9	1,292	0.8	138	1.1	109	0.7	988	0.5
Genetics	693	0.1	54	0.1	1	0.1	67	0.2	37	0.1	0	0.0	401	0.2	28	0.2	25	0.2	80	*
Microbiological sciences and immunology	1,934	0.4	295	0.6	5	0.4	162	0.4	131	0.4	2	0.4	913	0.6	77	0.6	104	0.7	245	0.1
Molecular biology	388	0.1	56	0.1	0	0.0	47	0.1	40	0.1	1	0.2	143	0.1	20	0.2	8	0.1	73	*
Neurobiology and neuroscience	480	0.1	74	0.2	2	0.2	81	0.2	42	0.1	0	0.0	189	0.1	14	0.1	14	0.1	64	*
Nutrition science	2,959	0.6	371	0.8	7	0.6	230	0.6	145	0.5	6	1.1	1,647	1.0	91	0.8	145	0.9	317	0.2
Pathology and experimental pathology	143	*	43	0.1	1	0.1	11	*	9	*	0	0.0	50	*	2	*	2	*	25	*
Pharmacology and toxicology	844	0.2	67	0.1	2	0.2	80	0.2	50	0.2	1	0.2	285	0.2	20	0.2	34	0.2	305	0.2
Physiology	2,951	0.6	274	0.6	5	0.4	277	0.7	262	0.8	6	1.1	1,311	0.8	121	1.0	109	0.7	586	0.3
Zoology and animal biology	901	0.2	81	0.2	4	0.3	31	0.1	19	0.1	0	0.0	610	0.4	48	0.4	15	0.1	93	*
Biological and biomedical sciences nec	3,303	0.6	439	0.9	7	0.6	359	0.9	609	1.9	5	0.9	1,170	0.7	113	0.9	119	0.8	482	0.2
Computer and information sciences	143,530	28.1	5,425	11.3	141	11.6	12,577	30.7	5,529	17.4	75	13.8	20,179	12.4	1,784	14.7	3,336	21.3	94,484	47.9
Artificial intelligence, informatics, and computer and information science topics	6,433	1.3	266	0.6	9	0.7	612	1.5	242	0.8	5	0.9	1,112	0.7	114	0.9	115	0.7	3,958	2.0
Computer and information sciences	41,959	8.2	1,437	3.0	26	2.1	4,526	11.1	909	2.9	17	3.1	6,409	3.9	553	4.6	712	4.5	27,370	13.9
Computer and information systems security	10,774	2.1	1,015	2.1	33	2.7	1,068	2.6	1,670	5.3	20	3.7	3,033	1.9	293	2.4	497	3.2	3,145	1.6
Computer science	46,477	9.1	1,010	2.1	20	1.7	3,539	8.6	633	2.0	12	2.2	4,015	2.5	380	3.1	956	6.1	35,912	18.2

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race					
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Information science and studies	16,138	3.2	804	1.7	15	1.2	1,424	3.5	1,304	4.1	15	2.8	3,111	1.9	232	1.9	767	4.9	8,466	4.3
Information technology	14,484	2.8	512	1.1	31	2.6	923	2.3	504	1.6	6	1.1	1,282	0.8	116	1.0	158	1.0	10,952	5.6
Computer and information sciences nec	7,265	1.4	381	0.8	7	0.6	485	1.2	267	0.8	0	0.0	1,217	0.7	96	0.8	131	0.8	4,681	2.4
Geosciences, atmospheric sciences, and ocean sciences	4,793	0.9	582	1.2	19	1.6	159	0.4	143	0.5	3	0.6	2,985	1.8	189	1.6	129	0.8	584	0.3
Atmospheric sciences and meteorology	441	0.1	35	0.1	0	0.0	16	*	16	0.1	1	0.2	300	0.2	16	0.1	5	*	52	*
Geological and earth sciences	2,984	0.6	354	0.7	15	1.2	93	0.2	86	0.3	1	0.2	1,825	1.1	104	0.9	85	0.5	421	0.2
Ocean and marine sciences	1,368	0.3	193	0.4	4	0.3	50	0.1	41	0.1	1	0.2	860	0.5	69	0.6	39	0.2	111	0.1
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Mathematics and statistics	20,105	3.9	1,250	2.6	27	2.2	1,553	3.8	548	1.7	11	2.0	4,917	3.0	321	2.6	459	2.9	11,019	5.6
Applied mathematics	8,977	1.8	433	0.9	9	0.7	568	1.4	173	0.5	5	0.9	1,509	0.9	110	0.9	196	1.2	5,974	3.0
Mathematics	3,623	0.7	395	0.8	14	1.2	250	0.6	157	0.5	3	0.6	1,742	1.1	83	0.7	117	0.7	862	0.4
Statistics	7,505	1.5	422	0.9	4	0.3	735	1.8	218	0.7	3	0.6	1,666	1.0	128	1.1	146	0.9	4,183	2.1
Multidisciplinary and interdisciplinary sciences	21,928	4.3	1,596	3.3	33	2.7	2,071	5.1	1,206	3.8	20	3.7	6,085	3.7	448	3.7	605	3.9	9,864	5.0
Biological and physical sciences	921	0.2	88	0.2	3	0.2	132	0.3	65	0.2	3	0.6	365	0.2	40	0.3	31	0.2	194	0.1
Computational science	2,939	0.6	177	0.4	4	0.3	242	0.6	70	0.2	4	0.7	834	0.5	51	0.4	39	0.2	1,518	0.8
Data science and data analytics	10,243	2.0	609	1.3	11	0.9	1,051	2.6	504	1.6	3	0.6	2,381	1.5	158	1.3	346	2.2	5,180	2.6
International and global studies	865	0.2	157	0.3	7	0.6	83	0.2	70	0.2	5	0.9	283	0.2	35	0.3	21	0.1	204	0.1
Multidisciplinary and interdisciplinary sciences nec	6,960	1.4	565	1.2	8	0.7	563	1.4	497	1.6	5	0.9	2,222	1.4	164	1.4	168	1.1	2,768	1.4
Natural resources and conservation	9,486	1.9	953	2.0	76	6.3	295	0.7	306	1.0	23	4.2	6,091	3.7	350	2.9	215	1.4	1,177	0.6
Environmental science and studies	4,359	0.9	508	1.1	45	3.7	184	0.4	157	0.5	20	3.7	2,596	1.6	150	1.2	103	0.7	596	0.3
Forestry, natural resources, and conservation	5,127	1.0	445	0.9	31	2.6	111	0.3	149	0.5	3	0.6	3,495	2.1	200	1.7	112	0.7	581	0.3
Physical sciences	6,000	1.2	716	1.5	5	0.4	418	1.0	315	1.0	6	1.1	2,601	1.6	182	1.5	179	1.1	1,578	0.8
Astronomy and astrophysics	100	*	16	*	0	0.0	9	*	4	*	1	0.2	50	*	5	*	1	*	14	*
Chemistry	2,891	0.6	374	0.8	1	0.1	217	0.5	206	0.6	4	0.7	1,135	0.7	85	0.7	76	0.5	793	0.4
Materials sciences	373	0.1	21	*	1	0.1	43	0.1	6	*	0	0.0	104	0.1	6	*	15	0.1	177	0.1
Physics	2,179	0.4	273	0.6	3	0.2	129	0.3	84	0.3	1	0.2	1,007	0.6	71	0.6	76	0.5	535	0.3
Physical sciences nec	457	0.1	32	0.1	0	0.0	20	*	15	*	0	0.0	305	0.2	15	0.1	11	0.1	59	*
Psychology	49,474	9.7	10,496	21.8	190	15.7	2,544	6.2	5,722	18.0	120	22.1	23,337	14.3	1,708	14.1	2,253	14.4	3,104	1.6
Applied psychology	20,430	4.0	4,637	9.6	64	5.3	1,009	2.5	2,079	6.5	55	10.1	10,036	6.1	619	5.1	1,107	7.1	824	0.4
Clinical psychology	4,603	0.9	1,104	2.3	12	1.0	327	0.8	336	1.1	16	2.9	2,205	1.4	219	1.8	217	1.4	167	0.1
Counseling psychology	13,161	2.6	2,914	6.1	75	6.2	593	1.4	2,089	6.6	25	4.6	6,081	3.7	422	3.5	602	3.8	360	0.2

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Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

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			Not Hispanic or Latino														Unknown ethnicity and race					
			Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race							
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number	Percent		
Human development	1,321	0.3	187	0.4	10	0.8	59	0.1	112	0.4	1	0.2	739	0.5	58	0.5	64	0.4	91	*		
Psychology, general	7,321	1.4	1,256	2.6	23	1.9	352	0.9	874	2.8	21	3.9	3,188	2.0	309	2.5	206	1.3	1,092	0.6		
Research and experimental psychology	2,638	0.5	398	0.8	6	0.5	204	0.5	232	0.7	2	0.4	1,088	0.7	81	0.7	57	0.4	570	0.3		
Social sciences	41,600	8.1	5,553	11.5	165	13.6	2,066	5.0	4,051	12.8	78	14.3	17,738	10.9	1,322	10.9	1,314	8.4	9,313	4.7		
Agricultural and natural resource economics	436	0.1	38	0.1	2	0.2	6	*	20	0.1	0	0.0	181	0.1	10	0.1	8	0.1	171	0.1		
Anthropology	1,971	0.4	305	0.6	18	1.5	43	0.1	73	0.2	1	0.2	1,260	0.8	105	0.9	47	0.3	119	0.1		
Area, ethnic, cultural, gender, and group studies	2,582	0.5	510	1.1	43	3.6	124	0.3	250	0.8	26	4.8	863	0.5	122	1.0	58	0.4	586	0.3		
Criminal justice and safety studies	4,942	1.0	939	2.0	16	1.3	122	0.3	1,064	3.3	12	2.2	2,258	1.4	174	1.4	245	1.6	112	0.1		
Criminology	1,161	0.2	253	0.5	7	0.6	40	0.1	144	0.5	1	0.2	545	0.3	46	0.4	25	0.2	100	0.1		
Economics (except agricultural and natural resource)	6,398	1.3	369	0.8	6	0.5	296	0.7	200	0.6	6	1.1	1,537	0.9	103	0.8	119	0.8	3,762	1.9		
Geography and cartography	2,517	0.5	228	0.5	8	0.7	84	0.2	104	0.3	3	0.6	1,496	0.9	84	0.7	102	0.6	408	0.2		
International relations and national security studies	7,147	1.4	965	2.0	12	1.0	433	1.1	560	1.8	15	2.8	3,457	2.1	240	2.0	256	1.6	1,209	0.6		
Linguistics	1,117	0.2	141	0.3	12	1.0	82	0.2	44	0.1	2	0.4	515	0.3	29	0.2	44	0.3	248	0.1		
Political science and government	2,649	0.5	424	0.9	7	0.6	106	0.3	255	0.8	4	0.7	1,320	0.8	86	0.7	82	0.5	365	0.2		
Public policy analysis	4,645	0.9	619	1.3	13	1.1	338	0.8	452	1.4	3	0.6	2,234	1.4	143	1.2	164	1.0	679	0.3		
Sociology and population studies	1,888	0.4	395	0.8	10	0.8	64	0.2	376	1.2	3	0.6	694	0.4	79	0.7	54	0.3	213	0.1		
Urban studies and affairs	648	0.1	66	0.1	2	0.2	40	0.1	136	0.4	0	0.0	316	0.2	19	0.2	18	0.1	51	*		
Social sciences, other	3,499	0.7	301	0.6	9	0.7	288	0.7	373	1.2	2	0.4	1,062	0.7	82	0.7	92	0.6	1,290	0.7		
Engineering	100,567	19.7	7,204	15.0	138	11.4	8,305	20.3	2,894	9.1	50	9.2	28,366	17.4	2,191	18.1	2,380	15.2	49,039	24.9		
Aerospace, aeronautical, and astronautical engineering	5,380	1.1	588	1.2	7	0.6	669	1.6	117	0.4	6	1.1	2,712	1.7	193	1.6	130	0.8	958	0.5		
Biological, biomedical, and biosystems engineering	5,204	1.0	459	1.0	8	0.7	770	1.9	225	0.7	3	0.6	1,663	1.0	156	1.3	111	0.7	1,809	0.9		
Chemical, petroleum, and chemical-related engineering	2,658	0.5	165	0.3	3	0.2	277	0.7	65	0.2	2	0.4	723	0.4	54	0.4	61	0.4	1,308	0.7		
Chemical engineering	2,271	0.4	145	0.3	1	0.1	265	0.6	52	0.2	2	0.4	652	0.4	51	0.4	55	0.4	1,048	0.5		
Petroleum engineering	387	0.1	20	*	2	0.2	12	*	13	*	0	0.0	71	*	3	*	6	*	260	0.1		
Civil, environmental, transportation and related engineering fields	12,082	2.4	1,081	2.2	39	3.2	766	1.9	338	1.1	8	1.5	3,889	2.4	254	2.1	213	1.4	5,494	2.8		
Civil engineering	9,149	1.8	856	1.8	28	2.3	629	1.5	239	0.8	6	1.1	2,975	1.8	186	1.5	156	1.0	4,074	2.1		
Architectural, environmental, construction and surveying engineering	2,933	0.6	225	0.5	11	0.9	137	0.3	99	0.3	2	0.4	914	0.6	68	0.6	57	0.4	1,420	0.7		
Electrical, electronics, communications and computer engineering	31,093	6.1	1,617	3.4	25	2.1	2,610	6.4	756	2.4	13	2.4	5,657	3.5	512	4.2	663	4.2	19,240	9.8		
Electrical, electronics, and communications engineering	18,215	3.6	1,173	2.4	20	1.7	1,793	4.4	551	1.7	10	1.8	4,290	2.6	399	3.3	369	2.4	9,610	4.9		
Computer engineering	12,878	2.5	444	0.9	5	0.4	817	2.0	205	0.6	3	0.6	1,367	0.8	113	0.9	294	1.9	9,630	4.9		
Industrial, manufacturing, systems engineering and operations research	11,873	2.3	1,006	2.1	10	0.8	756	1.8	391	1.2	3	0.6	3,220	2.0	222	1.8	404	2.6	5,861	3.0		

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(Number and percent)

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					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Industrial and manufacturing engineering	5,821	1.1	417	0.9	3	0.2	229	0.6	128	0.4	1	0.2	1,048	0.6	76	0.6	65	0.4	3,854	2.0
Systems engineering and operations research	6,052	1.2	589	1.2	7	0.6	527	1.3	263	0.8	2	0.4	2,172	1.3	146	1.2	339	2.2	2,007	1.0
Mechanical engineering	15,335	3.0	1,288	2.7	21	1.7	1,389	3.4	365	1.1	9	1.7	5,193	3.2	450	3.7	302	1.9	6,318	3.2
Metallurgical, mining, materials and related engineering fields	2,462	0.5	219	0.5	6	0.5	200	0.5	74	0.2	2	0.4	918	0.6	70	0.6	71	0.5	902	0.5
Other engineering	14,480	2.8	781	1.6	19	1.6	868	2.1	563	1.8	4	0.7	4,391	2.7	280	2.3	425	2.7	7,149	3.6
Agricultural engineering	377	0.1	23	*	1	0.1	18	*	12	*	0	0.0	162	0.1	19	0.2	5	*	137	0.1
Engineering mechanics, physics, and science	696	0.1	49	0.1	0	0.0	49	0.1	32	0.1	0	0.0	219	0.1	20	0.2	9	0.1	318	0.2
Nuclear engineering	516	0.1	47	0.1	1	0.1	29	0.1	8	*	0	0.0	336	0.2	25	0.2	10	0.1	60	*
Engineering, other	12,891	2.5	662	1.4	17	1.4	772	1.9	511	1.6	4	0.7	3,674	2.3	216	1.8	401	2.6	6,634	3.4
Health	61,779	12.1	8,585	17.8	265	21.9	5,740	14.0	6,822	21.5	81	14.9	28,884	17.7	1,931	15.9	3,050	19.4	6,421	3.3
Clinical medicine	28,484	5.6	3,867	8.0	173	14.3	3,400	8.3	4,190	13.2	46	8.5	11,240	6.9	1,000	8.3	1,794	11.4	2,774	1.4
Medical clinical sciences and clinical and medical laboratory sciences	1,242	0.2	91	0.2	5	0.4	191	0.5	178	0.6	0	0.0	571	0.3	30	0.2	54	0.3	122	0.1
Public health	27,242	5.3	3,776	7.9	168	13.9	3,209	7.8	4,012	12.6	46	8.5	10,669	6.5	970	8.0	1,740	11.1	2,652	1.3
Other health	33,295	6.5	4,718	9.8	92	7.6	2,340	5.7	2,632	8.3	35	6.4	17,644	10.8	931	7.7	1,256	8.0	3,647	1.8
Communication disorders sciences	18,183	3.6	2,929	6.1	52	4.3	916	2.2	952	3.0	14	2.6	11,710	7.2	500	4.1	816	5.2	294	0.1
Dental sciences	1,420	0.3	94	0.2	1	0.1	244	0.6	53	0.2	2	0.4	658	0.4	41	0.3	46	0.3	281	0.1
Kinesiology and exercise science	4,286	0.8	704	1.5	26	2.1	122	0.3	572	1.8	8	1.5	2,133	1.3	178	1.5	114	0.7	429	0.2
Nursing science	1,701	0.3	270	0.6	1	0.1	174	0.4	230	0.7	2	0.4	906	0.6	38	0.3	53	0.3	27	*
Pharmaceutical sciences	2,265	0.4	150	0.3	3	0.2	209	0.5	248	0.8	2	0.4	673	0.4	70	0.6	43	0.3	867	0.4
Other health nec	5,440	1.1	571	1.2	9	0.7	675	1.6	577	1.8	7	1.3	1,564	1.0	104	0.9	184	1.2	1,749	0.9

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):

Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. 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.