

TABLE 3-5

Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Number and median years)

Time to degree and demographic characteristic	All fields		Science and engineering, total		Agricultural sciences and natural resources		Biological and biomedical sciences		Computer and information sciences		Engineering		Geosciences, atmospheric, and ocean sciences		Health sciences		Mathematics and statistics		Multidisciplinary/ interdisciplinary sciences		Physical sciences		Psychology		Social sciences		
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	
Years since bachelor's degree																											
Doctorate recipients reporting year of bachelor's degree	54,429	8.6	43,361	8.0	1,204	9.0	9,266	7.8	2,159	8.2	10,074	7.4	1,155	8.1	2,512	11.4	1,970	7.0	1,616	8.3	5,179	6.7	3,474	8.6	4,752	10.2	
Sex																											
Male	28,564	8.3	24,059	7.9	540	9.1	4,202	8.0	1,620	8.1	7,426	7.6	630	8.3	714	9.9	1,411	6.8	993	8.1	3,414	7.0	800	8.9	2,309	10.0	
Female	25,858	9.0	19,295	8.2	664	8.6	5,063	7.6	539	8.9	2,648	7.1	524	8.0	1,798	12.2	558	7.2	623	8.4	1,764	6.3	2,673	8.4	2,441	10.3	
Citizenship status																											
U.S. citizen or permanent resident	34,922	8.8	26,551	8.0	770	8.9	6,908	7.6	806	8.3	4,458	6.9	767	8.0	1,880	12.2	924	6.3	813	8.3	3,101	6.3	3,084	8.6	3,040	10.3	
Temporary visa holder	18,754	8.3	16,264	8.1	425	8.9	2,259	8.3	1,310	8.1	5,509	7.9	375	8.5	586	9.9	1,020	7.3	784	8.2	2,025	7.3	320	8.5	1,651	10.0	
Ethnicity and race (U.S. citizens and permanent residents)																											
Hispanic or Latino	3,370	8.6	2,552	7.9	63	8.3	713	7.6	47	7.4	398	6.6	58	8.3	155	10.7	64	6.3	73	8.4	294	6.6	361	8.6	326	10.5	
Not Hispanic or Latino																											
American Indian or Alaska Native	113	11.4	67	10.0	D	D	11	8.1	D	D	6	6.2	D	D	9	13.2	0	-	D	D	5	8.6	12	7.6	15	10.3	
Asian	3,765	8.3	3,196	8.0	46	10.1	890	8.0	189	8.3	721	7.3	57	9.3	189	11.6	135	6.3	109	8.0	342	6.7	229	9.2	289	10.3	
Black or African American	2,680	11.4	1,633	9.6	D	D	333	8.0	D	D	209	7.5	D	D	235	13.0	22	9.5	D	D	97	7.0	291	10.0	292	11.2	
White	22,814	8.6	17,402	7.8	574	8.4	4,511	7.6	469	8.3	2,846	6.8	594	7.9	1,170	12.6	644	6.3	521	8.1	2,166	6.3	1,966	8.3	1,941	10.3	
More than one race	1,291	8.0	1,055	7.3	27	10.0	325	7.3	21	7.2	175	6.3	29	7.4	60	11.7	40	6.1	24	6.8	111	6.2	140	8.6	103	9.4	
Other race or race not reported	435	9.2	326	8.3	9	12.3	72	8.0	17	9.3	54	7.8	5	7.5	24	13.4	11	6.3	7	12.9	46	6.3	37	8.8	44	10.3	
Ethnicity not reported	454	9.6	320	8.3	15	7.3	53	7.7	18	9.0	49	8.0	5	8.8	38	10.7	8	7.6	16	14.8	40	6.6	48	8.3	30	10.7	
Years since entering graduate school																											
Doctorate recipients reporting year of graduate school entry	52,827	7.2	42,184	6.8	1,149	7.3	9,108	6.4	2,071	7.0	9,775	6.6	1,131	6.8	2,451	9.0	1,906	6.0	1,577	7.0	5,032	6.0	3,329	6.9	4,655	8.7	
Sex																											
Male	27,788	7.0	23,449	6.8	515	7.3	4,143	6.7	1,561	6.9	7,197	6.7	626	6.9	703	7.8	1,372	6.0	981	6.9	3,319	6.0	779	7.0	2,253	8.3	
Female	25,032	7.4	18,728	6.8	634	7.3	4,964	6.3	510	7.7	2,578	6.3	504	6.8	1,748	9.3	533	6.1	596	7.3	1,712	5.8	2,549	6.8	2,400	8.8	
Citizenship status																											
U.S. citizen or permanent resident	33,766	7.1	25,736	6.7	721	7.2	6,760	6.3	771	7.0	4,313	6.0	751	6.6	1,824	9.8	897	5.8	772	7.0	2,995	5.8	2,950	6.9	2,982	8.6	
Temporary visa holder	18,200	7.3	15,815	7.0	409	7.8	2,251	7.0	1,251	7.0	5,321	6.9	364	7.5	580	7.7	975	6.3	777	7.0	1,974	6.3	303	7.0	1,610	8.7	
Ethnicity and race (U.S. citizens and permanent residents)																											
Hispanic or Latino	3,260	7.3	2,467	6.8	61	7.5	697	6.3	45	6.3	388	6.0	57	6.8	153	9.3	60	5.8	70	6.9	281	5.8	331	7.0	324	8.8	
Not Hispanic or Latino																											
American Indian or Alaska Native	95	8.8	59	7.9	D	D	11	7.0	D	D	D	D	D	D	9	12.8	0	-	D	D	D	D	9	6.9	15	8.0	
Asian	3,699	7.0	3,137	6.8	45	8.4	885	6.8	181	7.3	705	6.3	56	7.7	187	9.1	131	5.8	107	7.0	336	5.9	219	7.0	285	9.0	
Black or African American	2,596	9.7	1,578	8.0	D	D	321	6.8	D	D	D	D	D	D	232	10.0	21	7.8	D	D	D	D	282	8.3	284	9.8	
White	22,279	7.0	17,042	6.3	547	6.9	4,434	6.2	459	6.8	2,782	6.0	584	6.5	1,153	9.8	628	5.8	497	6.8	2,125	5.8	1,919	6.8	1,914	8.3	
More than one race	1,283	6.8	1,050	6.2	27	7.8	324	6.0	21	6.0	174	5.8	29	6.1	58	9.7	41	5.8	24	6.0	111	5.8	139	6.8	102	7.8	
Other race or race not reported	340	7.6	251	6.5	3	12.2	60	6.4	12	12.1	36	5.9	4	6.3	16	10.4	11	5.8	6	12.7	34	5.4	31	6.3	38	8.9	

TABLE 3-5

Median years to science and engineering research doctorate, by sex, citizenship status, ethnicity, race, and broad field of doctorate: 2023

(Number and median years)

Time to degree and demographic characteristic	All fields		Science and engineering, total		Agricultural sciences and natural resources		Biological and biomedical sciences		Computer and information sciences		Engineering		Geosciences, atmospheric, and ocean sciences		Health sciences		Mathematics and statistics		Multidisciplinary/ interdisciplinary sciences		Physical sciences		Psychology		Social sciences	
	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median	Number	Median
Ethnicity not reported	214	8.1	152	7.0	5	7.6	28	5.9	10	6.3	21	8.3	2	6.6	16	11.5	5	5.8	10	6.5	15	6.8	20	8.5	20	10.1
Years since entering doctoral program ^a																										
Doctorate recipients reporting year of doctoral program entry ^b	52,050	5.7	41,586	5.6	1,132	5.0	8,995	5.8	2,031	5.7	9,615	5.3	1,119	5.7	2,415	5.0	1,880	5.3	1,560	5.3	4,967	5.7	3,270	5.9	4,602	6.0
Sex																										
Male	27,340	5.7	23,075	5.6	505	5.0	4,083	5.8	1,531	5.7	7,068	5.3	620	5.5	690	5.0	1,353	5.3	973	5.6	3,271	5.8	759	5.9	2,222	5.9
Female	24,703	5.8	18,504	5.7	627	5.0	4,911	5.7	500	5.7	2,547	5.3	498	5.8	1,725	5.0	526	5.3	587	5.3	1,695	5.3	2,510	5.9	2,378	6.0
Citizenship status																										
U.S. citizen or permanent resident	33,211	5.8	25,326	5.8	708	5.0	6,668	5.8	745	5.8	4,238	5.3	742	5.8	1,791	5.3	877	5.7	763	5.7	2,949	5.7	2,897	5.9	2,948	6.1
Temporary visa holder	17,993	5.3	15,637	5.3	405	4.8	2,231	5.7	1,236	5.4	5,241	5.2	362	5.3	579	5.0	971	5.1	769	5.3	1,955	5.6	297	5.7	1,591	5.8
Ethnicity and race (U.S. citizens and permanent residents)																										
Hispanic or Latino	3,200	5.8	2,419	5.8	57	5.3	685	5.8	43	5.9	381	5.3	57	5.8	149	5.2	59	5.3	68	5.3	275	5.5	323	6.0	322	6.3
Not Hispanic or Latino																										
American Indian or Alaska Native	92	5.8	59	6.0	D	D	11	6.0	D	D	D	D	D	D	9	5.0	0	-	D	D	D	D	9	6.9	15	6.2
Asian	3,638	5.8	3,085	5.8	45	4.8	871	5.8	174	5.9	692	5.6	56	5.8	184	5.0	129	5.3	106	5.8	333	5.8	211	5.9	284	6.0
Black or African American	2,527	5.8	1,545	5.8	D	D	313	5.8	D	D	D	D	D	D	228	5.6	20	5.9	D	D	D	D	276	6.0	281	5.9
White	21,955	5.8	16,791	5.8	540	5.0	4,379	5.7	445	5.8	2,740	5.3	577	5.8	1,133	5.2	612	5.7	491	5.7	2,090	5.7	1,894	5.9	1,890	6.3
More than one race	1,265	5.8	1,036	5.8	27	5.8	321	5.8	21	5.8	171	5.3	28	5.5	57	5.2	41	5.7	24	5.2	110	5.7	135	6.0	101	6.0
Other race or race not reported	325	5.8	242	5.8	3	7.1	60	5.8	11	6.3	33	5.5	4	5.8	16	5.5	11	5.8	6	5.5	34	5.4	29	5.9	35	6.0
Ethnicity not reported	209	5.8	149	5.8	4	7.4	28	5.5	9	4.8	21	5.6	2	5.6	15	6.8	5	5.8	10	5.3	15	6.3	20	6.0	20	6.8

- = not calculable; D = suppressed to avoid disclosure of confidential information.

^a Years since entering doctoral program is based on master's degree program entry if the master's degree was at the doctoral institution in the same field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

^b Doctorate recipients reporting year of doctoral program entry includes only cases with valid year of entry into master's program if master's degree was at the doctoral institution in the same field of study or was a prerequisite to the doctorate; otherwise, includes only cases with valid year of doctoral program entry.

Note(s):

Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in table A-4. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information about the 2021 taxonomy change, see the "Technical Notes."

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.