TABLE 1-10a

Graduate students in engineering broad fields: 1975−2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields[a]	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields[b]	Other engineering[c]
1975	68,332	1,670	883	5,397	12,560	16,320	11,663	8,601	2,788	8,450
1976	66,723	1,477	895	5,647	11,995	15,926	10,687	8,313	2,913	8,870
1977	68,757	1,518	855	5,652	12,335	17,406	10,438	8,722	3,037	8,794
1978[d]	67,787	1,463	920	5,859	12,358	17,127	9,494	8,638	3,008	8,920
1979	71,808	1,481	1,004	6,109	12,822	17,715	10,729	9,251	3,167	9,530
1980	74,335	1,737	964	6,541	13,097	19,132	9,698	9,888	3,347	9,931
1981	79,585	1,883	1,017	7,047	14,089	20,113	9,737	10,618	3,614	11,467
1982	83,720	1,941	1,085	7,808	14,122	21,927	9,577	11,467	3,603	12,190
1983	91,146	2,305	1,230	8,327	14,910	25,295	9,247	12,911	4,001	12,930
1984	92,739	2,340	1,315	8,144	15,192	26,388	9,282	13,855	4,175	12,048
1985	96,018	2,538	1,335	7,959	14,902	28,203	10,525	14,157	4,448	11,951
1986	101,905	2,804	1,487	7,790	14,976	29,969	11,569	15,713	4,748	12,849
1987	103,983	3,015	1,628	7,959	14,682	31,399	12,353	16,366	4,910	11,671
1988	102,854	3,223	1,708	7,385	14,811	32,035	11,575	16,151	4,870	11,096
1989	104,065	3,524	1,867	7,147	14,909	33,257	11,333	16,265	5,053	10,710
1990	107,658	3,934	2,097	7,438	15,542	33,722	11,555	16,879	5,420	11,071
1991	113,535	4,120	2,199	7,862	17,398	35,111	12,996	17,730	5,692	10,427
1992	118,039	4,036	2,492	8,170	19,572	36,428	13,826	18,637	5,987	8,891
1993	116,872	3,940	2,640	8,279	19,583	35,290	13,905	18,477	5,837	8,921
1994	113,024	3,715	2,716	8,263	19,925	33,067	13,992	17,761	5,652	7,933
1995	107,201	3,343	2,693	8,062	19,218	30,861	13,475	16,363	5,329	7,857
1996	103,224	3,208	2,586	7,970	18,528	29,941	12,675	15,509	5,118	7,586
1997	101,148	3,083	2,797	7,849	17,193	30,787	11,957	15,045	5,036	7,401
1998	100,038	3,137	2,855	7,664	16,517	31,384	11,221	14,696	4,984	7,580
1999	101,691	3,349	3,132	7,525	16,226	31,822	11,803	14,956	4,809	8,132
2000	104,112	3,407	3,197	7,683	16,451	33,611	12,119	15,235	4,664	7,745
2001	109,493	3,451	3,599	7,569	16,665	36,100	12,940	15,852	4,961	8,356
2002	119,668	3,685	4,338	8,180	17,713	39,948	14,033	17,139	5,259	9,373
2003	127,377	4,048	5,301	8,365	18,890	41,763	14,313	18,393	5,409	10,895
2004	123,566	4,089	5,807	8,297	18,561	38,995	13,852	17,852	5,367	10,746
2005	120,565	4,170	6,067	7,981	18,114	37,450	13,650	17,373	5,439	10,321
2006	123,041	4,482	6,482	8,074	17,802	38,265	13,829	17,919	5,512	10,676
2007old[d]	130,255	4,616	6,881	8,397	19,867	40,207	14,290	18,366	5,672	11,959
2007new[a]	131,676	4,616	6,904	8,598	16,071	40,588	14,474	18,347	5,536	16,542
2008	137,856	4,902	7,339	8,901	16,931	41,164	15,692	19,585	5,829	17,513
2009	144,677	5,266	7,904	9,378	18,638	41,218	15,825	21,243	6,175	19,030

TABLE 1-10a

Graduate students in engineering broad fields: 1975–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields[a]	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields[b]	Other engineering[c]
2010	149,241	5,540	8,497	9,963	19,559	41,336	15,205	22,509	6,693	19,939
2011	146,501	5,691	9,175	10,129	19,596	41,580	14,494	21,883	7,149	16,804
2012	148,385	5,069	9,157	10,747	19,922	42,347	14,469	23,088	7,341	16,245
2013	153,049	5,181	9,198	11,307	20,110	45,562	14,363	24,087	7,501	15,740
2014old[d]	162,013	5,116	9,510	11,909	20,660	50,051	14,659	25,508	7,869	16,731
2014new[d]	164,488	5,116	9,510	11,926	20,789	51,909	14,865	25,651	7,914	16,828
2015	169,354	5,345	9,761	12,029	20,978	52,940	16,284	27,314	8,148	16,555
2016	168,443	5,416	10,208	12,049	20,569	50,062	16,200	27,898	8,484	17,557
2017old[b]	166,819	na	na	na	na	na	na	na	na	na
2017new[b]	165,581	5,708	11,116	11,744	21,132	47,752	15,905	27,428	7,082	17,714
2018	163,301	5,848	11,763	11,414	20,461	46,227	15,987	26,593	7,216	17,792
2019	164,004	6,255	12,358	10,938	19,625	46,754	14,869	26,108	7,083	19,209
2020	157,729	6,971	12,775	10,554	18,304	43,032	14,869	25,782	7,181	18,261
2021	168,050	7,838	14,059	10,696	19,608	45,265	15,870	27,258	7,422	20,034
2022	176,000	8,095	14,442	10,601	20,375	49,901	15,870	27,552	7,118	21,481
2023	175,559	8,264	15,203	10,546	19,934	48,799	15,762	27,014	7,244	22,793
Master's students										
2017new[b]	96,756	3,322	4,108	4,208	13,506	29,816	12,272	16,279	2,427	10,818
2018	93,064	3,342	4,282	3,815	12,729	28,108	12,389	15,434	2,395	10,570
2019	91,939	3,701	4,424	3,274	11,873	28,177	11,912	14,861	2,266	11,451
2020	86,450	4,326	4,536	2,942	10,819	25,312	11,030	14,305	2,299	10,881
2021	95,126	5,065	5,192	2,983	11,730	27,695	11,949	15,718	2,518	12,276
2022	103,020	5,263	5,177	3,011	12,621	32,316	12,579	16,029	2,545	13,479
2023	100,567	5,380	5,204	2,658	12,082	31,093	11,873	15,335	2,462	14,480
Doctoral students										
2017new[b]	68,825	2,386	7,008	7,536	7,626	17,936	3,633	11,149	4,655	6,896
2018	70,237	2,506	7,481	7,599	7,732	18,119	3,598	11,159	4,821	7,222
2019	72,065	2,554	7,934	7,664	7,752	18,577	3,762	11,247	4,817	7,758
2020	71,279	2,645	8,239	7,612	7,485	17,720	3,839	11,477	4,882	7,380
2021	72,924	2,773	8,867	7,713	7,878	17,570	3,921	11,540	4,904	7,758
2022	72,980	2,832	9,265	7,590	7,754	17,585	3,856	11,523	4,573	8,002
2023	74,992	2,884	9,999	7,888	7,852	17,706	3,889	11,679	4,782	8,313

na = not applicable; data were not collected at this level of detail in the year shown.

[a] In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. Architecture is reported as a separate field of engineering in 2007*new*; data were reported under civil engineering in 2007old and previous years. See appendix A in https://www.nsf.gov/statistics/nsf10307/ for more detail.

[b] As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Materials sciences was reported as part of metallurgical and materials engineering from 2011–16; starting in 2017, materials sciences is reported as part of physical sciences, nanotechnology was reported as part of the science detailed field multidisciplinary and interdisciplinary studies from 2007–16; and starting in 2017, architecture was removed.

[c] Other engineering includes agricultural engineering; engineering mechanics, science, and physics; nuclear engineering; engineering, other; and, from 2007new to 2017old, architecture. Architecture was reported under civil engineering in 2007old and previous years.

[d] Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

[e] In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see https://www.nsf.gov/statistics/2016/nsf16314.

Note(s):
Prior to 2020, there were no broad fields in engineering, and this table includes all engineering detailed fields. All fields have been moved to match the current broad field organization. Master's and doctoral students were not reported separately until 2017. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see technical table A-17.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.