

TABLE 1-10b

Postdoctoral appointees in engineering detailed fields: 1979–2019

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Agricultural engineering	Architecture ^{a,b}	Bioengineering and biomedical engineering	Biological and biosystems engineering	Chemical engineering	Civil engineering ^b	Electrical, electronics, and communications engineering	Engineering mechanics, physics, and science	Industrial and manufacturing engineering	Mechanical engineering	Metallurgical and materials engineering ^a	Mining engineering	Nanotechnology ^a	Nuclear engineering	Petroleum engineering	Engineering nec
1979	1,067	32	29	na	28	na	192	128	142	74	8	143	209	5	NA	20	6	51
1980	981	20	13	na	25	na	185	122	123	79	16	137	172	3	NA	22	6	58
1981	1,040	14	12	na	32	na	173	103	191	87	13	130	194	16	NA	26	2	47
1982	980	25	9	na	28	na	177	103	178	76	9	130	168	10	NA	18	4	45
1983	1,108	32	5	na	27	na	199	131	180	71	13	182	204	19	NA	15	1	29
1984	1,203	42	11	na	31	na	246	146	178	63	21	196	168	18	NA	19	4	60
1985	1,356	51	16	na	46	na	274	122	183	90	18	207	245	19	NA	31	6	48
1986	1,405	48	17	na	53	na	298	140	175	67	25	240	250	25	NA	31	1	35
1987	1,446	43	29	na	44	na	312	174	177	41	26	216	283	26	NA	20	10	45
1988	1,690	48	31	na	47	na	425	203	187	38	32	218	325	63	NA	17	8	48
1989	1,928	38	39	na	69	na	477	182	193	74	32	304	323	90	NA	36	9	62
1990	1,950	67	34	na	71	na	557	168	242	76	6	222	363	19	NA	30	15	80
1991	2,262	77	37	na	59	na	576	186	346	117	27	326	392	11	NA	29	19	60
1992	2,369	92	39	na	79	na	544	188	318	71	38	352	450	23	NA	34	12	129
1993	2,446	116	44	na	80	na	529	181	388	78	63	358	403	19	NA	40	13	134
1994	2,606	100	51	na	135	na	527	210	411	95	54	388	441	24	NA	39	14	117
1995	2,648	101	51	na	129	na	576	201	381	101	30	410	490	19	NA	28	9	122
1996	2,677	109	51	na	140	na	545	230	395	93	30	425	496	10	NA	28	6	119
1997	2,971	125	62	na	154	na	636	248	508	115	28	440	465	11	NA	33	21	125
1998	2,853	133	56	na	180	na	613	225	488	110	30	434	404	10	NA	19	14	137
1999	3,196	128	62	na	242	na	671	299	548	122	27	476	421	6	NA	30	19	145
2000	3,313	111	56	na	220	na	703	295	525	163	48	480	507	8	NA	40	20	137
2001	3,152	128	58	na	262	na	574	268	436	162	21	501	479	14	NA	77	17	155
2002	3,566	140	65	na	284	na	758	342	613	169	43	441	507	10	NA	26	15	153
2003	3,810	141	85	na	388	na	686	300	646	180	45	543	539	12	NA	49	17	179
2004	3,949	141	79	na	425	na	689	313	654	180	50	514	567	9	NA	67	14	247
2005	4,166	153	89	na	477	na	702	384	689	168	51	562	578	8	NA	41	13	251
2006	4,642	165	116	na	591	na	735	458	721	224	51	644	571	11	NA	85	18	252
2007 ^{old} ^b	4,908	178	139	na	640	na	758	419	885	192	73	725	555	4	na	77	22	241
2007 ^{new} ^b	4,942	178	139	5	640	na	790	417	884	183	71	722	564	5	na	73	22	249
2008	5,462	154	135	11	710	na	880	465	987	214	115	784	605	5	na	85	28	284
2009	6,416	168	110	22	960	na	1,084	535	1,025	226	109	948	758	4	na	90	36	341
2010 ^{c,d}	6,969	212	119	10	1,023	na	1,077	571	1,095	236	151	1,021	841	4	na	107	44	458
2011 ^d	6,786	202	129	16	1,069	na	1,137	551	1,035	281	121	889	860	4	na	111	35	346

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2012	7,103	170	133	6	1,161	na	1,098	590	1,152	292	127	985	854	5	na	120	53	357
2013	7,106	202	152	17	1,103	na	1,230	587	1,180	240	133	1,034	809	7	na	105	49	258
2014old ^e	7,292	220	146	14	1,196	na	1,244	629	1,177	270	131	1,055	776	15	na	112	66	241
2014new ^e	7,307	220	150	14	1,198	na	1,244	629	1,179	270	131	1,058	780	15	na	112	66	241
2015	7,656	217	221	17	1,201	na	1,283	670	1,160	251	142	1,161	911	15	na	107	73	227
2016	7,796	201	165	16	1,278	na	1,218	706	1,186	284	130	1,080	882	10	na	100	72	468
2017old ^a	7,929	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2017new ^a	7,839	196	111	ne	1,398	78	1,197	804	1,170	316	127	1,089	550	15	85	94	65	544
2018	7,914	207	113	ne	1,433	96	1,142	739	1,197	354	156	1,069	549	26	134	106	63	530
2019	8,266	227	112	ne	1,515	87	1,157	865	1,305	180	167	1,142	642	23	151	80	72	541

na = not applicable; data were not collected at this level of detail in the year shown. NA = not available; nanotechnology was not collected until 2007. ne = not eligible.

nec = not elsewhere classified.

^a As part of 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.

^b 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 2007new; data were reported under civil engineering in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^d Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^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, or 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):

"Field" refers to the field of the unit that reports postdocs to the Survey of Graduate Students and Postdoctorates in Science and Engineering. Sum of the broad fields may not add to total because of rounding.

Source(s):

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