TABLE 27-1

U.S. residing employed doctoral scientists and engineers, by selected demographic and employment-related characteristics and primary or secondary work activity: 2021

(Number and SE)

Characteristic	All employed						Hispanic or Latino[a]						Not Hispanic or Latino[b]																							
													American Indian or Alaska Native						Asian						Black or African American						White					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Doctorate recipient	872,100	2,425	543,550	2,350	328,500	1,250	40,100	475	22,600	425	17,500	325	1,400	125	650	100	700	100	219,800	1,600	148,600	1,550	71,200	1,125	31,800	475	15,700	375	16,100	400	562,950	2,075	347,250	1,925	215,700	1,325	16,000	575	8,750	500	7,250	375
Age																																									
Under 35	99,200	925	57,600	800	41,600	775	5,250	225	3,000	200	2,300	150	50	25	D	D	50	25	33,750	700	20,750	600	12,950	500	2,800	175	1,100	125	1,700	150	54,450	775	31,250	650	23,150	550	2,900	250	1,450	200	1,500	175
35–39	130,150	1,225	74,950	1,025	55,150	875	7,700	300	3,650	200	4,050	250	200	50	100	50	100	50	37,250	800	23,400	725	13,850	450	4,750	250	2,050	175	2,650	175	76,850	950	43,900	750	32,950	675	3,400	325	1,900	275	1,500	175
40–44	127,550	1,400	73,950	1,175	53,600	1,025	6,850	275	3,700	200	3,150	200	300	75	150	50	150	50	37,450	900	24,550	775	12,900	575	5,350	275	2,050	175	3,250	250	75,150	1,125	42,250	950	32,900	750	2,500	200	1,250	150	1,250	125
45–49	111,200	1,250	65,650	1,075	45,550	850	5,250	250	2,900	200	2,350	150	150	50	100	50	50	25	34,000	825	21,650	725	12,350	550	4,650	300	2,350	200	2,300	225	65,000	1,100	37,700	900	27,300	575	2,100	250	900	125	1,200	225
50–54	104,550	1,225	65,850	1,025	38,650	800	4,500	250	2,400	175	2,100	175	150	50	100	50	100	50	25,950	750	18,450	675	7,500	400	4,100	275	2,100	200	2,000	175	68,400	1,025	42,050	825	26,350	650	1,400	150	750	150	650	100
55–59	98,950	1,375	65,650	1,275	33,350	725	4,150	225	2,700	175	1,500	150	100	50	50	25	50	25	23,850	750	17,750	625	6,100	375	3,400	250	2,100	200	1,350	150	66,100	1,050	42,200	975	23,950	600	1,350	225	900	200	450	75
60–64	86,450	1,375	59,350	1,150	27,100	650	3,500	225	2,250	175	1,250	150	100	50	50	25	50	25	15,000	700	11,450	650	3,550	350	2,800	250	1,550	150	1,300	200	64,050	1,150	43,450	1,025	20,600	550	950	175	650	175	300	75
65–75	114,100	1,575	80,600	1,400	33,500	875	2,900	175	2,050	175	850	100	300	75	100	75	150	75	12,550	675	10,650	600	1,900	250	3,950	250	2,400	200	1,600	200	92,950	1,425	64,450	1,275	28,500	775	1,400	200	950	200	450	100
Years since doctorate																																								
≤ 5	141,750	600	81,250	775	60,500	725	9,300	300	5,050	250	4,300	175	300	75	100	50	200	75	42,500	725	26,800	625	15,700	550	6,450	225	2,800	200	3,600	175	78,950	725	44,650	650	34,300	600	4,250	325	1,850	200	2,350	250
6–10	159,000	975	90,000	975	69,000	825	9,450	300	4,650	200	4,800	250	300	75	150	50	150	50	45,650	775	28,850	725	16,800	525	6,800	250	3,150	225	3,650	200	92,900	800	51,150	750	41,750	650	3,900	275	2,100	200	1,800	200
11–15	137,450	875	79,700	1,125	57,750	875	6,500	300	3,650	225	2,850	175	300	75	150	50	150	50	42,850	925	27,950	850	14,900	575	5,850	325	2,700	225	3,150	250	79,450	875	43,850	875	35,600	700	2,550	225	1,400	200	1,100	125
16–20	108,850	825	65,000	850	43,850	775	4,600	250	2,550	200	2,100	175	200	50	100	50	100	50	28,900	800	19,150	700	9,750	500	4,150	225	1,900	175	2,200	200	69,500	900	40,450	800	29,050	600	1,500	175	800	150	700	125
21–25	104,600	950	67,650	950	37,000	800	4,200	250	2,400	175	1,800	175	150	50	50	25	50	50	24,500	750	18,100	700	6,400	400	3,350	250	2,000	225	1,350	125	71,150	1,000	44,400	975	26,750	675	1,250	200	650	175	600	150
> 25	220,400	1,675	159,950	1,600	60,450	1,050	6,000	275	4,300	225	1,700	150	150	75	100	75	S	S	35,400	975	27,800	925	7,600	500	5,250	300	3,100	225	2,150	250	171,000	1,700	122,700	1,575	48,300	900	2,600	275	1,900	300	650	125
Citizenship																																								
U.S. citizen	746,850	2,200	457,900	2,200	288,950	1,250	34,350	500	18,850	400	15,500	325	1,350	125	650	100	700	100	131,550	1,425	88,500	1,400	43,050	1,025	28,300	475	13,250	375	15,050	400	536,750	2,150	328,650	1,925	208,100	1,325	14,600	550	8,050	475	6,550	325
Native-born	554,050	1,850	325,300	1,650	228,750	1,300	22,100	425	11,350	350	10,750	325	1,250	125	600	100	650	100	20,750	650	11,500	575	9,250	400	19,100	450	7,000	300	12,100	375	478,500	2,050	288,200	1,800	190,300	1,375	12,350	500	6,650	400	5,700	325
Naturalized	192,800	1,675	132,550	1,575	60,200	1,075	12,250	350	7,500	275	4,750	225	50	50	*	*	D	D	110,800	1,450	77,000	1,325	33,800	950	9,200	350	6,200	300	2,950	250	58,250	1,075	40,450	900	17,850	625	2,200	250	1,400	225	850	125
Non-U.S. citizen	125,250	1,425	85,700	1,275	39,550	725	5,800	325	3,800	250	2,000	175	D	D	D	D	D	D	88,250	1,200	60,100	1,075	28,150	750	3,500	250	2,450	200	1,050	150	26,200	750	18,600	700	7,600	400	1,450	225	750	200	700	175
Permanent resident	84,250	1,300	57,750	1,200	26,500	675	3,800	275	2,450	200	1,350	175	D	D	D	D	D	D	56,900	1,050	38,800	975	18,050	600	2,450	200	1,750	175	700	125	20,200	700	14,200	675	6,000	375	900	200	550	150	400	100
Temporary resident	40,950	825	27,950	725	13,050	525	2,000	200	1,350	150	650	125	D	D	D	D	D	D	31,350	725	21,300	625	10,100	500	1,100	150	700	125	400	100	6,000	450	4,400	400	1,600	225	550	175	200	75	350	150
Employer location																																								
New England	81,350	1,750	49,400	1,350	31,950	900	2,700	200	1,550	175	1,150	125	100	50	S	S	50	25	20,350	925	13,000	775	7,350	475	1,850	225	900	125	1,000	200	54,650	1,250	33,050	950	21,650	650	1,700	225	900	175	750	150
Middle Atlantic	117,150	1,750	71,450	1,475	45,650	1,100	4,600	250	2,600	200	2,000	175	50	50	S	S	S	S	30,950	900	20,450	800	10,500	600	4,150	225	2,000	175	2,150	175	75,450	1,375	45,600	1,100	29,850	850	1,900	250	750	150	1,150	200
East North Central	101,700	1,550	64,800	1,375	36,900	850	3,750	250	2,400	225	1,350	125	150	50	50	50	50	50	22,900	900	16,150	775	6,750	525	3,600	250	1,950	175	1,650	175	69,850	1,200	43,400	1,025	26,450	725	1,450	200	850	175	600	150
West North Central	48,800	1,175	30,450	1,000	18,350	650	1,650	200	900	150	750	125	150	50	*	*	150	50	9,150	575	6,200	525	2,950	300	1,200	150	600	100	600	125	35,650	975	22,050	750	13,600	575	1,050	175	700	175	350	75
South Atlantic	167,250	1,950	99,550	1,725	67,750	1,200	8,150	325	4,400	250	3,750	250	250	75	150	75	100	50	35,300	900	23,150	900	12,150	550	11,000	400	4,850	275	6,100	300	110,150	1,625	65,700	1,475	44,450	925	2,450	250	1,300	175	1,150	150
East South Central	30,000	900	18,650	775	11,350	525	800	100	450	100	350	75	S	S	D	D	D	D	5,400	475	3,650	400	1,750	225	2,050	200	900	150	1,100	150	21,350	775	13,450	650	7,900	425	400	75	150	50	250	50
West South Central	66,900	1,325	43,050	1,075	23,850	850	4,350	225	2,650	175	1,700	175	200	50	100	50	50	25	18,350	750	13,250	650	5,100	350	3,050	250	1,500	175	1,550	175	39,900	1,075	24,900	850	15,000	650	1,050	150	650	125	450	100
Mountain	59,300	1,150	36,950	975	22,350	650	3,000	225	1,550	150	1,450	175	200	50	100	50	50	25	9,100	550	5,850	475	3,250	325	800	125	450	75	350	125	45,100	975	28,400	825	16,750	600	1,050	175	600	125	450	125

TABLE 27-1

U.S. residing employed doctoral scientists and engineers, by selected demographic and employment-related characteristics and primary or secondary work activity: 2021

(Number and SE)

Characteristic	All employed						Hispanic or Latino[a]						Not Hispanic or Latino[b]																							
													American Indian or Alaska Native						Asian						Black or African American						White					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Pacific	193,000	2,200	124,950	1,975	68,050	1,275	8,700	325	5,000	250	3,700	225	250	75	100	50	200	75	66,600	1,275	45,500	1,100	21,050	750	3,900	275	2,400	225	1,500	175	108,600	1,725	69,100	1,525	39,500	1,000	4,950	375	2,850	300	2,100	200
U.S. territories and other areas	6,650	425	4,350	350	2,300	225	2,400	225	1,150	175	1,250	175	D	D	D	D	D	D	1,750	275	1,450	250	300	125	250	50	150	50	100	50	2,250	275	1,600	250	650	150	D	D	D	D	D	D
Sector of employment																																								
4-year educational institution[d]	340,950	2,450	204,700	2,175	136,250	1,375	17,300	525	9,850	400	7,450	325	600	100	300	75	300	75	69,800	1,375	44,600	1,200	25,200	825	13,650	425	6,900	350	6,800	275	233,700	2,075	140,000	1,775	93,700	1,200	5,850	325	3,100	300	2,750	200
Other educational institution[e]	27,800	825	12,600	575	15,150	600	1,950	150	700	100	1,250	150	100	50	50	25	50	50	3,350	325	1,750	250	1,600	225	2,050	175	900	150	1,150	125	19,900	675	9,050	500	10,900	500	450	75	200	75	200	50
Private, for profit[f]	320,850	2,625	225,900	2,325	94,950	1,475	12,400	425	7,900	350	4,550	300	300	75	100	50	200	75	114,300	1,375	83,050	1,325	31,300	875	7,700	350	4,300	225	3,400	250	180,150	1,975	127,000	1,775	53,150	1,175	5,950	425	3,600	350	2,350	275
Private, nonprofit	60,200	1,300	32,050	1,025	28,150	825	2,950	250	1,300	150	1,650	200	150	50	100	50	50	25	12,150	625	7,100	575	5,050	375	2,750	275	1,300	200	1,500	175	40,800	1,025	21,600	750	19,150	700	1,400	175	650	150	750	125
Federal government	52,700	1,250	31,400	1,025	21,250	700	2,800	200	1,650	150	1,150	150	100	50	100	25	50	25	8,700	575	4,850	425	3,850	375	2,450	200	1,050	125	1,400	175	37,550	1,025	23,350	875	14,250	525	1,050	150	500	100	550	125
State or local government	19,650	750	11,500	650	8,200	450	750	100	350	75	400	75	S	S	D	D	D	D	4,650	400	2,700	325	1,950	225	1,350	175	750	125	650	125	12,550	650	7,500	550	5,050	400	300	75	200	50	150	50
Self-employed[g]	42,650	1,075	20,900	850	21,750	800	1,500	150	550	100	950	125	50	25	S	S	D	D	4,150	375	2,700	350	1,500	250	1,350	200	400	100	950	175	34,750	1,050	16,750	800	18,000	725	750	150	400	125	350	100
Other sector[h]	7,300	425	4,450	350	2,850	250	500	100	350	75	150	50	D	D	D	D	D	D	2,650	300	1,850	250	750	150	450	100	150	50	300	75	3,500	325	2,000	250	1,500	175	250	125	100	75	S	S
Primary or secondary work activity[i]																																								
Any R&D	523,500	2,725	347,350	2,500	176,150	1,575	24,500	525	14,650	400	9,850	325	800	100	400	100	400	75	151,200	1,525	104,850	1,425	46,400	925	16,900	450	9,000	350	7,900	325	320,850	2,400	212,950	2,125	107,900	1,300	9,200	475	5,500	425	3,700	250
Basic research	184,350	2,075	123,700	1,750	60,650	1,175	9,600	375	5,800	275	3,800	250	400	75	200	75	200	50	50,100	1,250	33,800	1,000	16,300	650	5,800	325	3,450	250	2,350	225	114,700	1,650	78,000	1,425	36,700	925	3,700	300	2,350	250	1,300	150
Applied research	307,900	2,750	198,900	2,400	109,000	1,425	14,650	475	8,700	350	5,950	275	400	75	250	75	200	50	86,600	1,500	58,550	1,325	28,050	950	10,450	400	5,300	300	5,150	250	190,400	2,200	122,900	1,825	67,500	1,150	5,400	400	3,150	350	2,200	200
Experimental development	135,750	1,925	98,100	1,650	37,650	775	5,200	300	3,050	225	2,100	225	200	75	100	50	100	50	53,550	1,175	40,250	1,050	13,350	525	3,500	200	1,950	175	1,550	150	70,900	1,475	51,250	1,275	19,650	625	2,400	250	1,500	225	900	150
Computer applications	92,500	1,525	74,650	1,425	17,800	650	3,150	200	2,600	175	550	75	50	25	D	D	D	D	37,350	1,025	28,600	850	8,800	550	1,400	125	1,150	125	250	50	49,250	1,000	41,350	975	7,900	350	1,300	200	950	175	350	100
Design	68,450	1,425	52,350	1,300	16,100	600	2,500	175	1,800	150	700	100	50	25	50	25	D	D	25,600	1,050	20,150	975	5,450	450	1,900	200	1,200	150	700	150	37,050	975	28,250	925	8,800	425	1,350	175	900	175	450	100
Management, sales, or administration[j]	369,000	2,700	216,150	2,200	152,900	1,425	16,900	450	9,150	400	7,750	300	550	75	300	75	250	50	76,300	1,400	48,600	1,175	27,650	800	13,500	375	5,850	275	7,700	300	254,450	1,975	148,650	1,725	105,850	1,175	7,300	450	3,600	300	3,700	275
Professional services	124,600	1,575	57,850	1,300	66,700	1,175	5,850	275	2,400	200	3,450	225	300	75	50	25	200	75	18,500	825	10,400	675	8,100	475	5,600	350	1,650	175	3,950	325	91,750	1,300	42,300	1,050	49,450	1,050	2,550	200	1,000	150	1,550	150
Teaching	241,550	2,375	140,600	1,850	100,950	1,300	12,650	400	6,750	300	5,900	275	550	100	200	75	350	75	40,500	1,050	25,600	875	14,850	650	11,500	375	5,800	300	5,700	275	172,600	2,025	100,250	1,575	72,300	1,200	3,850	275	1,950	200	1,900	200
Other work activities[k]	62,100	1,350	35,900	1,075	26,250	825	3,050	250	1,700	200	1,350	125	50	25	50	25	50	25	14,100	775	8,900	650	5,200	375	2,550	225	1,300	175	1,300	150	40,950	1,200	23,350	925	17,600	675	1,400	225	650	175	750	150
Federal support																																								
Receiving support	227,600	2,300	147,350	1,775	80,300	1,325	10,350	400	5,650	300	4,700	275	400	75	150	50	250	75	49,750	1,150	33,550	975	16,200	625	7,150	350	3,650	250	3,550	225	155,800	1,850	101,850	1,525	53,900	1,125	4,200	300	2,450	275	1,700	150
Not receiving support	643,600	3,175	395,750	2,600	247,850	1,600	29,750	500	16,950	400	12,800	325	950	100	500	100	450	75	169,750	1,650	114,800	1,525	54,950	1,075	24,550	500	12,000	350	12,550	400	406,750	2,625	245,200	2,050	161,550	1,475	11,800	475	6,300	400	5,550	350
Degree-job relationship																																								
Closely related	567,400	2,750	349,800	2,525	217,550	1,475	27,250	500	15,150	400	12,100	325	1,000	125	500	75	550	100	138,600	1,575	95,200	1,450	43,400	900	21,450	475	10,600	350	10,850	400	368,950	2,275	222,800	1,975	146,100	1,350	10,150	475	5,550	400	4,550	350

TABLE 27-1

U.S. residing employed doctoral scientists and engineers, by selected demographic and employment-related characteristics and primary or secondary work activity: 2021

(Number and SE)

Characteristic	All employed						Hispanic or Latino[a]						Not Hispanic or Latino[b]																							
													American Indian or Alaska Native						Asian						Black or African American						White					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
Somewhat related	239,550	2,450	151,750	2,050	87,750	1,200	9,950	375	5,750	275	4,150	250	300	75	150	50	150	50	63,300	1,375	41,200	1,075	22,100	900	8,050	350	3,900	225	4,100	250	153,200	1,950	98,100	1,800	55,100	1,000	4,750	325	2,600	275	2,150	200
Not related	65,150	1,375	42,000	1,125	23,200	725	2,950	200	1,700	175	1,250	125	50	25	D	D	50	25	17,900	750	12,250	675	5,700	375	2,300	200	1,150	150	1,150	150	40,800	1,100	26,300	925	14,500	650	1,150	175	550	125	600	125

* = suppressed when population estimate < 25. D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

SE = standard error.

[a] Hispanic or Latino may be of any race.
[b] American Indian or Alaska Native, Asian, Black or African American, and White are single race.
[c] Other race includes Native Hawaiian or Other Pacific Islander and persons reporting more than one race who are not of Hispanic or Latino ethnicity.
[d] Includes 4-year colleges or universities, medical schools (including university-affiliated hospitals or medical centers), and university-affiliated research institutes.
[e] Includes 2-year colleges, community colleges, or technical institutes, and other precollege institutions.
[f] Includes those self-employed in an incorporated business.
[g] Self-employed or business owner in a nonincorporated business.
[h] Includes employers not broken out separately.
[i] Primary and secondary work activities were self-defined by respondent in response to the question: "On which two activities...did you work the most hours during a typical week on this job?" Detail may exceed total due to multiple responses.
[j] Administration includes accounting, finance, contracts, and human resources.
[k] Includes production, operations, maintenance, and other activities not broken out separately.

Note(s):
Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. Residence location is based on reported living location on 1 February 2021.

Source(s):
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2021.