TABLE 29

U.S. residing doctoral scientists and engineers, by occupation and employment status: 2019

(Number and SE)

| | | | Employed | | | | | | | | | | Not employe | |
|---|-----------|-------|----------|-------|-----------|-------|-----------|-------|-------------------------|-----|---------|-------|----------------------------------|-----|
| | Total | | Total | | Full time | | Part time | | Unemployed ^a | | Retired | | not seeking work ^b | |
| Occupation | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE |
| All occupations | 1,008,750 | 1,475 | 857,200 | 1,975 | 763,350 | 2,000 | 93,900 | 1,525 | 14,100 | 650 | 120,000 | 1,400 | 17,450 | 625 |
| Science occupations | 578,050 | 2,425 | 492,750 | 2,500 | 438,250 | 2,325 | 54,500 | 1,225 | 7,250 | 425 | 67,750 | 1,125 | 10,300 | 450 |
| Biological, agricultural, and other life scientist | 183,050 | 1,625 | 156,650 | 1,525 | 145,900 | 1,575 | 10,750 | 525 | 2,950 | 300 | 19,650 | 725 | 3,750 | 275 |
| Agricultural, food scientist | 14,500 | 525 | 11,600 | 450 | 10,600 | 400 | 1,000 | 175 | 250 | 75 | 2,500 | 250 | 150 | 50 |
| Biochemists, biophysicist | 19,650 | 725 | 16,350 | 675 | 15,300 | 650 | 1,100 | 200 | 500 | 125 | 1,950 | 275 | 800 | 150 |
| Biological scientist | 30,700 | 700 | 26,750 | 675 | 25,200 | 650 | 1,550 | 225 | 500 | 100 | 2,750 | 275 | 750 | 150 |
| Forestry, conservation scientist | 2,750 | 225 | 2,250 | 175 | 2,000 | 175 | 250 | 75 | S | S | 400 | 125 | S | S |
| Medical scientist | 48,300 | 1,100 | 42,350 | 1,025 | 39,950 | 1,050 | 2,400 | 325 | 950 | 200 | 4,100 | 300 | 850 | 175 |
| Postsecondary teachers, agricultural, other natural sciences | 7,150 | 375 | 5,550 | 350 | 5,350 | 350 | 250 | 75 | S | S | 1,400 | 200 | 100 | 50 |
| Postsecondary teachers, biological sciences | 37,800 | 800 | 32,400 | 775 | 29,550 | 775 | 2,850 | 250 | 200 | 75 | 4,750 | 375 | 400 | 100 |
| Other biological, agricultural, life scientist | 22,250 | 725 | 19,350 | 700 | 18,000 | 675 | 1,350 | 200 | 450 | 125 | 1,850 | 225 | 600 | 125 |
| Computer and information scientist | 71,350 | 1,075 | 63,000 | 1,100 | 59,750 | 1,075 | 3,250 | 350 | 750 | 125 | 6,600 | 375 | 1,000 | 175 |
| Computer and information scientist | 60,650 | 1,075 | 53,450 | 1,075 | 51,000 | 1,075 | 2,450 | 300 | 700 | 125 | 5,550 | 375 | 950 | 175 |
| Postsecondary teachers, computer science | 10,700 | 525 | 9,550 | 525 | 8,800 | 500 | 750 | 150 | 50 | 25 | 1,050 | 150 | 100 | 50 |
| Mathematical scientist | 47,850 | 825 | 41,400 | 750 | 38,150 | 750 | 3,300 | 300 | 600 | 125 | 5,050 | 325 | 750 | 150 |
| Mathematical scientist | 24,750 | 700 | 21,800 | 650 | 20,650 | 650 | 1,150 | 150 | 350 | 100 | 2,200 | 200 | 400 | 125 |
| Postsecondary teachers, mathematics, statistics | 23,050 | 600 | 19,600 | 575 | 17,450 | 525 | 2,150 | 275 | 250 | 100 | 2,900 | 275 | 300 | 75 |
| Physical scientist | 101,350 | 1,325 | 84,550 | 1,275 | 76,850 | 1,250 | 7,700 | 425 | 1,450 | 175 | 13,950 | 550 | 1,450 | 150 |
| Chemists, except biochemist | 27,250 | 800 | 21,850 | 725 | 20,000 | 675 | 1,850 | 225 | 550 | 125 | 4,400 | 325 | 500 | 100 |
| Earth, atmospheric, ocean scientist | 14,550 | 400 | 11,750 | 400 | 10,600 | 350 | 1,150 | 150 | 300 | 100 | 2,300 | 200 | 200 | 75 |
| Physicists, astronomers | 14,700 | 700 | 12,450 | 625 | 11,450 | 600 | 950 | 175 | 200 | 100 | 1,950 | 225 | 150 | 75 |
| Postsecondary teachers, chemistry | 19,500 | 675 | 16,900 | 625 | 15,050 | 600 | 1,850 | 250 | 150 | 75 | 2,150 | 250 | 300 | 75 |
| Postsecondary teachers, physics | 12,350 | 600 | 10,650 | 575 | 9,900 | 550 | 750 | 150 | 50 | 25 | 1,450 | 225 | 150 | 75 |

TABLE 29

U.S. residing doctoral scientists and engineers, by occupation and employment status: 2019

(Number and SE)

| | | | | | Emplo | yed | 1 | | | | | | Not | |
|--|---------|-------|---------|-------|-----------|-------|-----------|-----|-------------------------|-----|---------|-----|---|----|
| Occupation | Total | | Total | | Full time | | Part time | | Unemployed ^a | | Retired | | employed or not seeking work ^b | |
| | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE |
| Postsecondary teachers, other physical science | 8,400 | 300 | 7,300 | 300 | 6,650 | 325 | 650 | 125 | S | S | 950 | 125 | 50 | 25 |
| Other physical scientist | 4,550 | 325 | 3,650 | 250 | 3,200 | 250 | 450 | 125 | S | S | 750 | 150 | D | 0 |
| Psychologist | 91,600 | 975 | 77,600 | 950 | 56,250 | 1,000 | 21,350 | 775 | 500 | 125 | 11,650 | 575 | 1,850 | 20 |
| Psychologist | 67,850 | 1,025 | 57,500 | 1,000 | 38,550 | 975 | 18,950 | 775 | 400 | 125 | 8,400 | 525 | 1,550 | 20 |
| Postsecondary teachers, psychology | 23,750 | 675 | 20,100 | 625 | 17,700 | 625 | 2,400 | 250 | 100 | 50 | 3,250 | 300 | 250 | 7 |
| Social scientist | 82,850 | 1,050 | 69,500 | 1,025 | 61,300 | 875 | 8,200 | 475 | 1,050 | 150 | 10,800 | 475 | 1,500 | 17 |
| Economist | 11,300 | 575 | 9,600 | 500 | 8,300 | 475 | 1,250 | 225 | 100 | 50 | 1,550 | 200 | S | : |
| Political scientist | 2,450 | 300 | 1,850 | 275 | 1,500 | 225 | 350 | 150 | D | D | 400 | 100 | 150 | 7 |
| Postsecondary teachers, economics | 12,800 | 550 | 10,900 | 500 | 9,900 | 500 | 1,000 | 150 | D | D | 1,750 | 225 | 150 | 7 |
| Postsecondary teachers, political science | 12,600 | 475 | 11,450 | 450 | 10,500 | 425 | 900 | 200 | D | D | 950 | 175 | 150 | 7 |
| Postsecondary teachers, sociology | 9,450 | 375 | 7,500 | 350 | 6,750 | 325 | 750 | 150 | 150 | 75 | 1,650 | 225 | 150 | 7 |
| Postsecondary teachers, other social sciences | 19,200 | 600 | 16,550 | 575 | 14,700 | 525 | 1,800 | 200 | 200 | 75 | 2,250 | 200 | 250 | 7 |
| Sociologist, anthropologist | 4,500 | 325 | 3,500 | 275 | 2,850 | 250 | 600 | 125 | S | S | 800 | 150 | 100 | 5 |
| Other social scientist | 10,500 | 525 | 8,250 | 475 | 6,800 | 425 | 1,450 | 175 | 300 | 75 | 1,550 | 175 | 450 | 10 |
| Engineering occupations | 136,750 | 1,375 | 120,650 | 1,375 | 114,500 | 1,350 | 6,100 | 425 | 2,250 | 250 | 12,350 | 575 | 1,550 | 22 |
| Aerospace, aeronautical, astronautical engineer | 8,250 | 475 | 7,150 | 425 | 6,850 | 450 | 300 | 100 | 100 | 50 | 1,000 | 175 | S | |
| Chemical engineer | 10,950 | 525 | 9,250 | 525 | 8,950 | 525 | 300 | 125 | 300 | 125 | 1,250 | 225 | 150 | 10 |
| Civil, architectural, sanitary engineer | 7,750 | 475 | 6,900 | 425 | 6,250 | 425 | 650 | 150 | S | S | 700 | 150 | 100 | 5 |
| Electrical engineer | 30,700 | 825 | 27,500 | 750 | 26,450 | 750 | 1,050 | 175 | 650 | 150 | 2,450 | 300 | 150 | 5 |
| Industrial engineers | 2,100 | 275 | 1,950 | 250 | 1,750 | 225 | S | S | D | D | S | S | D | |
| Mechanical engineer | 15,000 | 575 | 13,450 | 550 | 12,950 | 525 | 500 | 125 | 150 | 75 | 1,200 | 175 | 150 | 7 |
| Postsecondary teacher, engineering | 25,750 | 800 | 23,950 | 750 | 22,500 | 725 | 1,450 | 250 | 150 | 100 | 1,300 | 200 | 300 | 12 |
| Other engineer | 36,200 | 725 | 30,500 | 675 | 28,850 | 700 | 1,650 | 175 | 750 | 150 | 4,350 | 325 | 600 | 15 |
| S&E-related occupations | 108,900 | 1,600 | 92,350 | 1,475 | 83,900 | 1,475 | 8,450 | 450 | 1,450 | 200 | 13,750 | 550 | 1,400 | 17 |
| Health occupations, except postsecondary teachers and managers | 36,200 | 875 | 30,800 | 825 | 26,050 | 825 | 4,750 | 300 | 450 | 100 | 4,100 | 275 | 850 | 15 |

TABLE 29

U.S. residing doctoral scientists and engineers, by occupation and employment status: 2019

(Number and SE)

| | | | Employed | | | | | | | | | | Not | | |
|---|---------|-------|----------|-------|-----------|-------|-----------|-----|-------------------------|-----|---------|-----|---|-----|--|
| | Total | | Total | | Full time | | Part time | | Unemployed ^a | | Retired | | employed or not seeking work ^b | | |
| Occupation | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | Number | SE | |
| Postsecondary teacher, health and related science | 27,600 | 700 | 23,600 | 675 | 21,650 | 675 | 1,950 | 200 | 150 | 75 | 3,700 | 325 | 150 | 50 | |
| S&E managers, including health | 28,900 | 925 | 24,650 | 850 | 24,000 | 850 | 650 | 175 | 500 | 125 | 3,750 | 325 | 50 | 25 | |
| S&E precollege teachers | 6,850 | 450 | 5,200 | 400 | 4,600 | 400 | 600 | 125 | 200 | 75 | 1,250 | 225 | 200 | 75 | |
| S&E technicians/ technologists | 8,300 | 475 | 7,200 | 475 | 6,650 | 425 | 550 | 150 | 150 | 75 | 750 | 150 | 150 | 75 | |
| Other S&E-related occupation | 1,100 | 175 | 900 | 150 | 900 | 150 | D | D | D | D | 200 | 100 | D | D | |
| Non-S&E occupations | 185,050 | 1,900 | 151,500 | 1,650 | 126,700 | 1,575 | 24,800 | 825 | 3,150 | 300 | 26,150 | 825 | 4,250 | 350 | |
| Arts, humanities- related occupation | 11,100 | 450 | 8,900 | 425 | 5,600 | 325 | 3,300 | 300 | 350 | 100 | 1,150 | 175 | 650 | 150 | |
| Management-related occupation | 42,000 | 1,275 | 33,050 | 1,175 | 27,800 | 1,075 | 5,250 | 425 | 850 | 150 | 7,350 | 500 | 750 | 150 | |
| Non-S&E managers | 64,350 | 1,175 | 55,650 | 1,175 | 51,800 | 1,125 | 3,850 | 350 | 600 | 125 | 7,750 | 450 | 350 | 100 | |
| Non-S&E postsecondary teachers | 23,750 | 725 | 19,700 | 650 | 17,100 | 625 | 2,600 | 275 | 200 | 75 | 3,450 | 275 | 450 | 100 | |
| Non-S&E precollege/ other teachers | 6,950 | 450 | 4,750 | 375 | 2,350 | 275 | 2,400 | 275 | 250 | 75 | 1,300 | 225 | 650 | 150 | |
| Sales, marketing occupation | 11,350 | 550 | 9,400 | 450 | 7,450 | 400 | 1,950 | 225 | 250 | 100 | 1,300 | 225 | 400 | 125 | |
| Social service-related occupation | 8,150 | 450 | 6,300 | 400 | 4,400 | 375 | 1,950 | 225 | 100 | 50 | 1,400 | 200 | 300 | 100 | |
| Other non-S&E occupation | 17,400 | 700 | 13,750 | 650 | 10,250 | 575 | 3,500 | 300 | 550 | 175 | 2,450 | 275 | 650 | 125 | |

D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering; SE = standard error.

^a Unemployed includes individuals who were not working during the survey reference week but had been seeking work in the prior 4 weeks or who were on layoff from their job.

^b Not employed or not seeking work includes individuals who were not working during the survey reference week and had not been seeking work in the prior 4 weeks because of family responsibilities, chronic illness, or other reasons.

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. If respondent was not employed during survey reference period, occupation when last employed was reported. Excludes 350 individuals who reported never having worked so could not be classified by occupation. Designation of full-time and part-time employment status is based on principal job only, not on all jobs held in labor force. For example, an individual could work part time in his or her principal job but full time in the labor force. Full time is based on working 35 or more hours per week. Residence location is based on reported living location on 1 February 2019.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients: 2019.