TABLE 32-3

Labor force participation rate among U.S. residing doctoral scientists and engineers, by occupation: 2023

(Percent and SE)

Occupation	Labor force participation rate	
	Percent	SE
All occupations	86.9	0.15
Science occupations	87.5	0.25
Biological, agricultural, and other life scientists	86.8	0.40
Agricultural, food scientists	83.2	1.50
Biochemists, biophysicists	87.8	1.30
Biological scientists	88.6	0.90
Forestry, conservation scientists	84.8	3.10
Medical scientists	89.7	0.85
Postsecondary teachers, agricultural, other natural sciences	73.8	2.45
Postsecondary teachers, biological sciences	83.4	1.00
Other biological, agricultural, life scientists	88.9	1.25
Computer and information scientists	90.3	0.60
Computer and information scientists	90.9	0.65
Postsecondary teachers, computer science	86.6	1.75
Mathematical scientists	91.0	0.60
Mathematical scientists	92.6	0.70
Postsecondary teachers, mathematics, statistics	88.4	1.10
Physical scientists	85.1	0.60
Chemists, except biochemists	85.2	1.20
Earth, atmospheric, ocean scientists	82.1	1.40
Physicists, astronomers	88.4	1.20
Postsecondary teachers, chemistry	86.5	1.20
Postsecondary teachers, physics	82.9	2.20
Postsecondary teachers, other physical science	83.2	1.50
Other physical scientists	86.2	2.45
Psychologists	86.5	0.85
Psychologists	89.2	1.30
Postsecondary teachers, psychology	84.2	1.15
Social scientists	87.3	0.60
Economists	90.4	1.85
Political scientists	78.5	4.80
Postsecondary teachers, economics	85.3	1.70
Postsecondary teachers, political science	90.9	1.45
Postsecondary teachers, sociology	84.4	1.90
Postsecondary teachers, other social sciences	86.7	1.10
Sociologists, anthropologists	82.7	2.45
Other social scientists	89.8	1.10
Engineering occupations	90.8	0.45
Aerospace, aeronautical, astronautical engineers	87.9	1.85
Chemical engineers	88.5	2.15
Civil, architectural, sanitary engineers	94.7	1.35
Electrical engineers	92.2	0.90
Industrial engineers	88.9	3.55
Mechanical engineers	88.1	1.75
Postsecondary teachers, engineering	90.9	1.05
Other engineers	90.9	0.75
S&E-related occupations	84.7	0.45
Health occupations, except postsecondary teachers and managers	84.9	0.60
Postsecondary teachers, health and related science	82.5	1.25
S&E managers, including health	87.1	1.00

TABLE 32-3

Labor force participation rate among U.S. residing doctoral scientists and engineers, by occupation: 2023

(Percent and SE)

Occupation	Labor force participation rate	
	Percent	SE
S&E precollege teachers	77.5	2.65
S&E technicians and technologists	82.7	3.15
Other S&E-related occupations	75.2	6.85
Non-S&E occupations	84.1	0.45
Arts, humanities-related occupations	83.9	1.65
Management-related occupations	87.2	0.95
Non-S&E managers	85.4	0.70
Non-S&E postsecondary teachers	79.7	1.45
Non-S&E precollege and other teachers	70.7	2.70
Sales, marketing occupations	86.7	1.85
Social service-related occupations	85.5	2.10
Other non-S&E occupations	82.1	1.45

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

Note(s):
Percentages are rounded to the nearest 0.1%. Standard errors of unrounded percentages (based on unrounded counts) are rounded up to the nearest multiple of 0.05%. Labor force is defined as those employed (E) plus those unemployed and seeking work (U). 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. Population (P) is defined as all S&E doctorate holders less than 76 years of age, who were residing in the United States during the week of 1 February 2023, and who earned doctorates from U.S. institutions. Labor force participation rate (RLF) = (E + U) / P. If respondent was not employed during survey reference period, occupation when last employed was reported. Individuals who reported never having worked but were still in the labor force during the reference week are included in overall (All occupation) rate calculation but excluded from computing the rates by occupation. Residence location is based on reported living location on 1 February 2023.

Source(s):
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2023.