

TABLE 4-4

Labor force participation rate among non-U.S. residing doctoral scientists and engineers, by fine field of doctorate: 2021

(Percent and SE)

Field	Labor force participation rate	
	Percent	SE
All fields	91.6	0.45
Science	90.9	0.60
Biological, agricultural, and environmental life sciences	90.3	1.05
Agricultural and food sciences	89.1	2.15
Agricultural sciences	87.1	3.75
Animal sciences	89.2	3.90
Food sciences and technology	95.8	2.45
Plant sciences	84.1	4.65
Soil sciences	90.9	3.45
Biochemistry and biophysics	89.6	3.70
Biochemistry	89.6	3.90
Biophysics	89.7	6.60
Cell, cellular biology, and molecular biology	88.5	5.25
Microbiological sciences and immunology	93.4	2.55
Immunology	95.7	4.30
Microbiological sciences	92.4	3.15
Natural resources and conservation	92.1	2.05
Fish, fisheries, wildlife, and wildlands science and management	94.0	3.10
Forestry	85.8	5.35
Natural resource conservation, research, management, and policy	95.8	1.90
Zoology	87.9	4.10
Other biological sciences	90.7	1.50
Biomathematics, bioinformatics, and computational biology	99.4	0.60
Botany and plant biology	90.0	2.70
Epidemiology, ecology, and population biology	93.1	2.50
Genetics	93.2	4.45
Neurobiology and neuroscience	87.3	6.90
Nutrition sciences	95.0	3.70
Pharmacology and toxicology	89.6	6.15
Physiology, pathology, and related sciences	90.0	5.25
Biological and biomedical sciences, general	85.2	6.60
Biological and biomedical sciences, other	84.6	10.40
Computer and information sciences	93.8	1.55
Computer science	93.5	1.95
Information science, studies	92.0	4.05
Computer and information sciences, other	98.5	1.35
Mathematics and statistics	93.7	1.45
Applied mathematics	99.3	0.65
Mathematics	95.5	1.30
Statistics	83.6	7.15
Mathematics and statistics, other	89.5	4.35
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	90.8	1.25
Astronomy and astrophysics	89.8	4.70
Chemistry, except biochemistry	89.2	2.55
Inorganic chemistry	90.3	6.95
Organic chemistry	87.5	5.75
Chemistry, other, except biochemistry	89.8	2.80
Geosciences, atmospheric sciences, and ocean sciences	91.9	1.55
Atmospheric sciences and meteorology	95.9	1.90
Geological and earth sciences, geosciences	91.4	2.25

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Field	Labor force participation rate	
	Percent	SE
Ocean sciences and marine sciences	89.6	3.90
Oceanography, chemical and physical	90.9	3.65
Physics	91.8	2.15
Psychology	91.5	1.55
Clinical psychology	94.5	3.35
Counseling and applied psychology	91.1	5.10
Educational and school psychology	83.9	6.65
Industrial and organizational psychology	95.2	3.80
Research and experimental psychology	90.0	2.45
Psychology, general	97.5	2.75
Psychology, other	97.2	2.95
Social sciences	90.1	1.05
Economics	93.0	1.35
Political science and government	96.5	1.20
Political science and government	96.9	1.30
Public policy analysis	94.2	2.80
Sociology, demography, and population studies	79.9	5.20
Other social sciences	86.6	2.00
Anthropology	90.1	3.90
Area, ethnic, cultural, gender, and group studies	91.1	4.70
Geography and cartography	80.9	6.75
International relations and national security studies	92.1	4.95
Linguistics	86.5	4.20
Urban studies, affairs	97.6	1.40
Social sciences, other	81.0	5.15
Engineering	93.0	0.85
Aerospace, aeronautical, and astronautical engineering	96.9	2.00
Chemical engineering	88.1	3.70
Civil engineering	97.6	1.55
Electrical and computer engineering	92.9	1.70
Computer engineering	92.0	2.90
Electrical, electronics, and communications engineering	93.1	2.00
Mechanical engineering	93.8	2.35
Industrial engineers	89.7	3.30
Other engineering	92.3	1.50
Agricultural engineering	93.3	4.75
Bioengineering and biomedical engineering	D	D
Engineering mechanics, physics, and science	87.7	5.00
Industrial and manufacturing engineering	91.3	2.75
Nuclear engineering	81.3	7.65
Engineering, other	94.8	2.10
Health	95.1	1.40
Communication disorders sciences and services	90.3	7.65
Hospital and medical administration services	85.9	7.65
Pharmacy, pharmaceutical sciences, and administration	96.1	2.10
Public health	91.6	4.90
Registered nursing, nursing administration, nursing research	98.1	1.50
Health sciences, other	97.9	1.20

D = suppressed to avoid disclosure of confidential information.

SE = standard error.

Note(s):

Percentage rounded to the nearest 0.1%, standard error of the unrounded percentage (based on unrounded counts), 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 science, engineering, or health doctorate holders under age 76, residing in the United States during the week of 1 February 2021, who earned doctorates from U.S. institutions. Labor force participation rate (LFR) = $(E + U) / P$. 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.