TABLE 4-1

Unemployment rate among U.S. residing doctoral scientists and engineers, by fine field of doctorate: 2021

(Percent and SE)

Field of study	Unemployment rate	
	Percent	SE
All fields	1.9	0.10
Science	1.8	0.10
Biological, agricultural, and environmental life sciences	1.7	0.15
Agricultural and food sciences	2.6	0.55
Agricultural sciences	*	*
Animal sciences	S	S
Food sciences and technology	3.4	1.25
Plant sciences	2.6	0.80
Soil sciences	1.3	0.55
Biochemistry and biophysics	1.2	0.45
Biochemistry	1.2	0.55
Biophysics	D	D
Cell, cellular biology, and molecular biology	1.5	0.45
Microbiological sciences and immunology	1.6	0.45
Immunology	1.9	0.65
Microbiological sciences	1.4	0.55
Natural resources and conservation	2.0	0.55
Fish, fisheries, wildlife, and wildlands science and management	S	S
Forestry	1.8	0.70
Natural resource conservation, research, management, and policy	1.9	0.80
Zoology	2.9	0.90
Other biological sciences	1.6	0.20
Biomathematics, bioinformatics, and computational biology	*	*
Botany and plant biology	3.0	0.90
Epidemiology, ecology, and population biology	1.7	0.50
Genetics	1.7	0.60
Neurobiology and neuroscience	1.6	0.40
Nutrition sciences	2.1	0.80
Pharmacology and toxicology	0.7	0.30
Physiology, pathology, and related sciences	2.2	0.55
Biological and biomedical sciences, general	1.1	0.45
Biological and biomedical sciences, other	2.2	0.90
Computer and information sciences	1.2	0.30
Computer science	1.1	0.35
Information science, studies	1.9	0.90
Computer and information sciences, other	*	*
Mathematics and statistics	1.2	0.30
Applied mathematics	D	D
Mathematics	1.9	0.55
Statistics	D	D
Mathematics and statistics, other	0.9	0.45
Physical sciences, geosciences, atmospheric sciences, and ocean sciences	2.2	0.25
Astronomy and astrophysics	1.6	0.60
Chemistry, except biochemistry	2.6	0.45
Inorganic chemistry	2.7	1.15
Organic chemistry	1.2	0.45
Chemistry, other, except biochemistry	3.2	0.60
Geosciences, atmospheric sciences, and ocean sciences	2.7	0.45
Atmospheric sciences and meteorology	1.6	0.45
Geological and earth sciences, geosciences	2.9	0.65

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Unemployment rate among U.S. residing doctoral scientists and engineers, by fine field of doctorate: 2021

(Percent and SE)

Field of study	Unemployment rate	
	Percent	SE
Ocean sciences and marine sciences	1.7	0.50
Oceanography, chemical and physical	4.2	1.90
Physics	1.5	0.30
Psychology	1.4	0.20
Clinical psychology	0.7	0.25
Counseling and applied psychology	0.9	0.40
Educational and school psychology	2.5	0.75
Industrial and organizational psychology	2.0	0.90
Research and experimental psychology	1.6	0.30
Psychology, general	2.0	0.85
Psychology, other	1.9	0.65
Social sciences	2.4	0.30
Economics	1.4	0.35
Political science and government	2.7	0.65
Political science and government	2.7	0.80
Public policy analysis	2.5	0.75
Sociology, demography, and population studies	2.3	0.70
Other social sciences	3.1	0.55
Anthropology	3.3	1.05
Area, ethnic, cultural, gender, and group studies	2.4	0.75
Geography and cartography	S	S
International relations and national security studies	2.3	0.85
Linguistics	2.1	0.65
Urban studies, affairs	3.5	1.45
Social sciences, other	3.4	0.75
Engineering	2.0	0.20
Aerospace, aeronautical, and astronautical engineering	1.7	0.75
Chemical engineering	2.5	0.55
Civil engineering	1.5	0.50
Electrical and computer engineering	1.8	0.40
Computer engineering	3.9	1.70
Electrical, electronics, and communications engineering	1.4	0.35
Mechanical engineering	1.8	0.50
Metallurgical and materials engineering	2.3	0.60
Other engineering	2.5	0.45
Agricultural engineering	1.5	0.65
Bioengineering and biomedical engineering	2.4	0.80
Engineering mechanics, physics, and science	2.0	0.75
Industrial and manufacturing engineering	2.0	0.95
Nuclear engineering	2.7	1.25
Engineering, other	3.9	0.95
Health	2.3	0.40
Communication disorders sciences and services	S	S
Hospital and medical administration services	*	*
Pharmacy, pharmaceutical sciences, and administration	1.8	0.65
Public health	3.5	1.20
Registered nursing, nursing administration, nursing research	2.0	0.75
Health sciences, other	2.3	1.00

* = 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.

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. Unemployment rate (UR) = U / (E + U). 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.