Table 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2022

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Doctorate recipients reporting postgraduation status (number)	1,952	451	872	629
Definite postdoctoral training plans	36.7	33.7	47.5	23.8
Definite employment plans	39.4	41.2	27.2	55.2
Seeking employment or study	21.8	23.7	23.1	18.6
Other status ^a	1.9	1.3	2.2	2.1
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	98.0	96.7	98.3	98.7
Other training or unknown ^c	2.0	3.3	1.7	1.3
Definite employment plans (%) ^d				
Academe	29.9	23.1	49.8	19.9
In tenure track faculty position (%)	34.3	46.5	22.9	46.4
Not in tenure track position (%)	64.3	53.5	75.4	52.2
Government	3.8	6.5	4.2	2.0
Industry or business ^e	60.0	61.8	38.4	73.8
Nonprofit organization	3.4	4.8	2.5	3.2
Other or unknown ^f	3.0	3.8	5.1	1.2
	3.0	3.0	5.1	1.2
Primary activity ^g	F1.0	60.7	20.2	F0 0
Research and development Teaching	51.0 D	62.7 20.3	28.3 D	59.9 D
·	D	0.0	D D	D
Management or administration Professional services and other	23.2	16.9	21.5	27.6
	23.2	10.9	21.5	27.0
Secondary activity ^g	0.5	20.7	00.6	20.1
Research and development	26.5	23.7	33.6	23.1
Teaching Management or administration	6.0	5.1	3.6	8.0
Management or administration Professional services and other	6.2	6.2	9.0	4.5
	16.3	16.9 48.0	9.9	20.2 44.2
No secondary activity Activity unknown	45.0	48.0	5.9	2.9
	4.3	4.0	5.9	2.9
Postgraduation location (%) ^h				
United States ⁱ	85.1	90.8	77.4	91.1
Midwest	14.4	10.4	17.5	13.1
Northeast	24.4	25.4	20.6	28.8
South	20.6	23.4	19.2	20.5
West	25.1	30.8	19.7	28.4
Outside the United States Location unknown	14.7	9.2	22.1	8.9
Postgraduation location in same state as doctorate institution (%)	23.4	33.7	0.5	24.9
Male doctorate recipients reporting postgraduation status (number)	1,388	33.7	665	400
Definite postdoctoral training plans	38.5	34.7	48.0	25.8
Definite employment plans	37.2	39.3	25.9	54.5
Seeking employment or study	22.3	25.1	24.1	17.3
Other status ^a	1.7	0.9	2.0	2.0
	1.7	0.9	2.0	2.0
Definite postdoctoral training plans (%) ^b	00.1	07.0	00.4	00.1
Postdoc fellowship or research associateship	98.1	97.3	98.4	98.1
Other training or unknown ^c	1.9	2.7	1.6	1.9

Table 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2022

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Academe	29.0	21.3	47.1	19.3
In tenure track faculty position (%)	27.3	37.0	17.3	40.5
Not in tenure track position (%)	70.7	63.0	80.2	57.1
Government	4.1	D	D	D
Industry or business ^e	60.9	63.0	41.3	75.2
Nonprofit organization	2.7	D	D	D
Other or unknown ^f	3.3	4.7	4.7	1.4
Primary activity ^g				
Research and development	51.0	59.5	28.1	63.5
Teaching	D	20.7	47.5	D
Management or administration	D	0.0	0.0	D
Professional services and other	23.2	19.8	24.4	24.2
Secondary activity ^g	-			
Research and development	24.6	24.0	31.3	19.9
Teaching	5.5	D	D D	8.1
Management or administration	7.7	D	D	7.1
Professional services and other	16.9	16.5	10.6	21.8
No secondary activity	45.3	49.6	45.0	43.1
Activity unknown	4.8	4.7	7.0	3.2
Postgraduation location (%) ^h				
United States ⁱ	83.8	90.8	75.6	91.3
Midwest	14.5	10.9	16.7	13.7
Northeast	24.1	23.8	21.0	29.0
South	20.1	23.0	18.9	19.6
West	24.6	31.8	18.3	29.0
Outside the United States	16.0	9.2	24.0	8.7
Location unknown	0.2	0.0	0.4	0.0
Postgraduation location in same state as doctorate	0.2		0	0.0
institution (%)	22.9	36.4	16.3	23.1
Female doctorate recipients reporting postgraduation status (number)	564	128	207	229
Definite postdoctoral training plans	32.3	31.3	45.9	20.5
Definite employment plans	44.9	46.1	31.4	56.3
Seeking employment or study	20.4	20.3	19.8	21.0
Other status ^a	2.5	2.3	2.9	2.2
Definite postdoctoral training plans (%) ^b				
Postdoc fellowship or research associateship	97.8	95.0	97.9	100.0
Other training or unknown ^c	2.2	5.0		0.0
Definite employment plans (%) ^d				
Academe	31.6	27.1	56.9	20.9
In tenure track faculty position (%)	47.5	62.5		55.6
Not in tenure track position (%)	52.5	37.5	64.9	44.4
Government	3.2	D	D	D
Industry or business ^e	58.1	59.3	30.8	71.3
Nonprofit organization	4.7		D D	71.3 D
Other or unknown ^f	2.4	1.7	6.2	0.8
	2.4	1.7	0.2	0.8
Primary activity ^g	F. ()		20.1	F4.0
Research and development	51.0	69.6		54.0
Teaching	D	19.6	D	D

Table 9-9

Mathematics and statistics research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2022

(Number and percent)

Characteristic	All mathematics and statistics fields	Applied mathematics	Mathematics	Statistics
Management or administration	D	0.0	D	D
Professional services and other	23.3	10.7	14.3	33.3
Secondary activity ^g				
Research and development	30.2	23.2	39.7	28.6
Teaching	6.9	D	D	7.9
Management or administration	3.3	D	D	0.0
Professional services and other	15.1	17.9	7.9	17.5
No secondary activity	44.5	44.6	41.3	46.0
Activity unknown	3.2	5.1	3.1	2.3
Postgraduation location (%) ^h				
United States ⁱ	88.0	90.9	83.1	90.9
Midwest	14.3	9.1	20.0	11.9
Northeast	25.3	29.3	19.4	28.4
South	21.8	24.2	20.0	22.2
West	26.2	28.3	23.8	27.3
Outside the United States	11.7	9.1	16.3	9.1
Location unknown	0.2	0.0	0.6	0.0
Postgraduation location in same state as doctorate institution (%)	24.4	27.3	18.1	28.4

D = suppressed to avoid disclosure of confidential information.

Note(s):

A definite postgraduation commitment includes accepting new employment or a postdoctoral study (postdoc) position or returning to predoctoral employment, while postgraduation employment includes accepting new employment or returning to predoctoral employment that is not a postdoctoral study (postdoc) position. Due to rounding, percentages may not sum to 100. Beginning in 2021, a modified version of the 2020 Classification of Instructional Programs (CIP) codes was used in the survey data collection, and new broad, major, and detailed fields are used in tables reporting data from 2021 to the present; see the field list in table A-4. Therefore, the field of doctorate data prior to 2021 may not be comparable to subsequent years. For more information, see the "Technical Notes" and the SED 2021 Taxonomy Changes Working Paper (available at https://ncses.nsf.gov/pubs/ncses23200).

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

^a Includes doctorate recipients reporting: no plans to work or study, some other type of postgraduation plans, or definite plans for other full-time degree program.

^b Excludes doctorate recipients reporting plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postdoctoral plans for study.

^c Other includes doctorate recipients who reported definite postdoctoral plans for traineeship, internship or clinical residency, or other study.

^d Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

e Includes doctorate recipients reporting self-employment.

^f Other is mainly composed of elementary and secondary schools.

⁹ Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary or secondary work activity.

h Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

ⁱ Includes doctorate recipients with an unknown U.S. region of employment after doctorate, thus the percentages by regions will not sum to the value for United States; see the "Technical Notes" for states or territories included in regions.