

Table 9-6. Engineering research doctorate recipients, postgraduation plans by sex and major field of doctorate: 2025

(Number and percent)

Characteristic	All engineering fields	Aerospace, aeronautical, astronautical, and space engineering	Biological, biomedical, and biosystems engineering	Chemical and petroleum engineering	Civil, environmental, and transportation engineering	Electrical and computer engineering	Engineering technologies	Industrial engineering and operations research	Materials and mining engineering	Mechanical engineering	Engineering, other
United States ⁱ	92.2	91.4	96.5	90.9	91.5	91.5	90.8	90.4	91.7	93.0	92.7
Midwest	14.4	15.8	17.1	16.0	14.6	9.1	12.5	14.0	14.4	17.7	17.5
Northeast	18.2	11.8	25.6	25.2	14.1	14.3	23.8	18.9	18.3	18.1	17.0
South	26.9	29.2	28.4	23.8	36.4	23.5	20.4	35.5	24.3	23.2	27.7
West	32.1	34.0	25.1	25.2	25.6	44.1	33.3	22.1	34.7	33.4	29.9
Outside the United States	7.7	8.6	3.5	9.0	8.4	8.4	9.2	9.6	8.1	6.8	7.0
Location unknown	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.2	0.2
Postgraduation location in same state as doctorate institution (%)	40.8	42.1	53.0	37.6	46.9	34.1	41.3	31.1	44.0	43.0	35.4
Male doctorate recipients reporting postgraduation status (number)	6,928	445	698	783	744	1,503	286	390	539	1,092	448
Definite postdoctoral training plans (%)	24.0	23.8	35.1	24.6	26.1	16.0	19.2	14.4	31.9	25.5	27.2
Definite employment plans (%)	42.8	45.4	21.5	35.9	42.2	57.2	45.1	55.6	33.0	40.7	42.2
Seeking employment or study (%)	31.1	29.9	39.1	38.1	29.8	24.5	32.2	28.2	33.0	32.5	27.9
Other status (%) ^a	2.1	0.9	4.2	1.4	1.9	2.2	3.1	1.5	2.0	1.3	2.7
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	96.3	93.4	93.1	94.8	96.9	96.3	D	96.4	98.3	98.6	96.7
Other training or unknown ^c	3.7	6.6	6.9	5.2	3.1	3.8	D	3.6	1.7	1.4	3.3
Definite employment plans (%) ^d											
Academe	14.4	18.3	D	D	D	D	13.2	26.7	D	D	20.1
In tenure track faculty position	45.1	37.8	D	D	D	D	D	55.2	D	41.6	36.8
Not in tenure track position	45.8	45.9	83.3	57.1	54.5	36.3	D	34.5	68.8	D	42.1
Government	7.0	D	D	2.8	15.9	4.2	D	11.1	4.5	5.9	D
Industry or business ^e	73.9	65.3	80.7	85.8	65.6	79.5	77.5	56.7	82.6	72.1	61.4
Nonprofit organization	3.1	D	4.7	D	D	D	D	3.7	D	D	D
Other or unknown ^f	1.5	1.0	0.7	2.5	1.9	1.5	0.8	1.8	0.0	1.6	2.1
Primary activity ^g											
Research and development	62.1	63.1	D	71.4	28.9	69.0	D	49.5	68.6	61.8	D
Teaching	6.8	6.7	4.7	3.0	8.2	6.0	3.9	9.9	5.1	9.4	9.8
Management or administration	3.2	3.6	D	D	D	D	D	9.9	D	1.6	D

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Professional services and other	27.8	26.7	19.6	D	D	D	20.3	30.7	D	27.2	22.3
Secondary activity ^g											
Research and development	20.2	21.0	12.2	15.2	29.8	19.6	10.2	25.5	20.6	20.4	20.1
Teaching	6.0	D	D	D	7.9	5.5	D	14.6	D	D	5.4
Management or administration	10.4	D	17.6	12.3	12.5	6.2	10.2	8.0	D	8.2	17.9
Professional services and other	21.4	19.5	D	22.3	14.4	23.7	D	17.0	21.1	23.9	19.0
No secondary activity	42.0	40.5	39.9	D	35.4	45.0	54.7	34.9	40.0	D	37.5
Activity unknown	2.9	3.5	1.3	4.3	2.9	2.8	0.8	2.3	1.7	3.8	2.6
Postgraduation location (%) ^h											
United States ⁱ	91.4	D	96.2	89.7	89.6	91.1	D	89.0	90.0	92.8	92.9
Midwest	14.2	16.2	19.7	15.2	14.4	8.9	13.0	12.5	14.3	17.6	17.0
Northeast	17.4	10.4	25.3	24.3	11.2	14.2	21.7	20.9	17.1	18.4	17.0
South	26.4	32.1	24.3	24.5	37.4	23.5	18.5	34.1	23.4	23.1	28.0
West	33.0	32.1	26.6	25.5	25.8	44.2	36.4	21.6	35.1	33.2	30.2
Outside the United States	8.5	D	3.8	10.1	10.4	8.8	D	11.0	9.7	6.9	6.8
Location unknown	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.3	0.3	0.3
Postgraduation location in same state as doctorate institution (%)	39.9	42.9	53.2	35.2	45.1	33.8	41.8	29.7	44.3	43.2	35.7
Female doctorate recipients reporting postgraduation status (number)	2,783	100	554	390	406	371	76	203	241	292	150
Definite postdoctoral training plans (%)	24.9	19.0	29.8	23.8	27.8	19.1	32.9	12.8	32.0	24.7	21.3
Definite employment plans (%)	36.8	46.0	21.1	36.9	37.2	49.1	40.8	53.7	33.2	32.2	46.0
Seeking employment or study (%)	36.0	34.0	44.0	37.2	32.8	29.9	25.0	32.5	34.0	41.4	31.3
Other status (%) ^a	2.3	1.0	5.1	2.1	2.2	1.6	1.3	1.0	0.8	1.7	1.3
Definite postdoctoral training plans (%) ^b											
Postdoc fellowship or research associateship	98.0	D	98.2	D	98.2	97.2	96.0	88.5	98.7	98.6	96.9
Other training or unknown ^c	2.0	D	1.8	D	1.8	2.8	4.0	11.5	1.3	1.4	3.1
Definite employment plans (%) ^d											
Academe	20.6	D	D	D	D	D	D	33.9	D	D	33.3

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In tenure track faculty position	44.5	D	D	D	D	D	55.6	48.6	D	36.4	43.5
Not in tenure track position	47.4	41.7	80.0	88.9	34.3	33.3	D	48.6	63.6	D	39.1
Government	7.2	D	D	4.9	18.5	2.7	D	9.2	6.3	7.4	D
Industry or business ^e	67.6	63.0	73.5	84.0	54.3	75.8	64.5	51.4	77.5	63.8	55.1
Nonprofit organization	3.2	D	4.3	D	D	D	0.0	4.6	D	D	D
Other or unknown ^f	1.3	4.3	0.9	0.7	1.3	2.2	3.2	0.9	0.0	1.1	0.0
Primary activity ^g											
Research and development	54.9	D	D	72.9	27.9	61.0	48.3	45.8	67.9	56.8	D
Teaching	9.8	12.5	6.2	5.0	10.9	6.2	20.7	16.8	6.4	14.8	13.2
Management or administration	2.2	D	D	D	D	D	0.0	5.6	D	0.0	D
Professional services and other	33.0	40.0	34.5	D	D	D	31.0	31.8	D	28.4	16.2
Secondary activity ^g											
Research and development	20.3	35.0	8.8	7.1	33.3	18.1	31.0	28.0	14.1	25.0	19.1
Teaching	7.7	D	D	D	7.5	9.6	D	17.8	D	D	11.8
Management or administration	11.9	D	22.1	19.3	10.2	6.2	17.2	4.7	D	14.8	14.7
Professional services and other	16.5	20.0	D	17.9	10.2	15.8	D	14.0	21.8	27.3	14.7
No secondary activity	43.7	35.0	48.7	D	38.8	50.3	37.9	35.5	50.0	D	39.7
Activity unknown	3.5	13.0	3.4	2.8	2.6	2.7	6.5	1.8	2.5	6.4	1.4
Postgraduation location (%) ^h											
United States ⁱ	94.3	D	96.8	93.2	95.1	93.3	D	93.3	95.5	94.0	92.1
Midwest	14.9	13.8	13.5	17.7	15.2	9.9	10.7	17.0	14.6	18.1	18.8
Northeast	20.6	18.5	25.9	27.0	19.7	15.0	30.4	14.8	21.0	16.9	16.8
South	28.2	15.4	34.0	22.4	34.5	23.7	26.8	38.5	26.1	23.5	26.7
West	29.8	43.1	23.0	24.5	25.4	43.9	23.2	23.0	33.8	34.3	28.7
Outside the United States	5.6	D	3.2	6.8	4.5	6.3	D	6.7	4.5	6.0	7.9
Location unknown	0.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Postgraduation location in same state as doctorate institution (%)	43.0	38.5	52.8	42.2	50.4	35.6	39.3	34.1	43.3	42.2	34.7

D = suppressed to avoid disclosure of confidential information.

^a Other status 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 Definite postdoctoral training plans excludes doctorate recipients reporting plans for other full-time degree program. Percentages are based on the number of doctorate recipients reporting definite postdoctoral plans for study.

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

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

^e Industry or business includes doctorate recipients reporting self-employment.

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

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

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

ⁱ United States 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.

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. The survey data collection for the field of study changed in 2021, which may affect the data comparisons across years. This table uses the new field taxonomy based on a modified version of the 2020 Classification of Instructional Programs (CIP) codes and does not match data that uses the trend field taxonomy. For more information about the field taxonomy changes, see the "Technical Notes."

Source(s):

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