

Table 65. Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2015

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
All doctorate recipients (number) ^a	9,897	361	1,129	1,002	633	2,004	244	874	1,467	2,183
Postgraduation status (number) ^b										
Definite postgraduation study	1,694	64	304	175	113	267	17	182	254	318
Definite employment	3,064	124	215	318	169	736	98	233	430	741
Seeking employment or study	3,359	116	405	343	211	608	86	338	535	717
Other ^c	358	11	70	32	21	74	6	19	33	92
Definite postgraduation study (%) ^d										
Postdoc fellowship	35.2	40.6	54.9	36.0	21.2	28.8	35.3	31.3	34.3	28.0
Postdoc research associateship	63.2	59.4	42.1	62.9	77.0	70.0	64.7	67.6	65.7	69.2
Other or unknown ^e	1.6	0.0	3.0	1.1	1.8	1.1	0.0	1.1	0.0	2.8
Definite employment (%) ^f										
Academe	17.2	16.9	16.7	8.2	32.5	9.8	35.7	10.3	20.9	22.8
Government	10.1	28.2	5.1	D	14.2	8.3	D	6.4	9.5	14.3
Industry or business ^g	68.7	46.0	72.1	85.5	49.7	78.5	54.1	80.7	67.7	57.6
Nonprofit organization	3.1	8.1	4.7	D	3.0	3.0	6.1	D	1.4	3.9
Other or unknown ^h	0.9	0.8	1.4	0.6	0.6	0.4	D	D	0.5	1.3
Primary activity ⁱ										
R&D	74.6	75.2	73.3	84.7	47.8	84.8	64.5	77.4	76.8	65.7
Teaching	8.3	7.4	4.4	3.9	18.0	4.5	16.1	5.4	10.7	11.6
Management or administration	4.6	6.6	8.7	2.6	8.1	1.7	8.6	3.6	2.2	7.1
Professional services	8.7	6.6	10.7	4.9	22.4	5.5	7.5	11.3	7.1	10.6

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Other	3.7	4.1	2.9	3.9	3.7	3.5	3.2	2.3	3.2	4.9
Secondary activity ^j										
R&D	12.1	13.2	9.2	7.5	21.1	7.9	17.2	6.8	12.7	17.6
Teaching	7.3	7.4	4.4	2.9	11.8	4.4	16.1	5.4	9.5	9.9
Management or administration	18.6	19.8	31.6	21.1	18.6	14.1	14.0	26.7	17.1	16.9
Professional services	7.0	D	8.3	6.5	D	5.9	6.5	8.1	6.8	7.8
Other	2.1	D	3.9	3.9	D	2.0	1.1	2.3	2.0	1.0
No secondary activity	53.0	54.5	42.7	58.1	37.3	65.7	45.2	50.7	52.0	46.6
Activity unknown	3.9	2.4	4.2	3.1	4.7	3.7	5.1	5.2	4.7	3.6
Postgraduation location (%) ^k										
United States ^l	89.7	92.0	90.2	91.5	87.2	91.8	83.5	88.7	90.6	87.4
New England	8.1	D	13.5	9.9	4.3	7.6	D	8.9	6.9	7.5
Middle Atlantic	11.0	4.8	14.6	14.2	9.9	9.7	10.4	10.8	10.5	10.8
East North Central	12.7	14.4	11.8	16.4	7.8	11.4	19.1	15.7	17.3	8.7
West North Central	3.8	5.3	4.4	4.5	5.3	2.6	6.1	4.1	3.2	3.6
South Atlantic	14.0	23.9	15.4	9.9	16.7	10.3	13.9	10.1	17.0	16.1
East South Central	2.5	D	1.7	2.4	4.3	1.0	D	3.6	2.3	3.2
West South Central	8.1	5.3	5.8	12.6	12.8	6.0	10.4	5.1	6.6	10.5
Mountain	5.3	6.4	2.1	4.9	5.0	6.0	4.3	4.6	6.1	6.0
Pacific and insular	24.2	22.9	20.8	16.4	21.3	37.3	11.3	25.8	20.8	21.1
Not in United States	9.9	8.0	9.8	8.1	12.4	7.8	16.5	11.1	9.1	11.9
Location unknown	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.2	0.3	0.7
Male doctorate recipients (number)	7,596	308	701	685	458	1,711	154	651	1,265	1,663

Table 65. Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2015

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Bioengineering and biomedical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communications engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Postgraduation status (number) ^b										
Definite postgraduation study	1,304	56	188	126	93	225	9	144	221	242
Definite employment	2,412	109	142	210	118	648	60	166	370	589
Seeking employment or study	2,544	98	247	239	151	511	60	254	459	525
Other ^c	257	8	45	20	18	56	3	14	28	65
Definite postgraduation study (%) ^d										
Postdoc fellowship	34.0	D	52.7	38.1	D	27.1	D	34.0	34.4	26.4
Postdoc research associateship	64.4	D	44.7	61.1	D	71.6	D	64.6	65.6	70.7
Other or unknown ^e	1.5	0.0	2.7	0.8	2.2	1.3	0.0	1.4	0.0	2.9
Definite employment (%) ^f										
Academe	16.1	D	16.2	7.1	30.5	D	38.3	10.8	20.0	21.2
Government	10.1	D	4.2	3.8	D	8.5	D	4.8	D	14.8
Industry or business ^g	70.1	45.0	73.9	87.6	55.1	79.3	51.7	81.9	69.5	59.4
Nonprofit organization	2.8	D	3.5	D	D	D	D	D	D	3.1
Other or unknown ^h	0.9	0.0	2.1	D	0.8	0.5	D	D	0.5	1.5
Primary activity ⁱ										
R&D	76.6	75.0	75.2	87.3	52.6	85.7	62.5	78.8	79.8	67.0
Teaching	7.2	D	D	D	13.2	4.3	D	D	9.1	10.2

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Management or administration	4.8	7.4	D	D	D	D	D	D	D	7.2
Professional services	8.0	D	9.5	D	21.1	5.0	D	10.9	D	10.5
Other	3.4	D	1.5	3.9	D	D	1.8	1.9	2.0	5.1
Secondary activity ^j										
R&D	11.3	D	10.2	D	17.5	7.6	17.9	D	10.5	16.7
Teaching	7.4	D	D	D	D	3.7	D	D	D	9.8
Management or administration	18.4	D	27.7	22.0	19.3	15.1	D	27.6	17.9	16.3
Professional services	7.2	D	D	7.3	9.6	5.3	D	D	D	8.6
Other	1.9	D	5.1	2.9	D	2.1	0.0	1.9	2.0	0.7
No secondary activity	53.8	54.6	43.1	59.5	36.0	66.2	41.1	48.1	52.3	47.8
Activity unknown	3.9	0.9	3.5	2.4	3.4	4.0	6.7	6.0	4.9	3.4
Postgraduation location (%) ^k										
United States ^l	90.0	D	92.1	91.1	88.2	92.2	D	89.4	D	87.6
New England	8.0	6.1	14.8	10.7	D	7.3	D	8.4	6.8	7.3
Middle Atlantic	11.0	D	17.0	14.0	9.5	9.5	D	11.9	10.7	10.6
East North Central	13.0	D	11.2	16.7	7.6	12.1	D	15.5	18.1	9.1
West North Central	3.7	6.1	4.8	D	D	D	D	3.9	2.9	3.6
South Atlantic	13.7	22.4	15.8	10.1	15.6	10.2	13.0	9.0	16.9	15.2
East South Central	2.5	D	D	D	D	D	D	D	D	3.2
West South Central	8.1	D	4.5	12.2	13.7	6.1	D	4.8	6.3	11.4
Mountain	5.2	D	D	5.1	D	5.7	D	D	5.4	6.0

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Pacific and insular	24.7	21.8	19.7	15.8	22.7	37.8	11.6	26.8	20.5	21.1
Not in United States	9.7	D	7.9	8.3	11.8	7.4	D	10.3	D	11.8
Location unknown	0.3	0.0	0.0	0.6	0.0	0.3	0.0	0.3	0.3	0.6
Female doctorate recipients (number)	2,301	53	428	317	175	293	90	223	202	520
Postgraduation status (number) ^b										
Definite postgraduation study	390	8	116	49	20	42	8	38	33	76
Definite employment	652	15	73	108	51	88	38	67	60	152
Seeking employment or study	815	18	158	104	60	97	26	84	76	192
Other ^c	101	3	25	12	3	18	3	5	5	27
Definite postgraduation study (%) ^d										
Postdoc fellowship	39.0	D	58.6	30.6	D	38.1	D	21.1	33.3	32.9
Postdoc research associateship	59.2	D	37.9	67.3	D	61.9	D	78.9	66.7	64.5
Other or unknown ^e	1.8	0.0	3.4	2.0	0.0	0.0	0.0	0.0	0.0	2.6
Definite employment (%) ^f										
Academe	21.3	D	17.8	10.2	37.3	D	31.6	9.0	26.7	28.9
Government	10.0	D	6.8	D	D	6.8	0.0	10.4	D	12.5
Industry or business ^g	63.5	53.3	68.5	81.5	37.3	72.7	57.9	77.6	56.7	50.7
Nonprofit organization	4.4	D	6.8	D	D	D	D	D	D	7.2

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Other or unknown ^h	0.8	6.7	0.0	D	0.0	0.0	D	D	0.0	0.7
Primary activity ⁱ										
R&D	67.3	76.9	69.6	79.6	36.2	78.2	67.6	73.8	58.6	60.7
Teaching	12.3	D	D	D	29.8	5.7	D	D	20.7	17.2
Management or administration	3.7	0.0	D	D	D	D	D	D	D	6.9
Professional services	11.5	D	13.0	D	25.5	9.2	D	12.3	D	11.0
Other	5.1	D	5.8	3.9	D	D	5.4	3.1	10.3	4.1
Secondary activity ^j										
R&D	15.1	D	7.2	D	29.8	10.3	16.2	D	25.9	21.4
Teaching	6.9	D	D	D	D	9.2	D	D	D	10.3
Management or administration	19.2	D	39.1	19.4	17.0	6.9	D	24.6	12.1	19.3
Professional services	6.3	0.0	D	4.9	D	10.3	D	D	D	4.8
Other	2.6	0.0	1.4	5.8	2.1	1.1	2.7	3.1	1.7	2.1
No secondary activity	50.0	53.8	42.0	55.3	40.4	62.1	51.4	56.9	50.0	42.1
Activity unknown	4.3	13.3	5.5	4.6	7.8	1.1	2.6	3.0	3.3	4.6
Postgraduation location (%) ^k										
United States ^l	88.9	D	86.8	92.4	84.5	89.2	D	86.7	D	86.8
New England	8.3	D	11.1	8.3	D	9.2	D	10.5	7.5	7.9
Middle Atlantic	10.9	D	10.6	14.6	11.3	10.8	D	7.6	9.7	11.4
East North Central	11.3	D	12.7	15.9	8.5	6.2	D	16.2	11.8	7.0
West North Central	4.2	0.0	3.7	D	D	D	D	4.8	5.4	3.5
South Atlantic	15.4	34.8	14.8	9.6	19.7	10.8	15.2	13.3	17.2	19.3

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East South Central	2.3	0.0	D	D	D	D	D	D	D	3.1
West South Central	8.3	D	7.9	13.4	9.9	5.4	D	5.7	8.6	7.0
Mountain	5.6	D	D	4.5	D	7.7	D	D	10.8	6.1
Pacific and insular	22.3	30.4	22.8	17.8	16.9	33.8	10.9	22.9	22.6	21.1
Not in United States	10.7	D	13.2	7.6	14.1	10.0	D	13.3	D	12.3
Location unknown	0.4	0.0	0.0	0.0	1.4	0.8	0.0	0.0	0.0	0.9

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.

^b Includes only respondents who reported postgraduation status.

^c Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

^d Excludes respondents who indicated plans for other full-time degree program. Percentages based on number of doctorate recipients reporting definite postgraduation plans for study.

^e "Other" includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

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

^g Includes doctorate recipients who indicated self-employment.

^h "Other" is mainly composed of elementary and secondary schools.

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

^j Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

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

^l Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

NOTES: Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2015.