

TABLE 63. Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2014

Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communication engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
All doctorate recipients (number) ^a	9,568	387	975	622	1,957	298	836	1,332	3,161
Postgraduation status (number) ^b									
Definite postgraduation study	1,536	67	184	95	203	20	157	246	564
Definite employment	3,006	145	278	166	759	107	217	397	937
Seeking employment or study	3,303	124	369	232	605	100	319	465	1,089
Other ^c	397	14	30	21	100	16	27	40	149
Definite postgraduation study (%) ^d									
Postdoc fellowship	33.2	28.4	28.8	D	30.5	D	27.4	35.0	38.5
Postdoc research associateship	65.4	71.6	70.1	70.5	67.5	80.0	72.6	63.4	59.9
Other or unknown ^e	1.4	0.0	1.1	D	2.0	D	0.0	1.6	1.6
Definite employment (%) ^f									
Academe	18.1	14.5	9.7	43.4	13.3	29.9	12.4	17.9	20.5
Government	10.4	27.6	D	D	7.1	11.2	10.1	11.6	10.1
Industry or business ^g	68.7	50.3	83.8	35.5	77.9	51.4	75.1	68.5	66.0
Nonprofit organization	2.3	6.9	D	D	1.2	7.5	2.3	2.0	2.8
Other or unknown ^h	0.5	0.7	1.4	0.0	0.5	0.0	0.0	0.0	0.6
Primary activity ⁱ									
R&D	72.6	77.4	78.9	43.4	84.6	53.8	83.0	74.9	64.3
Teaching	8.8	7.3	4.9	22.6	6.6	16.3	5.8	10.1	8.6
Management or administration	5.1	D	2.6	10.1	1.7	15.4	D	4.3	7.5
Professional services	10.1	7.3	8.7	22.0	4.8	7.7	7.8	7.2	15.0
Other	3.5	D	4.9	1.9	2.3	6.7	D	3.5	4.5
Secondary activity ^j									
R&D	13.1	10.9	6.4	29.6	8.3	23.1	7.8	13.3	16.4
Teaching	7.5	3.6	3.8	19.5	5.9	13.5	4.9	4.8	9.3
Management or administration	17.6	19.7	24.2	13.8	13.8	12.5	24.8	18.7	17.6
Professional services	6.9	8.0	7.2	6.3	3.4	12.5	4.4	7.5	9.3
Other	2.4	5.1	1.9	1.3	2.2	1.9	1.0	3.5	2.3
No secondary activity	52.5	52.6	56.6	29.6	66.4	36.5	57.3	52.3	45.1
Activity unknown	4.3	5.5	4.7	4.2	4.3	2.8	5.1	5.5	3.5
Postgraduation location (%) ^k									
United States ^l	89.4	91.5	90.9	81.2	90.2	89.8	90.1	90.0	89.0
New England	8.0	10.8	8.0	5.0	7.2	4.7	7.8	8.2	9.0
Middle Atlantic	9.5	2.4	11.0	8.8	9.0	11.0	8.8	10.3	10.1
East North Central	12.3	16.5	14.9	10.0	8.2	22.8	12.8	18.5	10.1
West North Central	3.7	4.2	4.1	7.3	1.8	3.9	3.7	4.4	3.8
South Atlantic	13.5	17.0	10.6	14.6	10.1	18.1	11.0	14.3	15.7
East South Central	3.3	3.8	2.2	5.7	1.6	5.5	4.5	3.0	4.1
West South Central	8.7	5.7	13.0	9.6	7.9	8.7	6.7	7.6	9.1

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Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communication engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
Mountain	5.7	6.6	3.5	7.7	5.8	5.5	6.4	5.8	5.6
Pacific and insular	24.5	24.5	23.2	12.6	38.5	8.7	27.8	17.9	21.4
Not in United States	10.4	8.0	8.9	18.8	9.6	9.4	9.9	9.8	10.8
Location unknown	0.2	0.5	0.2	0.0	0.2	0.8	0.0	0.2	0.2
Male doctorate recipients (number)	7,349	331	684	470	1,618	209	619	1,128	2,290
Postgraduation status (number) ^b									
Definite postgraduation study	1,162	D	122	72	162	D	122	203	409
Definite employment	2,396	D	200	127	650	D	156	345	713
Seeking employment or study	2,483	106	263	179	490	65	235	394	751
Other ^c	283	12	18	15	79	10	20	31	98
Definite postgraduation study (%) ^d									
Postdoc fellowship	31.9	D	27.9	30.6	29.6	D	26.2	34.5	36.2
Postdoc research associateship	66.8	73.7	71.3	D	68.5	D	73.8	64.5	62.1
Other or unknown ^e	1.3	0.0	0.8	D	1.9	D	0.0	1.0	1.7
Definite employment (%) ^f									
Academe	17.1	D	D	43.3	13.1	29.1	14.1	16.8	18.1
Government	10.4	D	4.5	D	7.2	7.6	D	D	10.2
Industry or business ^g	70.0	51.6	83.0	35.4	77.8	54.4	76.9	70.4	68.7
Nonprofit organization	2.1	D	D	D	1.4	D	D	D	2.5
Other or unknown ^h	0.4	0.8	1.0	0.0	0.5	0.0	0.0	0.0	0.4
Primary activity ⁱ									
R&D	74.2	79.0	81.0	43.3	84.4	55.3	85.3	75.5	66.6
Teaching	8.3	D	D	21.7	D	14.5	D	10.0	7.4
Management or administration	4.9	D	D	9.2	D	D	D	D	7.6
Professional services	9.3	D	7.4	23.3	4.5	D	D	D	14.2
Other	3.3	D	4.2	2.5	D	D	D	3.6	4.2
Secondary activity ^j									
R&D	12.8	D	D	27.5	8.8	22.4	D	D	15.3
Teaching	7.5	4.2	D	20.0	5.6	D	6.7	D	9.6
Management or administration	18.2	D	24.3	D	14.7	D	27.3	18.7	17.7
Professional services	6.7	D	5.8	D	D	D	D	D	9.2
Other	2.1	4.2	2.1	1.7	D	0.0	D	3.3	1.9
No secondary activity	52.7	52.1	56.1	28.3	65.2	36.8	53.3	52.6	46.4
Activity unknown	4.0	5.6	5.5	5.5	3.5	3.8	3.8	4.1	3.5
Postgraduation location (%) ^k									
United States ^l	89.3	D	91.0	79.9	90.1	D	91.4	89.8	88.6
New England	7.8	8.7	8.1	D	6.9	D	8.3	8.6	8.6
Middle Atlantic	9.6	2.7	11.2	D	8.9	D	9.0	10.4	10.6
East North Central	12.4	D	14.6	D	8.0	D	12.6	18.2	10.1

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Characteristic	All engineering fields	Aerospace, aeronautical, and astronautical engineering	Chemical engineering	Civil engineering	Electrical, electronics, and communication engineering	Industrial and manufacturing engineering	Materials science engineering	Mechanical engineering	Other engineering
West North Central	3.5	D	D	6.5	D	D	D	D	3.4
South Atlantic	13.0	15.8	9.3	13.6	10.3	16.0	9.7	14.2	15.4
East South Central	3.4	4.4	D	D	D	D	D	D	4.0
West South Central	8.4	6.6	11.5	9.0	7.6	D	D	7.5	9.2
Mountain	6.0	7.7	D	D	6.3	7.4	5.8	5.5	5.7
Pacific and insular	24.9	23.5	24.8	11.6	38.5	5.3	29.5	17.7	21.6
Not in United States	10.5	D	8.7	20.1	9.6	D	8.6	10.0	11.1
Location unknown	0.3	0.5	0.3	0.0	0.2	1.1	0.0	0.2	0.3
Female doctorate recipients (number)	2,179	55	290	147	326	89	213	197	862
Postgraduation status (number) ^b									
Definite postgraduation study	374	D	62	23	41	D	35	43	155
Definite employment	610	D	78	39	109	D	61	52	224
Seeking employment or study	820	18	106	53	115	35	84	71	338
Other ^c	114	2	12	6	21	6	7	9	51
Definite postgraduation study (%) ^d									
Postdoc fellowship	37.2	D	30.6	D	34.1	D	31.4	37.2	44.5
Postdoc research associateship	61.2	60.0	67.7	D	63.4	D	68.6	58.1	54.2
Other or unknown ^e	1.6	0.0	1.6	0.0	2.4	0.0	0.0	4.7	1.3
Definite employment (%) ^f									
Academe	21.8	D	D	43.6	14.7	32.1	8.2	25.0	28.1
Government	10.8	D	D	D	6.4	21.4	D	D	9.8
Industry or business ^g	63.3	42.1	85.9	35.9	78.0	42.9	70.5	55.8	57.1
Nonprofit organization	3.1	D	0.0	D	0.0	D	D	D	3.6
Other or unknown ^h	1.0	0.0	2.6	0.0	0.9	0.0	0.0	0.0	1.3
Primary activity ^j									
R&D	66.1	66.7	73.7	43.6	85.9	50.0	76.8	70.5	56.9
Teaching	10.6	D	D	25.6	D	21.4	D	11.4	12.5
Management or administration	6.1	D	D	12.8	D	D	D	D	7.4
Professional services	13.2	D	11.8	17.9	7.1	D	D	D	17.6
Other	4.0	0.0	6.6	0.0	D	D	0.0	2.3	5.6
Secondary activity ^j									
R&D	14.4	D	D	35.9	5.1	25.0	D	D	19.9
Teaching	7.5	0.0	D	17.9	8.1	D	0.0	D	8.3
Management or administration	15.1	D	23.7	D	8.1	D	17.9	18.2	17.1
Professional services	7.8	D	10.5	D	D	D	D	D	9.7
Other	3.3	11.1	1.3	0.0	D	7.1	D	4.5	3.7
No secondary activity	51.9	55.6	57.9	33.3	73.7	35.7	67.9	50.0	41.2
Activity unknown	5.6	5.3	2.6	0.0	9.2	0.0	8.2	15.4	3.6

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Postgraduation location (%) ^k									
United States ^l	89.7	D	90.7	85.5	90.7	D	86.5	91.6	90.2
New England	8.9	24.1	7.9	D	8.7	D	6.3	6.3	10.3
Middle Atlantic	8.9	0.0	10.7	D	10.0	D	8.3	9.5	8.7
East North Central	11.8	D	15.7	D	9.3	D	13.5	20.0	10.3
West North Central	4.3	D	D	9.7	D	D	D	D	5.0
South Atlantic	15.1	24.1	13.6	17.7	8.7	24.2	14.6	14.7	16.6
East South Central	3.0	0.0	D	D	D	D	D	D	4.2
West South Central	9.7	0.0	16.4	11.3	9.3	D	D	8.4	9.0
Mountain	4.6	0.0	D	D	3.3	0.0	8.3	7.4	5.3
Pacific and insular	23.2	31.0	19.3	16.1	38.0	18.2	22.9	18.9	20.8
Not in United States	10.3	D	9.3	14.5	9.3	D	13.5	8.4	9.8
Location unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.

^b Includes only respondents who responded to 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.

NOTE: Due to rounding, percentages may not sum to 100.

SOURCE: NSF, NIH, USED, USDA, NEH, NASA, Survey of Earned Doctorates, 2014.