

TABLE 63. Statistical profile of postgraduation plans of doctorate recipients in engineering fields, by sex and field of study: 2013

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	8,963	349	829	543	1,900	240	815	1,282	3,005
Postgraduation status (number) ^b									
Definite postgraduation study	1,583	56	175	85	227	22	179	254	585
Definite employment	2,902	146	264	159	730	100	222	405	876
Seeking employment or study	2,954	98	251	207	563	83	311	409	1,032
Other ^c	338	9	31	20	87	13	24	25	129
Definite postgraduation study (%) ^d									
Postdoc fellowship	31.4	26.8	D	23.5	27.3	D	32.4	28.7	36.4
Postdoc research associateship	66.7	73.2	68.6	76.5	69.2	77.3	65.9	70.9	61.2
Other or unknown ^e	1.9	0.0	D	0.0	3.5	D	1.7	0.4	2.4
Definite employment (%) ^f									
Academe	16.9	10.3	8.7	34.6	11.2	38.0	15.8	16.5	20.0
Government	9.7	30.8	4.2	D	7.0	D	5.4	9.1	10.7
Industry or business ^g	70.0	53.4	85.6	47.2	78.6	52.0	75.7	70.4	65.3
Nonprofit organization	2.7	4.8	D	D	2.3	D	2.3	3.0	3.1
Other or unknown ^h	0.8	0.7	D	0.0	0.8	D	0.9	1.0	0.9
Primary activity ⁱ									
R&D	74.8	80.0	81.8	45.5	86.5	48.5	78.4	76.8	68.6
Teaching	7.6	D	3.5	18.9	4.6	26.8	D	7.0	8.5
Management or administration	6.0	10.7	2.3	6.3	3.3	8.2	6.1	4.2	9.0
Professional services	8.7	5.0	7.4	26.6	2.4	11.3	6.6	9.9	11.4
Other	3.0	D	5.0	2.8	3.3	5.2	D	2.1	2.5
Secondary activity ^l									
R&D	12.4	10.7	7.0	20.3	6.8	26.8	13.6	13.1	15.3
Teaching	7.5	D	D	17.5	5.5	13.4	4.7	6.8	10.1
Management or administration	19.1	22.1	22.5	14.7	16.4	13.4	24.9	20.6	19.1
Professional services	7.1	D	D	11.9	4.3	13.4	9.4	6.5	7.6
Other	1.0	0.7	1.6	1.4	1.2	0.0	0.9	1.3	0.7
No secondary activity	52.8	52.9	62.0	34.3	65.8	33.0	46.5	51.7	47.2
Activity unknown	5.6	4.1	2.3	10.1	7.9	3.0	4.1	5.4	4.8
Postgraduation location (%) ^j									
United States ^k	88.3	92.1	87.2	81.1	89.7	84.4	87.0	87.3	89.5
New England	8.0	D	6.6	4.1	7.5	D	8.2	9.0	9.5
Middle Atlantic	10.8	6.9	15.3	6.1	10.9	13.1	14.7	9.9	9.9
East North Central	11.4	15.3	13.7	7.4	7.5	19.7	12.5	16.4	10.1
West North Central	3.7	D	3.6	4.9	2.4	D	2.7	4.4	4.5
South Atlantic	13.0	18.8	11.4	16.4	9.6	20.5	12.2	9.7	15.3
East South Central	2.8	3.5	2.1	3.3	1.8	5.7	3.7	2.6	3.1
West South Central	8.7	5.9	13.7	14.8	6.4	9.0	5.2	9.0	8.8

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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	6.0	D	5.7	7.0	5.6	D	6.7	6.8	6.0
Pacific and insular	23.7	24.8	15.3	17.2	37.7	10.7	20.9	19.0	22.1
Not in United States	11.6	7.4	12.5	18.9	10.2	15.6	13.0	12.4	10.5
Location unknown	0.1	0.5	0.2	0.0	0.1	0.0	0.0	0.3	0.1
Male doctorate recipients (number)	6,910	294	569	418	1,617	175	598	1,085	2,154
Postgraduation status (number) ^b									
Definite postgraduation study	1,197	46	119	68	196	14	140	217	397
Definite employment	2,328	123	191	127	625	75	162	345	680
Seeking employment or study	2,196	D	161	152	476	D	225	342	696
Other ^c	263	9	23	14	69	11	17	21	99
Definite postgraduation study (%) ^d									
Postdoc fellowship	30.2	D	D	D	28.1	D	30.7	27.2	34.8
Postdoc research associateship	68.3	D	66.4	D	69.4	D	68.6	72.4	63.2
Other or unknown ^e	1.5	0.0	D	0.0	2.6	D	0.7	0.5	2.0
Definite employment (%) ^f									
Academe	16.2	D	D	32.3	11.5	40.0	16.7	15.7	19.0
Government	10.1	31.7	D	D	D	D	4.3	D	11.3
Industry or business ^g	70.4	56.9	85.9	49.6	77.4	50.7	76.5	71.0	66.5
Nonprofit organization	2.6	D	D	D	D	D	D	D	2.6
Other or unknown ^h	0.6	0.0	D	0.0	D	0.0	D	0.9	0.6
Primary activity ⁱ									
R&D	75.7	81.2	81.2	45.2	86.5	52.1	78.2	76.4	70.6
Teaching	7.0	D	D	17.4	D	28.8	5.1	D	7.4
Management or administration	6.0	D	D	D	D	D	D	D	8.7
Professional services	8.3	D	7.5	28.7	D	D	5.8	D	11.0
Other	3.1	D	D	D	3.1	6.8	D	2.5	2.3
Secondary activity ^j									
R&D	12.2	D	7.0	D	D	27.4	D	12.9	14.2
Teaching	7.2	D	D	16.5	D	D	D	D	9.4
Management or administration	19.8	D	23.7	13.9	17.7	D	22.4	21.5	20.3
Professional services	7.1	9.4	D	D	D	D	D	D	7.7
Other	1.0	0.0	2.2	1.7	0.9	0.0	1.3	1.5	0.8
No secondary activity	52.6	53.0	60.8	36.5	63.7	31.5	46.2	51.8	47.5
Activity unknown	5.7	4.9	2.6	9.4	7.8	2.7	3.7	5.5	5.0
Postgraduation location (%) ^k									
United States ^k	88.0	D	86.8	80.5	89.2	D	87.7	86.8	89.2
New England	7.7	6.5	6.1	D	7.7	D	7.6	8.4	9.0
Middle Atlantic	11.0	D	16.1	D	10.8	12.4	13.2	10.3	10.6
East North Central	11.7	D	14.8	9.2	7.8	18.0	D	16.2	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	3.6	4.7	D	D	2.2	0.0	D	D	4.5
South Atlantic	12.3	19.5	11.0	16.9	9.1	18.0	13.6	8.9	14.0
East South Central	2.8	4.1	D	D	1.3	7.9	D	D	3.1
West South Central	8.7	D	12.9	14.9	6.6	D	5.3	9.1	9.3
Mountain	6.2	5.9	5.2	D	5.8	0.0	7.0	D	6.4
Pacific and insular	23.9	22.5	15.8	D	37.8	D	20.5	18.7	21.9
Not in United States	11.9	D	12.9	19.5	10.7	D	12.3	12.8	10.7
Location unknown	0.2	0.6	0.3	0.0	0.1	0.0	0.0	0.4	0.1
Female doctorate recipients (number)	2,051	55	260	125	281	65	217	197	851
Postgraduation status (number) ^b									
Definite postgraduation study	386	10	56	17	31	8	39	37	188
Definite employment	574	23	73	32	105	25	60	60	196
Seeking employment or study	758	D	90	55	87	D	86	67	336
Other ^c	75	0	8	6	18	2	7	4	30
Definite postgraduation study (%) ^d									
Postdoc fellowship	35.0	D	25.0	D	22.6	D	38.5	37.8	39.9
Postdoc research associateship	61.9	D	73.2	D	67.7	D	56.4	62.2	56.9
Other or unknown ^e	3.1	0.0	1.8	0.0	9.7	0.0	5.1	0.0	3.2
Definite employment (%) ^f									
Academe	19.5	D	D	43.8	9.5	32.0	13.3	21.7	23.5
Government	7.8	26.1	D	18.8	D	D	8.3	D	8.7
Industry or business ^g	67.9	34.8	84.9	37.5	85.7	56.0	73.3	66.7	61.2
Nonprofit organization	3.1	D	D	0.0	D	0.0	D	D	4.6
Other or unknown ^h	1.6	4.3	0.0	0.0	D	D	D	1.7	2.0
Primary activity ⁱ									
R&D	71.2	73.9	83.3	46.4	86.5	37.5	78.9	78.9	61.7
Teaching	10.1	D	D	25.0	D	20.8	D	D	12.2
Management or administration	5.9	D	D	D	D	D	D	D	10.1
Professional services	10.3	D	6.9	17.9	D	D	8.8	D	12.8
Other	2.6	4.3	D	D	4.2	0.0	0.0	0.0	3.2
Secondary activity ^j									
R&D	13.6	D	6.9	D	D	25.0	D	14.0	19.1
Teaching	8.4	D	D	21.4	D	D	D	D	12.2
Management or administration	16.3	D	19.4	17.9	8.3	D	31.6	15.8	14.9
Professional services	7.0	D	D	D	D	D	D	D	6.9
Other	0.9	4.3	0.0	0.0	3.1	0.0	0.0	0.0	0.5
No secondary activity	53.8	52.2	65.3	25.0	78.1	37.5	47.4	50.9	46.3
Activity unknown	5.1	0.0	1.4	12.5	8.6	4.0	5.0	5.0	4.1

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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
Postgraduation location (%) ^j									
United States ^k	89.4	D	88.4	83.7	92.6	D	84.8	89.7	90.1
New England	9.2	D	7.8	D	6.6	D	10.1	12.4	10.9
Middle Atlantic	10.2	D	13.2	D	11.0	15.2	19.2	7.2	7.8
East North Central	10.4	D	10.9	0.0	5.9	24.2	D	17.5	10.2
West North Central	4.3	D	D	D	3.7	D	D	D	4.4
South Atlantic	15.5	15.2	12.4	14.3	12.5	27.3	8.1	14.4	19.0
East South Central	2.9	0.0	D	D	4.4	0.0	D	D	3.1
West South Central	8.4	D	15.5	14.3	5.1	D	5.1	8.2	7.3
Mountain	4.9	D	7.0	D	4.4	D	6.1	D	4.7
Pacific and insular	23.3	36.4	14.0	D	37.5	D	22.2	20.6	22.7
Not in United States	10.6	D	11.6	16.3	7.4	D	15.2	10.3	9.9
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 and type of plans.

^k 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: NSF, NIH, USED, USDA, NEH, NASA, Survey of Earned Doctorates, 2013.