

Table A-3. Educational attainment of employed U.S. scientists and engineers, by level and field of highest degree and broad occupation category: 1997

Level and field of highest degree	All occupations, total		Occupation					
	Number	Percent	Computer/ math scientists	Life/ related scientists	Physical/ related scientists	Social/ related scientists	Engineers	Non-S&E occupa- tions
			Percent					
All degree levels, total¹								
All degree fields, total	10,585,600	100.0%	9.8%	3.0%	2.7%	3.3%	13.0%	68.2%
S&E degree fields, total	7,704,000	100.0	10.5	3.6	3.5	3.7	15.5	63.1
Sciences, total	5,794,700	100.0	10.9	4.7	4.4	4.9	2.3	72.8
Computer/math sciences, total	1,003,300	100.0	45.4	0.2	0.4	0.2	3.1	50.7
Computer/information sciences	543,800	100.0	58.4	0.1	0.1	0.1	2.6	38.7
Mathematical sciences	459,500	100.0	29.9	0.3	0.8	0.4	3.8	64.8
Life/related sciences, total	1,204,700	100.0	2.3	19.5	3.1	0.4	1.8	72.9
Agricultural/food sciences	218,700	100.0	1.7	18.5	1.3	0.2	1.7	76.5
Biological sciences	889,100	100.0	2.2	20.4	3.1	0.4	1.3	72.5
Environmental life sciences	96,900	100.0	3.8	13.8	6.4	0.6	6.9	68.4
Physical/related sciences, total	619,200	100.0	7.1	3.1	33.8	0.3	9.7	46.0
Chemistry, except biochemistry	275,100	100.0	3.7	5.2	38.3	0.1	6.0	46.7
Earth science, geology and oceanography	146,900	100.0	4.9	1.0	41.6	0.2	6.1	46.2
Physics/astronomy	144,100	100.0	16.6	1.4	27.3	0.8	19.6	34.4
Other physical sciences	53,000	100.0	5.3	2.6	5.8	0.6	11.5	74.2
Social/related sciences, total	2,967,600	100.0	3.5	0.5	0.2	9.4	0.6	85.8
Economics	402,800	100.0	5.3	0.7	0.3	8.4	1.0	84.3
Political/related sciences	558,700	100.0	3.4	0.3	0.2	4.8	0.8	90.5
Psychology	1,112,800	100.0	3.2	0.6	S	15.5	0.6	80.1
Sociology/anthropology	558,600	100.0	2.1	0.4	0.1	6.1	0.3	90.9
Other social sciences	334,800	100.0	4.9	0.3	0.7	3.4	0.7	90.0
Engineering, total	1,909,200	100.0	9.4	0.2	0.8	0.1	55.7	33.8
Aerospace/related engineering	77,400	100.0	8.9	0.1	0.5	S	47.0	43.4
Chemical engineering	138,400	100.0	3.0	0.4	3.0	0.1	61.2	32.3
Civil/architectural engineering	322,300	100.0	2.0	S	0.3	0.1	61.7	35.8
Electrical/related engineering	582,100	100.0	19.4	0.1	0.3	0.1	52.5	27.6
Industrial engineering	105,400	100.0	10.7	S	S	0.3	36.7	52.2
Mechanical engineering	386,100	100.0	4.9	0.2	0.2	S	64.4	30.3
Other engineering	297,500	100.0	6.5	0.7	2.5	0.1	50.5	39.8
Non-S&E degrees, total	2,881,700	100.0	7.9	1.7	0.5	2.1	6.2	81.7
Business/management	703,100	100.0	16.4	0.9	0.5	1.5	11.6	69.1
Education	434,200	100.0	6.9	1.5	0.2	3.6	1.8	86.0
Health	589,900	100.0	0.7	3.8	0.8	0.8	0.5	93.4
Other non-S&E	1,154,500	100.0	6.8	1.1	0.4	2.5	7.5	81.7

See explanatory information, if any, and SOURCE at end of table.

Table A-3. Educational attainment of employed U.S. scientists and engineers, by level and field of highest degree and broad occupation category: 1997

Level and field of highest degree	All occupations, total		Occupation					
	Number	Percent	Computer/ math scientists	Life/ related scientists	Physical/ related scientists	Social/ related scientists	Engineers	Non-S&E occupa- tions
			Percent					
Bachelor's, total								
All degree fields, total	6,193,700	100.0%	10.9%	2.0%	2.1%	1.1%	14.8%	69.1%
S&E degree fields, total	5,683,700	100.0	9.7	2.0	2.2	1.2	14.7	70.3
Sciences, total	4,303,400	100.0	10.1	2.6	2.8	1.5	2.1	81.0
Computer/math sciences, total	721,600	100.0	41.5	0.2	0.4	0.1	2.5	55.3
Computer/information sciences	385,000	100.0	57.5	S	0.2	0.1	1.8	40.5
Mathematical sciences	336,600	100.0	23.3	0.3	0.8	0.2	3.1	72.2
Life/related sciences, total	884,500	100.0	2.3	10.4	2.7	0.2	1.9	82.3
Agricultural/food sciences	175,200	100.0	1.8	11.4	0.7	0.2	1.7	84.2
Biological sciences	634,500	100.0	2.3	10.2	3.1	0.2	1.5	82.6
Environmental life sciences	74,800	100.0	3.9	10.4	4.3	0.3	5.6	75.5
Physical/related sciences, total	381,900	100.0	7.4	2.2	23.3	0.3	10.6	56.2
Chemistry, except biochemistry	176,100	100.0	4.4	3.6	29.0	0.1	6.5	56.3
Earth science, geology and oceanography	96,300	100.0	5.4	0.5	29.6	0.2	7.3	56.9
Physics/astronomy	68,800	100.0	20.1	1.0	12.5	1.0	24.6	41.0
Other physical sciences	40,700	100.0	3.4	1.7	2.0	0.7	12.5	79.9
Social/related sciences, total	2,315,500	100.0	3.7	0.4	0.1	2.6	0.7	92.6
Economics	337,300	100.0	5.6	0.5	0.4	2.6	1.1	89.8
Political/related sciences	476,100	100.0	3.5	0.4	0.1	1.6	0.8	93.7
Psychology	750,000	100.0	3.6	0.4	0.1	3.7	0.5	91.7
Sociology/anthropology	496,300	100.0	2.2	0.4	0.1	2.4	0.4	94.6
Other social sciences	255,900	100.0	4.5	0.2	0.3	1.7	0.7	92.6
Engineering, total	1,380,300	100.0	8.4	0.1	0.6	0.1	53.9	36.9
Aerospace/related engineering	55,200	100.0	9.6	S	0.2	S	43.5	46.6
Chemical engineering	102,100	100.0	2.7	0.3	2.8	0.2	59.5	34.7
Civil/architectural engineering	243,800	100.0	1.8	S	0.1	S	60.5	37.5
Electrical/related engineering	413,200	100.0	18.2	S	0.3	0.2	50.8	30.4
Industrial engineering	79,300	100.0	7.4	S	S	0.3	33.4	58.9
Mechanical engineering	308,500	100.0	4.1	0.2	0.1	S	63.4	32.2
Other engineering	178,200	100.0	5.3	0.3	1.6	0.1	44.8	47.9
Non-S&E degrees, total	510,000	100.0	24.7	2.5	0.9	0.5	16.1	55.3
Business/management	161,200	100.0	35.7	2.9	0.2	0.4	7.7	53.1
Education	48,800	100.0	22.5	1.4	0.2	S	10.2	65.6
Health	59,700	100.0	3.2	4.2	4.2	S	2.5	85.8
Other non-S&E	240,400	100.0	23.2	2.1	0.7	0.6	26.2	47.1

See explanatory information, if any, and SOURCE at end of table.

Table A-3. Educational attainment of employed U.S. scientists and engineers, by level and field of highest degree and broad occupation category: 1997

Level and field of highest degree	All occupations, total		Occupation					
	Number	Percent	Computer/ math scientists	Life/ related scientists	Physical/ related scientists	Social/ related scientists	Engineers	Non-S&E occupa- tions
			Percent					
Master's, total								
All degree fields, total	2,819,800	100.0%	10.7%	2.5%	2.5%	5.4%	13.3%	65.7%
S&E degree fields, total	1,431,600	100.0	14.7	3.7	4.2	7.6	19.8	50.0
Sciences, total	1,001,000	100.0	15.5	5.2	5.5	10.8	3.0	60.0
Computer/math sciences, total	244,700	100.0	51.8	0.1	0.3	0.5	5.2	42.1
Computer/information sciences	148,800	100.0	59.7	0.1	0.1	0.2	4.4	35.6
Mathematical sciences	95,800	100.0	39.5	0.1	0.7	0.9	6.4	52.4
Life/related sciences, total	156,600	100.0	2.3	29.0	4.6	1.0	2.3	60.8
Agricultural/food sciences	26,700	100.0	1.9	34.8	3.7	S	2.2	57.3
Biological sciences	112,500	100.0	2.1	29.1	3.3	1.2	1.0	63.4
Environmental life sciences	17,400	100.0	4.0	19.5	14.4	1.1	10.9	50.0
Physical/related sciences, total	114,500	100.0	8.4	3.0	40.3	0.3	9.6	38.7
Chemistry, except biochemistry	36,500	100.0	2.5	6.0	44.9	S	6.8	39.7
Earth science, geology and oceanography	34,400	100.0	4.9	2.0	58.1	S	4.7	30.2
Physics/astronomy	33,200	100.0	17.2	0.3	24.4	0.9	18.7	38.9
Other physical sciences	10,500	100.0	13.3	2.9	15.2	S	6.7	61.9
Social/related sciences, total	485,300	100.0	3.2	0.6	0.3	21.6	0.6	73.7
Economics	44,000	100.0	5.0	1.6	S	22.5	0.2	70.7
Political/related sciences	66,000	100.0	2.9	S	0.3	13.8	0.8	82.3
Psychology	271,500	100.0	2.5	0.6	S	28.1	0.7	68.0
Sociology/anthropology	39,500	100.0	1.8	0.3	S	18.7	0.3	78.7
Other social sciences	64,300	100.0	5.9	0.5	1.6	3.7	0.5	87.7
Engineering, total	430,600	100.0	12.9	0.2	1.2	0.1	58.8	26.8
Aerospace/related engineering	18,200	100.0	6.0	S	0.5	S	52.7	40.1
Chemical engineering	23,000	100.0	4.3	0.4	3.9	S	64.3	26.5
Civil/architectural engineering	69,200	100.0	2.7	S	0.7	0.3	63.3	32.8
Electrical/related engineering	142,700	100.0	23.5	S	0.3	S	55.6	20.6
Industrial engineering	22,800	100.0	21.5	S	S	0.4	46.5	31.6
Mechanical engineering	65,800	100.0	8.4	S	0.6	S	67.0	24.0
Other engineering	89,100	100.0	8.5	0.8	3.4	0.1	57.4	29.9
Non-S&E degrees, total	1,388,200	100.0	6.5	1.3	0.6	3.1	6.7	81.9
Business/management	525,200	100.0	10.9	0.3	0.6	1.6	13.2	73.4
Education	334,900	100.0	4.2	1.1	0.1	3.3	0.7	90.4
Health	95,200	100.0	1.8	6.2	2.3	4.3	1.4	84.1
Other non-S&E	432,900	100.0	4.0	1.5	0.5	4.4	4.5	85.1

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Level and field of highest degree	All occupations, total		Occupation					
	Number	Percent	Computer/ math scientists	Life/ related scientists	Physical/ related scientists	Social/ related scientists	Engineers	Non-S&E occupa- tions
			Percent					
Doctorate, total								
All degree fields, total	696,000	100.0%	8.5%	16.1%	12.0%	17.4%	11.4%	34.7%
S&E degree fields, total	580,300	100.0	8.8	18.8	14.4	19.0	13.3	25.8
Sciences, total	482,000	100.0	8.7	22.4	16.7	22.9	2.4	26.9
Computer/math sciences, total	36,900	100.0	77.5	0.5	1.1	0.3	3.3	17.3
Computer/information sciences	9,700	100.0	77.3	1.0	S	S	4.1	17.5
Mathematical sciences	27,200	100.0	77.6	0.4	1.5	0.4	2.9	17.3
Life/related sciences, total	162,500	100.0	1.8	59.9	3.4	0.8	0.8	33.3
Agricultural/food sciences	16,800	100.0	1.2	67.3	3.6	0.6	1.2	26.2
Biological sciences	141,200	100.0	1.9	59.3	3.1	0.7	0.6	34.4
Environmental life sciences	4,500	100.0	2.2	51.1	8.9	4.4	6.7	24.4
Physical/related sciences, total	122,200	100.0	5.2	6.1	60.5	0.2	7.0	21.1
Chemistry, except biochemistry	62,500	100.0	2.4	9.0	60.8	S	4.0	23.7
Earth science, geology and oceanography	16,100	100.0	2.5	1.2	77.0	0.6	2.5	16.1
Physics/astronomy	41,800	100.0	10.5	2.9	54.3	0.2	12.7	19.4
Other physical sciences	1,800	100.0	S	22.2	38.9	S	16.7	16.7
Social/related sciences, total	160,500	100.0	2.6	1.7	0.6	67.6	0.4	27.1
Economics	21,500	100.0	2.3	0.9	0.5	70.2	S	26.0
Political/related sciences	16,500	100.0	1.8	S	1.2	62.4	0.6	35.2
Psychology	85,000	100.0	1.9	2.6	S	75.2	0.4	20.0
Sociology/anthropology	22,800	100.0	2.6	1.8	0.4	64.5	S	31.1
Other social sciences	14,600	100.0	8.2	0.7	3.4	31.5	1.4	54.8
Engineering, total	98,200	100.0	9.1	1.2	2.7	0.1	66.6	20.3
Aerospace/related engineering	4,000	100.0	12.5	S	2.5	S	70.0	15.0
Chemical engineering	13,300	100.0	3.0	1.5	2.3	S	69.2	24.8
Civil/architectural engineering	9,400	100.0	3.2	S	2.1	S	78.7	14.9
Electrical/related engineering	26,300	100.0	16.3	0.4	1.5	S	61.2	20.5
Industrial engineering	3,300	100.0	15.2	S	S	S	51.5	33.3
Mechanical engineering	11,800	100.0	5.9	0.8	1.7	S	77.1	14.4
Other engineering	30,100	100.0	7.6	2.7	5.0	0.3	63.5	21.3
Non-S&E degrees, total	115,800	100.0	6.9	2.3	0.3	9.1	2.2	79.2
Business/management	12,000	100.0	3.3	S	S	9.2	S	86.7
Education	43,200	100.0	11.3	4.4	0.9	10.6	0.5	72.2
Health	S	S	S	S	S	S	S	S
Other non-S&E	60,600	100.0%	4.5	1.3	S	7.9	3.8	82.5%

1 Includes professional degrees

NOTES: The term "Scientists and Engineers" (S&Es) includes all persons who have ever received a bachelor's degree or higher in a science or engineering (S&E) field, plus persons holding a non-S&E bachelor's or higher degree who were employed in a S&E occupation during either the 1993, 1995 or 1997 SESTAT surveys. Figures are rounded to nearest hundred. Details may not add to total because of rounding.

KEY: S = Suppressed for reasons of confidentiality and/or data reliability

SOURCE: National Science Foundation/Science Resources Studies Division, 1997 SESTAT (Scientists and Engineers Statistical Data System)