

Table A-3. Educational attainment of employed U.S. scientists and engineers, by level and field of highest degree and broad occupation category: 1993

Page 1 of 4

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	9,793,500	100.0%	10.1%	3.3%	2.9%	3.2%	14.2%	66.3%	
S&E degree fields, total	7,035,800	100.0	8.9	3.6	3.7	3.4	16.2	64.2	
Sciences, total	5,202,100	100.0	9.6	4.8	4.7	4.6	2.6	73.7	
Computer/math sciences, total	918,000	100.0	40.6	0.1	0.5	0.2	3.6	55.0	
Computer/information sciences	477,400	100.0	51.7	S	0.1	0.2	2.9	45.1	
Mathematical sciences	440,600	100.0	28.6	0.2	0.9	0.2	4.3	65.8	
Life/related sciences, total	1,073,100	100.0	2.0	20.3	2.9	0.3	2.3	72.1	
Agricultural/food sciences	204,300	100.0	1.2	18.6	1.5	0.2	1.8	76.7	
Biological sciences	785,100	100.0	2.1	21.3	2.7	0.3	2.1	71.5	
Environmental life sciences	83,700	100.0	3.5	15.1	7.9	0.7	6.1	67.0	
Physical/related sciences, total	599,800	100.0	5.5	3.1	33.5	0.2	9.2	48.5	
Chemistry, except biochemistry	262,800	100.0	3.1	5.1	37.2	0.2	6.4	48.1	
Earth science, geology and oceanography	144,100	100.0	3.6	1.8	40.4	0.1	5.8	48.4	
Physics/astronomy	142,100	100.0	12.0	1.1	29.3	0.4	17.3	40.0	
Other physical sciences	26,700	100.0	4.9	3.4	10.9	S	6.0	74.9	
Social/related sciences, total	2,611,200	100.0	2.8	0.4	0.3	8.9	0.8	86.8	
Economics	395,000	100.0	4.0	0.8	0.6	7.3	0.9	86.3	
Political/related sciences	481,400	100.0	2.5	S	0.1	4.7	1.1	91.5	
Psychology	960,700	100.0	2.8	0.5	0.1	14.7	0.6	81.3	
Sociology/anthropology	485,900	100.0	1.5	0.2	0.1	5.9	0.5	91.7	
Other social sciences	288,200	100.0	3.4	0.8	1.4	3.3	1.4	89.7	
Engineering, total	1,833,700	100.0	6.7	0.2	0.9	S	55.0	37.2	
Aerospace/related engineering	78,900	100.0	4.9	S	0.3	S	45.6	49.0	
Chemical engineering	135,000	100.0	3.0	0.3	3.0	0.1	58.7	34.9	
Civil/architectural engineering	310,300	100.0	1.1	0.1	0.4	S	58.4	40.0	
Electrical/related engineering	544,300	100.0	15.2	S	0.3	0.1	55.0	29.5	
Industrial engineering	103,300	100.0	9.2	0.1	0.1	0.1	35.9	54.7	
Mechanical engineering	371,500	100.0	2.6	0.1	0.2	S	64.0	33.1	
Other engineering	289,900	100.0	3.4	0.6	3.2	0.1	47.3	45.5	
Non-S&E degrees, total	2,757,700	100.0	13.4	2.5	0.7	2.9	9.0	71.5	
Business/management	657,400	100.0	25.5	1.1	0.6	1.4	15.2	56.1	
Education	418,600	100.0	12.1	1.8	1.1	5.2	4.1	75.7	
Health	583,400	100.0	0.9	6.1	0.7	0.8	0.6	90.9	
Other non-S&E	1,098,400	100.0	13.2	1.7	0.6	4.0	11.6	68.8	

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: 1993

Page 2 of 4

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	5,727,200	100.0%	11.8%	2.3%	2.3%	1.2%	17.0%	65.4%	
S&E degree fields, total	5,172,600	100.0	8.1	2.0	2.4	1.0	15.9	70.5	
Sciences, total	3,814,400	100.0	8.9	2.7	3.0	1.4	2.5	81.5	
Computer/math sciences, total	663,800	100.0	37.1	S	0.5	0.1	3.0	59.2	
Computer/information sciences	346,200	100.0	50.6	S	0.1	0.1	2.3	46.9	
Mathematical sciences	317,700	100.0	22.4	0.1	0.9	0.2	3.7	72.7	
Life/related sciences, total	773,600	100.0	2.2	11.6	2.5	0.2	2.6	80.9	
Agricultural/food sciences	162,200	100.0	1.1	12.8	0.9	0.2	1.9	83.0	
Biological sciences	546,400	100.0	2.4	11.0	2.7	0.2	2.5	81.2	
Environmental life sciences	65,000	100.0	3.1	13.4	5.4	0.3	5.2	72.6	
Physical/related sciences, total	372,500	100.0	5.7	2.3	23.1	0.1	10.1	58.7	
Chemistry, except biochemistry	168,800	100.0	3.5	3.8	28.9	0.2	6.8	56.9	
Earth science, geology and oceanography	94,700	100.0	3.6	1.2	28.7	0.1	6.2	60.1	
Physics/astronomy	70,700	100.0	14.4	1.0	12.2	0.1	22.1	50.1	
Other physical sciences	18,800	100.0	2.7	0.5	6.9	S	6.9	83.0	
Social/related sciences, total	2,004,400	100.0	2.8	0.3	0.3	2.4	0.9	93.3	
Economics	332,800	100.0	4.1	0.5	0.5	1.7	1.0	92.2	
Political/related sciences	407,400	100.0	2.7	S	0.1	1.7	1.1	94.4	
Psychology	619,600	100.0	3.0	0.4	0.1	4.1	0.7	91.7	
Sociology/anthropology	424,400	100.0	1.4	0.1	0.1	2.0	0.5	95.8	
Other social sciences	220,300	100.0	3.2	0.5	1.0	1.1	1.4	92.7	
Engineering, total	1,358,300	100.0	5.9	0.1	0.6	0.1	53.5	39.8	
Aerospace/related engineering	57,600	100.0	4.9	S	0.2	S	43.6	51.4	
Chemical engineering	97,700	100.0	2.9	0.2	2.9	0.2	57.1	36.8	
Civil/architectural engineering	236,700	100.0	0.8	S	0.1	S	56.7	42.3	
Electrical/related engineering	395,600	100.0	14.3	S	0.2	0.1	54.0	31.4	
Industrial engineering	82,300	100.0	6.8	S	0.1	S	34.8	58.2	
Mechanical engineering	301,000	100.0	2.2	0.1	0.1	S	63.4	34.2	
Other engineering	187,000	100.0	2.2	0.4	2.2	0.1	42.2	52.9	
Non-S&E degrees, total	554,500	100.0	46.0	4.6	1.4	2.9	27.2	17.8	
Business/management	178,800	100.0	63.3	3.0	0.8	1.4	20.1	11.4	
Education	60,100	100.0	43.1	3.8	2.3	1.7	19.5	29.6	
Health	55,200	100.0	6.0	10.9	3.1	2.4	5.4	72.1	
Other non-S&E	260,400	100.0	43.3	4.6	1.2	4.4	38.4	8.0	

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: 1993

Page 3 of 4

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	2,575,600	100.0%	10.2%	2.7%	2.8%	5.2%	13.6%	65.4%	
S&E degree fields, total	1,328,400	100.0	12.2	3.8	4.8	6.8	19.4	53.1	
Sciences, total	937,700	100.0	13.4	5.3	6.1	9.6	3.1	62.6	
Computer/math sciences, total	221,400	100.0	46.0	0.2	0.4	0.4	5.4	47.5	
Computer/information sciences	124,400	100.0	53.5	0.1	0.2	0.6	4.5	41.2	
Mathematical sciences	97,000	100.0	36.5	0.4	0.7	0.1	6.6	55.6	
Life/related sciences, total	151,000	100.0	2.1	28.9	4.8	0.4	2.1	61.6	
Agricultural/food sciences	26,100	100.0	2.3	29.5	3.4	0.4	1.1	62.8	
Biological sciences	110,200	100.0	1.7	30.7	3.2	0.4	1.3	62.7	
Environmental life sciences	14,800	100.0	5.4	14.2	18.9	1.4	10.1	50.7	
Physical/related sciences, total	111,300	100.0	6.9	3.0	42.5	0.4	9.2	38.1	
Chemistry, except biochemistry	34,000	100.0	3.2	5.6	45.0	0.3	7.6	38.2	
Earth science, geology and oceanography	34,000	100.0	4.7	2.6	58.5	0.3	5.3	28.8	
Physics/astronomy	32,400	100.0	12.0	0.3	34.3	0.6	15.1	37.7	
Other physical sciences	6,500	100.0	12.3	7.7	15.4	S	1.5	63.1	
Social/related sciences, total	453,900	100.0	2.7	0.5	0.4	19.3	0.7	76.3	
Economics	41,800	100.0	4.8	2.2	1.4	25.1	1.0	65.6	
Political/related sciences	58,300	100.0	2.1	S	0.2	12.0	1.5	84.2	
Psychology	259,700	100.0	2.7	0.2	S	22.7	0.4	73.9	
Sociology/anthropology	39,900	100.0	1.8	0.8	S	20.3	0.3	76.9	
Other social sciences	54,200	100.0	3.0	0.6	2.0	5.9	1.7	87.1	
Engineering, total	390,700	100.0	9.3	0.2	1.6	S	58.6	30.3	
Aerospace/related engineering	17,900	100.0	5.6	S	0.6	S	48.6	45.3	
Chemical engineering	24,800	100.0	3.2	0.4	3.2	S	64.1	29.0	
Civil/architectural engineering	65,100	100.0	1.5	0.2	1.2	S	62.8	34.1	
Electrical/related engineering	127,300	100.0	18.2	S	0.3	0.1	57.7	23.6	
Industrial engineering	18,700	100.0	18.7	S	S	S	40.1	41.7	
Mechanical engineering	59,900	100.0	4.5	0.2	0.5	S	65.9	28.9	
Other engineering	76,900	100.0	5.3	0.4	4.8	S	56.0	33.3	
Non-S&E degrees, total	1,247,100	100.0	8.2	1.6	0.7	3.6	7.4	78.5	
Business/management	462,100	100.0	11.5	0.4	0.6	1.1	13.9	72.5	
Education	311,100	100.0	6.5	1.3	0.7	4.6	1.5	85.4	
Health	76,100	100.0	2.1	11.0	2.1	3.7	0.7	80.7	
Other non-S&E	397,800	100.0	6.8	1.5	0.6	5.7	5.7	79.7	

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: 1993

Page 4 of 4

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	634,800	100.0%	7.7%	15.5%	12.1%	16.8%	10.2%	37.7%	
S&E degree fields, total	529,200	100.0	7.6	18.2	14.3	17.6	11.7	30.7	
Sciences, total	444,500	100.0	7.7	21.4	16.3	20.9	2.3	31.3	
Computer/math sciences, total	32,800	100.0	75.3	0.3	0.9	0.6	3.4	19.8	
Computer/information sciences	6,800	100.0	75.0	S	S	1.5	2.9	20.6	
Mathematical sciences	26,000	100.0	75.4	0.4	1.2	0.4	3.5	19.6	
Life/related sciences, total	148,500	100.0	1.3	57.1	2.8	0.6	0.9	37.4	
Agricultural/food sciences	16,100	100.0	0.6	59.0	3.7	0.6	0.6	34.8	
Biological sciences	128,500	100.0	1.3	57.2	2.5	0.5	0.8	37.7	
Environmental life sciences	3,900	100.0	2.6	43.6	7.7	5.1	5.1	35.9	
Physical/related sciences, total	115,900	100.0	3.5	6.0	58.2	0.2	6.4	25.8	
Chemistry, except biochemistry	60,000	100.0	1.7	8.7	56.3	S	4.5	29.0	
Earth science, geology and oceanography	15,400	100.0	1.3	3.9	72.1	S	3.2	19.5	
Physics/astronomy	39,000	100.0	7.2	2.1	56.4	0.3	10.3	23.8	
Other physical sciences	1,400	100.0	S	28.6	35.7	S	7.1	21.4	
Social/related sciences, total	147,300	100.0	2.4	2.4	0.5	62.3	0.4	32.0	
Economics	20,400	100.0	1.5	1.5	S	63.7	S	33.3	
Political/related sciences	15,600	100.0	1.3	S	0.6	55.8	0.6	41.7	
Psychology	75,900	100.0	1.7	2.8	S	70.6	0.4	24.5	
Sociology/anthropology	21,700	100.0	3.2	1.4	0.5	57.6	0.5	37.3	
Other social sciences	13,700	100.0	8.8	5.8	3.6	28.5	0.7	52.6	
Engineering, total	84,700	100.0	7.0	0.9	3.5	0.1	60.8	27.7	
Aerospace/related engineering	3,400	100.0	2.9	S	S	S	67.6	29.4	
Chemical engineering	12,500	100.0	3.2	0.8	4.8	S	60.0	30.4	
Civil/architectural engineering	8,500	100.0	5.9	S	2.4	S	70.6	21.2	
Electrical/related engineering	21,400	100.0	12.6	0.5	2.3	S	55.1	29.4	
Industrial engineering	2,300	100.0	21.7	4.3	S	S	43.5	34.8	
Mechanical engineering	10,700	100.0	2.8	S	2.8	S	71.0	23.4	
Other engineering	26,000	100.0	5.8	1.9	5.8	S	58.1	28.1	
Non-S&E degrees, total	105,600	100.0	8.1	1.9	1.4	13.0	3.0	72.5	
Business/management	11,900	100.0	9.2	1.7	S	13.4	S	75.6	
Education	41,300	100.0	10.4	2.7	1.7	15.5	1.7	68.3	
Health	S	S	S	S	S	S	S	S	
Other non-S&E	52,400	100.0	6.1	1.3	1.5	11.1	4.8	75.2	

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 are employed in an S&E occupation.

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, 1993 SESTAT (Scientists and Engineers Statistical Data System)