

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
All degree levels and fields <sup>a</sup>	84,000	82,000	76,000	33,000	19,000	44,000	30,000	30,000
<30	31,000	30,000	28,000	10,000	6,000	11,000	S	11,000
30-39	47,000	45,000	43,000	17,000	10,000	18,000	2,000	18,000
40-49	51,000	49,000	48,000	16,000	9,000	17,000	5,000	16,000
50-59	48,000	47,000	44,000	17,000	9,000	18,000	11,000	13,000
60+	38,000	25,000	20,000	15,000	7,000	29,000	28,000	8,000
S&E fields	73,000	67,000	65,000	23,000	14,000	35,000	25,000	23,000
<30	24,000	23,000	22,000	7,000	5,000	9,000	S	9,000
30-39	39,000	38,000	36,000	12,000	8,000	16,000	1,000	16,000
40-49	40,000	37,000	35,000	12,000	7,000	12,000	5,000	12,000
50-59	36,000	35,000	34,000	12,000	7,000	13,000	9,000	10,000
60+	30,000	18,000	16,000	10,000	6,000	24,000	23,000	7,000
Sciences	69,000	64,000	60,000	22,000	13,000	32,000	22,000	23,000
<30	22,000	21,000	20,000	7,000	5,000	10,000	S	10,000
30-39	36,000	36,000	34,000	12,000	7,000	16,000	1,000	16,000
40-49	37,000	34,000	32,000	12,000	6,000	12,000	5,000	11,000
50-59	36,000	34,000	32,000	11,000	6,000	13,000	9,000	10,000
60+	27,000	16,000	14,000	9,000	5,000	21,000	20,000	6,000
Biological/agricultural/environmental life sciences	31,000	27,000	27,000	9,000	5,000	14,000	10,000	10,000
<30	12,000	12,000	12,000	3,000	2,000	5,000	S	5,000
30-39	17,000	16,000	16,000	4,000	3,000	6,000	S	6,000
40-49	17,000	16,000	15,000	5,000	3,000	5,000	1,000	5,000
50-59	14,000	13,000	13,000	3,000	3,000	4,000	3,000	3,000
60+	11,000	6,000	5,000	3,000	1,000	9,000	9,000	2,000
Computer/mathematical sciences	26,000	24,000	21,000	10,000	5,000	11,000	7,000	8,000
<30	9,000	8,000	8,000	3,000	1,000	3,000	S	3,000
30-39	16,000	15,000	14,000	6,000	3,000	4,000	S	4,000
40-49	15,000	14,000	14,000	4,000	3,000	4,000	1,000	4,000
50-59	10,000	9,000	9,000	4,000	2,000	5,000	3,000	5,000
60+	9,000	6,000	5,000	3,000	1,000	7,000	6,000	2,000
Physical/related sciences	18,000	16,000	15,000	4,000	3,000	9,000	7,000	5,000
<30	6,000	6,000	6,000	1,000	500	1,000	S	1,000
30-39	8,000	7,000	7,000	1,000	2,000	4,000	S	4,000
40-49	10,000	9,000	9,000	3,000	1,000	3,000	S	3,000
50-59	9,000	8,000	8,000	2,000	1,000	2,000	2,000	1,000
60+	9,000	5,000	4,000	3,000	2,000	7,000	7,000	2,000
Social/related sciences	56,000	50,000	49,000	18,000	10,000	24,000	16,000	20,000
<30	17,000	16,000	15,000	5,000	4,000	7,000	S	7,000
30-39	33,000	31,000	28,000	10,000	6,000	13,000	S	13,000

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
40-49	27,000	25,000	24,000	10,000	4,000	10,000	4,000	10,000
50-59	30,000	27,000	26,000	9,000	5,000	11,000	7,000	8,000
60+	20,000	12,000	11,000	7,000	4,000	14,000	13,000	5,000
Engineering	33,000	28,000	27,000	8,000	6,000	14,000	13,000	6,000
<30	7,000	6,000	7,000	2,000	2,000	2,000	S	2,000
30-39	16,000	16,000	15,000	3,000	2,000	3,000	S	3,000
40-49	15,000	14,000	14,000	3,000	4,000	4,000	1,000	4,000
50-59	13,000	13,000	13,000	3,000	3,000	3,000	3,000	2,000
60+	16,000	9,000	8,000	4,000	3,000	13,000	13,000	2,000
S&E-related fields	42,000	39,000	37,000	21,000	7,000	24,000	15,000	17,000
<30	17,000	16,000	15,000	5,000	2,000	5,000	S	5,000
30-39	24,000	23,000	21,000	12,000	4,000	9,000	S	9,000
40-49	25,000	23,000	22,000	11,000	4,000	12,000	2,000	12,000
50-59	23,000	22,000	20,000	9,000	3,000	9,000	5,000	8,000
60+	16,000	13,000	10,000	7,000	3,000	14,000	14,000	5,000
Non-S&E fields	52,000	45,000	43,000	15,000	8,000	17,000	13,000	10,000
<30	14,000	14,000	13,000	4,000	2,000	3,000	S	3,000
30-39	25,000	25,000	23,000	8,000	4,000	7,000	S	7,000
40-49	28,000	28,000	27,000	8,000	4,000	6,000	2,000	6,000
50-59	24,000	24,000	23,000	8,000	4,000	7,000	6,000	5,000
60+	18,000	14,000	12,000	8,000	2,000	12,000	12,000	2,000
Bachelor's degrees	73,000	69,000	66,000	29,000	15,000	38,000	26,000	27,000
<30	28,000	27,000	25,000	9,000	5,000	10,000	S	10,000
30-39	41,000	40,000	38,000	15,000	8,000	17,000	2,000	17,000
40-49	43,000	41,000	41,000	13,000	7,000	15,000	5,000	15,000
50-59	38,000	36,000	34,000	13,000	6,000	15,000	9,000	12,000
60+	32,000	19,000	16,000	10,000	6,000	25,000	24,000	7,000
S&E fields	66,000	60,000	58,000	22,000	14,000	31,000	23,000	22,000
<30	24,000	23,000	22,000	6,000	5,000	9,000	S	9,000
30-39	37,000	37,000	34,000	11,000	7,000	15,000	S	15,000
40-49	37,000	34,000	33,000	11,000	7,000	12,000	5,000	11,000
50-59	32,000	30,000	29,000	10,000	6,000	13,000	8,000	10,000
60+	27,000	16,000	14,000	8,000	6,000	21,000	20,000	6,000
Sciences	64,000	59,000	56,000	21,000	12,000	30,000	20,000	22,000
<30	23,000	21,000	20,000	6,000	5,000	9,000	S	9,000
30-39	34,000	34,000	31,000	11,000	7,000	15,000	S	15,000
40-49	34,000	31,000	29,000	11,000	6,000	11,000	5,000	11,000
50-59	32,000	30,000	29,000	10,000	5,000	12,000	8,000	10,000
60+	24,000	14,000	13,000	7,000	5,000	18,000	17,000	6,000

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Biological/agricultural/environmental life sciences	29,000	26,000	25,000	8,000	5,000	13,000	9,000	9,000
<30	12,000	11,000	11,000	3,000	2,000	5,000	S	5,000
30-39	17,000	16,000	15,000	4,000	3,000	6,000	S	6,000
40-49	16,000	15,000	14,000	5,000	2,000	4,000	S	4,000
50-59	13,000	12,000	12,000	3,000	3,000	3,000	2,000	3,000
60+	10,000	5,000	5,000	3,000	1,000	8,000	8,000	2,000
Computer/mathematical sciences	24,000	21,000	20,000	9,000	4,000	11,000	7,000	8,000
<30	8,000	7,000	7,000	3,000	1,000	3,000	S	3,000
30-39	14,000	13,000	12,000	5,000	2,000	4,000	S	4,000
40-49	14,000	13,000	12,000	3,000	3,000	4,000	S	4,000
50-59	9,000	7,000	7,000	3,000	2,000	5,000	3,000	4,000
60+	8,000	5,000	5,000	3,000	1,000	6,000	6,000	1,000
Physical/related sciences	16,000	14,000	13,000	4,000	3,000	8,000	7,000	5,000
<30	6,000	6,000	6,000	1,000	500	1,000	S	1,000
30-39	8,000	7,000	7,000	1,000	2,000	4,000	S	4,000
40-49	9,000	8,000	8,000	2,000	1,000	3,000	S	3,000
50-59	8,000	8,000	7,000	2,000	1,000	2,000	2,000	1,000
60+	8,000	4,000	4,000	2,000	2,000	7,000	7,000	2,000
Social/related sciences	52,000	45,000	43,000	16,000	10,000	23,000	14,000	19,000
<30	17,000	16,000	15,000	5,000	4,000	7,000	S	7,000
30-39	31,000	28,000	26,000	9,000	6,000	13,000	S	13,000
40-49	25,000	23,000	22,000	10,000	4,000	9,000	4,000	9,000
50-59	28,000	24,000	23,000	8,000	4,000	11,000	7,000	8,000
60+	17,000	10,000	9,000	5,000	4,000	13,000	12,000	5,000
Engineering	31,000	25,000	25,000	7,000	6,000	14,000	13,000	5,000
<30	6,000	6,000	6,000	1,000	2,000	2,000	S	2,000
30-39	15,000	15,000	14,000	3,000	2,000	2,000	S	2,000
40-49	13,000	12,000	12,000	3,000	4,000	4,000	S	4,000
50-59	12,000	11,000	11,000	2,000	2,000	3,000	2,000	1,000
60+	15,000	8,000	7,000	4,000	3,000	13,000	13,000	2,000
S&E-related fields	40,000	36,000	35,000	19,000	6,000	20,000	12,000	15,000
<30	13,000	13,000	12,000	5,000	2,000	4,000	S	4,000
30-39	22,000	20,000	19,000	10,000	3,000	8,000	S	8,000
40-49	22,000	20,000	19,000	10,000	3,000	11,000	2,000	11,000
50-59	18,000	17,000	16,000	8,000	2,000	8,000	4,000	7,000
60+	14,000	9,000	7,000	5,000	3,000	12,000	11,000	4,000
Non-S&E fields	29,000	29,000	27,000	9,000	2,000	4,000	2,000	3,000
<30	9,000	9,000	8,000	3,000	S	S	S	S

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
30-39	14,000	14,000	13,000	5,000	S	S	S	S
40-49	18,000	18,000	17,000	5,000	S	1,000	S	S
50-59	13,000	13,000	12,000	4,000	S	2,000	S	2,000
60+	7,000	7,000	6,000	4,000	S	2,000	2,000	S
Master's degrees	50,000	47,000	45,000	17,000	10,000	22,000	17,000	14,000
<30	14,000	13,000	13,000	4,000	2,000	4,000	S	4,000
30-39	24,000	24,000	22,000	9,000	5,000	8,000	S	8,000
40-49	27,000	27,000	26,000	9,000	4,000	7,000	2,000	7,000
50-59	25,000	24,000	23,000	9,000	5,000	9,000	6,000	6,000
60+	22,000	16,000	14,000	10,000	3,000	17,000	16,000	4,000
S&E fields	33,000	28,000	26,000	9,000	5,000	14,000	12,000	8,000
<30	7,000	7,000	6,000	3,000	1,000	2,000	S	2,000
30-39	14,000	13,000	13,000	5,000	3,000	5,000	S	5,000
40-49	14,000	14,000	13,000	4,000	2,000	5,000	1,000	5,000
50-59	16,000	15,000	15,000	5,000	3,000	5,000	4,000	3,000
60+	15,000	10,000	8,000	6,000	2,000	11,000	11,000	3,000
Sciences	30,000	25,000	23,000	9,000	4,000	13,000	11,000	7,000
<30	6,000	6,000	5,000	3,000	1,000	1,000	S	1,000
30-39	12,000	12,000	12,000	5,000	2,000	5,000	S	5,000
40-49	13,000	12,000	12,000	4,000	2,000	4,000	1,000	4,000
50-59	15,000	14,000	14,000	5,000	2,000	5,000	4,000	3,000
60+	13,000	9,000	7,000	5,000	2,000	10,000	9,000	3,000
Biological/agricultural/environmental life sciences	11,000	9,000	9,000	3,000	1,000	6,000	5,000	3,000
<30	3,000	2,000	2,000	1,000	1,000	1,000	S	1,000
30-39	5,000	5,000	5,000	1,000	500	2,000	S	2,000
40-49	5,000	5,000	5,000	2,000	500	1,000	S	1,000
50-59	6,000	5,000	5,000	1,000	S	3,000	2,000	1,000
60+	5,000	3,000	3,000	1,000	S	4,000	4,000	S
Computer/mathematical sciences	12,000	11,000	10,000	4,000	3,000	4,000	3,000	2,000
<30	4,000	4,000	3,000	2,000	500	1,000	S	1,000
30-39	7,000	7,000	6,000	3,000	2,000	1,000	S	1,000
40-49	6,000	6,000	6,000	1,000	1,000	1,000	S	1,000
50-59	6,000	6,000	6,000	2,000	2,000	2,000	2,000	1,000
60+	4,000	3,000	2,000	1,000	500	3,000	3,000	S
Physical/related sciences	7,000	7,000	6,000	3,000	1,000	3,000	3,000	2,000
<30	1,000	1,000	1,000	1,000	500	500	S	500
30-39	2,000	2,000	2,000	500	500	1,000	S	1,000
40-49	4,000	4,000	4,000	1,000	500	1,000	S	1,000
50-59	4,000	4,000	4,000	1,000	500	1,000	500	S

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
60+	5,000	3,000	2,000	2,000	S	3,000	3,000	S
Social/related sciences	22,000	19,000	18,000	7,000	3,000	10,000	7,000	7,000
<30	4,000	4,000	4,000	2,000	1,000	1,000	S	1,000
30-39	10,000	9,000	9,000	3,000	1,000	4,000	S	4,000
40-49	10,000	9,000	9,000	3,000	2,000	4,000	S	4,000
50-59	12,000	11,000	11,000	4,000	1,000	3,000	2,000	2,000
60+	10,000	7,000	6,000	5,000	2,000	7,000	6,000	2,000
Engineering	13,000	12,000	11,000	4,000	2,000	6,000	5,000	3,000
<30	3,000	3,000	2,000	1,000	500	1,000	S	1,000
30-39	6,000	6,000	6,000	1,000	1,000	2,000	S	2,000
40-49	7,000	7,000	7,000	2,000	1,000	2,000	S	2,000
50-59	6,000	6,000	6,000	1,000	2,000	2,000	2,000	1,000
60+	6,000	4,000	3,000	2,000	1,000	5,000	5,000	1,000
S&E-related fields	22,000	20,000	20,000	10,000	4,000	11,000	7,000	7,000
<30	8,000	8,000	8,000	2,000	1,000	2,000	S	2,000
30-39	11,000	10,000	10,000	5,000	3,000	3,000	S	3,000
40-49	13,000	12,000	11,000	6,000	2,000	4,000	S	4,000
50-59	12,000	11,000	10,000	5,000	1,000	5,000	4,000	3,000
60+	10,000	7,000	6,000	4,000	S	6,000	6,000	S
Non-S&E fields	40,000	34,000	34,000	11,000	7,000	15,000	12,000	10,000
<30	10,000	9,000	9,000	2,000	1,000	3,000	S	3,000
30-39	18,000	17,000	17,000	5,000	3,000	6,000	S	6,000
40-49	19,000	19,000	19,000	6,000	3,000	5,000	1,000	5,000
50-59	19,000	18,000	17,000	5,000	4,000	6,000	5,000	4,000
60+	15,000	10,000	9,000	6,000	2,000	11,000	11,000	2,000
Doctorate degrees	11,000	11,000	10,000	3,000	2,000	5,000	4,000	2,000
<30	3,000	3,000	3,000	*	*	1,000	S	1,000
30-39	5,000	5,000	5,000	1,000	1,000	1,000	S	1,000
40-49	5,000	5,000	5,000	1,000	1,000	1,000	*	1,000
50-59	6,000	6,000	6,000	1,000	1,000	2,000	2,000	1,000
60+	6,000	4,000	4,000	2,000	1,000	4,000	4,000	1,000
S&E fields	5,000	5,000	5,000	2,000	1,000	3,000	2,000	1,000
<30	3,000	3,000	3,000	*	S	1,000	S	1,000
30-39	3,000	3,000	3,000	1,000	1,000	500	S	500
40-49	3,000	3,000	3,000	1,000	500	1,000	*	1,000
50-59	2,000	2,000	2,000	1,000	1,000	1,000	500	500
60+	3,000	2,000	2,000	1,000	1,000	2,000	2,000	1,000
Sciences	5,000	5,000	5,000	2,000	1,000	2,000	2,000	1,000

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
<30	3,000	3,000	3,000	*	S	1,000	S	1,000
30-39	3,000	3,000	3,000	1,000	1,000	500	S	500
40-49	3,000	3,000	3,000	1,000	500	1,000	*	1,000
50-59	2,000	2,000	2,000	1,000	500	1,000	500	500
60+	3,000	2,000	2,000	1,000	500	2,000	2,000	1,000
Biological/agricultural/environmental life sciences	4,000	3,000	3,000	1,000	1,000	2,000	2,000	500
<30	2,000	2,000	2,000	S	S	*	S	*
30-39	2,000	2,000	2,000	500	1,000	500	S	500
40-49	2,000	2,000	2,000	500	500	500	S	500
50-59	1,000	1,000	1,000	500	500	500	500	500
60+	2,000	1,000	1,000	1,000	500	2,000	2,000	500
Computer/mathematical sciences	2,000	2,000	2,000	500	500	500	500	500
<30	2,000	2,000	2,000	S	S	S	S	S
30-39	1,000	1,000	1,000	500	*	*	S	*
40-49	1,000	1,000	1,000	500	*	*	S	*
50-59	1,000	1,000	1,000	500	*	500	*	*
60+	1,000	1,000	1,000	500	*	500	500	*
Physical/related sciences	2,000	2,000	2,000	500	500	1,000	1,000	1,000
<30	500	500	500	S	S	S	S	S
30-39	1,000	1,000	1,000	500	*	500	S	500
40-49	1,000	1,000	1,000	500	500	500	S	500
50-59	1,000	1,000	1,000	500	500	500	500	500
60+	1,000	1,000	1,000	500	500	1,000	1,000	500
Social/related sciences	2,000	2,000	2,000	1,000	500	1,000	1,000	1,000
<30	1,000	500	500	S	S	S	S	S
30-39	1,000	1,000	1,000	1,000	500	500	S	500
40-49	1,000	1,000	1,000	500	500	500	S	500
50-59	1,000	1,000	1,000	1,000	500	1,000	500	500
60+	1,000	1,000	1,000	1,000	500	1,000	1,000	500
Engineering	2,000	2,000	2,000	1,000	1,000	1,000	1,000	500
<30	500	500	500	S	S	S	S	S
30-39	1,000	1,000	1,000	500	500	500	S	500
40-49	1,000	1,000	1,000	500	500	*	S	*
50-59	1,000	1,000	1,000	500	500	500	500	*
60+	1,000	1,000	1,000	500	500	1,000	1,000	500
S&E-related fields	5,000	4,000	4,000	1,000	500	2,000	2,000	1,000
<30	1,000	1,000	1,000	S	S	S	S	S
30-39	1,000	1,000	1,000	500	*	S	S	S
40-49	3,000	3,000	3,000	1,000	S	500	S	500

TABLE A-10. Standard errors for U.S. scientists and engineers, by level and field of highest degree, age, and employment status: 2003

Level and field of highest degree and age (years)	All scientists and engineers	Employed			Unemployed/ seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
50-59	2,000	2,000	2,000	500	*	500	500	*
60+	2,000	2,000	2,000	500	*	2,000	2,000	500
Non-S&E fields	8,000	8,000	8,000	2,000	1,000	3,000	3,000	1,000
<30	S	S	S	S	S	S	S	S
30-39	4,000	4,000	4,000	S	S	S	S	S
40-49	3,000	3,000	3,000	S	S	S	S	S
50-59	5,000	5,000	5,000	1,000	1,000	2,000	2,000	S
60+	4,000	3,000	3,000	2,000	S	3,000	2,000	S

\* = standard error is not calculated when estimate is less than 500; S = standard error is not calculated when estimate is suppressed for reliability or confidentiality.

S&E = science and engineering.

<sup>a</sup> Total includes professional degrees not broken out separately.

NOTES: Scientists and engineers include any person who has ever received a bachelor's or higher degree in a science or engineering (S&E) or S&E-related field, plus any person holding a non-S&E bachelor's or higher degree who was employed in a S&E or S&E-related occupation in 2003. See <http://sestat.nsf.gov/docs/ed03maj.html> for a detailed description of the educational field classification. Standard errors of less than 500 are rounded up to 500, and standard errors equal to or greater than 500 are rounded up to the nearest thousand.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT): 2003.