

**Table 819. Employment, Mean Earnings, and Growth in Science and Engineering (S&E) Occupations: 2004 to 2008**

[Minus sign (-) represents a decrease. Based on data derived from Bureau of Labor Statistics' Occupational Employment Survey (OES)]

Occupation	Employment					Mean earnings	
	2004, total	2008, total	Total growth	Total growth (percent)	Average annual growth rate (percent)	2008 annual earnings (dol.)	Average annual growth rate (percent)
<b>All occupations</b> . . . . .	<b>128,127,360</b>	<b>135,185,230</b>	<b>7,057,870</b>	<b>5.5</b>	<b>1.3</b>	<b>42,270</b>	<b>3.4</b>
STEM <sup>1</sup> . . . . .	7,160,770	7,852,710	691,940	9.7	2.3	74,950	3.6
S&E . . . . .	5,085,740	5,781,460	695,720	13.7	3.3	76,680	3.5
Engineers . . . . .	1,487,810	1,626,330	138,520	9.3	2.3	84,120	3.7
Mathematical and computer scientists . . . . .	2,566,170	2,972,940	406,770	15.9	3.7	74,420	3.4
Life scientists . . . . .	275,500	319,520	44,020	16.0	3.8	75,130	3.7
Physical scientists . . . . .	273,360	301,500	28,140	10.3	2.5	76,710	3.8
Social scientists . . . . .	482,900	561,160	78,260	16.2	3.8	67,980	2.9
Technicians, programmers, and S&E managers . . . . .	2,075,020	2,071,260	-3,760	-0.2	(Z)	70,170	3.6
S&E related . . . . .	6,914,070	7,737,490	823,420	11.9	2.9	(NA)	(NA)
Healthcare practitioners and technicians . . . . .	6,769,900	7,569,040	799,140	11.8	2.8	(NA)	(NA)
Other S&E related . . . . .	144,170	168,450	24,280	16.8	4.0	(NA)	(NA)
Not STEM or S&E related . . . . .	114,052,530	119,595,020	5,542,490	4.9	1.2	(NA)	(NA)

NA Not available. Z Less than 0.05. <sup>1</sup> STEM = science, technology, engineering, and mathematics.

Source: National Science Foundation, *Employment in Science and Engineering Occupations Reached 5.8 Million in 2008*, NSF 10-315, 2010. See also <<http://www.nsf.gov/statistics/infbrief/nsf10315/>>.

**Table 820. Research and Development (R&D) Scientists and Engineers—Employment and Cost by Industry: 2005 to 2007**

[In thousands (1,104.5 represents 1,104,500). Data are estimates on full-time-equivalent (FTE) basis. Based on the Survey of Industrial Research and Development. The Business R&D and Innovation Survey replaces the Survey of Industrial Research and Development for data available as of December 2010; see <<http://www.nsf.gov/statistics/srvyindustry/about/brdis/>>]

Industry	NAICS <sup>1</sup> code	Employed scientists and engineers <sup>2</sup> (1,000)			Cost per scientist or engineer, constant (2000) dollars <sup>3,4</sup> (\$1,000)		
		2005	2006	2007	2005	2006	2007
<b>All industries<sup>5</sup></b> . . . . .	<b>(X)</b>	<b>1,104.5</b>	<b>1,116.6</b>	<b>1,133.0</b>	<b>192.4</b>	<b>201.6</b>	<b>211.9</b>
Chemicals . . . . .	325	118.3	123.2	134.0	328.5	330.1	356.4
Machinery . . . . .	333	61.1	62.3	61.9	125.2	141.1	144.4
Electrical equipment, appliances, and components . . . . .	335	18.7	16.9	15.8	(D)	(D)	(D)
Motor vehicles, trailers, and parts . . . . .	3361-3363	42.0	42.0	(NA)	(D)	(D)	(D)
Aerospace products and parts . . . . .	3364	39.7	39.5	40.2	335.4	359.4	380.5
Software publishing . . . . .	5112	93.4	46.5	(NA)	162.5	174.0	175.4
Architectural, engineering, and related services . . . . .	5413	35.8	41.2	48.5	129.3	146.4	113.9
Computer systems design and related services . . . . .	5415	82.4	93.1	88.1	158.5	157.2	160.3
Scientific R&D services . . . . .	5417	43.7	44.3	50.4	264.0	298.2	308.7
NOTE: Constant 2000 dollar deflator. . . . .	(X)	(X)	(X)	(X)	1.1303	1.1668	1.1982

D Withheld to avoid disclosure. NA Not available. X Not applicable. <sup>1</sup> North American Industry Classification System 2002 (NAICS); see text, Section 15. <sup>2</sup> The mean number of full-time equivalent (R&D) scientists and engineers employed in January of the year shown and the following January. <sup>3</sup> Based on gross domestic product implicit price deflator. <sup>4</sup> Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in 2 consecutive years divided into total R&D expenditures in each industry. <sup>5</sup> Includes other industries not shown separately.

Source: National Science Foundation, *Research and Development in Industry*, NSF 10-319, 2010, and unpublished data. See also <<http://www.nsf.gov/statistics/industry/>>.