

**Appendix table 3-1**  
**SESTAT degree field and occupational category**

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Field	Occupation
S&E	S&E
Mathematics/computer sciences	Mathematical/computer scientists
Computer and information sciences	Computer/information scientists
Computer sciences	Computer engineers—software
Computer systems analysis	Computer scientists, except systems analysts
Information services and systems	Computer systems analysts
Other	Information systems scientists/analysts
Mathematics	Other
Applied mathematics	Mathematical scientists
General mathematics	Mathematicians
Operations research	Operations research analysts, modeling
Statistics	Statisticians
Other	Other
	Postsecondary teachers
	Computer sciences
	Mathematics
Life/related sciences	Life scientists
Agricultural/food sciences	Agricultural/food scientists
Animal sciences	Biological scientists
Food sciences/technology	Biochemists/biophysicists
Plant sciences	Biological scientists
Other	Medical scientists, except practitioners
Biological sciences	Other
Biochemistry/biophysics	Environmental life scientists
Biology	Forestry/conservation
Botany	Postsecondary teachers
Cell/molecular biology	Agriculture
Ecology	Biological sciences
Genetics, plant and animal	Medical sciences
Microbiology	Other
Nutritional science	
Pharmacology, human and animal	
Physiology, human and animal	
Zoology	
Other	
Environmental life sciences	
Environmental science studies	
Forestry sciences	
Health/related sciences (included under life sciences for doctoral programs only)	
Audiology/speech pathology	
Health services administration	
Health/medical assistants	
Health/medical technologies	
Medical preparatory programs	
Medicine	
Nursing, 4 years or longer	
Pharmacy	
Physical therapy/other rehabilitation	
Public health, including environment	
Other	

**Appendix table 3-1**  
**SESTAT degree field and occupational category**

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Field	Occupation
Physical/related sciences	Physical scientists
Chemistry, except biochemistry	Chemists, except biochemists
Earth science, geology, and oceanography	Earth scientists, geologists, and oceanographers
Atmospheric sciences/meteorology	Atmospheric and space scientists
Earth sciences	Geologists
Geology	Oceanographers
Other geological sciences	Physicists and astronomers
Oceanography	Astronomers
Physics and astronomy	Physicists
Physics	Other
Astronomy/astrophysics	Postsecondary teachers
Other	Chemistry
	Physics
	Earth, environmental, and marine science
Social/related sciences	Social scientists
Economics	Economists
Agricultural economics	Political/related scientists
Economics	Psychologists
Political/related sciences	Sociologists/anthropologists
International relations	Anthropologists
Political science/government	Sociologists
Public policy studies	Other
Psychology	Historians, science and technology
Clinical	Other
Counseling	Postsecondary teachers
Educational	Economics
Experimental	Political science
General	Psychology
Industrial/organizational	Sociology
Social	Other
Other	
Sociology/anthropology	
Anthropology/archaeology	
Area/ethnic studies	
Criminology	
Geography	
History of science	
Linguistics	
Philosophy of science	
Sociology	
Other	

**Appendix table 3-1**  
**SESTAT degree field and occupational category**

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Field	Occupation
Engineering	Engineers
Aerospace/related	Aerospace/related
Aerospace, aeronautical, and astronautical	Architectural/civil
Architectural/civil	Civil
Architectural	Chemical
Civil	Electrical/related
Chemical	Computer—hardware
Electrical/related	Electrical/electronics
Computer and systems	Industrial
Electrical, electronics, and communications	Mechanical
Industrial	Other
Mechanical	Agricultural
Other	Bioengineers/biomedical
Agricultural	Environmental
Bioengineering/biomedical	Naval architects/marine
Engineering sciences, mechanics and physics	Materials/metallurgical
Environmental	Mining/geological
General	Nuclear
Geophysical	Petroleum
Materials, including ceramics and textiles	Sales
Metallurgical	Other
Mining and minerals	Postsecondary teachers
Naval architecture and marine	Engineering
Nuclear	
Petroleum	
Other	
Non-S&E	Non-S&E
Management/administration	Managers and administrators
Agricultural business/production	Top and mid-level managers, executives, and administrators
Accounting	Accountants, auditors, and other financial specialists
Business administration/management	Personnel, training, and labor relations specialists
Business, general	Other
Business and managerial economics	
Financial management	
Other	
Health/related (included in non-S&E for bachelor's and master's programs only)	Health-related occupations
Audiology/speech pathology	Health practitioners
Health services administration	Registered nurses, pharmacists, dietitians, and therapists
Health/medical assistance	Technologists/technicians
Health/medical technologies	Other
Medical preparatory programs	
Medicine nursing, 4 years or longer	
Pharmacy	
Physical therapy/rehabilitation	
Public health, including environment	
Other	

Appendix table 3-1  
**SESTAT degree field and occupational category**

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Field	Occupation
Teaching/education	Teachers, except S&E postsecondary teachers
Education administration	Prekindergarten/kindergarten
Computer teacher education	Elementary school
Counselor education and guidance	Secondary:
Elementary teacher education	Computer, mathematics, or sciences
Mathematics teacher education	Social sciences
Physical education and coaching	Other
Preelementary teacher education	Special education
Science teacher education	Other precollegiate education
Secondary teacher education	Postsecondary teachers
Special education	Art, drama, and music
Social science teacher education	Business, commerce, and marketing
Other	Education
	English
	Foreign language
	History
	Home economics
	Law
	Physical education
	Social work
	Theology
	Trade/industrial
	Other health specialties
	Other
Social service/related disciplines	Social services/related occupations
Social work	Clergy/other religious workers
Other philosophy, religion, theology	Counselors, educational and vocational
	Social workers
Technology/technical disciplines	Technologists/technicians
Computer programming	Computer programmers
Data processing technology	Electrical, electronics, industrial, and mechanical engineering technicians
Electrical and electronics technologies	Drafting occupations
Industrial production technologies	Surveying and mapping engineering technicians
Mechanical engineering-related technologies	Other engineering technologists and technicians
Other engineering-related technologies	Surveyors
	Technologists and technicians
	Biological/life sciences
	Mathematical sciences
	Physical sciences
Sales/marketing	Sales/marketing
Business marketing/marketing management	Insurance, securities, real estate, and business services
Marketing research	Commodities, except retail
	Retail
	Other
Arts, humanities, and related disciplines	Art/humanities, and related occupations
English language, literature, and letters	Artists, editors, entertainers, public relations, and writers
Other foreign languages/literature	Historians, except science and technology
Liberal arts/general studies	
History	
Dramatic arts	
Fine arts	
Music	
Other visual/performing arts	

Appendix table 3-1  
**SESTAT degree field and occupational category**

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Field	Occupation
Other	Other
Architecture/environmental design	Accounting clerks/bookkeepers
Other conservation, renewable natural resources	Secretaries, receptionists, and typists
Actuarial science	Other administrative
Communications	Architects
Journalism	Farmers, foresters, and fishermen
Other	Lawyers and judges
Criminal justice and protective services	Librarians, archivists, and curators
Home economics	Actuaries
Law, prelaw, and legal studies	Food preparation and service workers
Library science	Protective service workers
Parks, recreation, leisure, and fitness studies	Other service occupations, except health
Public administration	Construction trades, miners, and well drillers
Other public affairs	Mechanics and repairers
Other	Precision production
	Operators and related occupations
	Transportation and material movers
	Other

SESTAT Scientists and Engineers Statistical Data System

NOTES: Individual occupations included in SESTAT adhere to the Standard Occupational Classification (SOC), a U.S. Government standard classification scheme. SOC was developed through an interagency committee headed by the Office of Management and Budget. It is used by Federal agencies that collect employment and occupational data and was meant to provide comparability of data among different Federal statistics agencies. Major and minor S&E groupings of occupations as shown in this table were developed by the National Science Foundation.

SOURCE: National Science Foundation, Division of Science Resources Statistics, SESTAT, 1999.

**Appendix table 3-2  
College graduates in nonacademic S&E occupations: 1980, 1990, and 2000**

Occupation	1980	1990	2000
All S&E occupations.....	1,413,000	2,459,000	3,664,000
Engineers .....	853,000	1,295,000	1,623,000
Life scientists .....	83,000	119,000	181,000
Mathematical/computer scientists .....	177,000	495,000	1,280,000
Physical scientists .....	143,000	219,000	259,000
Social scientists.....	158,000	332,000	318,000

SOURCES: U.S. Decennial Census Public Use Microdata Samples, 1980 and 1990; and National Bureau of Economic Research's Merged Outgoing Rotation Group Files from the Bureau of Labor Statistics' Current Population Survey.

*Science & Engineering Indicators – 2004*

**Appendix table 3-3**  
**Growth of employment in S&E occupations: 1983–2002**

Year	Number employed	Percent of U.S. workforce
1983 .....	2,925,000	2.6
1984 .....	3,010,000	2.7
1985 .....	3,128,000	2.7
1986 .....	3,328,000	2.8
1987 .....	3,355,000	2.8
1988 .....	3,499,000	2.9
1989 .....	3,593,000	2.9
1990 .....	3,750,000	3.0
1991 .....	3,924,000	3.1
1992 .....	3,768,000	3.0
1993 .....	3,963,000	3.1
1994 .....	4,379,000	3.3
1995 .....	4,384,000	3.3
1996 .....	4,557,000	3.4
1997 .....	4,775,000	3.5
1998 .....	5,074,000	3.7
1999 .....	5,294,000	3.8
2000 .....	5,544,000	3.9
2001 .....	5,581,000	3.9
2002 .....	5,412,000	3.8

SOURCES: U.S. Decennial Census Public Use Microdata Samples, 1980 and 1990; and National Bureau of Economic Research's Merged Outgoing Rotation Group Files from the Bureau of Labor Statistics' Current Population Survey.

**Appendix table 3-4**  
**Total S&E jobs, by occupation: 2000 and projected 2010**  
 (Thousands)

(Page 1 of 2)

Occupation	2000	2010	Projected change
All occupations .....	145,571	167,754	22,183
All S&E occupations .....	4,706	6,904	2,197
Scientists .....	3,241	5,301	2,059
Life scientists .....	184	218	33
Agriculture and food scientists .....	17	19	2
Biological scientists .....	73	88	15
Conservation scientists and foresters .....	29	31	2
Conservation scientists .....	16	18	1
Foresters .....	12	13	1
Medical scientists .....	37	47	10
Other .....	28	33	5
Mathematical/computer sciences .....	2,408	4,308	1,900
Computer specialists .....	2,318	4,213	1,895
Computer scientists/systems analysts .....	459	729	269
Computer/information scientists, research .....	28	39	11
Computer systems analysts .....	431	689	258
Computer software engineers .....	697	1,361	664
Applications .....	380	760	380
Systems software .....	317	601	284
Computer support specialists .....	506	996	491
Database administrators .....	106	176	70
Network/computer systems administrators .....	229	416	187
Network systems/data communication analysts .....	119	211	92
Other .....	203	325	122
Mathematical sciences .....	89	95	5
Mathematical scientists/technicians .....	85	90	5
Actuaries .....	14	15	1
Mathematicians .....	4	4	—
Operations research analysts .....	47	51	4
Statisticians .....	19	20	—
Other .....	5	5	—
Physical sciences .....	239	283	44
Astronomers/physicists .....	10	11	1
Atmospheric/space scientists .....	7	8	1
Chemists/materials scientists .....	92	110	18
Chemists .....	84	100	16
Materials scientists .....	8	9	2
Environmental scientists/geoscientists .....	97	118	21
Environmental scientists/specialists, including health .....	64	78	14
Geoscientists, except hydrologists and geographers .....	25	30	5
Hydrologists .....	8	10	2
Other .....	33	36	3
Social scientists/related occupations .....	410	492	82
Economists .....	22	26	4
Market/survey researchers .....	113	142	30
Market research analysts .....	90	112	22
Survey researchers .....	23	30	8
Psychologists .....	182	214	33
Social scientists .....	15	17	3
Urban/regional planners .....	30	35	5
Other .....	49	58	8

**Appendix table 3-4**  
**Total S&E jobs, by occupation: 2000 and projected 2010**  
 (Thousands)

(Page 2 of 2)

Occupation	2000	2010	Projected change
Engineers.....	1,465	1,603	138
Aerospace.....	50	57	7
Agricultural .....	2	3	—
Biomedical .....	7	9	2
Chemical.....	33	34	1
Civil.....	232	256	24
Computer hardware .....	60	75	15
Electrical and electronics.....	288	319	31
Electrical.....	157	175	18
Electronics, except computer .....	130	144	14
Environmental .....	52	66	14
Industrial, including health and safety.....	198	210	12
Health and safety, except mining safety engineers and inspectors.....	44	49	5
Industrial.....	154	161	7
Marine engineers/naval architects.....	5	5	—
Materials.....	33	35	2
Mechanical .....	221	251	29
Mining/geological, including mining safety .....	6	6	—
Nuclear .....	14	14	—
Petroleum .....	9	8	-1
Other.....	253	254	1

— no change

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections, (Washington, DC, 2001).

Appendix table 3-5

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**Employed individuals with S&E highest degrees whose jobs are closely or somewhat related to field of highest degree, by degree level and years since degree: 1999**  
 (Percent)

Degree and field	Employed individuals	Years since degree							
		1–5	6–10	11–15	16–20	21–25	26–30	31–35	
<b>All degree levels<sup>a</sup></b>									
All S&E fields .....	76.8	77.5	80.1	81.1	77.7	73.0	73.0	74.2	70.1
Engineering .....	89.6	91.9	91.0	91.1	89.6	89.2	88.6	88.1	80.2
Aerospace .....	79.8	85.7	74.7	80.6	75.9	95.5	80.4	92.6	44.9
Chemical .....	86.7	85.8	91.2	88.9	83.7	91.1	87.6	89.7	71.7
Civil .....	92.0	92.0	93.0	93.8	89.6	88.9	94.0	94.4	92.8
Electrical .....	92.9	95.5	92.4	93.8	95.8	93.0	89.5	89.6	83.2
Industrial .....	83.9	89.9	86.7	88.6	80.6	77.5	85.6	71.9	69.9
Mechanical .....	89.5	91.8	91.0	90.9	90.4	89.9	89.1	85.6	80.6
Other .....	86.5	90.0	91.2	87.7	87.0	83.1	84.0	82.5	77.2
Life sciences .....	74.4	75.8	83.8	79.0	72.6	69.1	70.1	70.4	64.3
Agriculture .....	74.6	80.8	80.9	77.6	73.4	70.2	69.4	78.5	60.8
Biological sciences .....	74.4	74.5	84.9	79.2	73.3	69.1	70.6	69.4	63.4
Health/medical .....	73.3	79.6	77.3	80.8	64.6	66.4	66.8	46.3	99.1
Mathematics/computer sciences .....	87.7	92.2	89.4	90.8	91.4	88.0	77.2	71.8	68.4
Computer sciences .....	93.3	94.8	93.4	92.9	92.9	94.6	87.6	87.2	S
Mathematics .....	80.5	86.8	81.0	84.6	88.4	84.1	74.6	70.9	68.1
Physical sciences .....	77.8	83.0	84.4	77.4	75.1	75.7	72.7	83.7	67.2
Chemistry .....	79.8	87.2	90.2	80.8	79.6	75.5	71.7	85.1	61.7
Geosciences .....	72.1	79.0	76.0	69.2	71.1	71.2	66.8	82.7	59.9
Physics and astronomy .....	79.5	81.8	81.6	78.1	72.2	82.3	75.9	82.2	84.2
Other .....	79.4	68.7	85.4	87.4	80.0	78.0	83.5	78.1	59.5
Social sciences .....	65.9	66.8	68.0	68.2	66.6	63.1	63.7	62.6	63.0
Economics .....	71.9	78.6	72.4	70.8	72.7	65.7	65.8	71.1	76.4
Political science .....	55.5	56.6	57.6	54.5	56.0	54.1	53.6	50.5	58.0
Psychology .....	72.0	72.6	75.0	76.0	73.2	69.3	68.3	63.7	62.6
Sociology and anthropology .....	61.5	61.9	64.3	62.2	60.9	60.2	59.6	65.4	57.9
Other .....	62.7	62.9	63.1	70.5	56.9	56.9	71.7	61.0	47.9
<b>Bachelor's</b>									
All S&E fields .....	72.4	72.3	76.0	76.8	73.8	68.1	68.8	69.6	67.8
Engineering .....	88.6	91.0	89.9	90.0	88.6	88.6	89.3	86.1	80.5
Aerospace .....	76.8	77.8	68.9	77.0	75.8	95.7	90.5	88.7	39.8
Chemical .....	84.5	83.6	89.9	86.0	82.1	90.9	84.0	88.7	70.3
Civil .....	92.4	91.9	91.6	93.3	87.7	92.7	95.5	96.3	93.7
Electrical .....	92.3	95.0	91.4	92.6	95.5	91.9	92.1	86.8	83.8
Industrial .....	82.9	86.8	84.6	89.0	78.9	79.8	86.6	72.3	71.9
Mechanical .....	89.1	91.9	90.5	90.6	91.4	88.1	88.7	83.7	81.2
Other .....	82.8	88.5	92.3	84.9	84.0	74.7	79.3	74.8	77.8

Appendix table 3-5

**Employed individuals with S&E highest degrees whose jobs are closely or somewhat related to field of highest degree, by degree level and years since degree: 1999**  
 (Percent)

Degree and field	Employed individuals	Years since degree							
		1–5	6–10	11–15	16–20	21–25	26–30	31–35	36 or more
Life sciences .....	69.0	70.5	80.8	73.4	66.8	63.5	64.1	64.1	58.2
Agriculture .....	72.3	76.7	79.5	73.8	71.7	69.8	66.8	79.2	60.4
Biological sciences.....	68.2	68.7	81.8	73.0	66.5	62.0	64.0	61.1	54.0
Health/medical.....	67.8	77.2	72.6	76.3	52.7	61.5	59.6	S	S
Mathematics/computer sciences.....	86.1	90.2	87.4	90.0	91.3	84.4	75.0	70.8	66.0
Computer sciences .....	92.8	93.2	91.8	93.0	93.3	94.6	87.8	S	S
Mathematics.....	77.6	84.5	78.4	81.0	87.1	78.7	72.4	69.7	65.7
Physical sciences.....	72.2	79.0	80.5	71.2	69.4	71.8	64.3	78.4	61.0
Chemistry .....	74.5	83.0	90.3	76.3	73.7	69.1	62.3	81.6	56.5
Geosciences .....	65.7	73.8	64.4	64.2	65.7	65.5	60.7	73.3	54.5
Physics and astronomy .....	74.7	80.7	76.6	64.6	66.2	93.8	62.5	74.5	79.6
Other .....	74.5	61.1	77.6	85.2	73.6	75.1	84.7	S	58.6
Social sciences .....	60.2	61.7	63.7	58.8	59.5	57.3	58.5	58.1	60.3
Economics .....	68.9	76.2	71.1	66.5	69.5	61.4	61.9	64.4	74.8
Political science .....	52.1	51.0	55.9	51.2	53.4	50.0	49.0	50.0	57.3
Psychology.....	63.3	66.2	67.9	60.8	63.1	60.6	59.6	49.5	55.8
Sociology and anthropology .....	59.1	59.2	62.2	56.0	58.4	59.2	56.8	65.4	55.2
Other .....	57.3	58.3	57.5	63.2	45.3	49.4	70.7	59.4	48.6
Master's									
All S&E fields.....	87.6	91.2	90.7	91.1	86.1	84.3	81.6	83.2	76.0
Engineering.....	91.8	93.2	93.1	94.8	92.7	90.3	87.0	92.5	74.8
Aerospace.....	84.6	93.7	85.1	95.0	73.4	93.9	58.4	95.6	S
Chemical.....	93.8	92.7	98.2	100.0	90.8	92.1	100.0	88.5	70.3
Civil .....	90.4	91.8	96.5	95.1	95.4	75.4	88.4	89.4	85.4
Electrical.....	94.2	96.3	94.3	96.6	96.7	96.1	82.1	95.7	78.4
Industrial.....	86.5	93.9	91.2	86.4	89.2	72.1	88.7	S	S
Mechanical .....	90.8	91.5	93.0	91.6	83.0	97.1	91.9	93.1	73.7
Other .....	91.8	90.5	89.2	93.9	93.8	95.3	92.8	92.6	56.4
Life sciences .....	85.8	92.4	86.4	89.5	83.9	83.1	80.1	79.9	79.9
Agriculture .....	78.5	91.8	74.9	94.1	75.8	65.2	S	70.6	S
Biological sciences.....	86.8	94.3	88.3	87.9	84.5	86.2	79.2	83.8	84.0
Health/medical.....	91.4	86.1	91.6	93.2	92.9	100.0	S	S	S
Mathematics/computer sciences.....	91.5	96.0	94.4	93.1	91.2	96.8	80.6	70.8	74.6
Computer sciences .....	94.3	97.8	97.4	92.1	91.3	94.6	87.2	S	S
Mathematics.....	87.0	91.2	87.1	96.8	91.0	98.4	77.6	70.3	73.9
Physical sciences.....	83.9	90.5	92.4	79.7	79.6	76.8	80.4	89.4	80.8
Chemistry .....	84.9	95.0	87.1	76.8	84.0	81.7	82.8	93.5	69.4
Geosciences .....	81.1	87.6	93.1	73.3	85.2	76.0	68.1	S	S
Physics and astronomy .....	82.6	87.2	91.4	91.1	60.4	64.7	86.7	84.4	92.3
Other .....	94.3	91.7	100.0	91.0	100.0	100.0	S	S	S

Appendix table 3-5

**Employed individuals with S&E highest degrees whose jobs are closely or somewhat related to field of highest degree, by degree level and years since degree: 1999**  
(Percent)

Degree and field	Employed individuals	Years since degree						
		1–5	6–10	11–15	16–20	21–25	26–30	31–35
Social sciences .....	83.1	86.8	85.3	89.6	81.4	78.0	78.5	76.6
Economics .....	82.3	89.5	75.3	93.4	82.3	72.4	71.7	100.0
Political science .....	71.6	85.7	65.3	75.8	59.7	69.1	71.2	S
Psychology.....	88.7	90.8	93.8	93.0	86.0	85.0	82.4	91.0
Sociology and anthropology .....	74.9	82.2	75.0	87.0	66.1	56.1	88.1	61.6
Other .....	77.8	76.9	88.9	83.2	86.4	75.7	70.4	63.3
Doctoral								
All S&E fields.....	92.6	95.0	93.5	92.5	92.4	91.1	90.1	92.0
Engineering.....	92.6	94.4	93.0	91.4	94.8	91.5	87.4	95.6
Aerospace.....	94.6	95.9	95.5	91.0	100.0	100.0	87.6	100.0
Chemical.....	92.9	95.3	91.5	89.1	97.0	90.5	91.4	97.0
Civil .....	95.3	94.8	94.1	97.4	99.2	90.1	100.0	87.5
Electrical.....	94.3	95.9	94.1	96.4	96.1	95.2	86.0	97.9
Industrial.....	87.9	98.0	90.7	90.2	100.0	100.0	60.0	S
Mechanical .....	91.4	91.1	90.9	93.9	91.7	90.6	86.1	100.0
Other .....	90.8	93.6	92.9	85.3	92.7	88.7	85.3	93.0
Life sciences .....	92.9	95.6	95.3	90.8	91.3	90.9	92.1	92.8
Agriculture .....	91.1	94.4	95.9	87.2	91.8	87.9	89.7	93.1
Biological sciences.....	93.0	95.5	95.2	91.2	91.3	90.9	92.3	93.8
Health/medical.....	95.3	100.0	92.9	93.9	91.2	99.6	96.5	86.1
Mathematics/computer sciences.....	93.1	96.0	92.3	93.3	93.6	93.1	88.3	90.3
Computer sciences .....	97.7	98.5	96.4	97.0	98.4	100.0	S	S
Mathematics .....	91.1	93.8	88.6	91.0	91.6	92.3	88.1	90.3
Physical science.....	89.5	91.8	87.7	91.8	90.9	87.8	86.9	88.7
Chemistry .....	91.1	95.7	91.0	92.6	91.4	91.4	88.3	87.3
Geosciences .....	92.6	92.3	88.1	91.6	91.5	94.5	93.9	97.0
Physics and astronomy .....	85.6	86.5	81.4	90.1	90.4	79.3	83.0	88.7
Other .....	96.3	93.1	100.0	100.0	81.7	100.0	S	S
Social sciences .....	94.7	96.3	96.4	95.1	93.2	92.9	93.3	93.9
Economics .....	97.2	95.7	96.9	97.3	95.9	99.1	97.3	98.5
Political sciences.....	91.3	93.7	92.3	88.2	97.1	88.0	89.8	87.7
Psychology.....	96.1	98.0	97.9	96.7	94.7	94.0	93.7	95.7
Sociology and anthropology .....	91.2	92.2	94.5	91.4	89.2	88.8	91.7	85.3
Other .....	91.9	96.4	93.0	94.3	85.8	90.3	91.6	90.8

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Appendix table 3-6

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**Employed individuals with S&E highest degrees whose jobs are closely related to field of highest degree, by degree level and years since degree: 1999**  
(Percent)

Degree and field	Employed individuals	Years since degree							
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	
<b>All degree levels<sup>a</sup></b>									
All S&E fields .....	45.7	49.1	50.3	51.3	47.3	39.2	37.0	42.5	36.9
Engineering .....	54.6	58.7	55.8	55.5	56.9	52.4	50.4	52.6	45.2
Aerospace .....	45.3	53.7	42.7	45.4	52.8	37.3	41.1	50.7	35.1
Chemical .....	45.2	47.1	48.2	47.1	41.4	43.5	40.2	53.3	41.2
Civil .....	65.8	68.0	70.0	71.1	68.2	58.3	65.3	62.9	57.0
Electrical .....	59.7	63.7	57.9	60.4	67.2	59.0	48.4	56.4	55.2
Industrial .....	37.7	47.2	29.3	40.2	39.5	32.9	45.2	S	27.4
Mechanical .....	50.2	53.3	55.2	46.0	50.2	56.1	48.0	49.8	40.1
Other .....	50.7	58.6	55.1	55.4	49.3	43.2	48.2	45.8	36.1
Life sciences .....	48.3	50.8	58.3	56.3	45.8	40.5	41.5	45.0	38.2
Agriculture .....	48.0	57.9	52.8	60.7	40.8	41.0	49.1	53.5	22.0
Biological sciences .....	48.6	50.0	60.6	55.2	47.3	41.2	39.6	43.8	42.7
Health/medical .....	45.7	48.7	43.7	53.8	48.6	32.0	44.3	24.4	84.3
Mathematics/computer sciences .....	60.8	70.0	66.6	67.9	68.0	48.8	36.1	38.4	41.1
Computer sciences .....	74.6	76.7	73.3	74.6	77.0	73.8	59.6	66.6	S
Mathematics .....	43.2	56.2	52.5	48.5	50.2	34.5	30.2	36.7	40.4
Physical sciences .....	47.4	57.3	57.6	47.3	45.0	41.1	37.2	48.8	38.9
Chemistry .....	51.4	66.1	62.7	54.8	50.7	44.6	36.6	51.2	34.5
Geosciences .....	44.8	51.3	56.7	40.0	41.1	41.0	38.6	61.1	39.6
Physics and astronomy .....	41.8	49.3	45.5	38.9	32.1	37.5	35.2	44.6	51.5
Other .....	49.3	42.9	66.6	56.9	69.4	33.1	45.2	S	S
Social sciences .....	33.7	37.2	36.7	36.2	33.6	29.8	27.6	32.4	25.3
Economics .....	28.9	34.4	26.8	29.0	27.4	27.4	22.4	37.3	29.1
Political science .....	23.5	27.9	30.4	14.9	25.5	18.4	20.6	16.2	20.9
Psychology .....	41.1	44.6	43.4	51.7	40.9	35.3	29.8	39.2	25.1
Sociology and anthropology .....	30.3	33.0	36.2	23.7	26.5	30.3	27.5	32.0	25.9
Other .....	36.5	36.2	40.3	46.7	35.8	28.9	36.9	36.1	22.5
<b>Bachelor's</b>									
All S&E fields .....	39.5	42.0	44.5	44.8	41.7	33.1	31.0	36.3	33.3
Engineering .....	52.2	54.9	52.5	53.3	55.5	51.4	48.8	48.9	45.1
Aerospace .....	41.2	45.3	36.4	39.5	51.9	33.5	45.5	51.2	29.8
Chemical .....	42.0	43.0	46.6	39.9	38.7	42.7	37.5	56.0	36.8
Civil .....	65.4	67.2	70.1	72.0	66.7	59.7	65.2	58.8	57.3
Electrical .....	57.0	59.0	52.5	57.4	66.4	57.7	47.4	51.9	58.1
Industrial .....	34.4	39.6	22.5	37.6	40.6	26.3	43.3	S	30.0
Mechanical .....	48.9	50.8	54.7	46.1	50.2	54.0	45.9	47.0	40.6
Other .....	45.8	53.8	50.1	52.9	46.1	39.2	43.6	37.2	34.2

Appendix table 3-6

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**Employed individuals with S&E highest degrees whose jobs are closely related to field of highest degree, by degree level and years since degree: 1999**  
 (Percent)

Degree and field	Employed individuals	Years since degree							
		1–5	6–10	11–15	16–20	21–25	26–30	31–35	36 or more
Life sciences .....	41.8	44.2	53.9	50.0	39.6	33.6	34.4	39.3	30.5
Agriculture .....	45.6	52.2	49.9	58.5	39.4	41.3	48.4	53.3	20.6
Biological sciences .....	41.0	42.8	55.8	46.2	40.0	32.4	31.0	36.7	32.5
Health/medical .....	40.2	45.2	41.0	54.9	37.3	27.3	34.1	S	S
Mathematics/computer sciences .....	57.8	66.6	63.2	66.5	66.8	46.6	28.7	34.0	35.8
Computer sciences .....	73.7	74.2	70.9	74.7	77.3	76.5	55.4	S	S
Mathematics .....	37.8	51.8	47.4	42.7	44.3	29.7	23.2	32.5	35.1
Physical sciences .....	41.6	54.1	55.7	40.1	38.6	34.8	29.4	41.8	31.8
Chemistry .....	47.3	64.1	64.1	51.6	45.3	37.3	30.2	46.8	29.7
Geosciences .....	37.0	45.2	46.8	30.8	33.7	36.7	32.6	S	32.0
Physics and astronomy .....	31.9	45.7	38.7	24.1	20.8	25.9	12.3	38.2	42.6
Other .....	44.9	37.6	66.0	53.4	63.0	30.3	48.9	S	S
Social sciences .....	25.5	30.0	30.3	21.7	22.8	21.6	21.1	25.7	21.2
Economics .....	23.2	29.1	23.0	20.2	22.0	21.2	13.5	31.9	26.9
Political science .....	19.6	23.1	28.0	11.0	19.3	12.8	18.2	15.5	18.2
Psychology .....	27.0	34.2	32.1	28.1	23.1	20.6	16.0	19.9	14.7
Sociology/anthropology .....	27.6	29.2	33.8	16.0	23.8	29.3	26.1	29.8	24.0
Other .....	30.5	30.3	34.6	41.5	26.6	21.5	32.4	31.4	22.5
Master's									
All S&E fields .....	60.1	67.6	64.1	65.5	59.5	52.0	48.6	54.1	48.2
Engineering .....	59.8	64.6	61.6	61.3	61.0	53.3	54.9	60.1	41.7
Aerospace .....	52.7	57.8	51.5	71.9	54.0	S	S	S	S
Chemical .....	53.9	59.0	48.3	76.7	54.3	44.0	37.3	S	60.8
Civil .....	66.6	68.6	70.0	67.2	72.4	52.2	66.4	74.5	53.6
Electrical .....	65.7	71.3	67.9	66.7	69.4	61.6	51.7	66.4	38.6
Industrial .....	45.9	57.8	41.4	48.8	30.9	40.3	60.3	S	S
Mechanical .....	53.8	59.4	55.4	43.0	49.6	63.2	57.4	58.9	34.0
Other .....	55.4	59.8	58.2	59.2	52.7	46.3	56.6	50.7	S
Life sciences .....	60.6	71.6	63.9	66.4	55.7	54.9	52.6	49.1	60.8
Agriculture .....	49.2	73.0	49.6	69.7	37.1	S	S	S	S
Biological sciences .....	63.3	75.4	69.5	68.9	57.3	60.7	51.4	48.9	69.8
Health/medical .....	62.3	55.5	52.2	S	75.1	62.4	S	S	S
Mathematics/computer sciences .....	67.9	77.4	75.4	71.6	71.0	52.3	50.6	45.0	62.1
Computer sciences .....	76.5	82.0	79.4	73.9	76.3	66.5	64.9	S	S
Mathematics .....	54.3	64.8	65.5	63.5	60.5	42.4	44.1	42.6	61.1
Physical sciences .....	53.6	66.6	57.5	52.3	53.5	47.9	41.0	49.9	59.3
Chemistry .....	56.1	72.8	45.5	58.0	60.6	64.0	35.3	58.0	40.0
Geosciences .....	54.2	61.9	67.0	47.6	59.5	38.7	36.0	S	S
Physics and astronomy .....	47.1	64.3	51.0	42.7	24.0	38.8	51.7	32.8	70.7
Other .....	63.0	59.3	66.7	67.9	92.3	S	S	S	S

Appendix table 3-6

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**Employed individuals with S&E highest degrees whose jobs are closely related to field of highest degree, by degree level and years since degree: 1999**  
(Percent)

Degree and field	Employed individuals	Years since degree							
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	36 or more
Social sciences .....	57.7	64.3	60.3	68.4	55.8	50.8	43.3	56.3	40.1
Economics .....	48.0	53.0	40.3	79.9	41.0	35.7	44.8	57.6	S
Political science .....	39.9	50.8	41.9	35.4	43.3	39.3	S	S	S
Psychology.....	67.4	74.1	70.0	77.8	62.9	61.5	50.1	79.7	54.3
Sociology/anthropology.....	40.8	61.1	44.0	46.8	27.5	22.8	S	43.3	S
Other social sciences .....	53.3	53.8	69.0	54.5	57.3	47.4	48.1	51.0	S
Doctoral									
All S&E fields.....	69.2	73.4	71.8	70.3	68.5	66.1	62.7	67.1	69.8
Engineering.....	63.6	69.2	64.3	61.0	67.0	60.4	52.5	67.5	62.8
Aerospace.....	62.1	75.5	73.3	48.9	74.2	70.2	49.0	43.4	S
Chemical.....	57.2	65.5	57.6	43.7	62.2	47.6	61.9	59.8	66.1
Civil .....	71.9	79.8	67.9	75.1	80.1	74.2	61.3	72.3	66.8
Electrical.....	66.1	69.1	67.1	71.7	71.0	65.5	48.2	70.1	64.9
Industrial.....	58.5	62.4	66.5	58.6	S	96.8	37.7	S	S
Mechanical .....	61.1	62.2	62.2	61.3	52.1	66.5	53.7	78	47.5
Other .....	63.3	70.9	62.9	59.3	66.5	53.9	50.3	75.6	68.8
Life sciences .....	71.5	75.4	73.8	71.4	68.0	70.1	67.8	70.9	71.5
Agriculture .....	69.7	76.1	72.2	66.7	67.5	66.8	73.6	66.9	50.9
Biological sciences.....	71.6	74.9	74.2	71.8	67.8	70.6	67.0	71.1	73.7
Health/medical.....	76.1	87.8	68.2	79.9	76.6	66.9	68.6	86.1	S
Mathematics/computer sciences.....	70.0	73.9	69.7	76.5	70.0	65.5	56.5	69.5	87.9
Computer sciences .....	78.0	78.2	75.2	81.4	72.2	94.2	S	S	S
Mathematics.....	66.6	69.9	64.7	73.4	69.0	62.2	55.8	69.5	87.9
Physical sciences.....	59.7	62.4	62.9	61.8	59.5	56.1	53.7	60.7	60.4
Chemistry .....	59.9	67.8	65.8	59.0	59.4	54.9	54.1	56.2	60.2
Geosciences .....	74.6	72.3	74.5	80.7	71.4	70.1	72.2	83.1	79.0
Physics and astronomy .....	53.7	51.9	51.9	58.6	55.8	49.9	48.7	61.6	55.0
Other .....	63.7	59.0	73.0	55.6	54.0	100.0	S	S	S
Social sciences .....	77.3	81.8	82.0	79.0	74.9	71.6	74.1	71.9	80.4
Economics .....	77.8	80.3	85.8	77.1	72.3	78.8	78.1	67.3	76.7
Political science .....	69.7	70.6	76.6	72.8	83.8	59.0	63.6	59.6	69.7
Psychology.....	81.7	85.7	85.9	83.4	79.5	76.2	77.9	76.8	83.1
Sociology and anthropology .....	71.2	78.9	78.2	71.1	63.4	63.7	71.9	70.1	91.7
Other .....	68.3	78.4	63.1	71.3	65.5	62.5	66.5	77.7	56.8

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Appendix table 3-7

(Page 1 of 4)

Individuals with current or past S&amp;E occupations, by highest degree, occupation, and employment status: 1999

Degree and occupation	All S&E occupations	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
<b>All degree levels<sup>a</sup></b>								
All S&E occupations.....	4,120,700	3,540,800	3,267,400	273,400	56,000	523,900	364,400	159,400
Scientists.....	2,464,500	2,170,500	1,949,400	221,100	30,200	263,800	146,100	117,700
Mathematical/computer scientists.....	1,277,900	1,167,400	1,092,400	74,900	14,700	95,800	52,700	43,100
Computer/information scientists.....	1,147,400	1,058,100	1,011,400	46,700	13,400	75,800	41,000	34,900
Mathematical scientists.....	45,100	36,200	31,200	5,000	900	8,000	4,700	3,300
Postsecondary teachers.....	85,400	73,000	49,800	23,200	400	12,000	7,100	4,900
Life/related scientists.....	406,100	341,900	311,800	30,100	4,400	59,800	28,800	31,000
Agricultural/food scientists.....	47,500	39,700	37,000	2,700	400	7,400	4,400	2,900
Biological scientists.....	244,800	206,500	192,700	13,800	2,200	36,100	12,800	23,300
Environmental life scientists.....	22,800	19,800	18,300	1,600	S	2,200	2,200	S
Postsecondary teachers.....	90,900	75,800	63,800	12,100	1,000	14,100	9,400	4,700
Physical/related scientists.....	360,600	297,900	272,000	25,900	5,800	57,000	39,300	17,700
Chemists, except biochemists.....	155,200	121,700	116,000	5,700	3,700	29,800	20,700	9,200
Earth scientists, geologists, oceanographers.....	83,900	72,800	66,900	5,900	1,400	9,600	7,000	2,700
Physicists/astronomers.....	37,900	30,400	27,900	2,500	S	7,000	5,800	1,200
Other.....	24,000	22,200	20,900	1,300	S	1,800	700	1,100
Postsecondary teachers.....	59,600	50,700	40,200	10,400	200	8,700	5,200	3,500
Social/related scientists.....	419,900	363,400	273,200	90,200	5,300	51,300	25,200	26,000
Economists.....	42,200	35,400	31,500	3,900	400	6,400	3,500	2,900
Political/related scientists.....	13,500	11,600	9,800	1,800	S	1,700	400	1,300
Psychologists.....	223,700	197,000	141,600	55,400	2,700	24,000	10,200	13,800
Sociologists/anthropologists.....	21,200	17,600	14,200	3,400	700	2,900	900	2,000
Other.....	15,800	13,600	11,500	2,100	600	1,600	800	700
Postsecondary teachers.....	103,500	88,100	64,600	23,600	600	14,700	9,400	5,300
Engineers.....	1,656,200	1,370,300	1,318,000	52,300	25,800	260,000	218,300	41,700
Aerospace/related.....	93,700	67,400	65,200	2,200	1,800	24,400	22,000	2,400
Chemical.....	101,100	79,900	77,100	2,700	1,900	19,300	16,400	3,000
Civil/architectural.....	265,900	223,700	214,400	9,300	2,600	39,600	33,300	6,300
Electrical/related.....	432,800	362,300	350,600	11,700	5,000	65,500	56,000	9,500
Industrial.....	98,100	81,200	77,200	3,900	1,600	15,400	11,800	3,600
Mechanical.....	317,400	265,800	257,900	7,900	5,500	46,100	40,300	5,800
Other.....	309,400	258,700	249,800	8,900	7,200	43,500	33,300	10,300
Postsecondary teachers.....	37,900	31,400	25,800	5,600	200	6,200	5,300	900

Appendix table 3-7

Individuals with current or past S&amp;E occupations, by highest degree, occupation, and employment status: 1999

Degree and occupation	All S&E occupations	Employed			Not in labor force		
		Total	Full time	Part time	Unemployed, seeking job	Total	Retired
Bachelor's							
All S&E occupations.....	2,350,500	1,994,400	1,870,600	123,800	32,700	323,300	223,200
Scientists .....	1,228,500	1,087,100	997,300	89,800	16,200	125,200	54,000
Mathematical/computer scientists.....	804,900	740,500	700,600	39,900	9,500	54,900	25,200
Computer/information scientists.....	773,400	715,400	686,700	28,800	9,200	48,800	22,500
Mathematical scientists .....	16,400	12,400	9,900	2,500	S	3,700	2,300
Postsecondary teachers .....	15,100	12,700	4,000	8,700	S	2,400	S
Life/related scientists .....	166,500	135,500	120,400	15,100	1,700	29,200	8,400
Agricultural/food scientists.....	24,900	20,100	19,000	1,100	S	4,600	2,600
Biological scientists.....	107,700	87,900	80,900	7,000	S	19,200	3,300
Environmental life scientists.....	17,100	14,600	13,600	S	S	1,700	S
Postsecondary teachers .....	16,800	12,800	6,800	6,000	S	3,700	S
Physical/related scientists .....	172,700	139,600	127,400	12,200	2,900	30,200	18,700
Chemists, except biochemists .....	90,400	70,500	68,100	2,400	1,900	18,000	11,300
Earth scientists, geologists, oceanographers .....	43,200	38,000	34,700	3,300	S	4,400	3,200
Physicists/astronomers .....	10,800	7,200	6,100	1,100	S	3,400	2,900
Other .....	14,100	13,100	13,000	S	S	1,000	S
Postsecondary teachers .....	14,200	10,900	5,500	5,400	S	3,300	S
Social/related scientists .....	84,400	71,400	48,900	22,500	2,000	11,000	1,700
Economists .....	14,500	11,800	10,300	1,500	S	2,500	S
Political/related scientists.....	6,500	5,800	4,800	1,000	S	S	S
Psychologists .....	38,100	32,100	23,300	8,800	1,200	4,700	S
Sociologists/anthropologists.....	9,100	6,900	5,800	1,100	S	1,600	S
Other .....	4,600	4,500	3,500	1,000	S	S	S
Postsecondary teachers .....	11,600	10,400	S	9,200	S	1,200	S
Engineers.....	1,122,000	907,400	873,300	34,000	16,600	198,000	169,200
Aerospace/related .....	55,300	36,300	34,900	1,400	1,400	17,600	15,900
Chemical.....	66,200	51,100	49,300	1,800	800	14,400	12,000
Civil/architectural .....	195,600	160,800	154,600	6,200	1,500	33,200	28,200
Electrical/ related.....	288,800	233,500	225,500	8,100	3,100	52,200	45,800
Industrial .....	76,400	62,700	59,600	3,100	1,400	12,300	9,900
Mechanical .....	234,400	194,300	188,900	5,300	3,600	36,600	32,700
Other.....	198,800	163,000	157,400	5,600	4,800	31,000	23,900
Postsecondary teachers .....	6,400	5,600	3,100	2,500	S	800	S

Appendix table 3-7

(Page 3 of 4)

Individuals with current or past S&amp;E occupations, by highest degree, occupation, and employment status: 1999

Degree and occupation	All S&E occupations	Employed			Not in labor force		
		Total	Full time	Part time	Unemployed, seeking job	Total	Retired
Master's							
All S&E occupations.....	1,188,100	1,032,100	921,500	110,600	17,300	138,800	90,800
Scientists .....	752,300	655,500	559,900	95,700	9,700	87,000	51,000
Mathematical/computer scientists.....	393,700	354,100	323,200	30,900	4,700	34,900	22,900
Computer/information scientists.....	333,700	304,800	288,000	16,800	4,000	24,800	17,000
Mathematical scientists .....	19,900	16,000	14,000	2,000	S	3,400	1,700
Postsecondary teachers .....	40,200	33,300	21,300	12,000	S	6,700	4,200
Life/related scientists .....	86,700	72,500	64,500	8,100	1,300	12,900	6,600
Agricultural/food scientists.....	11,900	10,400	9,400	1,000	S	1,400	S
Biological scientists.....	50,800	42,700	39,700	3,100	500	7,600	3,400
Environmental life scientists.....	4,300	4,000	3,500	S	S	S	S
Postsecondary teachers .....	19,700	15,500	11,900	3,600	600	3,700	2,400
Physical/related scientists .....	88,500	73,000	63,800	9,100	1,400	14,100	9,600
Chemists, except biochemists.....	30,500	23,000	21,100	2,000	1,000	6,500	4,700
Earth scientists, geologists, oceanographers.....	28,600	24,300	22,200	2,000	400	3,900	2,700
Physicists/astronomers .....	10,200	8,500	7,800	700	S	1,800	1,300
Other .....	7,800	7,300	6,300	1,100	S	500	S
Postsecondary teachers .....	11,400	9,800	6,500	3,300	S	1,500	700
Social/related scientists .....	183,400	155,900	108,400	47,500	2,300	25,200	11,900
Economists .....	18,000	15,200	13,100	2,000	S	2,700	900
Political/related scientists.....	5,100	4,200	3,500	800	S	700	S
Psychologists .....	118,100	102,400	70,400	32,000	1,100	14,500	7,500
Sociologists/anthropologists.....	7,500	6,900	5,100	1,800	S	S	S
Other .....	6,800	5,700	4,800	900	S	S	S
Postsecondary teachers .....	28,000	21,500	11,400	10,100	300	6,200	3,100
Engineers.....	435,900	376,500	361,700	14,900	7,600	51,800	39,800
Aerospace/related .....	32,700	26,300	25,700	600	S	6,100	5,600
Chemical.....	25,000	20,700	19,900	700	700	3,600	3,200
Civil and architectural.....	64,300	57,200	54,600	2,700	900	6,100	4,800
Electrical/related .....	123,100	109,400	106,100	3,200	1,600	12,000	9,000
Industrial .....	20,700	17,400	16,600	800	S	3,100	1,900
Mechanical .....	72,200	62,000	59,900	2,100	1,800	8,500	6,600
Other.....	88,200	76,900	74,300	2,600	1,800	9,500	6,500
Postsecondary teachers .....	9,600	6,600	4,400	2,200	S	2,900	2,200

Appendix table 3-7

Individuals with current or past S&amp;E occupations, by highest degree, occupation, and employment status: 1999

Degree and occupation	All S&E occupations	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
<b>Doctoral</b>								
All S&E occupations.....	547,800	484,100	447,100	37,000	5,800	57,900	48,000	9,900
Scientists.....	452,200	399,900	366,100	33,800	4,100	48,200	39,000	9,200
Mathematical/computer scientists.....	72,800	67,100	63,000	4,100	500	5,300	4,400	900
Computer/information scientists.....	34,100	32,400	31,300	1,100	200	1,500	1,100	400
Mathematical scientists.....	8,900	7,900	7,400	500	100	900	700	200
Postsecondary teachers.....	29,900	26,800	24,300	2,500	200	2,900	2,600	300
Life/related scientists.....	137,500	121,100	115,300	5,800	1,200	15,200	12,000	3,200
Agricultural/food scientists.....	10,700	9,200	8,600	600	100	1,400	1,300	100
Biological scientists.....	78,900	70,000	66,900	3,000	900	8,100	5,500	2,600
Environmental life scientists.....	1,500	1,200	1,100	S	S	200	200	S
Postsecondary teachers.....	46,400	40,800	38,700	2,100	100	5,500	5,000	500
Physical/related scientists.....	99,000	84,900	80,500	4,400	1,500	12,700	11,000	1,700
Chemists, except biochemists.....	34,200	28,100	26,900	1,200	700	5,400	4,700	700
Earth scientists, geologists, oceanographers.....	11,900	10,400	9,800	600	300	1,300	1,000	200
Physicists/astronomers.....	16,800	14,700	14,000	700	S	1,900	1,600	300
Other.....	2,000	1,800	1,700	100	S	200	200	S
Postsecondary teachers.....	34,000	29,800	28,100	1,700	200	4,000	3,500	500
Social/related scientists.....	142,800	126,900	107,300	19,600	900	15,000	11,600	3,300
Economists.....	9,400	8,100	7,700	400	S	1,200	1,000	200
Political/related scientists.....	1,700	1,400	1,400	S	S	300	300	S
Psychologists.....	62,900	58,000	43,900	14,000	400	4,500	2,700	1,800
Sociologists/anthropologists.....	4,600	3,700	3,200	500	S	800	700	100
Other.....	3,300	2,400	2,100	300	S	800	700	100
Postsecondary teachers.....	60,900	53,300	49,000	4,300	300	7,300	6,300	1,100
Engineers.....	95,600	84,200	81,000	3,200	1,700	9,700	9,000	700
Aerospace/related.....	5,200	4,600	4,400	200	S	500	500	S
Chemical.....	9,700	8,100	7,800	200	300	1,300	1,200	100
Civil/architectural.....	5,400	5,100	4,700	400	S	200	200	S
Electrical/related.....	19,900	18,400	18,000	400	300	1,300	1,200	100
Industrial.....	1,100	1,000	1,000	S	S	S	S	S
Mechanical.....	10,300	9,100	8,800	300	200	1,000	1,000	S
Other.....	22,100	18,800	18,100	700	500	2,800	2,600	200
Postsecondary teachers.....	21,800	19,200	18,300	900	100	2,500	2,400	200

S suppressed for reasons of confidentiality and/or data reliability

^Includes professional degrees.

NOTE: For unemployed individuals, occupation is for their previous reported job.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

**Appendix table 3-8**  
**Unemployment rate for S&E and other occupations: 1983–2002**  
(Percent)

Year	All U.S. workers	All S&E occupations	S&E technicians	Computer programmers
1983 .....	9.9	3.0	6.1	3.1
1984 .....	7.4	2.1	3.6	1.4
1985 .....	7.0	1.8	3.8	2.0
1986 .....	6.9	2.2	3.8	2.4
1987 .....	6.2	2.2	3.4	3.1
1988 .....	5.5	1.8	2.9	3.0
1989 .....	5.2	1.5	3.3	1.5
1990 .....	5.7	1.9	4.3	3.1
1991 .....	7.2	2.6	4.6	3.5
1992 .....	7.9	3.2	5.5	2.9
1993 .....	7.2	3.5	5.7	2.8
1994 .....	6.2	3.0	4.4	2.5
1995 .....	5.6	2.3	3.8	1.5
1996 .....	5.4	1.8	3.8	1.2
1997 .....	4.9	1.5	2.0	1.9
1998 .....	4.4	1.6	2.9	1.6
1999 .....	4.1	1.4	2.4	2.6
2000 .....	3.9	1.6	3.0	1.7
2001 .....	4.8	2.4	3.2	5.1
2002 .....	5.8	3.9	5.4	6.5

SOURCE: National Bureau of Economic Research's Merged Outgoing Rotation Group Files from the Bureau of Labor Statistics' Current Population Survey.

*Science & Engineering Indicators – 2004*

Appendix table 3-9  
Employed individuals in S&E occupations, by highest degree, occupation, and employment sector: 1999

Degree and occupation	Employed individuals	Business/industry			Education			Government			
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
<b>All degree levels<sup>a</sup></b>											
All S&E occupations.....	3,540,800	2,482,400	2,263,300	105,200	114,000	608,500	496,400	112,100	449,900	241,100	208,800
Scientists .....	2,170,500	1,373,600	1,197,400	80,200	96,000	541,800	434,200	107,600	255,100	137,300	117,800
Mathematical/computer scientists.....	1,167,400	943,800	886,800	21,500	35,600	132,200	95,000	37,300	91,300	52,600	38,600
Computer/information scientists.....	1,058,100	925,900	871,900	21,200	32,900	52,100	40,000	12,100	80,100	44,300	35,800
Mathematical scientists .....	36,200	17,300	14,300	300	2,700	7,800	7,500	400	11,100	8,400	2,700
Postsecondary teachers .....	73,000	600	600	S	S	72,300	47,500	24,800	S	S	S
Life/related scientists .....	341,900	113,400	92,600	8,000	12,800	163,300	148,900	14,400	65,300	36,700	28,500
Agricultural/food scientists.....	39,700	26,000	22,800	2,600	600	6,100	5,300	700	7,700	4,800	2,900
Biological scientists.....	206,500	80,900	66,000	3,700	11,200	81,200	79,100	2,100	44,400	24,600	19,900
Environmental life scientists.....	19,800	5,500	3,400	1,600	400	1,200	700	S	13,100	7,400	5,700
Postsecondary teachers .....	75,800	1,100	S	S	S	74,800	63,800	11,000	S	S	S
Physical/related scientists .....	297,900	161,200	148,800	6,300	6,100	82,400	73,200	9,100	54,300	31,300	23,000
Chemists, except biochemists.....	121,700	94,400	90,900	1,100	2,500	11,400	11,400	S	15,900	6,000	9,900
Earth scientists, geologists, and oceanographers....	72,800	43,100	38,700	3,500	900	9,100	8,300	700	20,700	14,100	6,600
Physicists/astronomers .....	30,400	13,600	11,100	200	2,400	10,000	9,900	100	6,800	5,900	900
Other .....	22,200	9,900	8,200	1,500	300	1,600	1,600	S	10,700	5,000	5,700
Postsecondary teachers .....	50,700	S	S	S	S	50,300	42,000	8,300	200	S	S
Social/related scientists .....	363,400	155,200	69,200	44,500	41,600	163,900	117,100	46,800	44,300	16,600	27,700
Economists .....	35,400	21,800	17,400	2,100	2,300	2,200	2,200	S	11,400	6,600	4,800
Political/related scientists.....	11,600	4,500	900	900	2,600	2,600	2,600	S	4,600	2,500	2,000
Psychologists .....	197,000	116,000	45,100	39,800	31,100	59,400	23,000	36,400	21,600	4,400	17,200
Sociologists/anthropologists.....	17,600	5,500	2,800	300	2,400	7,300	6,900	300	4,800	1,900	2,900
Other .....	13,600	7,100	2,900	1,100	3,100	4,600	4,000	700	1,900	1,200	700
Postsecondary teachers .....	88,100	300	S	S	S	87,900	78,400	9,500	S	S	S
Engineers.....	1,370,300	1,108,800	1,065,900	25,000	18,000	66,700	62,100	4,500	194,800	103,800	90,900
Aerospace/related.....	67,400	50,800	49,900	300	600	2,500	2,500	S	14,100	14,000	S
Chemical.....	79,900	74,900	72,800	1,300	800	2,000	1,900	S	3,000	2,600	S
Civil/architectural .....	223,700	142,400	132,700	7,600	2,000	3,600	3,400	S	77,700	17,200	60,500
Electrical/related.....	362,300	310,300	300,600	4,300	5,400	10,700	9,700	1,000	41,300	33,300	8,000
Industrial.....	81,200	75,900	73,200	1,100	1,500	1,500	1,500	S	3,800	3,100	700
Mechanical .....	265,800	245,200	237,100	5,400	2,700	5,300	5,200	S	15,300	12,100	3,200
Other.....	258,700	209,400	199,600	4,900	4,900	9,700	9,600	200	39,600	21,500	18,100
Postsecondary teachers .....	31,400	S	S	S	S	31,400	28,300	3,100	S	S	S

Appendix table 3-9

(Page 2 of 4)

Employed individuals in S&amp;E occupations, by highest degree, occupation, and employment sector: 1999

Degree and occupation	Employed individuals	Business/industry			Educational		Government		
		Total	Profit	Self-employed	4-year college/university	Other	Total	Federal	State/local
				Nonprofit					
<b>Bachelor's</b>									
All S&E occupations.....	1,994,400	1,555,000	1,465,300	37,200	52,500	171,800	142,500	29,300	267,600
Scientists .....	1,087,100	802,300	738,000	22,000	42,300	150,400	123,500	26,900	134,300
Mathematical/computer scientists.....	740,500	630,000	592,300	13,300	24,400	51,000	36,100	14,900	59,500
Computer/information scientists.....	715,400	624,800	587,900	13,100	23,800	35,600	26,100	9,500	55,000
Mathematical scientists .....	12,400	4,900	4,200	S	S	3,000	2,800	S	4,500
Postsecondary teachers .....	12,700	S	S	S	S	12,500	7,300	5,200	S
Life/related scientists .....	135,500	55,600	47,500	3,800	4,300	47,300	43,000	4,300	32,500
Agricultural/food scientists.....	20,100	15,500	13,900	S	S	1,200	1,200	S	3,400
Biological scientists.....	87,900	36,600	31,300	1,700	3,700	32,700	31,500	1,200	18,600
Environmental life scientists.....	14,600	3,300	2,000	S	S	S	S	S	10,500
Postsecondary teachers .....	12,800	S	S	S	S	12,500	10,000	2,500	S
Physical/related scientists .....	139,600	87,200	82,400	2,800	2,000	22,300	21,200	1,100	30,200
Chemists, except biochemists .....	70,500	55,000	53,300	S	1,500	5,300	5,300	S	10,100
Earth scientists, geologists, and oceanographers....	38,000	24,000	21,800	2,000	S	2,800	2,800	S	11,100
Physicists/astronomers .....	7,200	2,400	2,200	S	S	3,400	3,400	S	1,500
Other .....	13,100	5,700	5,100	S	S	S	S	S	7,300
Postsecondary teachers .....	10,900	S	S	S	S	10,700	9,700	S	S
Social/related scientists .....	71,400	29,600	15,800	2,200	11,600	29,800	23,100	6,700	12,100
Economists .....	11,800	6,200	5,400	S	S	700	700	S	4,900
Political/related scientists.....	5,800	2,000	S	S	1,000	1,000	1,000	S	2,800
Psychologists.....	32,100	16,500	7,900	S	7,800	13,000	7,800	5,200	2,700
Sociologists/anthropologists.....	6,900	2,400	S	S	S	3,100	3,000	S	S
Other social/related scientists .....	4,500	2,500	S	S	1,600	1,700	1,400	S	S
Postsecondary teachers .....	10,400	S	S	S	S	10,400	9,200	S	S
Engineers.....	907,400	752,700	727,200	15,200	10,300	21,400	19,000	2,400	133,300
Aerospace/related.....	36,300	29,000	28,700	S	S	600	600	S	6,800
Chemical.....	51,100	47,800	46,800	S	S	1,200	1,200	S	2,100
Civil/architectural .....	160,800	98,100	92,800	4,000	1,400	1,900	1,800	S	60,800
Electrical/related.....	233,500	202,100	196,300	2,700	3,100	4,400	3,600	800	27,100
Industrial.....	62,700	58,600	56,800	S	700	1,200	1,200	S	2,900
Mechanical .....	194,300	181,000	175,600	3,800	1,600	2,300	2,300	S	11,000
Other.....	163,000	136,000	130,200	2,700	3,100	4,300	4,200	S	22,700
Postsecondary teachers .....	5,600	S	S	S	S	5,500	4,200	1,300	S

Appendix table 3-9  
Employed individuals in S&E occupations, by highest degree, occupation, and employment sector: 1999

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Degree and occupation	Employed individuals	Business/industry			Educational		Government		
		Total	Profit	Self-employed	4-year college/university	Other	Total	Federal	State/local
				Nonprofit					
<b>Master's</b>									
All S&E occupations.....	1,032,100	719,400	639,100	41,200	39,100	178,400	111,800	66,600	134,300
Scientists .....	655,500	415,600	348,300	33,300	34,000	159,200	94,100	65,100	80,800
Mathematical/computer scientists.....	354,100	276,400	260,300	7,000	9,000	50,200	29,900	20,300	27,600
Computer/information scientists.....	304,800	268,400	253,500	7,000	7,900	13,600	11,200	2,400	22,800
Mathematical scientists .....	16,000	8,000	6,800	S	1,200	3,300	3,300	S	4,700
Postsecondary teachers .....	33,300	S	S	S	S	33,300	15,500	17,800	S
Life-related scientists .....	72,500	25,000	19,100	2,100	3,900	27,800	20,900	6,900	19,700
Agricultural/food scientists.....	10,400	5,600	4,400	1,200	S	2,200	1,500	S	2,600
Biological scientists.....	42,700	17,000	13,300	S	3,200	10,900	10,700	S	14,800
Environmental life scientists.....	4,000	1,700	1,200	S	S	S	S	S	2,200
Postsecondary teachers .....	15,500	S	S	S	S	14,800	8,700	6,100	S
Physical/related scientists .....	73,000	40,100	36,200	2,300	1,600	19,400	14,200	5,200	13,500
Chemists, except biochemists .....	23,000	16,800	16,100	S	S	3,100	3,100	S	3,100
Earth scientists, geologists, and oceanographers....	24,300	15,400	14,100	1,200	S	2,900	2,700	S	5,900
Physicists/astronomers .....	8,500	4,700	3,700	S	1,000	2,300	2,300	S	1,500
Other .....	7,300	3,200	2,200	800	S	1,200	1,200	S	2,900
Postsecondary teachers .....	9,800	S	S	S	S	9,800	4,900	4,900	S
Social/related scientists .....	155,900	74,100	32,700	21,900	19,400	61,800	29,100	32,700	20,000
Economists .....	15,200	10,300	7,800	1,100	1,400	300	300	S	4,600
Political/related scientists.....	4,200	2,000	S	S	1,400	900	900	S	1,300
Psychologists .....	102,400	57,300	22,400	19,900	15,000	34,600	7,700	26,900	10,600
Sociologists/anthropologists.....	6,900	1,800	900	S	1,000	2,500	2,400	S	2,600
Other .....	5,700	2,700	1,300	S	700	2,000	1,800	S	1,100
Postsecondary teachers .....	21,500	S	S	S	S	21,500	16,000	5,500	S
Engineers.....	376,500	303,800	290,800	7,900	5,100	19,200	17,700	1,500	53,500
Aerospace/related .....	26,300	18,600	18,400	S	200	1,500	1,500	S	6,200
Chemical.....	20,700	19,800	19,200	S	300	300	300	S	500
Civil/architectural .....	57,200	40,300	36,700	3,300	S	1,100	1,100	S	15,800
Electrical/related .....	109,400	92,500	89,700	1,100	1,700	5,000	4,900	S	11,900
Industrial.....	17,400	16,300	15,600	S	800	300	300	S	800
Mechanical .....	62,000	56,600	54,600	1,300	700	1,800	1,800	S	3,600
Other.....	76,900	59,600	56,600	1,800	1,200	2,600	2,600	S	14,700
Postsecondary teachers .....	6,600	S	S	S	S	6,600	5,200	1,400	S

Appendix table 3-9

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## Employed individuals in S&amp;E occupations, by highest degree, occupation, and employment sector: 1999

Degree and occupation	Employed individuals	Business/industry			Educational		Government				
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
<b>Doctoral</b>											
All S&E occupations.....	484,100	195,000	150,000	24,700	20,300	244,300	229,900	14,400	44,800	32,900	11,900
Scientists .....	399,900	144,000	103,200	23,000	17,700	218,300	204,400	13,800	37,700	26,900	10,800
Mathematical/computer scientists.....	67,100	32,600	29,400	1,100	2,000	30,700	28,700	2,000	3,800	2,700	1,100
Computer/information scientists.....	32,400	27,800	25,800	900	1,100	2,800	2,700	S	1,800	1,300	500
Mathematical scientists .....	7,900	4,400	3,200	200	900	1,600	1,400	100	1,900	1,400	500
Postsecondary teachers .....	26,800	300	300	S	S	26,300	24,500	1,800	S	S	S
Life/related scientists .....	121,100	30,400	24,200	1,900	4,300	78,500	75,600	2,900	12,200	10,200	2,000
Agricultural/food scientists.....	9,200	4,900	4,400	400	100	2,700	2,600	S	1,700	1,600	100
Biological scientists.....	70,000	25,000	19,600	1,400	4,000	34,800	34,200	600	10,100	8,300	1,800
Environmental life scientists.....	1,200	400	200	S	200	400	400	S	400	300	S
Postsecondary teachers .....	40,800	S	S	S	S	40,700	38,300	2,300	S	S	S
Physical/related scientists .....	84,900	33,800	30,200	1,100	2,500	40,600	37,800	2,800	10,400	8,800	1,600
Chemists, except biochemists .....	28,100	22,500	21,400	500	600	3,000	2,900	S	2,600	1,900	700
Earth scientists, geologists, and oceanographers....	10,400	3,600	2,800	300	500	3,300	2,900	400	3,400	2,800	600
Physicists/astronomers .....	14,700	6,600	5,200	200	1,200	4,300	4,200	S	3,800	3,600	300
Other .....	1,800	1,000	800	100	S	300	300	S	500	500	S
Postsecondary teachers .....	29,800	S	S	S	S	29,700	27,400	2,300	S	S	S
Social/related scientists .....	126,900	47,100	19,300	18,800	8,900	68,500	62,300	6,100	11,300	5,200	6,100
Economists .....	8,100	5,000	3,900	400	700	1,200	1,200	S	1,900	1,700	300
Political/related scientists.....	1,400	500	200	S	200	600	600	S	300	300	S
Psychologists .....	58,000	39,200	14,400	17,500	7,300	11,100	7,500	3,500	7,700	2,500	5,200
Sociologists/anthropologists.....	3,700	1,300	600	300	400	1,600	1,500	100	900	500	400
Other .....	2,400	1,000	300	300	300	1,000	700	S	500	300	200
Postsecondary teachers .....	53,300	300	S	S	S	53,000	50,700	2,200	S	S	S
Engineers.....	84,200	51,000	46,700	1,700	2,500	26,100	25,500	600	7,100	5,900	1,200
Aerospace/related .....	4,600	3,200	2,900	S	300	400	400	S	900	900	S
Chemical.....	8,100	7,200	6,700	200	300	500	500	S	400	400	S
Civil and architectural.....	5,100	3,400	2,700	400	400	600	600	S	1,100	500	700
Electrical/related.....	18,400	15,300	14,100	500	700	1,300	1,200	S	1,800	1,800	S
Industrial.....	1,000	900	800	S	S	S	S	S	100	100	S
Mechanical .....	9,100	7,300	6,800	100	300	1,200	1,200	S	600	500	S
Other.....	18,800	13,800	12,700	400	600	2,800	2,700	S	2,200	1,800	400
Postsecondary teachers .....	19,200	S	S	S	S	19,200	18,800	400	S	S	S

S suppressed for reasons of confidentiality and/or data reliability

aIncludes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Science &amp; Engineering Indicators – 2004

**Appendix table 3-10**  
**Workers with bachelor's or higher degrees: 1983–2002**  
(Percent)

Year	All S&E occupations	Non-S&E occupations	S&E technicians	Computer programmers
1983 .....	74.3	18.8	21.4	49.9
1984 .....	75.0	19.3	20.2	52.4
1985 .....	74.8	19.6	21.1	51.8
1986 .....	74.4	19.8	22.3	55.9
1987 .....	74.9	20.3	20.1	56.7
1988 .....	74.8	20.9	22.1	56.6
1989 .....	75.3	21.4	21.9	61.1
1990 .....	75.7	21.7	21.1	54.2
1991 .....	76.5	22.0	21.3	59.4
1992 .....	76.8	21.9	20.4	57.3
1993 .....	76.4	22.4	21.4	59.7
1994 .....	76.2	22.6	20.2	60.1
1995 .....	75.8	23.0	21.1	56.4
1996 .....	76.0	23.5	22.3	59.1
1997 .....	77.4	23.7	20.1	56.0
1998 .....	76.3	24.3	22.1	57.7
1999 .....	76.0	24.8	21.9	59.0
2000 .....	76.2	24.8	21.1	60.2
2001 .....	75.4	25.3	21.3	60.6
2002 .....	74.6	26.1	20.4	65.7

SOURCE: National Bureau of Economic Research's Merged Outgoing Rotation Group Files from the Bureau of Labor Statistics' Current Population Survey.

Appendix table 3-11

(Page 1 of 4)

Employed individuals with S&amp;E highest degree, by highest degree, field of highest degree, and employment sector: 1999

Degree and field	Employed individuals	Business/industry			Education			Government			
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
<b>All degree levels<sup>a</sup></b>											
All S&E fields .....	7,980,100	5,545,400	4,657,400	432,300	455,700	1,379,100	701,700	677,400	1,055,600	450,600	605,000
Sciences .....	6,043,700	3,945,200	3,167,800	353,400	423,900	1,279,100	621,000	658,200	819,400	319,200	500,200
Mathematics/computer sciences.....	1,045,800	804,100	732,600	37,000	34,600	164,100	66,600	97,500	77,600	46,600	31,000
Computer/information sciences.....	586,500	506,200	472,700	16,800	16,600	40,900	25,100	15,900	39,400	25,300	14,200
Mathematical sciences .....	459,300	298,000	259,900	20,100	18,000	123,200	41,500	81,700	38,100	21,400	16,800
Life/related sciences .....	1,287,700	768,700	603,900	78,400	86,500	345,200	219,700	125,500	173,800	78,800	95,000
Agricultural and food sciences .....	230,400	167,800	128,100	33,400	6,300	35,800	23,400	12,500	26,700	13,500	13,300
Biological sciences.....	955,300	540,600	426,500	39,600	74,500	295,300	189,400	105,900	119,400	53,700	65,700
Environmental life sciences.....	102,100	60,300	49,400	5,300	5,700	14,100	7,000	7,100	27,600	11,600	16,000
Physical/related sciences .....	596,400	398,400	352,500	29,000	17,000	124,500	90,000	34,500	73,500	42,400	31,100
Chemistry, except biochemistry.....	276,200	195,100	175,000	11,900	8,300	55,800	41,000	14,800	25,300	12,000	13,200
Earth science, geology, and oceanography .....	152,800	98,200	86,900	8,700	2,500	27,000	16,600	10,400	27,600	14,500	13,100
Physics and astronomy .....	144,000	90,400	78,900	6,500	5,000	38,400	30,900	7,600	15,200	13,000	2,200
Other .....	23,500	14,700	11,600	1,900	1,200	3,300	1,500	1,800	5,400	2,800	2,600
Social and related sciences .....	3,088,400	1,957,800	1,465,300	208,100	284,400	638,900	243,900	394,900	491,700	150,700	341,000
Economics .....	406,500	320,300	267,300	37,800	15,200	43,500	27,800	15,600	42,700	26,000	16,700
Political/related sciences.....	567,000	394,200	325,000	34,200	35,000	72,900	34,300	38,600	99,900	44,600	55,300
Psychology.....	1,166,100	701,000	475,200	84,600	141,200	297,600	95,800	201,800	167,600	37,800	129,800
Sociology and anthropology .....	592,700	343,900	250,800	30,100	63,000	126,300	55,100	71,300	122,500	24,700	97,700
Other .....	356,100	198,400	146,900	21,400	30,100	98,600	30,900	67,600	59,100	17,600	41,400
Engineering .....	1,935,800	1,599,700	1,489,100	78,900	31,700	100,000	80,800	19,200	236,200	131,400	104,800
Aerospace and related .....	76,300	59,900	54,900	3,600	1,400	4,800	3,900	900	11,700	10,700	900
Chemical.....	147,700	130,200	126,500	1,700	2,100	6,200	5,800	500	11,200	6,900	4,300
Civil and architectural.....	330,200	230,800	208,000	18,900	3,900	13,100	11,100	2,100	86,300	24,300	62,000
Electrical and related.....	587,000	507,000	479,900	18,100	9,000	29,900	24,600	5,200	50,100	38,700	11,400
Industrial.....	106,200	91,700	80,400	8,500	2,900	6,000	3,000	3,000	8,500	6,700	1,800
Mechanical .....	386,000	338,700	319,200	13,900	5,700	14,500	11,800	2,700	32,700	21,100	11,600
Other.....	302,500	241,300	220,100	14,300	6,800	25,400	20,500	4,900	35,700	23,100	12,700

Appendix table 3-11

Employed individuals with S&amp;E highest degree, by highest degree, field of highest degree, and employment sector: 1999

Degree and field	Employed individuals	Business/industry			Educational		Government				
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total	Federal	State/local
<b>Bachelor's</b>											
All S&E fields .....	5,866,100	4,312,700	3,654,300	323,800	334,500	762,800	305,400	457,300	790,700	314,100	476,500
Sciences .....	4,486,100	3,148,800	2,571,400	262,600	314,800	718,000	275,500	442,400	619,400	225,300	394,100
Mathematics/computer sciences.....	742,700	595,500	539,600	29,100	26,800	89,100	23,700	65,400	58,000	32,300	25,700
Computer/information sciences.....	413,500	364,000	338,100	13,300	12,600	20,800	11,400	9,400	28,700	17,300	11,400
Mathematics.....	329,200	231,500	201,600	15,800	14,200	68,300	12,300	56,000	29,300	15,000	14,300
Life and related sciences.....	947,000	631,000	501,800	62,600	66,500	190,000	101,700	88,200	126,100	50,200	75,800
Agricultural and food sciences .....	182,300	143,100	109,200	29,300	4,600	18,100	9,600	8,500	21,100	10,200	10,900
Biological sciences.....	686,000	438,000	351,300	28,600	58,000	163,200	88,600	74,600	84,800	32,500	52,300
Environmental life sciences.....	78,700	49,900	41,300	4,800	3,900	8,700	3,500	5,200	20,100	7,500	12,600
Physical and related sciences.....	360,500	264,800	234,500	19,700	10,600	51,300	32,100	19,200	44,400	20,600	23,800
Chemistry, except biochemistry.....	175,100	130,500	116,000	9,300	5,200	26,800	18,500	8,300	17,800	7,200	10,600
Earth science, geology, and oceanography .....	101,800	72,100	64,500	5,900	1,700	10,900	5,000	5,900	18,800	8,900	10,000
Physics and astronomy .....	66,900	49,800	44,400	2,700	2,700	11,800	8,300	3,500	5,300	3,800	1,500
Other .....	16,600	12,300	9,600	1,800	S	1,800	300	1,500	2,500	800	1,700
Social and related sciences.....	2,415,500	1,643,600	1,284,000	150,100	209,500	383,300	117,400	265,900	388,600	121,700	267,000
Economics .....	340,300	284,900	238,200	34,300	12,400	22,800	10,900	11,900	32,600	20,400	12,200
Political and related sciences .....	482,900	350,100	295,600	27,800	26,700	47,800	15,700	32,100	85,000	37,100	47,900
Psychology.....	794,500	525,400	387,300	44,700	93,400	154,000	45,500	108,400	115,200	29,000	86,200
Sociology and anthropology .....	525,200	319,600	236,000	27,300	56,300	95,100	31,700	63,400	110,500	21,400	89,100
Other .....	272,600	163,600	126,800	16,100	20,700	63,700	13,600	50,100	45,400	13,800	31,600
Engineering .....	1,379,400	1,163,300	1,082,300	61,300	19,800	44,800	29,900	14,900	171,300	88,900	82,400
Aerospace and related .....	53,600	43,200	40,000	2,700	500	2,300	1,700	600	8,000	7,600	S
Chemical.....	112,000	100,000	97,600	900	1,500	3,100	2,700	400	9,000	5,300	3,700
Civil and architectural.....	247,000	173,700	157,700	14,000	2,100	6,400	5,000	1,500	66,800	17,600	49,200
Electrical and related.....	407,400	356,900	336,800	13,900	6,200	14,000	9,400	4,600	36,500	27,000	9,400
Industrial.....	79,500	70,900	61,500	7,700	1,700	3,100	600	2,500	5,400	4,400	1,000
Mechanical .....	304,200	270,700	254,500	12,000	4,200	6,400	4,700	1,700	27,000	16,500	10,600
Other.....	175,800	147,800	134,200	9,900	3,700	9,500	5,900	3,600	18,500	10,500	8,100

Appendix table 3-11

(Page 3 of 4)

Employed individuals with S&amp;E highest degree, by highest degree, field of highest degree, and employment sector: 1999

Degree and field	Employed individuals	Business/industry			Educational		Government				
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/ university	Other	Total	Federal	State/ local
<b>Master's</b>											
All S&E fields .....	1,491,200	954,600	790,600	73,900	90,100	329,600	133,900	195,700	207,000	95,700	111,300
Sciences .....	1,040,400	585,600	445,100	59,100	81,400	304,500	111,900	192,600	150,200	60,100	90,100
Mathematics/computer sciences.....	262,600	192,700	178,700	7,100	6,900	52,600	21,400	31,200	17,200	12,300	4,900
Computer/information sciences.....	160,900	135,500	128,500	3,300	3,800	15,700	9,300	6,300	9,700	7,100	2,600
Mathematics.....	101,700	57,200	50,200	3,800	3,200	37,000	12,100	24,900	7,500	5,200	2,300
Life and related sciences.....	164,100	75,400	55,400	9,200	10,800	58,600	27,500	31,100	30,200	15,200	15,000
Agricultural and food sciences .....	30,100	17,000	12,500	3,400	1,100	9,200	5,800	3,500	3,800	1,800	1,900
Biological sciences.....	116,200	49,400	35,900	5,300	8,100	45,900	20,100	25,800	20,900	10,600	10,300
Environmental life sciences.....	17,900	9,000	7,000	400	1,600	3,400	1,600	1,800	5,500	2,800	2,800
Physical and related sciences.....	109,200	67,300	58,800	6,300	2,200	25,600	14,500	11,100	16,200	11,000	5,200
Chemistry, except biochemistry.....	37,400	24,600	22,200	1,100	1,400	9,400	4,900	4,500	3,400	1,800	1,600
Earth science, geology, and oceanography .....	34,200	21,400	18,800	2,400	S	7,100	3,500	3,600	5,700	3,100	2,600
Physics and astronomy .....	32,500	19,600	16,300	2,900	400	8,400	5,600	2,800	4,500	4,300	S
Other .....	5,100	1,800	1,600	S	S	800	S	200	2,500	1,700	800
Social and related sciences.....	499,800	248,000	150,200	36,500	61,300	165,600	48,400	117,200	86,200	21,400	64,800
Economics .....	43,700	28,300	23,800	2,500	2,000	7,800	4,300	3,500	7,600	3,500	4,100
Political and related sciences .....	67,400	40,700	27,700	5,600	7,500	13,500	7,700	5,800	13,200	6,600	6,600
Psychology.....	276,100	128,900	68,300	22,200	38,300	104,600	19,800	84,800	42,600	5,600	37,000
Sociology and anthropology .....	44,400	19,400	12,600	1,800	5,000	15,000	8,500	6,500	10,000	2,300	7,700
Other .....	68,100	30,700	17,800	4,400	8,500	24,700	8,100	16,600	12,700	3,400	9,400
Engineering .....	450,800	369,000	345,500	14,800	8,700	25,100	21,900	3,100	56,700	35,600	21,100
Aerospace and related .....	17,800	13,700	12,400	S	700	1,100	900	S	3,000	2,500	S
Chemical.....	22,000	19,800	19,100	S	300	700	600	S	1,600	1,000	600
Civil and architectural.....	73,300	52,300	46,300	4,500	1,400	3,000	2,700	S	18,100	5,800	12,200
Electrical and related.....	151,300	130,700	125,200	3,400	2,000	8,600	8,100	S	12,100	10,200	1,900
Industrial.....	23,500	19,100	17,200	S	1,200	1,500	1,100	S	2,900	2,100	800
Mechanical .....	68,300	59,200	56,700	1,500	900	4,000	3,100	900	5,100	4,000	1,000
Other.....	94,600	74,300	68,500	3,600	2,200	6,200	5,300	900	14,100	9,900	4,200

Appendix table 3-11

Employed individuals with S&amp;E highest degree, by highest degree, field of highest degree, and employment sector: 1999

Degree and field	Employed individuals	Business/industry			Educational		Government			State/local	
		Total	Profit	Self-employed	Nonprofit	Total	4-year college/university	Other	Total		
<b>Doctoral</b>											
All S&E fields .....	614,600	274,700	211,300	33,600	29,900	283,000	261,200	21,800	56,800	40,100	16,700
Sciences .....	509,000	207,300	150,000	30,700	26,700	253,000	232,300	20,700	48,700	33,200	15,400
Mathematics/computer sciences.....	40,600	15,800	14,200	800	800	22,400	21,500	900	2,300	2,000	400
Computer/information sciences.....	12,100	6,600	6,100	300	200	4,500	4,400	100	1,000	800	200
Mathematics.....	28,500	9,200	8,100	500	600	17,900	17,100	800	1,300	1,200	200
Life and related sciences.....	176,200	62,400	46,600	6,500	9,200	96,600	90,500	6,100	17,200	13,100	4,100
Agricultural and food sciences .....	18,100	7,700	6,300	800	600	8,500	8,000	600	1,900	1,400	400
Biological sciences.....	153,100	53,300	39,200	5,700	8,400	86,100	80,700	5,400	13,700	10,600	3,100
Environmental life sciences.....	5,000	1,400	1,100	100	200	2,000	1,900	200	1,600	1,000	600
Physical and related sciences.....	125,700	65,600	58,500	3,000	4,100	47,500	43,300	4,200	12,700	10,500	2,200
Chemistry, except biochemistry.....	63,600	40,000	36,800	1,500	1,700	19,500	17,600	2,000	4,100	3,000	1,100
Earth science, geology, and oceanography .....	16,500	4,600	3,600	500	500	9,000	8,100	900	2,900	2,300	500
Physics and astronomy .....	43,800	20,300	17,500	900	1,800	18,200	17,000	1,300	5,400	4,900	400
Other .....	1,800	700	500	S	S	700	700	S	400	300	100
Social and related sciences.....	166,400	63,500	30,600	20,400	12,500	86,500	77,000	9,400	16,400	7,700	8,800
Economics .....	22,500	7,200	5,400	1,000	800	12,900	12,600	300	2,500	2,000	500
Political and related sciences .....	16,700	3,300	1,700	800	800	11,700	10,900	800	1,600	900	800
Psychology.....	88,800	44,000	19,000	16,700	8,300	35,500	29,400	6,100	9,300	3,200	6,000
Sociology and anthropology .....	23,100	4,800	2,100	1,000	1,700	16,300	14,900	1,400	2,000	1,000	1,000
Other .....	15,300	4,200	2,300	1,000	900	10,100	9,200	900	1,000	500	500
Engineering .....	105,600	67,400	61,300	2,900	3,200	30,100	28,900	1,100	8,100	6,900	1,200
Aerospace and related .....	4,900	2,900	2,500	200	200	1,400	1,300	S	600	600	S
Chemical.....	13,600	10,500	9,800	400	400	2,500	2,400	S	600	600	S
Civil and architectural.....	9,900	4,800	4,000	300	400	3,700	3,400	300	1,400	800	600
Electrical and related.....	28,300	19,500	17,900	800	800	7,300	7,100	200	1,500	1,400	S
Industrial.....	3,300	1,700	1,600	S	S	1,400	1,300	S	200	200	S
Mechanical .....	13,500	8,800	8,000	300	500	4,100	4,000	S	600	600	S
Other.....	32,100	19,200	17,500	800	900	9,700	9,300	400	3,100	2,700	500

S suppressed for reasons of confidentiality and/or data reliability

\*Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Science &amp; Engineering Indicators – 2004

Appendix table 3-12

**Median annual salaries of U.S. individuals in S&E occupations, by occupation and highest degree: 1999**  
(Dollars)

Occupation	Employed individuals	Highest degree			
		Bachelor's	Master's	Doctoral	Professional
All S&E occupations.....	60,000	59,000	64,000	68,000	73,000
Scientists .....	58,800	55,000	60,000	65,000	79,000
Mathematical/computer scientists.....	64,000	60,800	68,000	71,200	60,000
Computer/information scientists.....	65,000	61,000	70,000	81,000	62,000
Mathematical scientists.....	61,700	56,000	60,000	74,400	S
Postsecondary teachers .....	48,000	30,000	41,000	60,000	S
Life and related scientists.....	47,700	37,000	43,800	62,000	123,000
Agricultural/food scientists .....	45,000	41,500	42,500	64,000	S
Biological scientists.....	44,000	36,000	44,000	61,300	103,000
Environmental life scientists.....	46,000	44,700	50,000	61,000	S
Postsecondary teachers .....	56,100	28,700	42,000	62,000	130,000
Physical and related scientists.....	52,000	45,000	52,000	70,000	S
Chemists, except biochemists .....	51,000	45,000	52,000	75,000	S
Earth scientists, geologists, and oceanographers.....	53,000	49,000	55,000	72,000	S
Physicists and astronomers.....	72,000	50,000	73,700	80,000	S
Other.....	42,000	40,000	43,000	68,800	S
Postsecondary teachers .....	51,000	15,000	38,000	59,600	S
Social and related scientists.....	47,000	30,000	41,000	60,000	57,000
Economists .....	67,000	53,000	70,000	92,000	S
Political and related scientists .....	36,000	35,000	33,000	65,000	S
Psychologists .....	43,200	26,500	40,000	60,000	57,000
Sociologists and anthropologists .....	38,000	28,000	39,000	56,000	S
Other.....	45,000	31,000	42,000	62,000	S
Postsecondary teachers .....	51,500	S	36,000	55,000	56,000
Engineers.....	65,000	60,000	70,000	79,000	65,000
Aerospace and related.....	71,000	69,400	75,000	83,600	S
Chemical.....	71,900	65,000	80,000	80,000	S
Civil and architectural.....	58,000	55,300	65,000	68,900	S
Electrical and related.....	70,000	65,000	75,000	86,000	63,000
Industrial .....	57,000	55,000	60,200	84,800	S
Mechanical.....	62,400	60,000	68,000	75,000	S
Other.....	65,000	60,600	69,400	77,000	S
Postsecondary teachers .....	64,000	39,000	52,000	72,800	S

S suppressed for reasons of confidentiality and/or data reliability

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

*Science & Engineering Indicators – 2004*

Appendix table 3-13

Individuals in labor force in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
<b>All degree levels<sup>a</sup></b>											
All S&E occupations.....	3,596,800	85,400	420,000	461,300	594,700	581,900	494,700	428,300	278,300	152,000	100,200
Male.....	2,745,900	50,300	287,000	339,700	444,300	439,700	385,800	342,500	232,400	133,700	90,700
Female.....	850,900	35,100	133,000	121,600	150,400	142,300	108,900	85,800	45,900	18,300	9,500
White.....	2,940,900	63,900	321,100	353,500	475,100	476,800	419,300	370,400	239,700	131,600	89,500
Asian/Pacific Islander.....	396,600	12,400	58,700	67,500	71,600	59,400	45,100	37,500	25,500	12,900	5,900
Black.....	124,900	4,000	17,700	17,900	21,900	22,700	16,100	11,600	7,200	4,100	1,800
Hispanic.....	123,100	4,800	20,500	20,300	24,500	21,300	12,900	8,000	5,200	2,900	2,700
Other.....	11,300	S	1,900	2,200	1,600	1,800	1,300	800	700	500	200
Scientists .....	2,200,700	58,700	263,600	283,300	357,000	349,100	326,200	263,200	171,500	78,400	49,700
Male.....	1,482,800	30,800	160,900	187,800	234,900	230,400	226,300	181,800	127,600	61,800	40,600
Female.....	717,900	27,900	102,800	95,500	122,100	118,700	99,900	81,500	43,900	16,600	9,100
White.....	1,797,800	43,000	200,700	215,300	280,800	284,100	278,900	230,100	151,300	69,500	44,100
Asian/Pacific Islander.....	237,100	8,600	37,300	43,400	45,900	38,200	26,300	19,400	11,100	4,100	2,900
Black.....	86,400	3,100	11,300	12,200	14,600	14,500	12,000	8,100	5,900	3,000	1,500
Hispanic.....	72,700	3,700	13,100	11,200	14,700	11,400	8,400	5,100	2,600	1,600	1,000
Other.....	6,700	S	1,300	1,200	1,000	900	600	600	600	200	100
Mathematical/computer scientists.....	1,182,100	23,800	130,900	165,100	226,200	202,400	178,100	136,000	78,200	29,300	12,100
Male .....	861,400	17,100	100,300	124,200	155,700	140,600	132,200	97,300	59,500	24,700	9,900
Female.....	320,600	6,700	30,600	40,900	70,600	61,800	45,900	38,700	18,700	4,600	2,200
White.....	933,200	16,500	90,300	118,600	177,800	160,800	148,600	115,600	68,600	26,100	10,400
Asian/Pacific Islander.....	155,500	4,700	25,900	31,700	29,400	26,200	18,100	12,400	5,400	900	700
Black.....	53,000	1,100	7,800	8,000	9,400	8,700	7,100	5,400	3,300	1,500	600
Hispanic.....	37,700	1,400	6,100	6,200	9,300	6,300	4,200	2,500	700	800	300
Other.....	2,700	S	900	600	400	S	S	S	S	S	S
Life-related scientists .....	346,300	14,400	41,600	42,400	50,800	52,200	50,400	40,300	28,900	14,700	10,500
Male .....	219,500	5,000	18,400	24,600	29,700	32,900	35,700	29,200	21,700	12,500	9,700
Female.....	126,800	9,400	23,200	17,800	21,200	19,300	14,700	11,100	7,200	2,200	800
White.....	288,800	10,500	33,500	34,800	39,500	43,300	44,300	35,200	26,100	12,600	9,000
Asian/Pacific Islander.....	38,300	2,300	5,300	5,400	8,400	5,200	3,300	3,600	2,300	1,300	1,100
Black.....	6,600	500	300	500	900	1,300	1,800	700	200	400	100
Hispanic.....	11,000	1,100	2,400	1,400	1,700	2,100	800	600	200	300	300
Other .....	1,600	S	S	300	300	200	300	100	100	S	S
Physical/related scientists .....	303,600	8,400	39,600	35,000	45,100	47,300	41,200	32,300	27,800	15,200	11,600
Male .....	232,800	4,600	25,400	23,400	35,000	35,600	32,300	27,400	24,200	13,500	11,400
Female.....	70,800	3,800	14,200	11,500	10,000	11,800	8,900	4,900	3,600	1,700	200
White .....	256,700	7,300	33,900	27,900	35,600	40,600	35,300	28,800	23,300	13,400	10,700

Appendix table 3-13

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## Individuals in labor force in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Asian/Pacific Islander .....	28,300	400	3,100	4,200	5,300	4,400	3,600	2,200	3,000	1,500	600
Black .....	9,400	500	1,000	1,600	2,300	1,400	900	700	800	100	100
Hispanic.....	8,300	200	1,500	1,200	1,700	800	1,200	500	700	200	S
Other .....	900	S	100	100	200	100	100	100	100	S	S
Social/related scientists .....	368,700	12,100	51,400	40,800	34,800	47,200	56,500	54,600	36,500	19,200	15,500
Male .....	169,000	4,100	16,700	15,500	14,500	21,300	26,000	27,900	22,100	11,100	9,600
Female.....	199,700	8,000	34,700	25,200	20,300	25,900	30,400	26,800	14,400	8,100	5,900
White .....	319,100	8,700	43,000	34,200	27,900	39,400	50,600	50,400	33,300	17,400	14,000
Asian/Pacific Islander .....	15,000	1,200	3,000	2,000	2,700	2,300	1,400	1,200	300	300	500
Black .....	17,300	1,100	2,200	2,100	2,000	3,100	2,200	1,300	1,600	1,100	600
Hispanic.....	15,700	900	3,100	2,300	2,100	2,100	2,200	1,500	1,100	300	200
Other .....	1,500	S	S	200	100	200	100	200	200	S	100
Engineers.....	1,396,100	26,700	156,300	178,000	237,700	232,800	168,500	165,100	106,900	73,600	50,500
Male.....	1,263,100	19,400	126,100	151,900	209,400	209,200	159,500	160,700	104,900	71,900	50,100
Female.....	133,000	7,300	30,200	26,100	28,300	23,600	9,000	4,400	2,000	1,700	500
White .....	1,143,200	20,900	120,500	138,100	194,300	192,700	140,400	140,400	88,400	62,200	45,400
Asian/Pacific Islander .....	159,400	3,800	21,500	24,100	25,700	21,200	18,800	18,100	14,400	8,800	3,000
Black.....	38,600	900	6,300	5,700	7,300	8,100	4,100	3,500	1,300	1,000	300
Hispanic.....	50,400	1,100	7,400	9,100	9,800	9,900	4,500	2,900	2,600	1,400	1,700
Other.....	4,600	S	600	1,000	600	900	700	300	100	S	S
Bachelor's											
All S&E occupations .....	2,027,200	82,500	316,900	269,100	347,100	328,700	257,400	202,300	112,200	65,600	45,500
Male.....	1,589,700	48,800	221,700	206,600	267,200	258,400	213,500	172,800	95,300	61,700	43,800
Female.....	437,500	33,700	95,200	62,500	79,900	70,300	43,900	29,500	16,900	3,900	1,700
White .....	1,707,300	62,100	250,000	222,500	294,900	278,800	223,500	176,400	98,400	58,000	42,700
Asian/Pacific Islander .....	160,900	11,400	34,500	22,500	22,300	21,100	18,800	15,300	9,000	4,900	1,100
Black.....	76,400	4,000	13,600	10,700	14,900	13,800	8,100	6,100	3,100	1,900	S
Hispanic.....	76,000	4,700	17,500	11,800	14,000	14,000	6,200	4,200	1,500	800	1,400
Other.....	6,600	S	1,300	1,600	900	1,000	900	S	S	S	S
Scientists .....	1,103,200	56,500	192,000	154,900	192,300	173,900	148,900	98,000	54,900	21,300	10,600
Male .....	754,600	29,800	121,100	107,700	129,500	116,800	110,900	71,700	38,800	18,900	9,400
Female.....	348,600	26,700	70,900	47,100	62,800	57,100	38,000	26,300	16,100	2,400	S
White .....	920,900	41,600	150,100	127,900	161,700	146,300	129,700	85,200	49,000	19,200	10,200
Asian/Pacific Islander .....	89,000	7,900	21,900	13,300	12,600	11,900	10,300	6,700	3,200	900	S
Black .....	48,500	3,100	8,300	7,200	9,400	8,200	5,400	3,700	2,200	S	S
Hispanic.....	41,600	3,600	11,000	5,800	8,000	7,000	3,400	2,200	S	S	S
Other .....	3,100	S	700	700	500	S	S	S	S	S	S

Appendix table 3-13

Individuals in labor force in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Mathematical/computer scientists.....	750,000	23,100	100,300	107,900	151,900	129,000	110,900	71,700	36,300	14,600	4,200
Male .....	546,000	16,700	77,700	82,100	102,400	88,600	85,000	52,300	25,300	12,900	2,900
Female .....	204,000	6,400	22,500	25,800	49,500	40,400	26,000	19,400	11,000	1,800	S
White .....	619,300	16,000	73,800	88,200	127,000	107,000	95,100	62,200	32,700	13,400	3,800
Asian/Pacific Islander .....	66,200	4,600	14,000	9,800	11,000	10,300	8,700	5,200	2,200	S	S
Black .....	35,800	1,100	6,700	5,300	7,000	6,300	4,400	2,900	1,300	S	S
Hispanic.....	27,100	1,400	5,500	4,100	6,600	5,000	2,800	1,300	S	S	S
Other .....	1,700	S	400	S	S	S	S	S	S	S	S
Life/related scientists.....	137,200	13,700	32,500	20,300	14,800	16,100	18,300	9,900	7,200	2,700	1,800
Male .....	77,900	4,600	14,900	11,900	8,900	8,500	13,100	7,200	4,600	2,500	1,800
Female .....	59,300	9,100	17,600	8,500	5,900	7,600	5,200	2,700	2,600	S	S
White .....	118,500	10,300	26,300	17,800	13,400	14,400	16,700	8,200	6,900	2,700	1,800
Asian/Pacific Islander .....	10,100	1,800	3,800	1,600	700	S	S	1,100	S	S	S
Black .....	2,000	500	S	S	S	S	S	S	S	S	S
Hispanic.....	5,700	1,100	2,100	600	S	1,000	S	S	S	S	S
Other .....	900	S	S	S	S	S	S	S	S	S	S
Physical/related scientists.....	142,500	8,100	31,600	18,300	20,700	20,600	14,000	11,900	9,800	3,600	3,900
Male .....	103,100	4,500	19,600	11,500	16,500	16,300	10,300	9,200	8,100	3,300	3,900
Female .....	39,400	3,600	12,000	6,800	4,200	4,300	3,800	2,700	1,700	S	S
White .....	123,000	7,000	27,400	14,800	17,100	18,600	12,200	10,700	8,100	3,000	3,900
Asian/Pacific Islander .....	8,600	S	2,100	1,400	800	900	1,000	S	S	S	S
Black .....	6,100	500	700	1,300	1,700	S	S	S	S	S	S
Hispanic.....	4,600	200	1,300	S	900	S	S	S	S	S	S
Other .....	S	S	S	S	S	S	S	S	S	S	S
Social/related scientists.....	73,400	11,600	27,700	8,400	4,900	8,100	5,700	4,400	S	S	S
Male .....	27,600	4,000	8,900	2,200	S	3,400	2,600	3,000	S	S	S
Female .....	45,800	7,600	18,800	6,100	3,200	4,700	3,100	S	S	S	S
White .....	60,200	8,300	22,600	7,100	4,200	6,200	5,700	4,100	S	S	S
Asian/Pacific Islander .....	4,000	1,100	2,000	S	S	S	S	S	S	S	S
Black .....	4,600	1,000	900	S	S	S	S	S	S	S	S
Hispanic.....	4,300	900	2,100	S	S	S	S	S	S	S	S
Other .....	S	S	S	S	S	S	S	S	S	S	S
Engineers.....	924,000	26,000	124,900	114,200	154,800	154,800	108,500	104,300	57,300	44,300	34,900
Male.....	835,100	19,000	100,600	98,800	137,700	141,600	102,600	101,100	56,500	42,700	34,500
Female .....	88,800	7,000	24,300	15,400	17,100	13,200	5,900	3,200	800	1,500	S
White .....	786,400	20,500	99,900	94,600	133,100	132,500	93,800	91,200	49,500	38,800	32,500
Asian/Pacific Islander .....	71,900	3,500	12,500	9,200	9,700	9,200	8,500	8,600	5,700	4,000	900
Black.....	27,900	900	5,400	3,500	5,500	5,600	2,700	2,300	S	S	S
Hispanic.....	34,400	1,100	6,500	6,100	6,000	7,000	2,800	2,000	1,100	S	1,200
Other .....	3,400	S	500	900	400	500	700	S	S	S	S

Appendix table 3-13

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Individuals in labor force in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
<b>Master's</b>											
All S&E occupations.....	1,049,400	2,900	93,800	143,800	171,800	166,300	155,300	145,200	95,800	48,000	26,500
Male.....	763,100	1,500	59,900	100,500	123,200	118,100	112,600	107,700	79,900	38,100	21,600
Female.....	286,300	1,400	34,000	43,200	48,600	48,300	42,700	37,500	15,900	9,800	4,900
White.....	820,500	1,800	64,300	96,800	128,300	133,000	128,100	125,100	79,600	40,900	22,500
Asian/Pacific Islander.....	155,500	1,000	22,400	33,400	29,700	21,500	16,300	13,800	11,000	4,100	2,300
Black.....	36,600	S	3,700	6,200	5,600	6,500	6,200	3,700	2,400	1,400	1,000
Hispanic.....	33,600	S	2,800	6,900	7,800	4,700	4,500	2,300	2,600	1,300	500
Other.....	3,100	S	600	500	400	600	S	300	S	S	S
Scientists .....	665,300	2,200	64,700	91,600	104,100	103,000	105,300	95,400	57,600	25,900	15,400
Male.....	416,400	1,000	36,100	57,200	65,000	64,000	65,000	58,700	42,700	16,100	10,500
Female.....	248,900	1,200	28,600	34,400	39,100	39,100	40,300	36,700	14,900	9,700	4,900
White.....	523,100	1,400	44,800	60,600	75,900	82,200	88,100	83,500	50,000	23,300	13,400
Asian/Pacific Islander.....	92,600	700	14,300	22,200	19,400	14,300	8,900	7,400	4,100	S	700
Black.....	27,700	S	3,000	4,300	4,000	4,200	5,000	2,700	2,100	1,300	1,000
Hispanic.....	19,800	S	2,000	4,100	4,500	2,100	3,100	1,600	1,300	700	S
Other.....	2,100	S	600	400	300	200	S	200	S	S	S
Mathematical/computer scientists.....	358,800	700	28,800	50,200	62,700	60,300	56,400	52,500	31,400	10,500	5,300
Male .....	257,000	400	21,200	36,600	44,100	42,300	38,900	35,700	25,100	8,200	4,500
Female.....	101,800	S	7,600	13,600	18,700	18,000	17,500	16,800	6,300	2,300	800
White.....	259,800	500	14,900	26,200	43,400	44,900	45,200	43,800	27,300	9,100	4,400
Asian/Pacific Islander.....	74,000	S	11,600	19,400	14,600	12,400	7,400	5,800	2,200	S	S
Black.....	15,300	S	1,200	2,600	2,300	1,900	2,600	2,000	1,400	700	600
Hispanic.....	8,800	S	600	1,900	2,300	1,000	1,100	900	S	S	S
Other .....	900	S	S	S	S	S	S	S	S	S	S
Life-related scientists .....	73,800	700	7,000	9,300	14,300	11,900	9,800	10,900	5,900	3,600	S
Male .....	44,500	S	2,700	5,400	7,200	6,700	7,000	7,100	5,100	2,300	S
Female.....	29,400	S	4,300	3,900	7,000	5,200	2,800	3,800	800	1,300	S
White.....	62,300	S	5,500	7,800	11,200	10,500	8,400	9,900	5,500	3,000	S
Asian/Pacific Islander.....	7,200	S	1,000	800	2,100	800	400	700	S	S	S
Black.....	2,200	S	200	S	500	S	500	S	S	S	S
Hispanic.....	1,800	S	200	400	500	S	S	S	S	S	S
Other .....	300	S	S	S	S	S	S	S	S	S	S
Physical/related scientists .....	74,400	300	6,300	8,900	11,000	12,500	14,400	8,700	6,800	3,000	2,600
Male .....	54,300	S	4,600	6,100	7,700	7,700	10,800	7,200	5,500	2,100	2,600
Female.....	20,000	S	1,700	2,800	3,300	4,800	3,600	1,400	1,300	900	S
White.....	62,900	200	5,100	7,100	8,900	10,800	12,700	7,900	5,200	2,700	2,300
Asian/Pacific Islander.....	7,200	S	700	1,300	1,300	1,000	700	500	1,400	S	S
Black.....	2,000	S	300	200	300	600	400	S	S	S	S
Hispanic.....	1,900	S	200	400	300	S	S	S	S	S	S
Other .....	400	S	S	S	S	S	S	S	S	S	S

Appendix table 3-13

Individuals in labor force in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Social/related scientists .....	158,300	500	22,600	23,100	16,100	18,400	24,800	23,300	13,600	8,800	7,100
Male .....	60,600	S	7,600	9,100	6,100	7,200	8,300	8,700	7,000	3,500	3,100
Female .....	97,600	400	15,000	14,100	10,100	11,200	16,500	14,600	6,500	5,200	4,000
White .....	138,200	400	19,300	19,500	12,400	15,900	21,900	21,800	12,000	8,500	6,500
Asian/Pacific Islander .....	4,200	S	900	700	1,400	S	S	300	S	S	S
Black .....	8,100	S	1,300	1,400	900	1,300	1,400	500	600	S	S
Hispanic .....	7,200	S	900	1,400	1,500	900	1,100	600	S	S	S
Other .....	500	S	S	S	S	S	S	S	S	S	S
Engineers .....	384,100	700	29,200	52,100	67,700	63,300	50,000	49,800	38,200	22,100	11,100
Male .....	346,700	500	23,800	43,300	58,200	54,100	47,600	49,000	37,200	22,000	11,100
Female .....	37,400	300	5,400	8,800	9,500	9,200	2,400	S	900	S	S
White .....	297,400	400	19,500	36,200	52,400	50,900	40,000	41,600	29,600	17,600	9,100
Asian/Pacific Islander .....	62,900	300	8,200	11,200	10,300	7,200	7,300	6,500	6,900	3,600	1,600
Black .....	8,900	S	700	1,900	1,500	2,300	1,200	1,000	S	S	S
Hispanic .....	13,800	S	800	2,800	3,300	2,600	1,500	600	1,300	600	S
Other .....	1,000	S	S	S	S	400	S	S	S	S	S
Doctoral											
All S&E occupations.....	489,900	S	9,000	47,100	73,200	79,300	75,400	75,300	67,900	37,400	25,100
Male .....	372,900	S	5,400	31,800	52,100	57,900	56,800	58,000	55,800	32,900	22,200
Female .....	117,000	S	3,700	15,300	21,100	21,400	18,600	17,300	12,100	4,500	2,900
White .....	386,100	S	6,700	33,000	49,900	58,100	61,800	63,500	59,700	31,900	21,600
Asian/Pacific Islander .....	78,000	S	1,800	11,400	19,100	16,300	9,700	8,200	5,400	3,700	2,200
Black .....	11,100	S	300	1,000	1,500	2,100	1,600	1,900	1,400	800	600
Hispanic .....	13,000	S	300	1,500	2,500	2,600	2,100	1,500	1,100	800	600
Other .....	1,600	S	S	200	200	200	200	200	300	200	100
Scientists .....	404,000	S	6,800	35,700	58,000	65,800	65,400	64,600	56,700	30,200	20,700
Male .....	293,500	S	3,700	22,300	38,600	45,500	47,500	47,600	44,800	25,800	17,800
Female .....	110,400	S	3,200	13,500	19,400	20,300	17,900	16,900	11,900	4,500	2,900
White .....	328,500	S	5,600	26,000	41,200	50,000	55,200	56,100	50,500	26,200	17,800
Asian/Pacific Islander .....	53,500	S	1,000	7,600	13,400	11,600	6,700	5,300	3,600	2,500	1,700
Black .....	9,400	S	100	700	1,200	1,900	1,400	1,700	1,400	700	600
Hispanic .....	11,100	S	100	1,300	2,100	2,200	1,900	1,300	1,000	700	500
Other .....	1,500	S	S	200	200	200	200	200	300	200	100
Mathematical/computer scientists.....	67,500	S	1,900	6,500	10,500	10,700	10,000	11,300	10,100	4,100	2,600
Male .....	55,300	S	1,400	4,900	8,300	8,900	8,200	8,800	8,600	3,600	2,400
Female .....	12,300	S	500	1,500	2,200	1,800	1,800	2,500	1,400	500	100
White .....	49,900	S	1,500	3,800	6,300	6,900	7,800	9,100	8,600	3,500	2,300
Asian/Pacific Islander .....	14,600	S	300	2,400	3,800	3,300	1,800	1,400	800	500	200

Appendix table 3-13

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**Individuals in labor force in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and age: 1999**

Degree, occupation, sex, and race/ethnicity	All ages	Age (years)									
		Less than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Black .....	1,400	S	S	100	100	200	100	400	400	100	100
Hispanic.....	1,600	S	S	200	300	200	200	300	300	S	S
Other .....	100	S	S	S	S	S	S	S	S	S	S
Life/related scientists .....	122,300	S	2,000	12,500	20,900	21,600	19,800	17,100	15,400	7,400	5,600
Male .....	86,900	S	800	7,400	12,900	15,300	14,100	13,100	11,800	6,800	4,800
Female.....	35,400	S	1,200	5,200	8,000	6,300	5,700	4,000	3,500	600	800
White .....	96,600	S	1,600	8,900	14,500	16,000	17,100	14,700	13,300	6,100	4,400
Asian/Pacific Islander .....	19,600	S	400	2,900	5,100	4,000	2,000	1,900	1,700	900	700
Black .....	2,200	S	S	200	400	600	300	300	200	100	100
Hispanic.....	3,500	S	S	400	800	900	400	200	200	300	300
Other .....	400	S	S	S	100	100	S	100	S	S	S
Physical/related scientists .....	86,300	S	1,800	7,700	13,200	14,200	12,800	11,700	11,300	8,600	5,000
Male .....	75,000	S	1,200	5,700	10,700	11,600	11,200	11,000	10,600	8,100	4,800
Female.....	11,300	S	500	1,900	2,600	2,600	1,600	800	700	500	100
White .....	70,400	S	1,500	5,900	9,300	11,200	10,500	10,200	10,100	7,600	4,300
Asian/Pacific Islander .....	12,500	S	300	1,500	3,100	2,500	1,900	1,200	800	800	500
Black .....	1,300	S	S	100	300	200	300	100	100	S	100
Hispanic.....	1,800	S	S	200	500	300	200	200	200	100	S
Other .....	300	S	S	S	S	S	S	100	100	S	S
Social/related scientists .....	127,800	S	1,200	9,100	13,500	19,300	22,800	24,400	19,900	10,100	7,600
Male .....	76,400	S	200	4,200	6,800	9,800	14,000	14,700	13,700	7,200	5,800
Female.....	51,400	S	900	4,900	6,700	9,500	8,800	9,700	6,200	2,800	1,800
White .....	111,600	S	1,100	7,400	11,100	15,900	19,800	22,100	18,600	9,000	6,800
Asian/Pacific Islander .....	6,800	S	100	800	1,300	1,800	1,000	900	200	300	300
Black .....	4,600	S	S	300	400	900	800	800	700	500	300
Hispanic.....	4,200	S	S	500	600	700	1,100	600	300	300	200
Other .....	700	S	S	100	100	100	100	S	200	S	100
Engineers.....	85,900	S	2,200	11,400	15,200	13,500	10,000	10,800	11,200	7,200	4,400
Male.....	79,400	S	1,700	9,600	13,500	12,400	9,300	10,400	11,000	7,200	4,300
Female.....	6,500	S	500	1,800	1,700	1,200	700	400	200	S	100
White .....	57,600	S	1,000	7,000	8,700	8,100	6,600	7,400	9,200	5,700	3,800
Asian/Pacific Islander .....	24,500	S	800	3,700	5,700	4,800	3,000	2,900	1,800	1,200	500
Black.....	1,700	S	200	300	300	300	200	200	100	100	S
Hispanic.....	1,900	S	200	300	400	300	200	200	100	100	S
Other.....	100	S	S	S	S	S	S	S	S	S	S

S suppressed for reasons of confidentiality and/or data reliability

\*Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Appendix table 3-14  
Individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
<b>All degree levels<sup>a</sup></b>								
All S&E occupations.....	4,120,700	3,540,800	3,267,400	273,400	56,000	523,900	364,400	159,400
Male.....	3,126,200	2,705,000	2,570,200	134,800	40,900	380,300	325,000	55,400
Female.....	994,400	835,800	697,200	138,600	15,100	143,500	39,500	104,100
White.....	3,406,400	2,896,600	2,658,900	237,600	44,400	465,500	337,600	127,900
Asian/Pacific Islander .....	430,300	390,500	373,400	17,100	6,100	33,800	14,100	19,700
Black.....	135,100	121,600	113,300	8,400	3,300	10,200	6,000	4,200
Hispanic.....	135,800	120,900	111,400	9,500	2,200	12,700	6,100	6,600
Other.....	13,000	11,300	10,500	800	100	1,700	700	1,000
Scientists .....	2,464,500	2,170,500	1,949,400	221,100	30,200	263,800	146,100	117,700
Male.....	1,626,100	1,464,800	1,373,400	91,400	18,000	143,400	110,000	33,400
Female.....	838,400	705,800	576,000	129,700	12,200	120,500	36,100	84,300
White.....	2,025,100	1,774,200	1,580,400	193,800	23,600	227,300	132,000	95,300
Asian/Pacific Islander .....	257,100	233,900	222,100	11,800	3,200	20,000	6,300	13,600
Black.....	94,200	84,000	76,300	7,600	2,400	7,900	4,800	3,100
Hispanic.....	80,200	71,800	64,700	7,100	900	7,500	2,700	4,800
Other.....	7,900	6,700	5,900	800	100	1,200	300	900
Mathematical/computer scientists.....	1,277,900	1,167,400	1,092,400	74,900	14,700	95,800	52,700	43,100
Male .....	913,700	850,600	816,400	34,200	10,800	52,300	38,900	13,300
Female.....	364,200	316,700	276,000	40,700	3,900	43,500	13,800	29,700
White.....	1,018,600	922,200	856,900	65,300	11,100	85,400	47,300	38,100
Asian/Pacific Islander .....	161,000	153,600	148,800	4,700	1,900	5,500	2,400	3,100
Black .....	55,600	51,400	48,900	2,500	1,700	2,600	1,500	1,100
Hispanic.....	39,800	37,600	35,200	2,400	S	2,100	1,400	700
Other.....	2,900	2,700	2,600	S	S	S	S	S
Life and related scientists .....	406,100	341,900	311,800	30,100	4,400	59,800	28,800	31,000
Male .....	251,000	217,500	204,000	13,400	2,100	31,500	22,400	9,100
Female.....	155,100	124,400	107,700	16,700	2,300	28,300	6,400	21,800
White.....	334,800	285,100	259,400	25,800	3,600	46,100	24,400	21,700
Asian/Pacific Islander .....	46,700	37,700	35,700	1,900	600	8,400	2,300	6,100
Black .....	9,200	6,600	5,700	900	S	2,600	1,300	1,200
Hispanic.....	13,400	10,900	9,600	1,400	100	2,400	800	1,600
Other.....	2,000	1,600	1,400	200	S	400	S	400
Physical and related scientists .....	360,600	297,900	272,000	25,900	5,800	57,000	39,300	17,700
Male .....	272,900	229,400	213,900	15,500	3,400	40,000	33,300	6,700
Female.....	87,700	68,400	58,100	10,400	2,400	17,000	6,000	10,900
White .....	306,900	252,500	229,300	23,200	4,200	50,200	37,000	13,200

Appendix table 3-14

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Individuals in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Asian/Pacific Islander .....	32,800	27,800	26,100	1,700	500	4,400	1,000	3,500
Black .....	10,800	8,800	8,400	400	600	1,400	1,100	300
Hispanic.....	9,200	7,800	7,200	600	500	900	200	600
Other .....	1,000	900	900	S	S	S	S	S
Social and related scientists .....	419,900	363,400	273,200	90,200	5,300	51,300	25,200	26,000
Male .....	188,500	167,300	139,000	28,300	1,700	19,600	15,400	4,200
Female.....	231,400	196,200	134,200	62,000	3,600	31,700	9,900	21,800
White .....	364,700	314,400	234,800	79,600	4,700	45,600	23,300	22,300
Asian/Pacific Islander .....	16,700	14,800	11,400	3,400	S	1,700	700	1,000
Black .....	18,600	17,200	13,200	3,900	100	1,300	900	400
Hispanic.....	17,800	15,500	12,700	2,800	200	2,100	300	1,800
Other .....	2,100	1,500	1,000	500	S	600	S	500
Engineers .....	1,656,200	1,370,300	1,318,000	52,300	25,800	260,000	218,300	41,700
Male.....	1,500,100	1,240,200	1,196,900	43,400	22,900	237,000	215,000	22,000
Female.....	156,000	130,000	121,200	8,900	2,900	23,100	3,300	19,800
White .....	1,381,300	1,122,400	1,078,500	43,800	20,800	238,200	205,600	32,600
Asian/Pacific Islander .....	173,200	156,600	151,300	5,300	2,800	13,800	7,700	6,100
Black.....	40,900	37,700	36,900	700	900	2,300	1,200	1,100
Hispanic.....	55,600	49,100	46,700	2,400	1,300	5,300	3,400	1,900
Other.....	5,100	4,600	4,600	S	S	500	400	S
Bachelor's								
All S&E occupations.....	2,350,500	1,994,400	1,870,600	123,800	32,700	323,300	223,200	100,100
Male.....	1,831,300	1,564,700	1,496,100	68,700	25,000	241,500	206,800	34,700
Female.....	519,200	429,700	374,500	55,200	7,800	81,700	16,400	65,300
White .....	1,996,900	1,680,900	1,571,500	109,400	26,400	289,500	209,000	80,500
Asian/Pacific Islander .....	179,300	158,300	152,000	6,300	2,600	18,400	6,900	11,500
Black.....	82,600	73,900	71,100	2,800	2,500	6,200	3,500	2,800
Hispanic.....	83,800	74,800	69,800	5,000	1,200	7,700	3,300	4,500
Other.....	7,900	6,600	6,200	S	S	1,400	500	800
Scientists .....	1,228,500	1,087,100	997,300	89,800	16,200	125,200	54,000	71,200
Male.....	815,200	744,300	705,000	39,400	10,300	60,600	40,400	20,200
Female.....	413,300	342,800	292,300	50,500	5,900	64,600	13,600	51,000
White .....	1,027,000	908,100	828,300	79,800	12,800	106,000	48,500	57,600
Asian/Pacific Islander .....	98,900	87,700	83,800	3,900	1,300	9,900	2,000	7,900
Black.....	53,100	46,600	44,200	2,400	1,900	4,500	2,600	1,900
Hispanic.....	45,500	41,500	38,200	3,300	S	3,900	S	3,100
Other.....	4,000	3,100	2,700	S	S	900	S	800

Appendix table 3-14

Individuals in S&amp;E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Mathematical/computer scientists.....	804,900	740,500	700,600	39,900	9,500	54,900	25,200	29,700
Male .....	572,600	538,900	522,100	16,800	7,100	26,700	19,000	7,700
Female.....	232,300	201,600	178,500	23,100	2,500	28,200	6,200	22,000
White .....	669,100	612,200	575,600	36,600	7,100	49,800	22,600	27,200
Asian/Pacific Islander .....	68,400	65,400	64,000	1,400	S	2,200	900	1,300
Black .....	37,700	34,200	33,700	500	1,600	1,900	1,100	800
Hispanic.....	28,000	27,000	25,600	1,400	S	900	S	400
Other .....	1,800	1,700	1,700	S	S	S	S	S
Life and related scientists .....	166,500	135,500	120,400	15,100	1,700	29,200	8,400	20,900
Male .....	90,400	76,900	69,800	7,100	S	12,500	5,800	6,800
Female.....	76,000	58,600	50,500	8,000	700	16,700	2,600	14,100
White .....	139,500	117,100	104,100	13,000	1,400	20,900	6,700	14,200
Asian/Pacific Islander .....	15,400	9,800	8,900	900	S	5,200	S	4,400
Black .....	3,400	2,000	1,700	300	S	1,400	S	800
Hispanic.....	7,100	5,700	4,900	800	S	1,400	S	1,100
Other .....	1,200	900	700	S	S	S	S	S
Physical and related scientists .....	172,700	139,600	127,400	12,200	2,900	30,200	18,700	11,500
Male .....	121,200	101,700	94,600	7,000	1,400	18,100	14,500	3,700
Female.....	51,500	38,000	32,700	5,200	1,500	12,100	4,300	7,800
White .....	149,200	120,600	109,200	11,400	2,400	26,200	17,400	8,800
Asian/Pacific Islander .....	10,700	8,400	8,000	S	S	2,100	S	1,800
Black .....	7,400	5,800	5,700	100	S	1,300	1,000	300
Hispanic.....	5,100	4,600	4,200	300	S	500	S	500
Other .....	300	S	S	S	S	S	S	S
Social and related scientists .....	84,400	71,400	48,900	22,500	2,000	11,000	1,700	9,200
Male .....	30,900	26,800	18,400	8,500	S	3,300	S	2,100
Female.....	53,500	44,600	30,600	14,100	1,200	7,700	S	7,100
White .....	69,300	58,300	39,500	18,800	1,900	9,100	1,700	7,400
Asian/Pacific Islander .....	4,400	4,000	2,800	1,300	S	S	S	S
Black .....	4,600	4,600	3,200	1,400	S	S	S	S
Hispanic.....	5,400	4,200	3,500	800	S	1,100	S	1,100
Other .....	S	S	S	S	S	S	S	S
Engineers .....	1,122,000	907,400	873,300	34,000	16,600	198,000	169,200	28,800
Male .....	1,016,100	820,400	791,100	29,300	14,700	181,000	166,400	14,500
Female.....	105,900	86,900	82,200	4,700	1,900	17,100	2,800	14,300
White .....	969,900	772,800	743,200	29,600	13,600	183,500	160,500	23,000
Asian/Pacific Islander .....	80,400	70,600	68,200	2,400	1,300	8,600	4,900	3,600
Black .....	29,600	27,300	26,900	400	600	1,700	S	800
Hispanic.....	38,200	33,300	31,600	1,700	1,100	3,800	2,500	1,400
Other .....	3,900	3,400	3,400	S	S	400	400	S

Appendix table 3-14

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**Individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999**

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Master's								
All S&E occupations.....	1,188,100	1,032,100	921,500	110,600	17,300	138,800	90,800	48,000
Male.....	853,800	751,200	705,200	46,000	11,900	90,800	74,100	16,700
Female.....	334,300	280,900	216,400	64,500	5,400	48,000	16,700	31,300
White .....	941,500	807,200	713,300	93,900	13,300	121,000	83,000	38,000
Asian/Pacific Islander .....	166,600	153,000	144,400	8,600	2,500	11,000	4,100	7,000
Black.....	39,600	35,900	31,400	4,600	700	3,000	2,000	1,000
Hispanic.....	37,300	32,800	29,600	3,100	800	3,700	1,700	2,000
Other.....	3,300	3,100	2,800	300	S	S	S	S
Scientists .....	752,300	655,500	559,900	95,700	9,700	87,000	51,000	36,000
Male.....	461,000	411,400	376,500	34,900	5,000	44,600	34,800	9,800
Female.....	291,300	244,200	183,400	60,800	4,700	42,400	16,300	26,200
White .....	598,400	516,000	433,500	82,500	7,200	75,200	46,200	29,100
Asian/Pacific Islander .....	99,300	91,100	85,100	5,900	1,500	6,700	2,100	4,600
Black.....	30,100	27,300	23,000	4,300	400	2,400	1,700	700
Hispanic.....	22,300	19,100	16,400	2,700	600	2,500	1,000	1,500
Other.....	2,200	2,100	1,800	300	S	S	S	S
Mathematical/computer scientists.....	393,700	354,100	323,200	30,900	4,700	34,900	22,900	12,000
Male .....	277,700	253,700	238,800	14,800	3,300	20,700	16,100	4,600
Female.....	116,000	100,500	84,400	16,100	1,400	14,200	6,800	7,400
White .....	290,400	256,200	230,600	25,600	3,600	30,600	20,800	9,800
Asian/Pacific Islander .....	76,700	72,900	70,000	2,900	1,000	2,700	1,100	1,600
Black.....	16,000	15,200	13,800	1,500	S	600	400	200
Hispanic.....	9,800	8,800	7,900	900	S	900	S	300
Other .....	900	900	800	S	S	S	S	S
Life and related scientists .....	86,700	72,500	64,500	8,100	1,300	12,900	6,600	6,200
Male .....	50,700	44,000	41,100	3,000	400	6,300	4,800	1,400
Female.....	36,000	28,500	23,400	5,100	800	6,600	1,800	4,800
White .....	72,000	61,200	54,200	7,000	1,000	9,800	5,200	4,600
Asian/Pacific Islander .....	8,900	7,100	6,500	500	S	1,600	S	1,100
Black.....	3,100	2,200	1,900	S	S	900	S	S
Hispanic.....	2,400	1,800	1,600	200	S	500	S	400
Other .....	300	300	S	S	S	S	S	S
Physical and related scientists.....	88,500	73,000	63,800	9,100	1,400	14,100	9,600	4,500
Male .....	65,200	53,700	48,800	4,900	600	10,900	8,500	2,400
Female.....	23,200	19,300	15,100	4,200	800	3,200	1,100	2,100
White .....	75,100	62,300	54,500	7,800	600	12,200	9,200	3,000
Asian/Pacific Islander .....	8,800	7,100	6,100	900	S	1,500	S	1,400
Black.....	2,100	1,800	1,600	200	S	S	S	S
Hispanic.....	2,100	1,400	1,300	S	S	S	S	S
Other .....	400	400	300	S	S	S	S	S

Appendix table 3-14  
Individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Social and related scientists.....	183,400	155,900	108,400	47,500	2,300	25,200	11,900	13,300
Male .....	67,400	60,000	47,800	12,200	600	6,700	5,300	1,500
Female .....	116,100	95,900	60,500	35,300	1,700	18,400	6,600	11,800
White .....	160,800	136,200	94,100	42,100	2,000	22,700	10,900	11,700
Asian/Pacific Islander .....	5,000	4,000	2,400	1,600	S	800	S	500
Black .....	8,900	8,100	5,800	2,200	S	800	S	S
Hispanic.....	8,000	7,100	5,600	1,500	S	800	S	700
Other .....	600	500	400	S	S	S	S	S
Engineers.....	435,900	376,500	361,700	14,900	7,600	51,800	39,800	12,000
Male.....	392,800	339,800	328,700	11,100	6,900	46,200	39,300	6,800
Female .....	43,000	36,700	33,000	3,800	700	5,600	S	5,200
White .....	343,100	291,300	279,800	11,400	6,100	45,700	36,800	8,900
Asian/Pacific Islander .....	67,300	62,000	59,300	2,700	1,000	4,300	2,000	2,400
Black.....	9,500	8,600	8,300	300	300	600	S	300
Hispanic.....	15,000	13,600	13,200	400	S	1,200	700	500
Other .....	1,000	1,000	1,000	S	S	S	S	S
Doctoral								
All S&E occupations.....	547,800	484,100	447,100	37,000	5,800	57,900	48,000	9,900
Male.....	418,200	368,900	349,600	19,200	4,000	45,300	42,000	3,400
Female .....	129,600	115,200	97,500	17,700	1,700	12,600	6,100	6,600
White .....	438,000	381,600	349,100	32,500	4,500	51,900	43,500	8,300
Asian/Pacific Islander .....	81,900	77,000	74,800	2,200	1,000	3,900	2,900	1,000
Black.....	11,900	11,000	10,000	1,000	100	800	500	300
Hispanic .....	14,200	12,900	11,700	1,200	100	1,100	900	200
Other .....	1,800	1,600	1,500	100	S	200	200	S
Scientists .....	452,200	399,900	366,100	33,800	4,100	48,200	39,000	9,200
Male.....	329,500	290,900	274,400	16,400	2,700	36,000	33,100	2,900
Female .....	122,700	109,100	91,700	17,400	1,400	12,200	5,900	6,300
White .....	372,000	325,100	295,400	29,700	3,400	43,500	35,700	7,800
Asian/Pacific Islander .....	56,500	53,100	51,100	1,900	400	3,000	2,000	1,000
Black.....	10,200	9,300	8,300	1,000	100	700	500	200
Hispanic .....	11,900	11,000	9,900	1,100	100	800	700	200
Other .....	1,700	1,500	1,300	100	S	200	200	S
Mathematical/computer scientists.....	72,800	67,100	63,000	4,100	500	5,300	4,400	900
Male .....	59,400	54,900	52,300	2,600	400	4,200	3,500	600
Female .....	13,400	12,200	10,700	1,500	100	1,100	800	300
White .....	54,200	49,500	46,300	3,100	400	4,300	3,600	700
Asian/Pacific Islander .....	15,100	14,500	14,000	400	S	600	400	200

Appendix table 3-14  
Individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and employment status: 1999

Degree and occupation	All individuals	Employed			Unemployed, seeking job	Not in labor force		
		Total	Full time	Part time		Total	Retired	Not seeking job
Black .....	1,500	1,400	1,000	400	S	100	S	S
Hispanic.....	1,900	1,600	1,600	S	S	300	300	S
Other .....	100	S	S	S	S	S	S	S
Life and related scientists .....	137,500	121,100	115,300	5,800	1,200	15,200	12,000	3,200
Male .....	98,100	86,200	83,400	2,800	600	11,200	10,300	900
Female.....	39,400	34,900	31,900	3,000	600	4,000	1,700	2,300
White .....	110,300	95,600	91,000	4,600	1,000	13,800	11,100	2,700
Asian/Pacific Islander .....	20,700	19,500	18,900	500	200	1,100	700	400
Black .....	2,200	2,100	1,900	200	S	100	S	S
Hispanic.....	3,800	3,500	3,100	400	100	300	200	100
Other .....	500	400	400	S	S	S	S	S
Physical and related scientists .....	99,000	84,900	80,500	4,400	1,500	12,700	11,000	1,700
Male .....	86,000	73,700	70,200	3,500	1,300	11,000	10,300	700
Female.....	13,000	11,200	10,300	900	100	1,700	700	1,000
White .....	82,200	69,200	65,400	3,800	1,200	11,800	10,300	1,400
Asian/Pacific Islander .....	13,300	12,300	11,900	400	200	800	500	300
Black .....	1,300	1,200	1,200	100	S	S	S	S
Hispanic.....	1,900	1,800	1,700	100	S	100	100	S
Other .....	300	300	300	S	S	S	S	S
Social and related scientists.....	142,800	126,900	107,300	19,600	900	15,000	11,600	3,300
Male .....	85,900	76,100	68,500	7,600	300	9,500	8,900	700
Female.....	56,800	50,800	38,800	12,000	600	5,400	2,700	2,700
White .....	125,300	110,800	92,700	18,100	800	13,700	10,700	3,000
Asian/Pacific Islander .....	7,300	6,800	6,200	500	S	500	400	100
Black .....	5,100	4,500	4,200	300	100	600	400	100
Hispanic.....	4,300	4,100	3,500	600	S	100	100	100
Other .....	700	700	600	100	S	S	S	S
Engineers.....	95,600	84,200	81,000	3,200	1,700	9,700	9,000	700
Male.....	88,700	78,000	75,200	2,800	1,300	9,300	8,900	400
Female.....	6,900	6,200	5,800	400	400	400	S	300
White .....	66,000	56,500	53,700	2,800	1,100	8,400	7,900	500
Asian/Pacific Islander .....	25,400	23,900	23,700	200	600	900	900	100
Black.....	1,800	1,700	1,600	S	S	S	S	S
Hispanic.....	2,200	1,900	1,900	100	S	300	300	S
Other .....	200	100	100	S	S	S	S	S

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

NOTE: For unemployed individuals, occupation is for previous reported job.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Appendix table 3-15

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
 (Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
<b>All degree levels<sup>a</sup></b>									
All S&E occupations.....	60,000	46,000	57,000	64,000	69,000	70,000	70,600	72,000	70,000
Male.....	64,000	48,800	60,000	66,000	70,000	70,700	72,100	74,000	70,100
Female.....	50,000	40,000	50,000	57,000	60,000	58,700	60,000	57,000	52,000
White .....	61,000	45,000	56,000	65,000	70,000	70,000	71,000	73,000	70,000
Asian/Pacific Islander .....	62,000	53,000	63,000	68,000	70,000	72,000	70,000	67,200	64,800
Black.....	53,000	45,000	54,000	55,000	60,000	58,000	53,000	53,000	46,500
Hispanic.....	55,000	44,000	56,000	58,000	65,000	61,000	68,500	67,000	68,000
Other.....	52,000	42,000	50,000	57,000	55,000	65,000	75,000	88,000	S
Scientists .....	58,800	43,000	54,500	62,000	65,300	65,000	67,600	68,100	65,000
Male.....	62,000	47,800	58,500	65,900	70,000	68,000	70,000	71,000	70,000
Female.....	50,000	37,000	48,000	55,000	58,100	58,000	60,000	56,000	49,000
White .....	59,700	41,000	53,000	62,000	65,000	65,000	68,000	70,000	69,000
Asian/Pacific Islander .....	60,000	54,000	63,000	67,000	73,000	69,000	67,500	60,000	58,200
Black.....	50,000	44,000	50,000	51,500	58,000	55,600	50,000	50,000	46,500
Hispanic.....	51,000	41,000	56,000	56,000	65,000	56,000	60,000	54,500	55,000
Other.....	45,000	38,000	47,500	50,000	36,000	54,000	74,200	70,000	S
Mathematical/computer scientists.....	64,000	55,000	62,000	66,000	69,000	70,000	70,000	69,000	64,000
Male .....	65,900	55,000	64,000	70,000	71,000	71,000	72,000	70,000	65,000
Female.....	58,000	50,000	57,000	58,400	60,000	60,000	63,000	62,000	58,000
White .....	65,000	53,000	60,000	67,000	68,600	70,000	70,000	69,200	65,000
Asian/Pacific Islander .....	65,000	60,000	70,000	70,000	75,000	70,000	62,000	69,100	59,000
Black .....	54,000	49,000	54,000	53,700	60,000	57,000	48,000	34,500	S
Hispanic.....	59,000	51,000	65,000	58,600	68,000	59,000	60,000	S	S
Other .....	54,000	54,000	30,000	60,000	S	S	S	S	S
Life and related scientists .....	47,700	29,000	43,000	52,800	60,000	56,000	63,000	61,000	72,100
Male .....	51,000	30,000	45,000	53,000	61,000	60,000	67,000	69,000	73,500
Female.....	39,000	28,100	40,000	49,800	55,000	52,000	50,600	46,000	40,000
White .....	49,000	28,100	42,000	53,000	60,000	58,000	63,000	61,000	72,100
Asian/Pacific Islander .....	43,000	30,000	44,700	50,400	76,000	54,000	80,000	68,000	58,200
Black .....	42,000	30,000	49,000	48,000	44,000	41,500	57,000	30,900	S
Hispanic.....	35,500	25,000	40,000	48,000	40,000	28,500	34,000	80,000	S
Other .....	39,000	35,000	43,000	87,000	43,000	43,100	S	S	S
Physical and related scientists .....	52,000	35,000	46,000	60,000	63,800	62,500	65,000	73,000	60,000
Male .....	56,000	35,000	47,500	60,000	65,000	68,000	66,000	75,000	74,000
Female.....	41,400	33,300	43,000	49,000	51,000	55,000	50,000	50,000	49,000
White .....	52,300	34,000	46,000	60,000	65,000	65,000	65,000	79,800	69,000
Asian/Pacific Islander .....	53,400	40,000	50,000	65,000	65,000	68,000	85,000	54,000	52,000
Black .....	43,000	30,000	45,000	43,000	41,700	38,000	43,000	S	S
Hispanic.....	43,000	30,000	37,000	51,000	50,000	48,000	89,500	79,000	S
Other .....	49,000	32,500	60,000	S	39,000	80,000	S	S	S

Appendix table 3-15

(Page 2 of 6)

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
(Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
Social and related scientists.....	47,000	33,000	42,000	50,000	60,000	60,000	63,000	64,000	62,000
Male .....	54,000	35,000	46,000	56,000	66,000	62,000	64,500	61,000	65,000
Female.....	40,000	32,000	39,000	45,000	52,000	58,000	62,000	64,000	40,000
White .....	48,000	32,500	42,000	51,000	60,000	59,000	63,000	64,000	65,000
Asian/Pacific Islander .....	48,000	36,000	49,400	65,000	66,000	68,000	60,000	75,000	S
Black .....	40,000	30,000	35,000	45,000	48,000	59,000	30,000	S	S
Hispanic.....	40,000	35,600	46,000	45,000	45,000	45,000	75,000	S	S
Other .....	49,000	45,000	50,000	50,000	55,000	53,000	S	S	S
Engineers.....	65,000	49,000	60,000	65,000	70,900	73,000	75,000	75,000	71,700
Male.....	65,000	50,000	60,000	66,000	72,000	74,000	76,000	75,000	73,000
Female.....	55,500	47,000	58,000	64,000	60,000	60,000	65,000	73,000	68,100
White .....	65,000	48,900	59,800	66,000	72,000	73,000	76,800	75,000	71,700
Asian/Pacific Islander .....	64,400	52,000	63,200	68,000	69,600	75,000	70,200	70,000	69,000
Black.....	58,000	48,000	60,000	59,300	65,000	65,000	70,000	S	S
Hispanic.....	58,000	47,000	56,000	60,000	65,000	75,000	72,000	67,000	80,000
Other .....	60,000	44,000	52,000	63,000	S	73,000	S	S	S
Bachelor's									
All S&E occupations.....	59,000	43,000	53,000	61,000	67,000	65,600	69,000	70,000	66,000
Male.....	60,000	45,000	55,000	63,000	68,600	68,400	70,000	70,000	67,200
Female .....	50,000	38,000	47,800	56,900	58,000	55,600	55,000	56,000	58,000
White .....	60,000	42,000	53,000	62,000	67,500	67,000	69,500	70,000	67,000
Asian/Pacific Islander .....	58,000	45,000	55,000	60,000	66,000	69,000	62,000	60,000	60,000
Black.....	50,600	44,000	50,000	54,000	60,000	56,000	53,000	53,000	63,400
Hispanic.....	53,500	42,600	53,000	57,000	64,000	59,000	60,000	60,000	68,000
Other .....	46,000	36,000	47,500	57,000	60,000	73,000	S	S	S
Scientists .....	55,000	40,000	50,000	60,000	63,800	62,000	64,000	61,800	59,000
Male.....	60,000	44,000	54,000	64,200	66,000	65,000	65,000	65,000	63,400
Female .....	48,000	33,300	45,000	55,200	57,000	55,000	51,600	55,000	52,000
White .....	56,000	40,000	50,000	60,700	65,000	62,700	64,700	64,000	62,000
Asian/Pacific Islander .....	55,000	45,500	53,000	63,000	61,000	68,600	62,000	54,000	50,000
Black.....	48,000	42,000	45,000	50,000	58,000	55,000	50,000	50,000	S
Hispanic.....	50,000	40,000	56,000	57,000	58,000	55,000	50,000	S	S
Other .....	36,000	33,000	S	40,500	35,000	S	S	S	S

Appendix table 3-15

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
 (Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
Mathematical/computer scientists.....	60,800	50,000	59,000	65,000	66,000	68,000	67,600	66,000	63,400
Male .....	64,000	50,000	60,000	67,000	70,000	70,000	69,000	70,000	65,000
Female.....	56,000	47,000	54,000	58,000	60,000	58,700	62,000	64,000	58,000
White .....	62,200	50,000	60,000	65,000	67,000	70,000	68,000	68,000	64,000
Asian/Pacific Islander .....	60,000	53,000	58,200	63,000	70,000	70,000	62,000	60,000	S
Black .....	50,000	45,000	50,000	53,000	58,000	60,000	48,000	S	S
Hispanic.....	57,000	47,800	64,800	57,000	66,000	62,000	S	S	S
Other .....	35,000	45,000	S	S	S	S	S	S	S
Life and related scientists .....	37,000	25,000	36,000	40,000	47,500	45,000	50,000	50,000	55,000
Male .....	41,500	25,000	36,000	45,000	46,700	45,000	51,800	54,000	S
Female.....	33,600	24,000	35,000	36,000	47,500	48,000	34,000	36,000	S
White .....	38,000	25,000	36,000	41,000	48,000	48,000	50,000	51,000	55,000
Asian/Pacific Islander .....	35,000	26,000	35,000	S	S	42,000	S	S	S
Black .....	36,000	28,000	S	S	S	S	S	S	S
Hispanic.....	28,500	19,500	S	S	S	S	S	S	S
Other .....	36,000	S	S	S	S	S	S	S	S
Physical and related scientists.....	45,000	30,000	40,000	52,000	53,400	55,000	60,000	56,500	52,000
Male .....	47,000	28,000	40,000	52,500	55,000	55,000	62,000	68,000	52,000
Female.....	38,000	31,000	36,000	47,500	50,000	55,000	40,700	50,000	S
White .....	45,000	30,000	40,000	52,000	55,000	55,000	60,000	70,000	50,000
Asian/Pacific Islander .....	41,400	36,000	40,000	S	40,000	55,000	S	52,800	S
Black .....	43,000	29,000	45,000	36,000	S	S	S	S	S
Hispanic.....	37,000	29,000	36,000	S	S	44,000	S	S	S
Other .....	S	S	S	S	S	S	S	S	S
Social and related scientists.....	30,000	27,500	28,000	48,000	70,000	45,000	36,000	S	S
Male .....	35,000	26,500	26,000	S	70,000	S	35,000	S	S
Female.....	29,700	28,000	28,000	37,000	S	45,000	S	S	S
White .....	30,000	26,400	28,000	48,000	80,000	45,000	36,000	S	S
Asian/Pacific Islander .....	30,000	30,000	S	S	S	S	S	S	S
Black .....	30,000	18,000	S	S	S	S	S	S	S
Hispanic.....	27,000	26,000	S	S	S	S	S	S	S
Other .....	S	S	S	S	S	S	S	S	S
Engineers.....	60,000	45,000	55,000	62,000	70,000	70,000	72,000	72,000	69,000
Male.....	62,000	45,000	55,000	62,000	70,000	70,000	72,000	72,000	70,000
Female.....	52,000	45,000	54,000	60,500	60,000	60,000	65,000	S	68,100
White .....	62,000	45,000	55,000	63,000	70,000	70,000	73,000	73,000	70,000
Asian/Pacific Islander .....	59,100	45,000	58,000	60,000	66,000	69,000	60,300	65,000	64,800
Black.....	56,000	45,000	57,000	59,300	64,000	63,000	70,000	S	S
Hispanic.....	56,000	45,000	53,000	58,000	64,000	70,000	68,500	60,000	70,500
Other.....	60,000	40,000	60,000	63,000	S	73,000	S	S	S

Appendix table 3-15

(Page 4 of 6)

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
(Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
<b>Master's</b>									
All S&E occupations.....	64,000	52,500	63,000	69,100	71,600	72,000	75,000	72,000	77,000
Male.....	68,000	56,000	65,000	70,000	75,000	74,000	75,000	75,000	80,000
Female.....	50,000	42,000	54,000	54,800	56,000	58,000	61,000	56,000	41,000
White .....	64,400	50,000	61,600	69,100	72,000	72,000	75,000	72,000	76,000
Asian/Pacific Islander .....	65,300	58,000	70,000	75,000	75,000	72,000	70,700	73,000	89,900
Black.....	54,000	50,000	65,000	51,000	59,000	58,000	30,000	S	S
Hispanic.....	58,000	50,000	62,000	61,000	72,000	60,000	72,400	67,000	S
Other.....	54,000	54,000	54,000	73,800	S	S	S	S	S
Scientists .....	60,000	49,500	60,000	63,000	65,000	62,000	68,000	64,000	59,700
Male.....	63,900	55,000	64,000	67,900	72,000	68,000	70,000	69,000	72,100
Female.....	48,000	39,200	49,000	50,000	55,000	58,000	61,000	56,000	41,000
White .....	58,000	44,000	56,000	61,000	65,000	63,500	68,000	64,000	59,700
Asian/Pacific Islander .....	65,000	60,000	70,000	70,000	75,000	60,000	60,000	56,000	S
Black.....	50,000	48,000	62,000	45,000	55,900	54,000	30,000	S	S
Hispanic.....	51,000	43,000	58,000	55,000	65,000	52,000	S	S	S
Other.....	52,500	52,500	55,000	S	S	S	S	S	S
Mathematical/computer scientists.....	68,000	60,000	68,000	72,000	75,000	71,000	75,000	65,000	74,000
Male .....	70,000	62,000	70,000	75,000	80,000	75,000	76,000	70,000	72,000
Female.....	61,000	57,000	62,000	62,700	69,600	63,000	67,000	62,000	S
White .....	68,000	60,000	65,000	70,600	75,000	74,000	75,400	65,000	74,000
Asian/Pacific Islander .....	70,000	62,000	75,000	77,000	80,000	61,000	60,000	60,000	S
Black .....	60,000	54,800	72,000	63,000	63,900	54,000	S	S	S
Hispanic.....	66,000	65,000	75,000	74,000	76,000	52,000	S	S	S
Other .....	55,000	S	S	S	S	S	S	S	S
Life and related scientists .....	43,800	33,000	42,000	41,300	52,000	50,000	54,000	49,300	58,000
Male .....	46,000	30,000	42,000	40,000	52,000	52,000	54,000	51,000	S
Female.....	41,000	34,000	41,000	49,700	50,000	49,000	51,000	46,000	S
White .....	45,000	32,000	40,000	41,300	56,000	49,000	54,000	49,300	S
Asian/Pacific Islander .....	41,000	35,000	42,800	40,000	S	52,000	S	S	S
Black .....	42,000	34,000	50,000	S	44,000	S	S	S	S
Hispanic.....	40,000	28,000	40,000	S	S	S	S	S	S
Other .....	S	S	S	S	S	S	S	S	S
Physical and related scientists.....	52,000	36,000	52,000	62,200	63,000	69,000	62,300	73,000	45,000
Male .....	58,000	35,000	54,000	65,000	70,000	70,000	65,000	73,000	69,000
Female.....	42,400	36,000	46,000	52,000	41,000	42,400	57,000	S	S
White .....	55,000	36,000	55,000	62,200	65,000	69,000	62,300	79,800	45,000
Asian/Pacific Islander .....	50,000	43,000	46,000	63,000	51,000	S	S	55,000	S
Black .....	44,700	33,000	44,700	S	S	S	S	S	S
Hispanic.....	36,000	32,000	55,000	S	S	S	S	S	S
Other .....	50,000	S	S	S	S	S	S	S	S

Appendix table 3-15

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
 (Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
Social and related scientists.....	41,000	32,000	40,000	45,000	46,000	50,000	60,000	64,000	80,000
Male.....	47,500	32,500	39,000	50,000	53,000	50,000	60,000	50,000	80,000
Female.....	38,000	31,000	40,000	41,000	46,000	51,400	60,000	64,000	S
White.....	42,000	30,000	39,000	46,000	50,000	50,000	60,000	64,000	80,000
Asian/Pacific Islander.....	48,000	36,000	35,000	S	S	S	S	S	S
Black.....	35,000	29,000	37,500	45,000	40,000	58,000	S	S	S
Hispanic.....	42,000	38,000	46,000	42,000	S	S	S	S	S
Other.....	40,000	S	S	S	S	S	S	S	S
Engineers.....	70,000	56,000	66,000	74,000	78,000	79,000	80,000	84,000	95,000
Male.....	70,000	56,000	67,000	75,000	78,000	79,000	80,000	84,000	95,000
Female.....	61,000	55,000	65,000	70,000	70,000	76,600	S	S	S
White.....	71,000	57,000	67,000	75,000	79,000	79,100	82,000	82,500	100,000
Asian/Pacific Islander.....	68,000	55,000	65,000	75,000	70,000	78,000	75,000	95,000	90,000
Black.....	62,000	54,000	65,000	59,000	78,000	105,000	S	S	S
Hispanic.....	62,000	54,100	65,000	66,000	78,000	75,800	72,400	S	S
Other.....	60,000	57,500	50,000	S	S	S	S	S	S
Doctoral									
All S&E occupations.....	68,000	50,000	61,500	68,000	75,000	78,000	80,000	85,500	85,000
Male.....	71,000	54,000	65,000	70,000	78,000	80,000	82,000	86,000	87,000
Female.....	55,000	42,000	55,000	58,800	65,500	69,000	72,000	75,000	70,000
White.....	68,000	48,000	60,000	67,000	75,000	78,000	80,000	86,000	85,000
Asian/Pacific Islander.....	70,000	58,000	67,000	73,000	80,000	85,000	84,000	85,000	104,000
Black.....	60,000	45,000	56,800	67,000	67,000	65,000	69,000	76,000	84,000
Hispanic.....	58,000	40,000	56,000	60,000	67,000	80,000	77,000	85,000	S
Other.....	56,000	44,000	49,000	53,000	65,000	80,000	78,000	S	S
Scientists.....	65,000	44,000	58,000	65,000	72,000	75,000	77,300	83,400	85,000
Male.....	68,000	46,000	60,000	68,000	75,000	76,000	78,000	84,000	85,000
Female.....	55,000	40,800	53,000	57,900	64,900	67,500	72,000	75,000	70,000
White.....	65,000	43,200	57,000	65,000	72,000	75,000	77,000	84,000	84,000
Asian/Pacific Islander.....	64,000	50,000	60,000	70,000	78,000	80,000	80,000	80,000	104,000
Black.....	60,000	44,000	52,000	67,000	66,000	61,000	69,000	76,000	84,000
Hispanic.....	56,000	38,000	55,000	56,000	65,000	77,000	76,000	82,500	S
Other.....	55,000	43,000	49,000	53,000	65,000	80,000	68,500	S	S
Mathematical/computer scientists.....	71,200	60,000	70,000	75,000	75,000	76,000	78,600	80,000	80,000
Male.....	75,000	64,000	74,000	75,000	78,000	78,000	79,000	80,500	80,000
Female.....	62,000	54,000	65,000	70,000	66,800	70,000	68,000	80,000	S
White.....	71,500	55,500	70,000	74,400	71,000	76,000	79,000	81,000	80,000
Asian/Pacific Islander.....	73,000	68,000	70,000	77,000	80,000	80,000	73,000	80,000	S

Appendix table 3-15

(Page 6 of 6)

**Median annual salaries of U.S. individuals in S&E occupations, by highest degree, occupation, sex, race/ethnicity, and years since degree: 1999**  
(Dollars)

Degree, occupation, sex, and race/ethnicity	Employed individuals	Years since highest degree							
		Less than 5	5–9	10–14	15–19	20–24	25–29	30–34	35 or more
Black .....	71,000	58,200	71,000	74,000	78,000	65,000	63,000	S	S
Hispanic.....	60,800	65,000	60,800	57,400	65,500	58,000	72,000	S	S
Other .....	60,500	62,000	S	S	S	S	S	S	S
Life and related scientists .....	62,000	34,000	54,000	65,000	74,000	76,000	80,000	86,000	85,000
Male .....	65,000	34,000	55,000	67,000	75,000	78,000	80,000	85,000	86,000
Female.....	53,000	33,000	53,000	60,000	65,000	68,000	80,000	89,100	63,000
White .....	64,600	35,000	55,000	65,800	73,200	75,000	80,000	86,900	85,000
Asian/Pacific Islander .....	54,300	31,000	53,800	61,500	78,000	80,000	80,000	85,000	110,000
Black .....	51,000	35,000	48,000	64,800	62,000	76,000	69,000	S	S
Hispanic.....	58,000	35,000	60,000	60,400	80,000	85,000	85,000	95,000	S
Other .....	56,000	35,000	54,300	87,000	65,000	63,000	S	S	S
Physical and related scientists .....	70,000	50,000	62,000	67,000	80,000	83,000	78,000	87,500	92,000
Male .....	71,000	50,000	62,000	70,000	80,000	83,000	78,000	88,000	94,000
Female.....	61,000	50,000	63,800	53,000	80,000	80,000	77,200	60,000	83,000
White .....	70,400	48,000	63,000	67,000	80,000	83,000	79,000	88,000	90,000
Asian/Pacific Islander .....	67,000	58,000	66,100	72,800	76,000	85,000	79,000	60,000	104,000
Black .....	58,000	42,000	42,900	67,000	70,500	73,000	75,000	S	S
Hispanic.....	63,000	38,000	61,500	67,000	67,000	85,000	63,000	79,000	S
Other .....	61,000	56,000	52,000	S	S	80,000	S	S	S
Social and related scientists....	60,000	44,000	53,000	60,000	67,000	69,400	71,100	75,000	80,000
Male .....	63,500	45,800	55,700	63,000	70,000	70,500	73,000	75,000	80,900
Female.....	52,000	42,000	50,000	55,000	60,000	64,000	65,000	70,400	75,000
White .....	60,000	43,500	54,000	59,000	68,000	69,700	71,000	72,500	80,000
Asian/Pacific Islander .....	57,000	45,000	50,000	72,000	60,000	77,000	78,000	75,000	S
Black .....	60,000	45,000	50,000	67,000	62,300	60,000	80,000	S	S
Hispanic.....	50,900	38,900	51,000	48,000	55,000	77,000	77,000	S	S
Other .....	53,000	44,000	49,000	53,000	55,000	80,000	S	S	S
Engineers .....	79,000	65,000	75,000	78,700	85,000	90,000	94,000	96,000	91,000
Male.....	80,000	67,000	75,000	80,000	85,000	90,000	94,000	96,000	91,000
Female.....	68,000	58,000	72,000	72,000	85,000	90,900	70,000	S	S
White .....	80,000	66,000	75,000	80,000	85,000	90,000	95,000	94,000	91,000
Asian/Pacific Islander .....	77,000	68,000	75,000	75,000	88,000	92,000	85,000	110,000	100,000
Black.....	67,000	62,000	75,000	74,000	78,000	84,500	75,500	S	S
Hispanic.....	65,000	54,000	68,000	71,000	85,000	100,000	S	S	S
Other.....	80,000	67,000	S	S	S	S	S	S	S

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

NOTES: Median annual salaries are for full-time employment. Very large or very small values may reflect very small cell sizes and should be interpreted with caution.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Appendix table 3-16

**Employed U.S. scientists and engineers, by highest degree attained, occupation, sex, and race/ethnicity: 1999**

Degree and occupation	Employed individuals	Sex		Race/ethnicity				Asian/Pacific Islander	Other
		Male	Female	White	Black	Hispanic			
<b>All degree levels<sup>a</sup></b>									
All S&E occupations.....	3,540,800	2,705,000	835,800	2,896,600	121,600	120,900	390,500	11,300	
Scientists .....	2,170,500	1,464,800	705,800	1,774,200	84,000	71,800	233,900	6,700	
Mathematical/computer scientists.....	1,167,400	850,600	316,700	922,200	51,400	37,600	153,600	2,700	
Life/related scientists .....	341,900	217,500	124,400	285,100	6,600	10,900	37,700	1,600	
Physical/related scientists .....	297,900	229,400	68,400	252,500	8,800	7,800	27,800	900	
Social/related scientists .....	363,400	167,300	196,200	314,400	17,200	15,500	14,800	1,500	
Engineers .....	1,370,300	1,240,200	130,000	1,122,400	37,700	49,100	156,600	4,600	
<b>Bachelor's</b>									
S&E occupations .....	1,994,400	1,564,700	429,700	1,680,900	73,900	74,800	158,300	6,600	
Scientists .....	1,087,100	744,300	342,800	908,100	46,600	41,500	87,700	3,100	
Mathematical/computer scientists.....	740,500	538,900	201,600	612,200	34,200	27,000	65,400	1,700	
Life/related scientists .....	135,500	76,900	58,600	117,100	2,000	5,700	9,800	900	
Physical/related scientists.....	139,600	101,700	38,000	120,600	5,800	4,600	8,400	S	
Social/related scientists .....	71,400	26,800	44,600	58,300	4,600	4,200	4,000	S	
Engineers.....	907,400	820,400	86,900	772,800	27,300	33,300	70,600	3,400	
<b>Master's</b>									
S&E occupations .....	1,032,100	751,200	280,900	807,200	35,900	32,800	153,000	3,100	
Scientists .....	655,500	411,400	244,200	516,000	27,300	19,100	91,100	2,100	
Mathematical/computer scientists.....	354,100	253,700	100,500	256,200	15,200	8,800	72,900	900	
Life/related scientists .....	72,500	44,000	28,500	61,200	2,200	1,800	7,100	300	
Physical/related scientists.....	73,000	53,700	19,300	62,300	1,800	1,400	7,100	400	
Social/related scientists .....	155,900	60,000	95,900	136,200	8,100	7,100	4,000	500	
Engineers.....	376,500	339,800	36,700	291,300	8,600	13,600	62,000	1,000	
<b>Doctoral</b>									
S&E occupations .....	484,100	368,900	115,200	381,600	11,000	12,900	77,000	1,600	
Scientists .....	399,900	290,900	109,100	325,100	9,300	11,000	53,100	1,500	
Mathematical/computer scientists.....	67,100	54,900	12,200	49,500	1,400	1,600	14,500	S	
Life/related scientists .....	121,100	86,200	34,900	95,600	2,100	3,500	19,500	400	
Physical/related scientists.....	84,900	73,700	11,200	69,200	1,200	1,800	12,300	300	
Social/related scientists .....	126,900	76,100	50,800	110,800	4,500	4,100	6,800	700	
Engineers.....	84,200	78,000	6,200	56,500	1,700	1,900	23,900	100	

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Science &amp; Engineering Indicators - 2004

Appendix table 3-17

Employment status and salaries of 1997 and 1998 bachelor's and master's degree recipients, by degree field: 1999

Degree and field	All degree holders	Full-time student	Not full-time student			Median salary for full-time employed <sup>a</sup>
			Employed in S&E	Employed in other occupation	Not employed	
<b>Bachelor's</b>						
All S&E fields .....	743,400	165,500	161,900	377,300	38,800	\$30,000
Sciences .....	628,800	150,800	83,100	359,300	35,500	28,000
Computer/information sciences .....	46,000	S	27,000	15,100	S	44,000
Life/related sciences .....	164,000	54,300	20,900	79,100	9,800	25,000
Agricultural/food sciences .....	15,700	3,200	S	10,000	0	27,000
Biological sciences .....	134,900	48,800	16,200	62,000	7,800	25,000
Environmental life sciences, including forestry .....	13,500	2,300	3,000	7,100	S	26,000
Mathematics/related sciences .....	23,700	4,800	3,900	13,900	S	30,000
Physical/related sciences .....	36,500	12,600	11,100	11,900	1,000	29,000
Chemistry, except biochemistry .....	20,100	7,900	6,300	5,500	S	29,000
Earth sciences, geology, and oceanography .....	8,700	1,900	2,500	4,000	S	26,000
Physics and astronomy .....	7,200	2,600	2,200	2,200	S	35,000
Other .....	600	S	S	S	S	S
Psychology .....	146,700	34,400	7,300	95,200	9,800	25,000
Social/related sciences .....	211,800	42,400	13,000	144,100	12,300	28,000
Economics .....	32,700	4,900	3,300	22,600	S	35,000
Political/related sciences .....	71,700	20,500	4,100	42,300	4,700	29,000
Sociology/anthropology .....	69,500	11,700	S	51,600	S	25,000
Other .....	37,900	5,300	S	27,600	2,800	26,000
Engineering .....	114,600	14,600	78,700	18,000	3,300	43,000
Aerospace/related .....	2,400	500	1,300	500	S	41,000
Chemical .....	12,400	1,900	8,500	1,600	S	45,000
Civil/architectural .....	20,200	2,500	14,200	2,800	S	37,000
Electrical, electronic, computer, and communications .....	34,200	4,000	25,500	4,200	S	46,000
Industrial .....	6,000	400	3,700	1,500	S	41,000
Mechanical .....	26,300	2,600	18,500	4,600	S	43,000
Other .....	13,200	2,700	7,200	2,800	S	40,000
<b>Master's</b>						
All S&E fields .....	157,000	32,100	71,800	46,300	6,800	\$46,000
Sciences .....	110,400	24,300	39,400	41,200	5,500	40,000
Computer/information sciences .....	20,000	1,600	14,200	3,700	S	58,000
Life/related sciences .....	16,600	4,900	5,000	6,000	S	34,000
Agricultural/food sciences .....	2,300	S	S	S	S	35,000
Biological sciences .....	11,600	4,300	3,400	3,600	S	34,000
Environmental life sciences, including forestry .....	2,600	S	S	1,400	S	36,000
Mathematics/related sciences .....	7,200	1,800	3,200	1,700	S	44,000
Physical and related sciences .....	9,100	2,900	4,100	1,600	S	42,000
Chemistry, except biochemistry .....	3,700	1,200	1,700	S	S	43,000
Earth sciences, geology, and oceanography .....	3,000	600	1,600	600	S	37,000
Physics and astronomy .....	2,300	1,100	800	S	S	40,000
Other .....	S	S	S	S	S	S
Psychology .....	30,000	6,900	7,700	13,200	2,200	32,000
Social/related sciences .....	27,500	6,200	5,100	14,900	1,300	40,000
Economics .....	4,300	1,300	S	1,600	S	45,000
Political/related sciences .....	9,400	1,900	1,600	5,600	S	40,000
Sociology/anthropology .....	4,300	1,400	S	1,700	S	31,000
Other .....	9,500	1,500	S	6,100	S	38,000
Engineering .....	46,700	7,900	32,500	5,100	1,300	55,000
Aerospace/related .....	1,500	400	800	S	S	50,000
Chemical .....	2,300	500	1,400	S	S	55,000
Civil/architectural .....	6,600	S	4,700	S	S	45,000
Electrical, electronic, computer, and communications .....	16,300	2,400	12,500	1,000	S	60,000
Industrial .....	3,600	S	2,400	S	S	55,000
Mechanical .....	6,800	1,100	4,900	S	S	51,000
Other .....	9,600	2,000	5,700	1,600	S	52,000

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Salary data for self-employed individuals, full-time students, and people who worked at principal job less than 35 hours per week are not included. Salary data are for principal job only.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation, Division of Science Resources Statistics, National Survey of Recent College Graduates, 1999.

Appendix table 3-18

Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
All degree levels <sup>a</sup>											
All S&E fields .....	8,131,400	277,100	1,142,100	998,000	1,076,100	1,171,400	1,210,700	1,045,800	632,700	330,400	247,100
Male.....	5,307,200	118,600	613,400	630,200	701,700	770,100	805,500	736,500	468,600	262,300	200,300
Female.....	2,824,200	158,500	528,800	367,800	374,400	401,300	405,200	309,200	164,000	68,100	46,800
White .....	6,667,600	216,500	111,000	791,800	862,700	955,800	1,024,800	893,900	536,400	280,200	223,100
Asian/Pacific Islander .....	674,000	28,000	100,800	100,700	98,600	77,300	75,700	48,000	24,700	9,100	
Black.....	429,600	15,600	72,100	53,000	57,500	63,300	65,600	49,000	30,800	14,100	8,600
Hispanic.....	329,800	16,400	70,000	48,600	51,500	49,800	38,500	23,500	15,600	10,100	5,800
Other.....	30,300	600	6,700	3,700	3,700	3,900	4,500	3,700	1,900	1,300	400
Sciences .....	6,163,800	238,100	920,500	743,200	748,400	847,600	974,900	821,400	481,600	225,100	162,900
Male.....	3,527,200	89,400	433,100	410,200	415,100	482,400	581,400	518,400	321,700	158,700	116,800
Female.....	2,636,500	148,700	487,300	333,100	333,300	365,300	393,400	303,000	160,000	66,400	46,100
White .....	5,096,700	187,400	721,000	600,900	604,400	697,800	828,600	706,600	412,800	191,600	145,700
Asian/Pacific Islander .....	415,000	21,300	72,800	58,900	57,800	61,400	49,800	48,300	26,500	12,700	5,500
Black.....	375,100	14,300	62,200	44,200	47,800	51,700	61,300	44,100	28,600	12,800	8,000
Hispanic.....	251,600	14,500	58,600	36,300	35,600	33,700	31,400	19,200	12,000	6,900	3,400
Other.....	25,300	600	5,900	2,900	2,700	3,000	3,800	3,200	1,800	1,100	200
Mathematics/computer sciences.....	1,058,900	24,100	115,600	155,600	195,100	165,100	148,400	133,200	75,100	33,700	13,100
Male .....	717,900	15,800	77,000	106,600	127,400	110,800	99,700	92,800	52,400	26,100	9,400
Female.....	341,000	8,200	38,600	49,000	67,700	54,300	48,700	40,400	22,700	7,700	3,800
White .....	834,600	18,400	82,900	113,000	149,800	127,100	123,200	112,400	66,700	29,500	11,600
Asian/Pacific Islander .....	123,700	3,100	18,200	23,700	23,300	22,900	14,200	11,900	4,300	1,300	800
Black .....	61,300	1,600	8,900	11,700	12,700	8,000	7,100	5,900	2,800	2,000	600
Hispanic.....	34,800	1,000	4,700	6,500	8,600	6,300	3,400	2,400	900	800	S
Other.....	4,600	S	800	800	700	800	600	500	300	S	S
Life-related sciences .....	1,311,700	57,500	197,800	139,400	155,600	209,100	216,200	163,500	100,200	43,300	29,200
Male .....	764,200	20,400	95,700	74,900	83,100	121,200	131,900	113,300	67,900	33,100	22,700
Female.....	547,500	37,100	102,100	64,500	72,500	87,800	84,400	50,100	32,300	10,100	6,500
White .....	1,094,800	44,800	160,000	112,200	128,500	176,000	185,600	141,400	87,100	34,100	25,100
Asian/Pacific Islander .....	99,200	6,000	16,800	13,300	12,200	14,000	11,700	12,100	7,600	4,400	1,300
Black .....	61,700	3,500	8,600	6,300	8,200	11,100	11,000	6,100	3,500	1,900	1,600
Hispanic.....	50,800	3,200	11,100	6,800	6,000	7,600	7,400	3,100	2,000	2,500	1,100
Other .....	5,300	S	1,300	800	800	400	500	800	100	300	S
Physical/related sciences .....	635,300	13,900	65,400	60,300	84,900	100,300	93,300	77,000	67,400	41,700	31,100
Male .....	492,900	7,700	41,500	42,500	66,200	75,400	75,900	61,300	59,000	35,100	28,200
Female.....	142,400	6,100	24,000	17,800	18,700	24,900	17,400	15,600	8,400	6,600	2,900
White .....	532,700	11,800	54,100	48,900	69,000	85,100	78,800	63,500	56,900	36,500	28,000
Asian/Pacific Islander .....	58,300	800	5,500	6,600	9,400	9,400	8,200	8,300	6,000	2,900	1,300
Black .....	22,800	600	2,600	2,700	2,900	2,300	3,100	3,400	2,300	1,600	1,200
Hispanic.....	18,900	600	2,800	2,000	3,400	3,100	2,700	1,200	1,900	700	500
Other .....	2,600	S	300	200	300	500	500	500	200	S	S

Appendix table 3-18

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Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Social and related sciences.....	3,157,800	142,700	541,700	387,900	312,800	373,100	517,000	447,800	239,000	106,400	89,400
Male .....	1,552,100	45,500	219,000	186,100	138,300	174,900	274,000	250,900	142,300	64,500	56,600
Female.....	1,605,700	97,200	322,700	201,800	174,500	198,200	243,000	196,900	96,600	41,900	32,800
White .....	2,634,700	112,400	423,900	326,800	257,200	309,600	441,100	389,200	202,100	91,500	81,000
Asian/Pacific Islander .....	133,800	11,500	32,300	15,400	13,000	15,200	15,700	15,900	8,500	4,200	2,200
Black .....	229,300	8,600	42,100	23,600	24,100	30,300	40,100	28,700	19,900	7,200	4,600
Hispanic.....	147,100	9,700	40,000	21,000	17,600	16,700	17,900	12,500	7,200	2,900	1,600
Other .....	12,800	S	3,500	1,100	1,000	1,300	2,200	1,400	1,200	600	100
Engineering.....	1,967,600	39,000	221,700	254,800	327,700	323,800	235,900	224,300	151,000	105,300	84,200
Male.....	1,780,000	29,200	180,200	220,100	286,600	287,700	224,100	218,100	147,000	103,500	83,400
Female.....	187,700	9,800	41,500	34,700	41,100	36,100	11,800	6,200	4,100	1,800	700
White .....	1,570,900	29,000	161,500	191,000	258,400	258,000	196,100	187,300	123,600	88,600	77,400
Asian/Pacific Islander .....	258,900	6,700	38,200	41,900	42,900	37,200	27,500	27,500	21,500	12,000	3,600
Black.....	54,500	1,300	9,900	8,800	9,600	11,600	4,300	4,800	2,300	1,300	600
Hispanic.....	78,200	1,900	11,400	12,300	15,900	16,100	7,200	4,300	3,600	3,200	2,400
Other .....	5,100	S	800	800	1,000	800	700	500	100	S	S
Bachelor's											
All S&E.....	5,982,400	273,600	1,013,200	767,000	795,100	847,800	861,600	694,700	368,400	197,400	163,500
Male.....	3,827,100	117,000	538,300	476,300	509,500	559,300	576,400	494,000	267,500	156,800	132,100
Female.....	2,155,300	156,500	475,000	290,800	285,600	288,500	285,200	200,700	101,000	40,600	31,400
White .....	4,971,800	214,400	792,800	632,300	659,500	703,600	739,000	597,500	311,400	169,200	152,200
Asian/Pacific Islander .....	379,000	26,800	83,000	48,400	45,300	52,300	41,200	42,600	24,800	11,600	3,000
Black.....	345,500	15,600	66,400	44,600	48,700	50,600	49,900	34,700	20,700	9,700	4,800
Hispanic.....	263,200	16,200	65,100	39,000	39,400	38,700	28,100	16,800	10,300	6,400	3,300
Other .....	22,800	600	5,900	2,800	2,200	2,700	3,500	3,000	1,300	600	S
Sciences .....	4,581,400	235,900	833,500	591,900	565,300	616,000	698,800	539,600	275,000	126,700	98,700
Male .....	2,560,000	88,600	392,000	324,200	309,000	350,800	420,700	343,000	176,400	87,500	67,700
Female.....	2,021,400	147,300	441,500	267,700	256,300	265,200	278,200	196,500	98,600	39,200	31,100
White .....	3,808,700	186,100	655,900	489,800	468,400	512,800	599,400	463,700	233,000	108,600	91,100
Asian/Pacific Islander .....	247,900	20,600	59,600	31,900	26,200	33,600	27,000	29,000	13,300	4,900	1,800
Black.....	301,800	14,300	57,600	38,300	41,100	41,000	46,500	30,900	19,200	8,500	4,400
Hispanic.....	204,100	14,400	55,100	29,900	28,000	26,500	23,100	13,500	8,300	4,200	1,300
Other .....	18,800	600	5,300	2,200	1,600	2,000	2,700	2,500	1,200	500	S

Appendix table 3-18

Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Mathematics/computer sciences.....	751,800	23,600	94,800	119,800	149,800	113,000	100,500	84,800	41,000	17,200	7,100
Male .....	498,300	15,500	62,300	80,800	95,500	74,900	68,000	57,900	26,300	12,200	4,900
Female.....	253,500	8,100	32,600	39,000	54,400	38,100	32,500	26,900	14,700	5,000	2,200
White .....	609,100	18,100	71,800	93,400	118,900	90,200	85,500	71,500	37,300	15,700	6,700
Asian/Pacific Islander .....	60,900	2,900	10,200	9,900	11,700	10,700	6,800	6,800	1,600	S	S
Black .....	49,800	1,600	8,100	10,100	11,100	6,300	5,700	4,200	1,300	1,200	S
Hispanic.....	28,800	1,000	4,500	5,600	7,600	5,400	1,900	1,900	S	S	S
Other .....	3,200	S	300	700	500	S	600	500	S	S	S
Life and related sciences.....	966,000	56,800	185,300	106,700	109,400	152,700	154,400	107,400	52,800	22,900	17,600
Male .....	547,100	20,100	90,100	56,700	58,000	89,500	93,300	75,700	33,900	16,900	12,900
Female.....	418,900	36,600	95,200	50,000	51,400	63,200	61,100	31,700	18,900	6,000	4,700
White .....	815,100	44,600	150,200	86,800	94,400	129,200	134,600	94,800	46,200	18,500	15,800
Asian/Pacific Islander .....	57,400	5,400	15,100	8,100	3,600	7,600	5,800	6,600	3,500	1,500	S
Black .....	49,300	3,500	8,100	5,500	6,800	9,400	8,500	3,600	1,800	S	S
Hispanic.....	40,300	3,200	10,600	5,900	4,200	6,300	5,300	1,800	1,300	1,600	S
Other .....	3,900	S	1,300	600	S	300	S	S	S	S	S
Physical and related sciences.....	390,500	13,700	55,300	39,200	51,700	61,900	56,000	41,500	30,800	23,900	16,500
Male .....	294,000	7,600	34,800	26,800	41,700	46,000	45,600	31,100	25,900	19,800	14,700
Female.....	96,500	6,100	20,500	12,400	10,100	16,000	10,400	10,300	4,900	4,200	1,800
White .....	333,900	11,700	46,000	33,000	44,900	54,700	48,200	33,700	25,500	21,000	15,100
Asian/Pacific Islander .....	23,900	700	4,200	2,400	2,100	3,300	3,400	4,000	2,300	1,100	S
Black .....	17,900	600	2,400	2,300	2,200	1,800	2,200	2,600	1,700	1,400	S
Hispanic.....	13,100	600	2,400	1,300	2,400	1,800	1,700	800	1,100	S	S
Other .....	1,800	S	300	S	S	S	S	S	S	S	S
Social and related sciences.....	2,473,100	141,800	498,000	326,200	254,300	288,300	387,900	305,900	150,400	62,600	57,500
Male .....	1,220,600	45,400	204,900	159,900	113,800	140,400	213,800	178,300	90,300	38,600	35,100
Female.....	1,252,600	96,500	293,200	166,400	140,500	147,900	174,100	127,600	60,100	24,000	22,300
White .....	2,050,700	111,700	388,000	276,500	210,100	238,700	331,100	263,800	124,000	53,400	53,400
Asian/Pacific Islander .....	105,800	11,500	30,100	11,500	8,800	12,000	11,000	11,700	5,900	2,200	S
Black .....	184,800	8,600	39,000	20,300	21,000	23,600	30,100	20,500	14,500	4,800	2,400
Hispanic.....	121,900	9,700	37,600	17,100	13,800	13,000	14,100	9,000	5,200	1,900	S
Other .....	9,900	S	3,400	700	600	900	1,600	1,000	800	S	S
Engineering.....	1,401,000	37,700	179,800	175,100	229,800	231,800	162,800	155,100	93,400	70,700	64,800
Male.....	1,267,200	28,400	146,200	152,000	200,500	208,500	155,700	150,900	91,000	69,300	64,500
Female.....	133,800	9,300	33,500	23,000	29,300	23,300	7,100	4,200	2,400	1,400	S
White .....	1,163,100	28,300	136,900	142,500	191,100	190,700	139,600	133,800	78,500	60,600	61,200
Asian/Pacific Islander .....	131,100	6,300	23,400	16,500	19,000	18,700	14,200	13,600	11,400	6,600	1,200
Black.....	43,700	1,300	8,800	6,300	7,600	9,500	3,300	3,900	1,500	1,200	S
Hispanic.....	59,000	1,800	10,000	9,100	11,400	12,200	5,000	3,400	2,000	2,200	2,000
Other.....	5,100	S	700	600	600	700	700	S	S	S	S

Appendix table 3-18

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Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
<b>Master's</b>											
All S&E .....	1,517,400	3,500	118,300	176,200	195,600	225,200	248,000	247,300	171,900	82,100	49,300
Male.....	1,004,100	1,600	69,300	117,200	131,300	140,400	155,500	164,200	124,700	61,600	38,300
Female.....	513,300	1,900	49,000	59,000	64,300	84,800	92,600	83,100	47,200	20,500	11,000
White .....	1,195,900	2,100	81,300	121,200	144,900	178,800	203,200	208,700	145,300	68,600	41,700
Asian/Pacific Islander .....	198,000	1,100	26,000	39,300	33,600	27,500	23,100	22,200	14,900	7,200	3,100
Black.....	69,500	S	5,600	7,200	6,700	10,000	13,300	11,500	8,300	3,700	3,000
Hispanic.....	49,000	200	4,600	7,900	9,100	8,100	7,700	4,600	3,300	2,100	1,400
Other.....	5,100	S	700	600	1,200	700	800	S	S	500	S
Sciences .....	1,058,200	2,200	79,000	110,100	116,200	150,300	188,000	191,200	129,000	57,300	35,000
Male.....	591,000	800	37,300	60,700	61,800	76,800	99,300	109,800	83,200	37,000	24,300
Female.....	467,200	1,400	41,700	49,400	54,400	73,400	88,700	81,500	45,900	20,200	10,700
White .....	858,400	1,400	58,100	80,600	88,000	121,400	154,900	164,200	111,600	48,400	29,900
Asian/Pacific Islander .....	102,400	700	12,300	18,900	17,000	15,500	13,800	12,000	7,600	3,400	1,200
Black.....	60,500	S	4,500	5,000	5,100	8,200	12,600	10,800	7,700	3,600	2,800
Hispanic.....	32,600	S	3,500	5,000	5,100	4,600	5,900	4,000	1,900	1,400	1,100
Other.....	4,300	S	600	500	900	600	800	S	S	400	S
Mathematics/computer sciences.....	266,400	500	19,200	32,100	39,200	45,500	41,600	42,000	27,900	13,600	4,700
Male .....	185,000	400	13,600	22,700	27,200	30,400	26,200	29,500	20,600	11,200	3,200
Female.....	81,400	S	5,600	9,400	12,100	15,100	15,400	12,500	7,300	2,400	1,500
White .....	194,300	300	10,000	17,100	27,000	32,200	32,600	35,700	24,000	11,400	3,900
Asian/Pacific Islander .....	55,200	S	7,800	12,700	9,500	10,700	6,400	4,400	2,200	S	S
Black .....	10,900	S	800	1,500	1,600	1,600	1,300	1,600	1,500	800	S
Hispanic.....	4,900	S	200	800	900	700	1,200	S	S	S	S
Other .....	1,100	S	S	S	S	S	S	S	S	S	S
Life and related sciences.....	166,900	700	10,000	16,800	21,700	26,300	29,900	27,400	22,500	8,700	2,800
Male .....	93,000	S	4,500	8,800	9,600	11,900	16,900	17,300	14,800	6,500	2,500
Female.....	73,900	500	5,400	8,000	12,200	14,400	13,100	10,100	7,800	2,200	S
White .....	138,500	S	7,700	14,100	16,900	23,900	24,700	22,200	19,800	6,800	2,100
Asian/Pacific Islander .....	15,500	S	1,300	1,500	2,800	1,400	2,100	3,000	1,600	1,100	S
Black .....	7,800	S	500	500	800	700	1,800	1,500	1,100	S	S
Hispanic.....	4,300	S	500	500	800	300	1,000	800	S	S	S
Other .....	800	S	S	S	400	S	S	S	S	S	S
Physical and related sciences.....	115,300	200	7,900	10,600	14,000	18,400	19,500	16,000	17,300	5,200	6,300
Male .....	86,300	S	5,200	7,600	9,300	13,100	14,600	12,300	15,000	3,600	5,400
Female.....	29,000	S	2,700	2,900	4,700	5,300	4,900	3,700	2,300	1,600	S
White .....	95,700	S	6,300	8,000	11,500	15,300	15,800	13,700	14,600	4,800	5,600
Asian/Pacific Islander .....	12,400	S	1,100	1,900	1,700	1,900	2,100	1,500	1,800	S	S
Black .....	3,300	S	200	200	300	200	700	S	S	S	S
Hispanic.....	3,400	S	400	400	400	800	800	S	S	S	S
Other .....	500	S	S	S	S	S	S	S	S	S	S

Appendix table 3-18

Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Social and related sciences.....	509,700	900	41,900	50,600	41,200	60,100	96,900	105,800	61,300	29,800	21,200
Male .....	226,800	S	14,000	21,500	15,700	21,500	41,600	50,700	32,900	15,700	13,100
Female.....	282,900	800	27,900	29,100	25,500	38,600	55,300	55,100	28,400	14,100	8,000
White .....	429,900	700	34,200	41,500	32,600	50,000	81,700	92,500	53,100	25,400	18,200
Asian/Pacific Islander .....	19,400	S	2,100	2,800	2,900	1,500	3,100	3,100	2,000	1,400	S
Black .....	38,400	S	3,100	2,800	2,400	5,600	8,800	7,200	4,600	2,100	1,800
Hispanic.....	20,000	S	2,400	3,300	3,100	2,800	2,800	2,700	1,400	700	700
Other .....	2,000	S	S	300	S	300	400	S	S	S	S
Engineering.....	459,200	1,300	39,300	66,100	79,400	74,900	60,100	56,100	42,900	24,800	14,300
Male.....	413,100	800	32,000	56,500	69,500	63,500	56,100	54,500	41,600	24,600	14,000
Female.....	46,100	500	7,400	9,600	9,900	11,300	3,900	1,600	1,300	S	S
White .....	337,500	700	23,200	40,600	56,900	57,400	48,300	44,600	33,700	20,300	11,800
Asian/Pacific Islander .....	95,500	400	13,700	20,400	16,600	12,000	9,300	10,200	7,300	3,800	1,800
Black.....	9,000	S	1,100	2,200	1,600	1,800	700	700	600	S	S
Hispanic.....	16,400	100	1,200	2,900	4,000	3,500	1,800	600	1,400	600	S
Other .....	800	S	S	100	300	S	S	S	S	S	S
Doctoral											
All S&E .....	623,400	S	10,100	54,200	85,000	96,900	99,900	101,400	91,300	50,500	34,200
Male.....	472,600	S	5,800	36,300	60,700	69,500	73,200	77,200	76,200	43,900	29,800
Female.....	150,700	S	4,200	17,900	24,300	27,500	26,600	24,200	15,100	6,600	4,400
White .....	491,900	S	7,700	37,700	57,900	72,100	81,500	85,200	78,700	41,900	29,200
Asian/Pacific Islander .....	96,900	S	2,000	13,200	21,900	18,700	13,000	10,900	8,300	5,900	3,000
Black.....	14,600	S	100	1,300	2,000	2,700	2,400	2,700	1,900	800	800
Hispanic.....	17,600	S	300	1,800	3,000	3,000	2,700	2,100	2,000	1,600	1,100
Other .....	2,400	S	S	200	300	500	300	400	400	200	100
Sciences .....	515,900	S	7,500	40,600	66,400	79,900	86,900	88,200	76,600	40,700	29,200
Male.....	372,900	S	3,800	24,800	44,000	53,800	61,000	64,500	61,900	34,200	24,900
Female.....	143,000	S	3,600	15,800	22,400	26,100	25,900	23,700	14,700	6,500	4,400
White .....	421,600	S	6,400	29,800	47,500	62,200	73,100	76,300	67,200	34,200	24,800
Asian/Pacific Islander .....	64,600	S	1,000	8,100	14,600	12,300	8,900	7,300	5,600	4,300	2,500
Black.....	12,800	S	100	1,000	1,600	2,400	2,200	2,400	1,700	700	800
Hispanic.....	14,800	S	100	1,400	2,400	2,600	2,400	1,800	1,800	1,300	1,000
Other .....	2,200	S	S	200	200	500	200	400	400	200	100
Mathematics/computer sciences.....	40,800	S	1,500	3,700	6,000	6,600	6,200	6,300	6,200	2,900	1,300
Male .....	34,700	S	1,100	3,100	4,800	5,500	5,500	5,400	5,500	2,700	1,200
Female.....	6,100	S	400	700	1,200	1,100	700	1,000	600	300	100
White .....	31,200	S	1,200	2,500	3,800	4,600	5,000	5,300	5,400	2,500	1,000
Asian/Pacific Islander .....	7,700	S	300	1,100	2,000	1,500	900	800	600	300	200
Black .....	600	S	S	S	S	100	100	100	100	S	100
Hispanic.....	1,000	S	S	100	100	200	200	200	100	S	S
Other .....	300	S	S	S	S	S	S	S	S	S	S

Appendix table 3-18

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## Individuals in labor force with S&amp;E highest degrees, by highest degree, degree field, sex, race/ethnicity, and age: 1999

Degree, field, sex, and race/ethnicity	All ages	Age (years)									
		Under 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 or more
Life and related sciences.....	178,400	S	2,500	15,700	24,500	29,800	31,900	28,700	24,900	11,700	8,800
Male .....	123,600	S	1,100	9,200	15,500	19,500	21,700	20,400	19,200	9,800	7,200
Female.....	54,800	S	1,400	6,500	9,000	10,200	10,200	8,300	5,600	1,900	1,600
White .....	140,700	S	2,100	11,200	17,100	22,700	26,200	24,400	21,100	8,800	7,100
Asian/Pacific Islander .....	26,300	S	300	3,700	5,700	5,000	3,800	2,600	2,500	1,900	800
Black .....	4,600	S	S	300	500	900	700	1,000	600	300	200
Hispanic.....	6,200	S	S	500	1,000	1,100	1,000	500	600	700	700
Other .....	600	S	S	100	100	100	100	200	S	100	S
Physical and related sciences.....	128,500	S	2,300	10,300	18,900	20,000	17,800	19,000	19,300	12,600	8,300
Male .....	111,600	S	1,500	7,700	15,000	16,400	15,700	17,400	18,200	11,700	8,100
Female.....	16,800	S	800	2,500	3,900	3,600	2,100	1,600	1,100	900	300
White .....	102,000	S	1,900	7,600	12,300	15,100	14,800	15,600	16,800	10,600	7,300
Asian/Pacific Islander .....	22,100	S	300	2,300	5,500	4,200	2,600	2,800	1,900	1,600	800
Black .....	1,600	S	S	200	400	300	200	200	200	100	100
Hispanic.....	2,500	S	S	200	600	400	200	300	500	200	S
Other .....	300	S	S	S	S	S	S	100	100	S	S
Social and related sciences.....	168,300	S	1,200	10,800	17,000	23,500	31,000	34,200	26,300	13,500	10,800
Male .....	103,000	S	200	4,700	8,800	12,400	18,200	21,400	18,900	10,100	8,300
Female.....	65,300	S	1,000	6,100	8,200	11,100	12,800	12,800	7,400	3,400	2,500
White .....	147,600	S	1,100	8,600	14,300	19,700	27,100	31,100	24,000	12,300	9,400
Asian/Pacific Islander .....	8,600	S	100	1,100	1,300	1,700	1,600	1,100	600	500	600
Black .....	6,100	S	S	500	700	1,100	1,200	1,000	900	300	400
Hispanic.....	5,100	S	S	600	600	900	1,000	800	600	300	300
Other .....	900	S	S	100	100	100	100	100	200	100	100
Engineering .....	107,400	S	2,600	13,600	18,600	17,100	13,000	13,200	14,700	9,800	5,000
Male.....	99,700	S	2,000	11,500	16,700	15,700	12,200	12,700	14,400	9,700	4,900
Female.....	7,700	S	600	2,100	1,900	1,400	800	500	400	100	S
White .....	70,300	S	1,400	7,800	10,400	9,900	8,300	8,900	11,500	7,700	4,300
Asian/Pacific Islander .....	32,300	S	1,000	5,100	7,300	6,400	4,100	3,600	2,800	1,600	600
Black.....	1,800	S	S	300	300	300	200	300	200	100	S
Hispanic.....	2,800	S	200	400	600	400	300	300	300	400	S
Other.....	u200	S	S	S	S	S	S	S	S	S	S

S suppressed for reasons of confidentiality and/or data reliability

<sup>a</sup>Includes professional degrees.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

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**Appendix table 3-19**  
**Employed S&E degree holders over age 50, by selected fields: 1999**  
(Percent)

Field	Degree holders
Sociology/anthropology.....	39.9
Political science .....	35.2
Mechanical engineering.....	34.4
Chemistry.....	32.4
Physics.....	29.4
Civil engineering .....	26.9
Economics .....	23.9
Mathematics.....	23.3
Chemical engineering .....	23.0
Agricultural sciences .....	22.3
Biological sciences .....	22.1
Electrical engineering .....	21.6
Geosciences .....	21.3
Psychology .....	18.8
Computer sciences .....	10.1

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

**Appendix table 3-20**  
**Older S&E degree holders working full time, by highest degree: 1999**  
(Percent)

Age (years)	Bachelor's	Master's	Doctoral
55 .....	74.5	76.7	86.3
56 .....	74.2	79.9	89.3
57 .....	72.8	81.7	86.2
58 .....	64.6	77.4	85.0
59 .....	64.1	69.5	83.7
60 .....	66.9	61.0	77.5
61 .....	58.5	57.7	75.5
62 .....	47.7	54.8	74.9
63 .....	45.7	48.5	63.4
64 .....	41.6	44.5	64.7
65 .....	29.8	28.3	50.9
66 .....	21.8	24.3	43.9
67 .....	15.3	16.5	40.8
68 .....	17.4	21.6	25.0
69 .....	13.5	12.9	27.2
70 .....	13.8	S	18.4

S suppressed for reasons of confidentiality and/or data reliability

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

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**Appendix table 3-21**  
**Foreign-born U.S. residents with S&E highest degree, by place of birth: 1999**

Place of birth	Residents
India .....	164,600
China.....	135,300
Germany.....	69,800
Philippines..	67,000
United Kingdom .....	65,400
Taiwan.....	64,800
Canada.....	59,400
Korea.....	46,700
Vietnam.....	44,300
Iran.....	39,900
Former Soviet Union .....	38,000
Mexico.....	31,700
Japan .....	30,700
Other foreign born .....	431,800

NOTE: Data do not include individuals with only foreign degrees who were not in the United States in 1990.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

**Appendix table 3-22**  
**Foreign-born U.S. residents with S&E doctorates, by place of birth: 1999**

Place of birth	Residents
China.....	37,900
India .....	30,100
United Kingdom .....	13,100
Taiwan.....	10,900
Canada.....	8,400
Germany.....	7,200
Iran.....	4,800
Former Soviet Union .....	4,600
Korea.....	4,500
Philippines.....	3,400
Poland .....	3,200
Japan .....	2,800
Argentina.....	2,700
Other foreign born .....	58,400

NOTE: Data do not include individuals with only foreign degrees who were not in the United States in 1990.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

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**Appendix table 3-23**  
**Permanent visas to immigrants in S&E occupations: 1988–2001**  
(Thousands)

Year	Total	Engineers	Natural scientists	Mathematical/ computer scientists	Social scientists
1988 .....	11.0	8.1	1.2	1.2	0.5
1989 .....	11.8	8.7	1.2	1.5	0.4
1990 .....	12.6	9.3	1.2	1.6	0.5
1991 .....	14.1	10.5	1.3	1.7	0.6
1992 .....	22.9	15.6	2.8	3.4	1.1
1993 .....	23.6	14.5	3.9	4.2	1.0
1994 .....	17.2	10.7	3.1	2.8	0.7
1995 .....	14.1	9.0	2.4	2.1	0.6
1996 .....	19.4	11.6	3.7	3.3	0.8
1997 .....	17.1	10.3	3.5	2.6	0.7
1998 .....	13.5	7.9	2.5	2.5	0.6
1999 .....	7.0	3.2	1.8	1.4	0.5
2000 .....	15.8	7.3	3.2	4.7	0.5
2001 .....	33.9	16.1	4.6	12.7	0.5

SOURCE: U.S. Department of Homeland Security, Bureau of Citizenship and Immigration Services, administrative records, 1988–2001.

Appendix table 3-24

**Nonimmigrant visas issued in selected classifications: FY 1998–2002**

Visa symbol	Class	1998	1999	2000	2001	2002
B-1	Temporary visitor for business .....	192,837	93,019	75,919	84,201	75,642
B-2	Temporary visitor for pleasure .....	854,738	642,676	509,031	381,431	255,487
B-1/B-2	Temporary visitor for business and pleasure .....	3,226,799	3,447,822	3,567,580	3,527,118	2,528,105
F-1	Student (academic or language training program).....	251,565	262,542	284,053	293,357	234,322
H-1B	Temporary worker of distinguished merit and ability performing services other than as registered nurse.....	91,360	116,513	133,290	161,643	118,351
H-3	Trainee .....	1,830	1,892	1,514	1,613	1,387
J-1	Exchange visitor .....	192,451	211,349	236,837	261,769	253,841
L-1	Intracompany transferee (executive, managerial, and specialized personnel continuing employment with international firm or corporation) .....	38,307	41,739	54,963	59,384	57,721
O-1	Person with extraordinary ability in sciences, arts, education, business, or athletics .....	4,257	5,009	6,466	6,666	6,026
O-2	Person accompanying and assisting in artistic or athletic performance by O-1 .....	1,778	2,185	1,894	1,918	1,972
TN	NAFTA professional.....	295	484	906	787	699

SOURCE: U.S. Department of State, Immigrant Visa Control and Reporting Division, 1998–2002.

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