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ABSTRACT

This publication is based on data from several federal surveys from all accredited institutions of higher education. Three of them are: the Completions Survey conducted by the National Center for Education Statistics; the U.S. Department of Education's Survey of Degrees and Other Formal Awards Conferred; and the Survey of Earned Doctorates. These data cover earned degrees conferred in the aggregate United States in science and engineering during the period from Earned Doctorates. These data cover earned degrees conferred in the aggregate United States in science and engineering during the period from June, 1985 through June, 1993. The first section contains data highlights for degrees awarded to underrepresented minorities by the following fields: psychology, social science, biological science, mathematics, physical sciences, engineering, agriculture, and computer Higher Education General Information Survey/Integrated Postsecondary Education Data System classification system. The last two sections definitions of racial/ethnic categories and historical changes in the Higher Education General Information Survey/Integrated Postsecondary Education Data System classification system. The last two sections contain statistical charts and tables. (MKR)

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EJ 406 139

Science and Engineering Degrees, by Race/Ethnicity of Recipients

1985-93

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation



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Susan T. Hill, Author

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation



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GENERAL NOTES

This publication is based on data obtained by the National Center for Education Statistics, U.S. Department of Education, from all accredited institutions of higher education. These data cover earned degrees conferred in the aggregate United States, which includes the 50 States, the District of Columbia, and the U.S. Territories and Outlying Areas (American Samoa, the former Canal Zone, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and the Trust Territory of the Pacific Islands). Degree data are compiled for a 12-month period, July of one year through June of the following year. For convenience, degrees for such a given 12-month period will be referred to by the year in which the period ended, e.g., 1993 means the 12-month period ending June 1993.

There were changes in the classification of fields between 1985–91 and 1992–93. See the Technical Notes for information on the field classifications used. Because racial/ethnic data were collected by broad fields of study only, the definition of science and engineering used by the National Science Foundation (NSF) for this report must include fields normally not included. There is one instance where this difference has a large impact—the broad field of “Social

Sciences.” The U.S. Department of Education includes the field of history in this broad category, so when it collects the racial/ethnic data, this field is included.

Before 1985, the broad category of “Engineering” included engineering technologies. This report is different from earlier reports in that it excludes engineering technologies so that trend data by race/ethnicity are more consistent with the definition of science and engineering used in other NSF reports. If the reader is interested in earlier data for science fields (that are consistent from 1977 to 1993), please request *Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977–91*, NSF 94-306.

For more information, please contact—

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SECTION A.

DATA HIGHLIGHTS

TRENDS IN BACHELOR'S DEGREES AWARDED TO RACIAL/ETHNIC MINORITIES IN SCIENCE AND ENGINEERING

The number of bachelor's degrees in science and engineering (S&E) fields awarded to underrepresented minority students showed robust growth in the early 1990s, after a period of relatively slow growth from 1985 to 1990. From 1990 to 1993, the number of baccalaureate recipients with degrees in S&E increased 34 percent for blacks, 32 percent for Hispanics, and 43 percent for American Indians. The percentage increases for underrepresented minority groups were higher than the percentage increases found among white recipients (10 percent) and Asian recipients (26 percent) (table A).

Table A. Science and engineering bachelor's degrees, by race/ethnicity of recipients: percentage change, 1985-90 and 1990-93

| Race/ethnicity | 1985-90 | 1990-93 |
|---|---------|---------|
| White, non-Hispanics | -4% | 10% |
| Asians or Pacific Islanders | 46% | 26% |
| Underrepresented minorities, total | 10% | 34% |
| Black, non-Hispanics | 7% | 34% |
| Hispanics | 16% | 32% |
| American Indians or Alaskan Natives | -8% | 43% |

SOURCE: NSF/SRS tabulations of National Center for Education Statistics Completions Survey data

In 1993 there were similar numbers of black bachelor's degree recipients in S&E (24,421) and Asian recipients (24,504). The number of Hispanics earning bachelor's degrees in S&E fields hit an all-time high of 18,442, as did American Indians, 1,819.

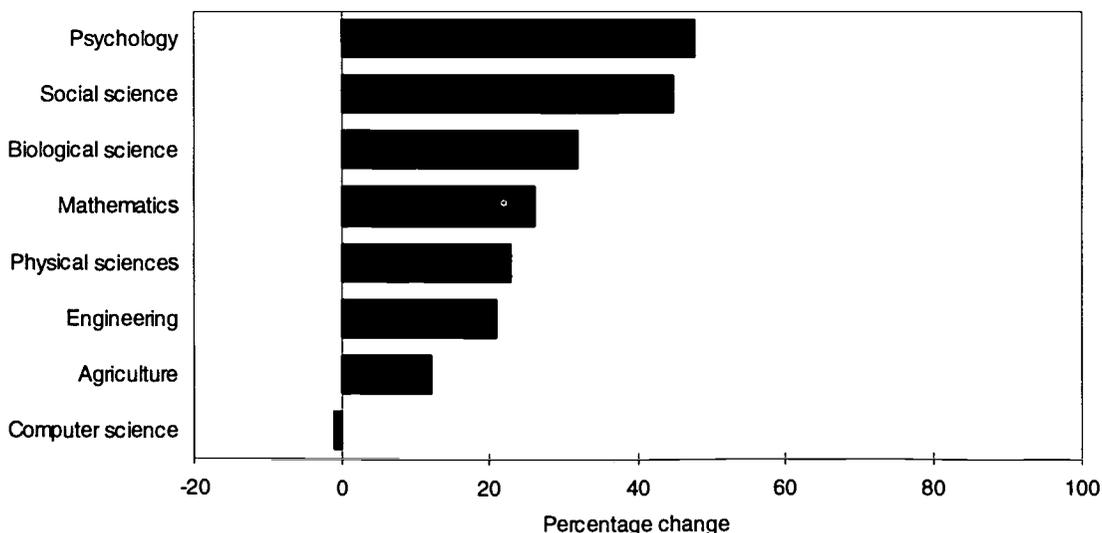
Among underrepresented minority groups, the increases in baccalaureate degrees vary by field of science or engineering. From 1990 to 1993 the percentage changes in baccalaureates awarded to underrepresented groups ranged from a 1-percent decrease in computer science degrees to an increase of 48 percent in psychology degrees (chart A).

Underrepresented minorities comprised 28 percent of the "college-age" population (18-24 years old) in 1993, whereas baccalaureates earned by underrepresented minority students accounted for only 12 percent of the total S&E degrees in 1993.

Degree awards have increased more in the social sciences, fields in which there is a slightly higher concentration of S&E bachelor's degree recipients among underrepresented minorities (59 percent) than among whites (56 percent).

Among S&E baccalaureate recipients in 1993, a slightly lower percentage of underrepresented minorities majored in engineering (13 percent) than did whites (15 percent), and the percentages of these groups choosing natural sciences were even more similar (table B).

Chart A. Science and engineering degrees awarded to underrepresented minorities, by field: percentage change, 1990-93



SOURCE: NSF/SRS tabulations of National Center for Education Statistics Completions Survey data

Table B. S&E bachelor's degree recipients, by broad field: percentage distribution, 1993

| Race/ethnicity | Engineering | Natural sciences | Social sciences |
|-----------------------------------|--------------------|-------------------------|------------------------|
| Underrepresented minorities | 13 | 28 | 59 |
| Whites | 15 | 29 | 56 |
| Asians | 26 | 39 | 35 |

Although these slight differences exist, the gaps once found between the field choices of underrepresented minorities and whites have virtually disappeared. One-third of all bachelor's degree recipients of all racial/ethnic groups (except Asians, at 49 percent) chose S&E fields in 1993.

SECTION B.

TECHNICAL NOTES

INTRODUCTION

This report is based on final data from several Federal surveys. Two of them are the U.S. Department of Education's Survey of Degrees and Other Formal Awards Conferred, and the Completions Survey conducted annually by the National Center for Education Statistics (NCES) as part of the Higher Education General Information Survey (HEGIS), later renamed the Integrated Postsecondary Education Data System (IPEDS). The third is the Survey of Earned Doctorates, conducted annually for the National Science Foundation (NSF) and four other Federal agencies by the National Research Council. Each source is described in more detail in the following sections.

Data from the Survey of Degrees and Other Formal Awards Conferred and from the Completions Survey were used to report the number of bachelor's and master's degrees. The data on doctoral degrees in this report were derived from the Survey of Earned Doctorates, which surveyed all individuals earning research doctorates, rather than from the Completions Survey, which surveyed the institutions awarding the doctorates. The Earned Doctorate data were preferred because the data provided by individuals are more specific with respect to the field of specialization and are less prone to errors in data reporting and data entry than are the data provided by institutions. Furthermore, doctorate data provide 100 percent coverage for data by field and sex of individual recipients, whereas institutional data are subject to imputation for nonresponse. For a comparison of reporting on doctoral degrees in the Completions Survey and the Survey of Earned Doctorates, see National Science Foundation, *Science and Engineering Doctorates: 1960-91*, NSF 93-301, Detailed Statistical Tables (Washington, DC, 1993).

In this report the racial and ethnic categories among U.S. citizens who were degree recipients during the 1985-93 period are charted and tabulated. It is recognized that the concept of race/ethnicity is as much a socially constructed characteristic as a biological one. Scholars such as Farley and Allen have noted that "the sociological reality of race is more important than its biological reality. Race

exerts a profound influence over the lives of people in this society."¹

The following five racial/ethnic categories are required in Federal Government surveys of institutions:

- Black, non-Hispanic
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Hispanic
- White, non-Hispanic

Persons who are U.S. citizens or foreign citizens admitted for permanent residence are classified into the above categories. The ethnic category of Hispanic took precedence over the racial categories in the data collection. In addition, nonresident aliens, i.e., those admitted to the United States for temporary residence, are separately identified as a sixth category in the survey. The nonresident aliens are not to be reported in the aforementioned racial/ethnic groups.

The definitions for the racial/ethnic categories used in the survey are as follows:

Nonresident alien—A person who is not a citizen or national of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely. Resident aliens who are not citizens of the United States and who have been lawfully admitted for permanent residence (and who hold alien registration receipt cards—Form I-551/155) are to be reported in the appropriate racial/ethnic categories along with U.S. citizens.

Black, non-Hispanic—A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).

American Indian or Alaskan Native—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

¹ Richard Farley and Walter R. Allen, *The Color Line and the Quality of Life in America* (New York: Russell Sage Foundation, 1987), p. 6.

Asian or Pacific Islander—A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. These areas include, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, non-Hispanic—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

For the bachelor's and master's degree data, the manner of collecting racial and ethnic data is left to the discretion of the institution, provided that the system established results in reasonably accurate data. The information is gathered by NCES for the Office of Civil Rights, U.S. Department of Education, in compliance with title I of the Civil Rights Act of 1964 and title IX of the Education Amendments of 1972.

BACHELOR'S AND MASTER'S DEGREE DATA

Bachelor's and master's degree data presented in this report were derived from two surveys conducted by NCES: the Survey of Degrees and Other Formal Awards Conferred and the Completions Survey. Data for the year 1985 are from the Degrees Survey conducted as part of HEGIS. Data for 1987 to 1993 are from the Completions Survey, which is a component of IPEDS. IPEDS has replaced HEGIS as the new postsecondary education data collection system for NCES. Data from the HEGIS and IPEDS surveys are comparable for the variables used in this report.

These surveys requested data on the number of associate's, bachelor's, master's, doctoral, and first-professional degrees conferred by institutions of higher education. The data were requested according to sex of recipient and field of study for each degree level. Data on the race/ethnicity of degree recipients were collected biennially by NCES for the Office of Civil Rights from 1985 through 1989 and annually since then. A major limitation is that data are

collected only at the broad field level² and according to the Federal racial/ethnic designations of degree recipients.

The surveys were mailed to all accredited universities and colleges in the United States, including the U.S. territories, for completion by the institution. Followup for nonresponse and editing was conducted by letter and telephone. The overall response rate for institutions of higher education ranged between 94 and 96 percent between 1985 and 1993.

Some institutions provided only the total number of completions, by award level and by sex; others provided the number of completions by award level, sex, and field but did not provide racial/ethnic data.

Imputations for the years 1985 through 1993 were computer generated. Imputations were developed for institutions that did not provide complete racial/ethnic data. Some of these institutions had reported total degrees awarded but not racial/ethnic data, and others had reported totals that were larger or smaller than the sum of the racial/ethnic components.

In the first case, wherein institutions did not report any racial/ethnic data by field, NCES imputed data on the basis of an earlier response for each institution, if available.

The following table indicates the percentage of imputed data in 1993, by award level and racial/ethnic category.

| Race/ethnicity | Bachelor's | Master's |
|---|------------|----------|
| White, non-Hispanics | 1.0 | 1.8 |
| Black, non-Hispanics | 1.3 | 2.1 |
| Hispanics | 1.3 | 2.6 |
| Asians or Pacific Islanders | 1.6 | 3.0 |
| American Indians or Alaskan Natives | 0.6 | 0.8 |
| Nonresident aliens | 1.2 | 2.7 |
| Race/ethnicity unknown | 1.7 | 7.0 |

² Broad field level refers to the 2-digit program levels in U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* (Washington, DC: GPO, 1991).

In the second case, wherein racial/ethnic data were reported but did not add to the total degree recipients, NCES distributed the difference among the racial/ethnic groups for that institution. *Note:* This report, however, does not do that; unknowns are shown in the table.

In examining data on degrees awarded to minorities, it must be noted that 1 to 5 percent of all S&E degrees awarded in 1985–93 were awarded to individuals whose race/ethnicity was unknown. This unknown category could affect trends and observable changes in the number and share of awards received by minority students, particularly if there are shifts from year to year in the number of degree recipients with unknown race/ethnicity. As tables 1–3 indicate, the share of degrees awarded to individuals whose race/ethnicity was unknown varied somewhat by degree level.

This National Science Foundation report differs from those published by NCES in that data for the U.S. territories are included, whereas NCES excludes them from most of its published reports.

DOCTORAL DEGREE DATA

In the Survey of Earned Doctorates, information is collected during the period of July 1 of one year to

June 30 of the next from all persons who have fulfilled the requirements for a research doctorate. The survey is funded jointly by NSF and four other agencies: the U.S. Department of Education, the National Institutes of Health, the National Endowment for the Humanities, and the U.S. Department of Agriculture. The National Research Council sends the survey forms to all accredited doctorate-granting institutions for distribution by the graduate deans to all research doctorate recipients as they complete degree requirements. Information collected in the survey comprises demographic data, such as the student's sex, citizenship, and racial/ethnic group; education history, including field of degrees; sources of graduate student support; employment status during the year preceding receipt of the doctorate; postgraduation plans; and background on parents' education. Approximately 92 to 95 percent of the doctorate recipients complete and return the survey forms. For nonrespondents, commencement programs constituted a source of skeletal information that was added to the file. These variables were sex, field of study, institution, year of doctorate, and educational background. Data are updated annually from completed survey forms submitted belatedly by previous nonrespondents, so numbers may change slightly in the future updates.

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System**

| Fields of study collected in HEGIS/IPEDS, 1985-91 | Fields of study from the IPEDS, 1992-93 | Fields of study from the Survey of Earned Doctorates classification |
|---|---|---|
| <p align="center">SCIENCE AND ENGINEERING (S&E)</p> <p>ENGINEERING 14 Engineering</p> | <p align="center">SCIENCE AND ENGINEERING (S&E)</p> <p>ENGINEERING 14 Engineering</p> | <p align="center">SCIENCE AND ENGINEERING (S&E)</p> <p>ENGINEERING</p> <p>Aeronautical/Astronautical Engineering 300 Aerospace, Aeronautical, and Astronautical Engineering</p> <p>Chemical Engineering 312 Chemical Engineering 366 Petroleum Engineering 369 Polymer and Plastics Engineering 547 Fuel Technology and Petroleum Engineering</p> <p>Civil Engineering 315 Civil Engineering 336 Environmental Health Engineering</p> <p>Electrical Engineering 318 Communications Engineering 321 Computer Engineering 322 Electrical Engineering 323 Electronics Engineering 324 Electrical and Electronics Engineering</p> <p>Industrial Engineering 339 Industrial and Manufacturing Engineering</p> <p>Mechanical Engineering 327 Engineering Mechanics 345 Mechanical Engineering</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
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Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|---|
| <p>SCIENCES</p> <p>NATURAL SCIENCES Physical Science 40 Physical Sciences (Includes Earth/Atmospheric/Oceanographic Sciences)</p> | <p>SCIENCES</p> <p>NATURAL SCIENCES Physical Science 40 Physical Sciences (Includes Earth/Atmospheric/Oceanographic Sciences)</p> | <p>Materials/Metallurgical Engineering 309 Ceramic Sciences 342 Materials Science 348 Metallurgical Engineering</p> <p>Other Engineering 303 Agricultural Engineering 306 Bioengineering and Biomedical Engineering 330 Engineering Physics 333 Engineering Science 351 Mining and Mineral Engineering 354 Naval Architecture and Marine Engineering 357 Nuclear Engineering 360 Ocean Engineering 363 Operations Research 372 Systems Engineering 375 Textile Engineering 398 Engineering, General 399 Engineering, Other</p> <p>SCIENCES</p> <p>PHYSICAL SCIENCES Astronomy 500 Astronomy 505 Astrophysics 506 Astronomy and Astrophysics</p> <p>Chemistry 520 Analytical Chemistry 521 Agricultural and Food Chemistry 522 Inorganic Chemistry 524 Nuclear Chemistry 526 Organic Chemistry 528 Pharmaceutical Chemistry 530 Physical Chemistry</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|---|
| | | 532 Polymer Chemistry 534 Theoretical Chemistry 538 Chemistry, General 539 Chemistry, Other Physics 560 Acoustics 561 Chemical and Atomic/ Molecular Physics 562 Electron Physics 563 Electromagnetic Physics 564 Elementary Particle Physics 566 Fluids 567 Mechanics 568 Nuclear Physics 569 Optics 570 Plasma and High- Temperature Physics 572 Polymer Physics 573 Thermal Physics 574 Solid State and Low- Temperature Physics 575 Theoretical Physics 578 Physics, General 579 Physics, Other Other Physical Sciences 599 Physical Sciences, Other Atmospheric Sciences 510 Atmospheric Physics and Chemistry 512 Atmospheric Dynamics 514 Meteorology 518 Atmospheric Science/ Meteorology, General 519 Atmospheric Science/ Meteorology, Other Geosciences 540 Geology 542 Geochemistry |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
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Classification System—continued**

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|---|---|---|
| <p>Mathematical Science 27 Mathematics</p> | <p>Mathematical Science 27 Mathematics</p> | <p>544 Geophysics and Seismology 545 Geophysics (Solid Earth) 546 Paleontology 548 Mineralogy and Petrology 549 Mineralogy, Petrology, and Geochemistry 550 Stratigraphy and Sedimentation 552 Geomorphology and Glacial Geology 554 Applied Geology 555 Applied Geology and Geological Engineering 558 Geological and Related Sciences, General 559 Geological and Related Sciences, Other 585 Hydrology and Water Resources</p> <p>Oceanography 590 Oceanography 595 Marine Sciences</p> <p>Other Environmental Sciences 580 Environmental Science</p> <p>MATHEMATICAL/COMPUTER SCIENCES Mathematics 420 Applied Mathematics 425 Algebra 430 Analysis and Functional Analysis 435 Geometry 440 Logic 445 Number Theory 450 Mathematical Statistics 455 Topology 460 Computing Theory and Practice 465 Operations Research</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
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**Historical Changes in the Higher Education General Information Survey (HEGIS)/
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Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|---|---|---|
| <p>Biological Science 26 Biological Sciences/Life Sciences</p> | <p>Biological Science 26 Biological Sciences/Life Sciences</p> | <p>072 Wood Science and Pulp/ Paper Technology 074 Conservation and Renewable Natural Resources 079 Forestry and Related Sciences 080 Wildlife and Range Management 098 Agricultural Science, General 099 Agricultural Science, Other</p> <p>Biological Sciences 100 Biochemistry 105 Biophysics 107 Biotechnology Research 110 Bacteriology 115 Plant Genetics 120 Plant Pathology 125 Plant Physiology 129 Botany, Other 130 Anatomy 133 Biometrics and Biostatistics 136 Cell Biology 139 Ecology 140 Hydrobiology 142 Embryology 145 Endocrinology 148 Entomology 151 Biological Immunology 154 Molecular Biology 156 Microbiology and Bacteriology 157 Microbiology 160 Neuroscience 163 Nutritional Sciences 166 Parasitology 169 Toxicology 170 Genetics, Human and Animal 171 Genetics</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|---|--|--|
| <p>Psychology 42 Psychology</p> | <p>Psychology 42 Psychology</p> | <p>710 History and Philosophy of Science and Technology 729 Linguistics 770 American Studies 773 Archeology</p> <p>Psychology 600 Clinical Psychology 603 Cognitive Psychology and Psycholinguistics 606 Comparative Psychology 609 Counseling Psychology 612 Developmental and Child Psychology 615 Experimental Psychology 616 Experimental, Comparative, and Physiological Psychology 618 Educational Psychology 619 Human Engineering 621 Industrial and Organizational Psychology 624 Personality Psychology 627 Physiological Psychology/ Psychobiology 630 Psychometrics 633 Quantitative Psychology 636 School Psychology 639 Social Psychology 648 Psychology, General 649 Psychology, Other</p> |
| <p align="center">NON-S&E</p> <p>01 Agribusiness and Agricultural Production 04 Architecture and Environmental Design 06 Business and Management</p> | <p align="center">NON-S&E</p> <p>01 Agricultural Business and Production 04 Architecture and Related Programs</p> | <p align="center">NON-S&E</p> <p>MEDICAL SCIENCES 205 Dentistry 210 Environmental Health 215 Public Health 219 Public Health and Epidemiology</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|---|---|
| 07 Business (Administrative Support), Other | 08 Marketing Operations/ Marketing and Distribution | 220 Epidemiology |
| 08 Marketing and Distribution | 09 Communications | 225 Medicine and Surgery |
| 09 Communications | 10 Communications Technologies | 235 Optometry and Ophthalmology |
| 12 Consumer, Personal, and Miscellaneous Services | 12 Personal and Miscellaneous Services | 240 Pharmacy |
| 13 Education | 13 Education | 250 Veterinary Science |
| 16 Foreign Languages | 15 Engineering-Related Technologies | OTHER SCIENCES |
| 17 Allied Health | 16 Foreign Languages and Literatures | 200 Speech/Language Pathology and Audiology |
| 18 Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic) | 17 Allied Health | 212 Health Systems/Services Administration |
| 19 Home Economics | 18 Health Professions and Related Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic, Allied Health) | 224 Hospital Administration |
| 20 Vocational Home Economics | 19 Home Economics | 230 Nursing |
| 22 Law | 20 Vocational Home Economics | 245 Rehabilitation/Therapeutic Services |
| 23 Letters | 22 Law and Legal Studies | 298 Health Sciences, General |
| 24 Liberal/General Studies | 23 English Language and Literature/Letters | 299 Health Sciences, Other |
| 25 Library and Archival Sciences | 24 Liberal/General Studies | HISTORY |
| 28 Military Sciences | 25 Library and Archival Sciences | 700 History, American |
| 29 Military Technologies | 28 Reserve Officer Training Corps (ROTC) | 705 History, European |
| 30 Multi-/Interdisciplinary Studies | 29 Military Technologies | 718 History, General |
| 31 Parks and Recreation | 30 Multi-/Interdisciplinary Studies | 719 History, Other |
| 38 Philosophy and Religion | 31 Parks, Recreation, Leisure, and Fitness Studies | ENGLISH AND LITERATURE |
| 39 Theology | 38 Philosophy and Religion | 720 Classics |
| 41 Science Technologies | 39 Theological Studies and Religious Vocations | 723 Comparative Literature |
| 44 Public Affairs (Does not include Parks and Recreation Management, and Law Enforcement and Correction) | 41 Science Technologies | 725 English and American Literature |
| 43 Protective Services | | 726 English Language |
| 46 Construction Trades | | 732 Literature, American |
| 47 Mechanics and Repairers | | 733 Literature, English |
| 48 Precision Production | | 734 English Language |
| | | 736 Speech and Rhetorical Studies |
| | | 738 Letters, General |
| | | 739 Letters, Other |
| | | FOREIGN LANGUAGES |
| | | 740 French |
| | | 743 German |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985-91 | Fields of study from the IPEDS, 1992-93 | Fields of study from the Survey of Earned Doctorates classification |
|--|---|---|
| 49 Transportation and Material Moving | 43 Protective Services | 746 Italian |
| 50 Visual and Performing Arts | 44 Public Administration and Services (Does not include Parks and Recreation Management, and Law Enforcement and Correction) | 749 Spanish |
| | 46 Construction Trades | 752 Russian |
| | 47 Mechanics and Repairers | 755 Slavic (Other than Russian) |
| | 48 Precision Production Trades | 758 Chinese |
| | 49 Transportation and Materials Moving Workers | 762 Japanese |
| | 50 Visual and Performing Arts | 765 Hebrew |
| | 52 Business Management and Administrative Services | 768 Arabic |
| | | 769 Other Languages and Literature |
| | | OTHER HUMANITIES |
| | | 785 Philosophy (See also 440) |
| | | 798 Humanities, General |
| | | 799 Humanities, Other |
| | | RELIGION AND THEOLOGY |
| | | 790 Religion (See also 984) |
| | | 791 Religion and Theology |
| | | 984 Theology/Religious Education (See also 790) |
| | | ARTS AND MUSIC |
| | | 774 Art, Applied |
| | | 775 Art, Fine/Applied |
| | | 776 Art History/Criticism/ Conservation |
| | | 780 Music |
| | | 795 Drama/Theater Arts |
| | | ARCHITECTURE AND ENVIRONMENTAL DESIGN |
| | | 960 Architecture and Environmental Design |
| | | SCIENCE EDUCATION |
| | | 884 Science Education |
| | | MATHEMATICS EDUCATION |
| | | 874 Mathematics Education |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|--|
| | | <p>SOCIAL SCIENCE EDUCATION 885 Social Science Education</p> <p>OTHER SCIENCE/ TECHNICAL EDUCATION 860 Agricultural Education 868 Health Education 872 Technical and Industrial Arts Education 878 Nursing Education 887 Technical Education</p> <p>NON-SCIENCE EDUCATION 800 Curriculum and Instruction 805 Education Administration and Supervision 807 Educational Leadership 810 Educational/Instructional Media Design 812 Early Childhood Education 814 Education Measurement and Statistics 815 Education Statistics/ Research Methods 820 Education Assessment, Testing, and Measurement 822 Educational Psychology (See also 618) 825 School Psychology (See also 636) 830 Social/Philosophical Foundations of Education 835 Special Education 840 Counseling Education/ Counseling and Guidance Services 845 Education Evaluation and Research 850 Pre-elementary/Early Childhood Teacher Education</p> |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|--|
| | | 852 Elementary Teacher Education |
| | | 854 Junior High Teacher Education |
| | | 856 Secondary Teacher Education |
| | | 858 Adult and Continuing Teacher Education |
| | | 861 Art Education |
| | | 862 Business Education |
| | | 864 English Education |
| | | 866 Foreign Languages Education |
| | | 867 Physical Education, Health, and Recreation |
| | | 870 Home Economics Education |
| | | 876 Music Education |
| | | 880 Physical Education and Coaching |
| | | 882 Reading Education |
| | | 886 Speech Education |
| | | 888 Trade and Industrial Education |
| | | 889 Teacher Education, Specific Academic and Vocational Programs, Other |
| | | 898 Education, General |
| | | 899 Education, Other |
| | | BUSINESS AND MANAGEMENT |
| | | 002 Agricultural Business and Management |
| | | 900 Accounting |
| | | 905 Banking/Financial Support Services |
| | | 910 Business Administration and Management |
| | | 915 Business/Managerial Economics |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|---|
| | | 917 Management Information Systems/Business Data Processing 920 Marketing Management and Research 925 Business Statistics 930 Operations Research (See also 363, 465) 935 Organizational Behavior (See also 621) 938 Business Management/ Administrative Services, General 939 Business Management/ Administrative Services, Other INFORMATION FIELDS (JOURNALISM, BROADCASTING, LIBRARIANSHIP) 940 Communications Research 945 Journalism 947 Mass Communications 950 Radio and Television 957 Communication Theory 958 Communications, General 959 Communications, Other 972 Library Science LAW 968 Law SOCIAL SERVICE PROFESSIONS 980 Social Service Professions VOCATIONAL STUDIES AND HOME ECONOMICS 964 Home Economics |

**Historical Changes in the Higher Education General Information Survey (HEGIS)/
Integrated Postsecondary Education Data System (IPEDS)
Classification System—continued**

| Fields of study collected in HEGIS/IPEDS, 1985–91 | Fields of study from the IPEDS, 1992–93 | Fields of study from the Survey of Earned Doctorates classification |
|--|--|---|
| | | <p>OTHER NON-SCIENCE FIELDS</p> <p>974 Parks/Recreation/Leisure/ Fitness</p> <p>988 Professional Fields, General</p> <p>989 Professional Fields, Other</p> <p>999 Other Fields</p> |

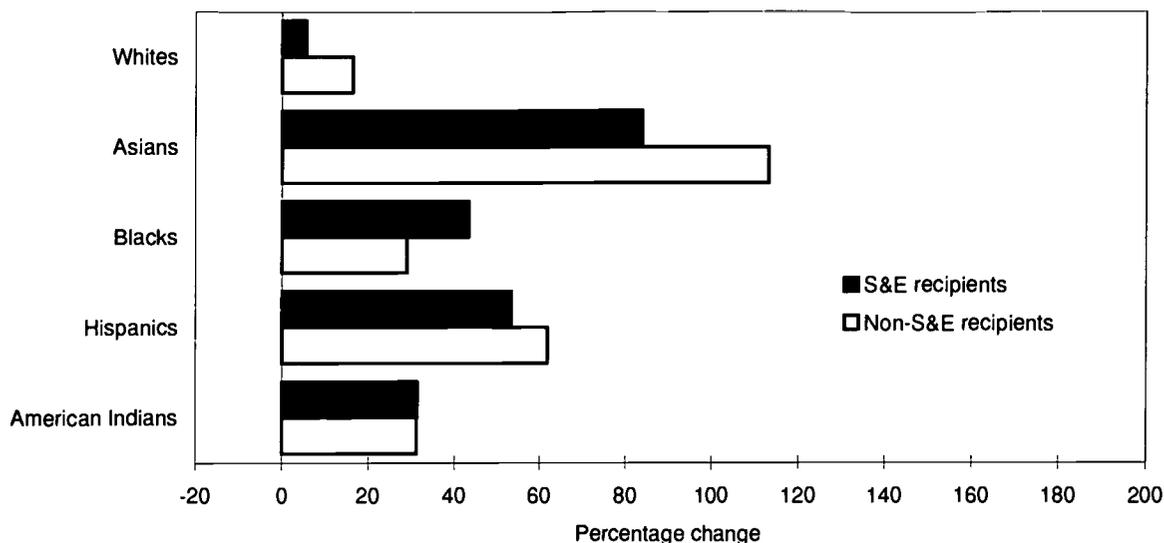
SECTION C.

STATISTICAL CHARTS

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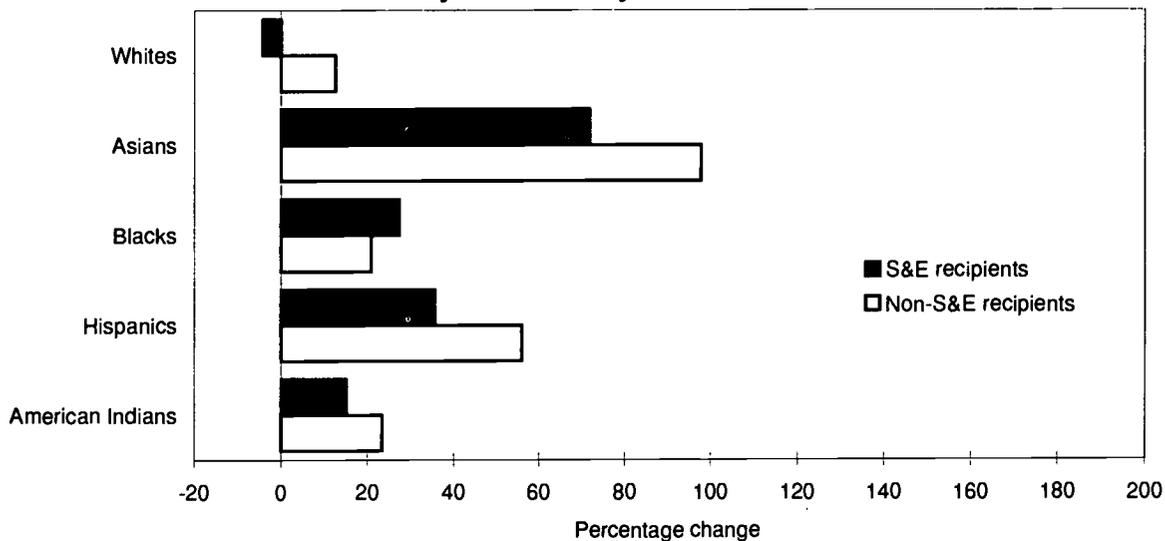
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Chart 1. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees, by race/ethnicity: 1985-93



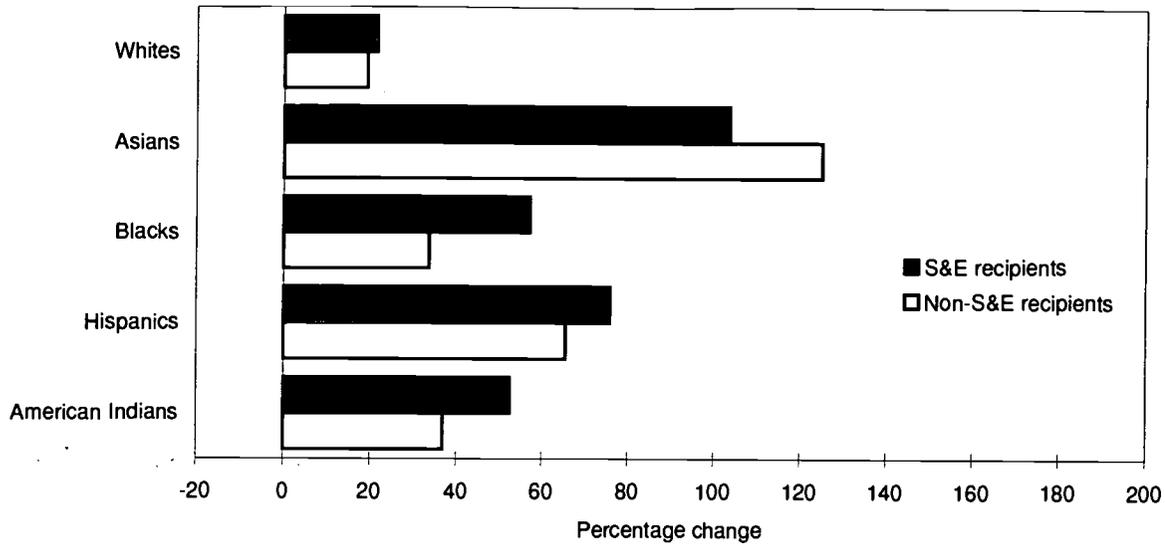
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 2. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees awarded to men, by race/ethnicity: 1985-93



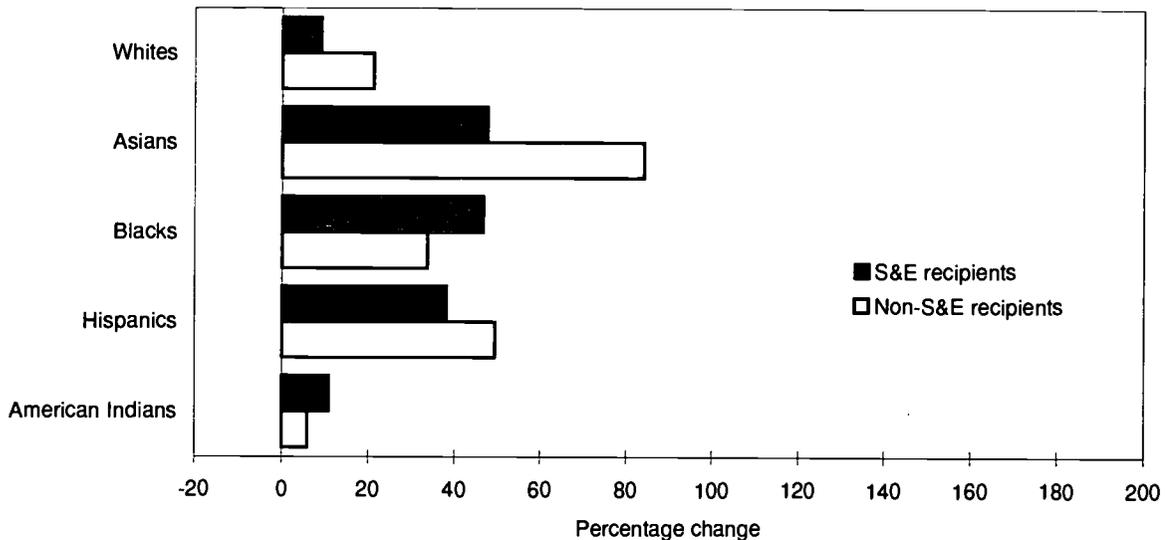
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 3. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees awarded to women, by race/ethnicity: 1985-93



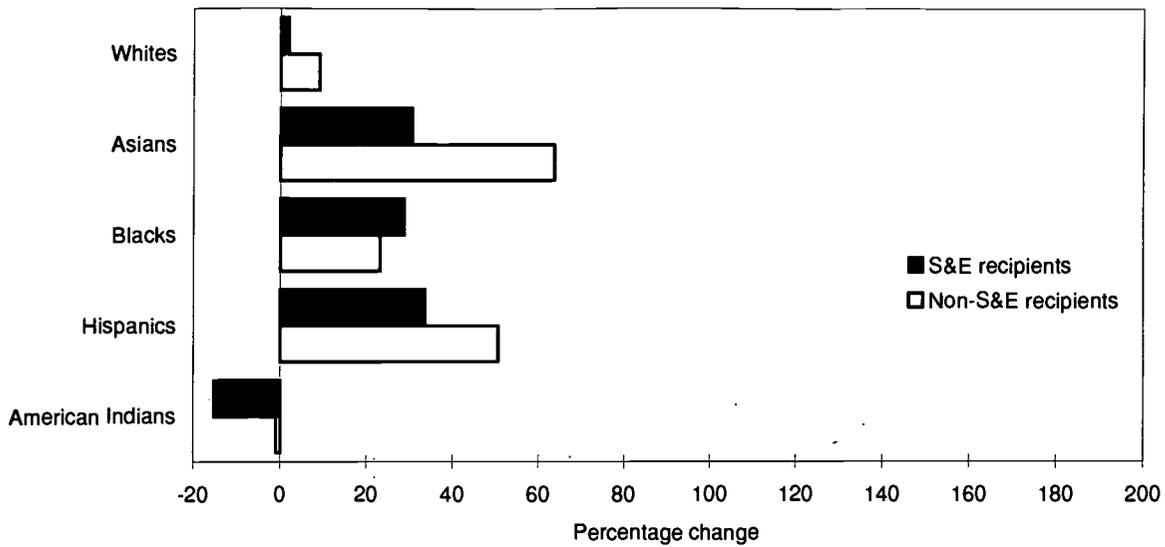
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

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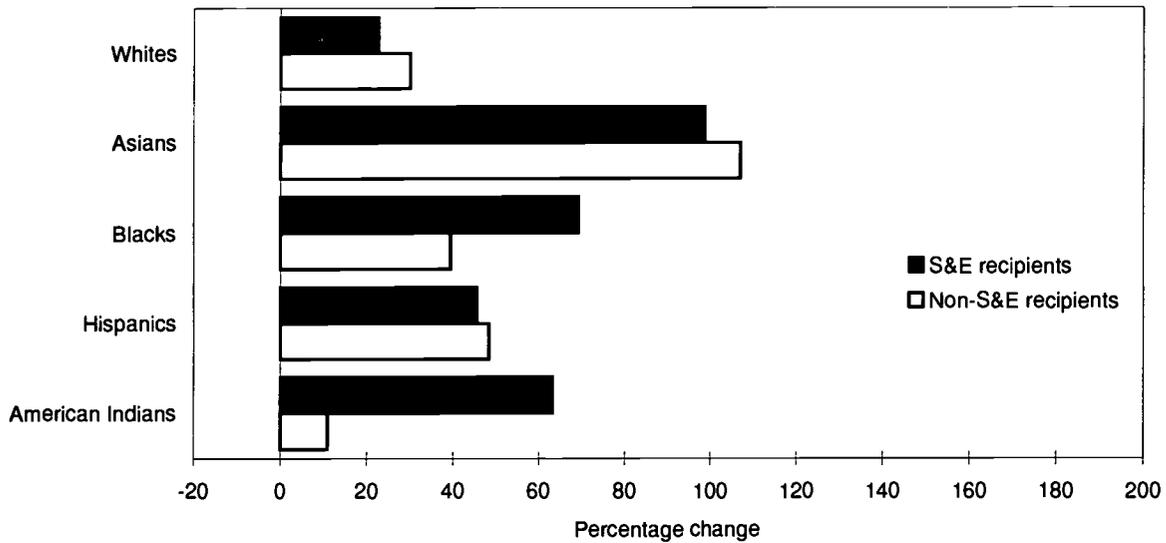
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 5. Percentage change in science and engineering (S&E) and non-S&E master's degrees awarded to men, by race/ethnicity: 1985-93



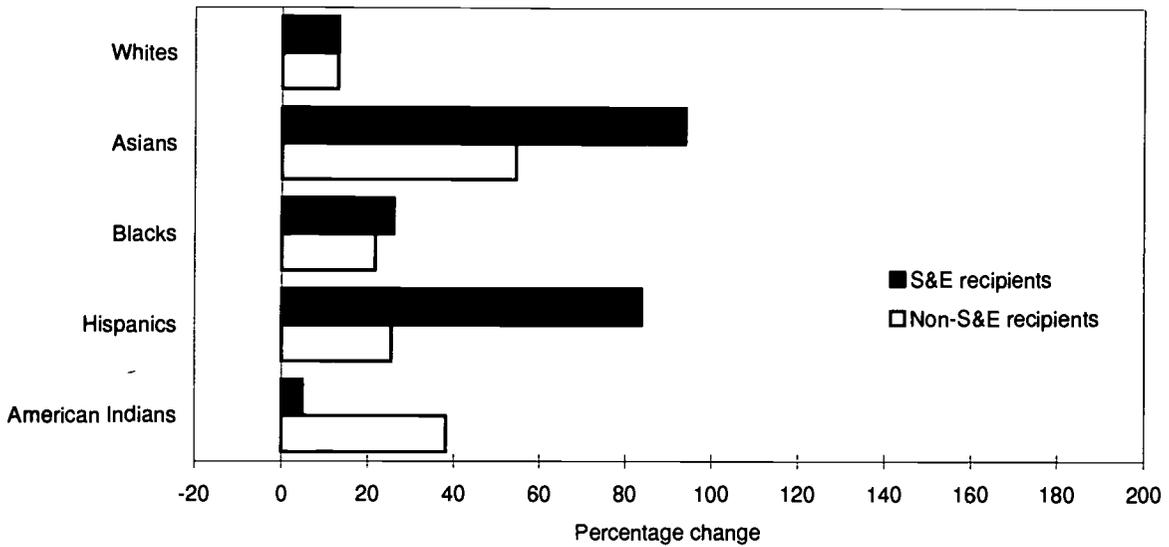
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 6. Percentage change in science and engineering (S&E) and non-S&E master's degrees awarded to women, by race/ethnicity: 1985-93



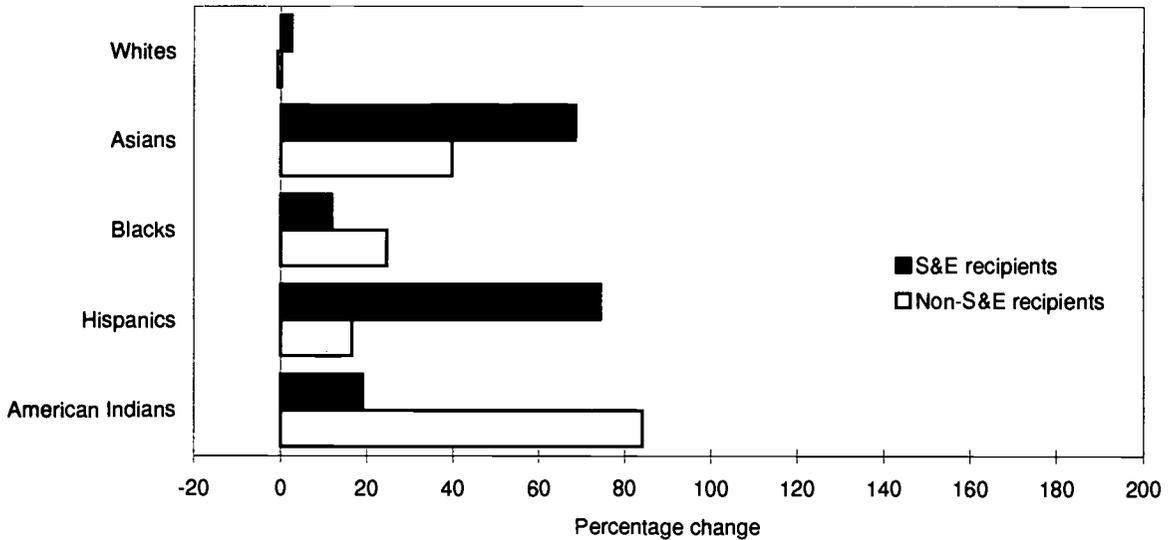
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 7. Percentage change in science and engineering (S&E) and non-S&E doctoral degrees, by race/ethnicity: 1985-93



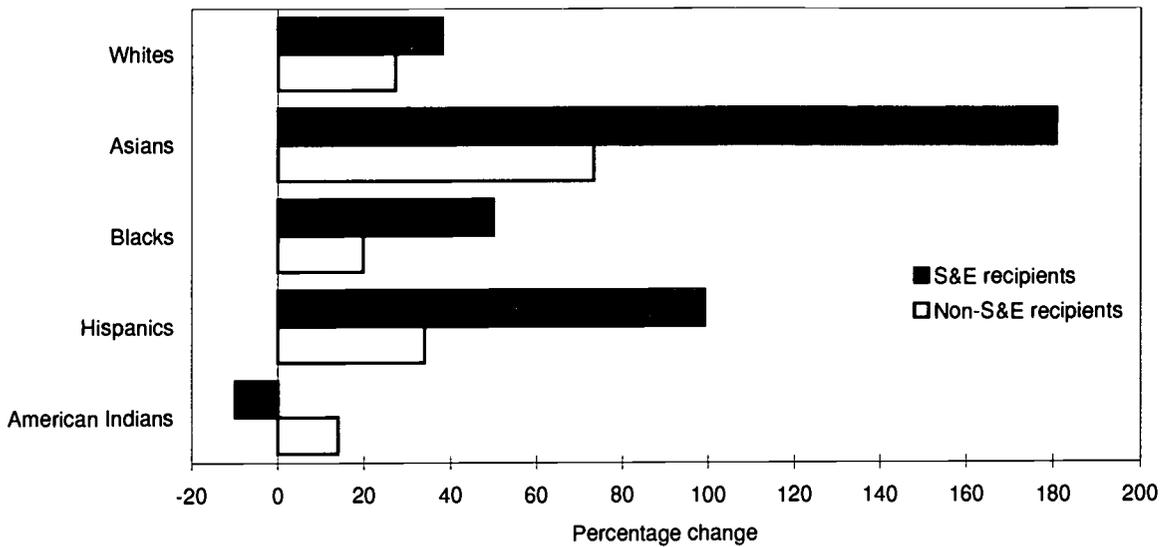
SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Chart 8. Percentage change in science and engineering (S&E) and non-S&E doctoral degrees awarded to men, by race/ethnicity: 1985-93



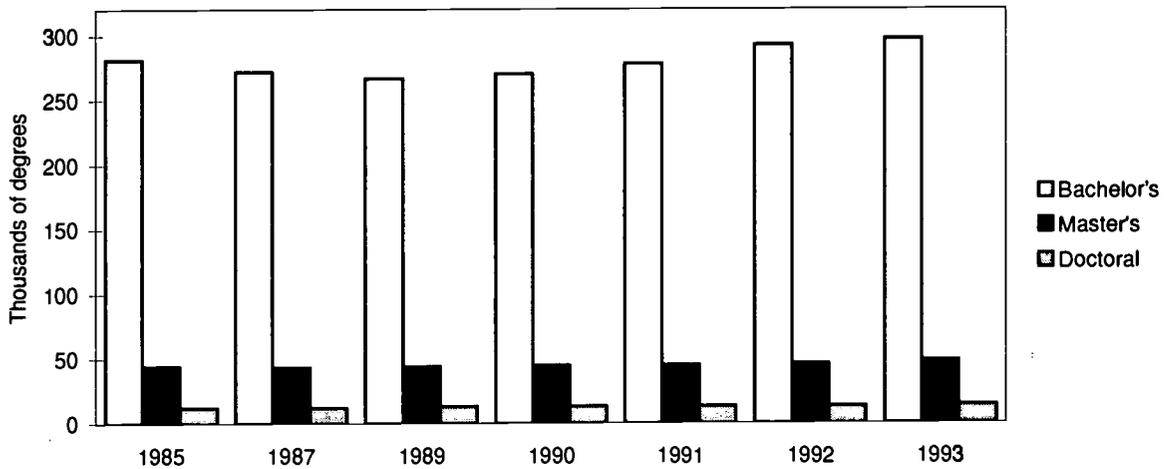
SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Chart 9. Percentage change in science and engineering (S&E) and non-S&E doctoral degrees awarded to women, by race/ethnicity: 1985-93



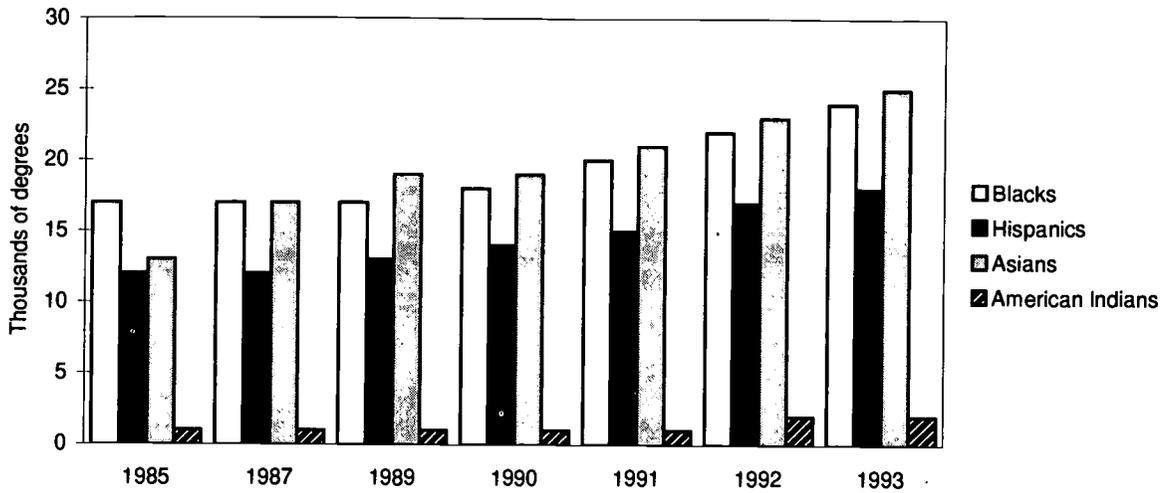
SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Chart 10. Number of earned science and engineering degrees awarded to whites, by degree level: 1985-93



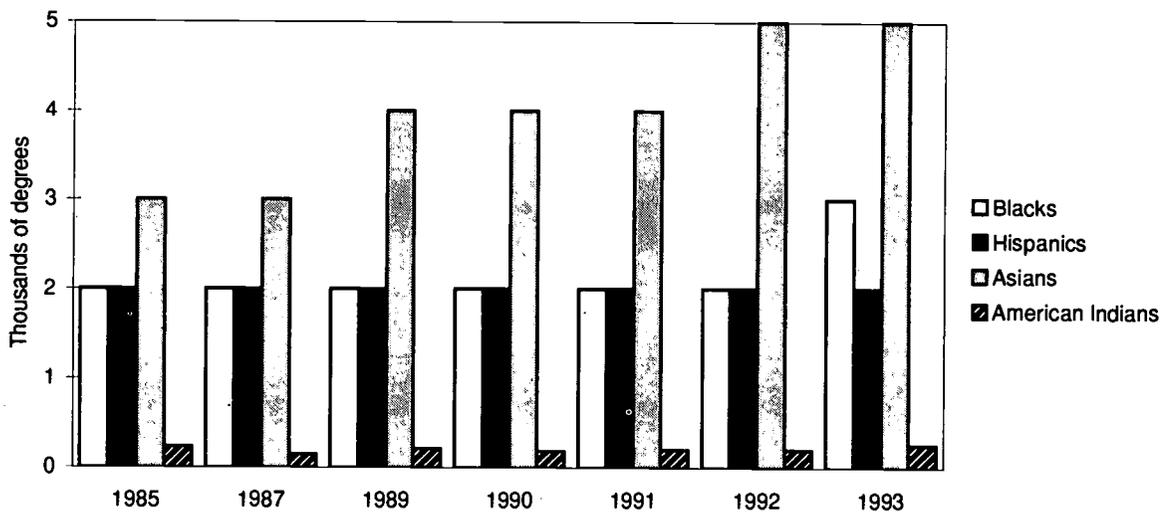
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93; doctoral data from NSF/SRS Survey of Earned Doctorates

Chart 11. Number of earned science and engineering bachelor's degrees awarded to minority groups: 1985-93



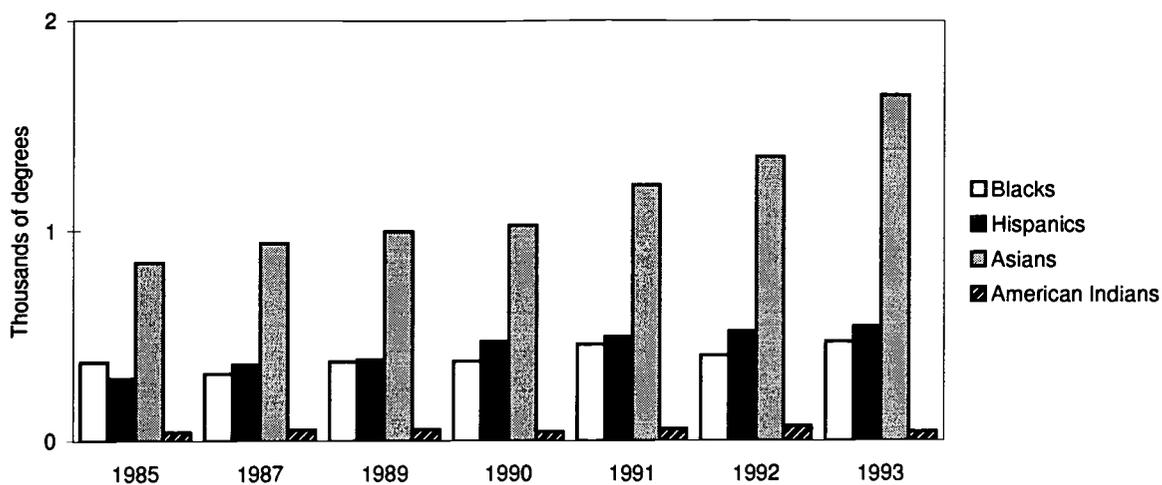
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 12. Number of earned science and engineering master's degrees awarded to minority groups: 1985-93



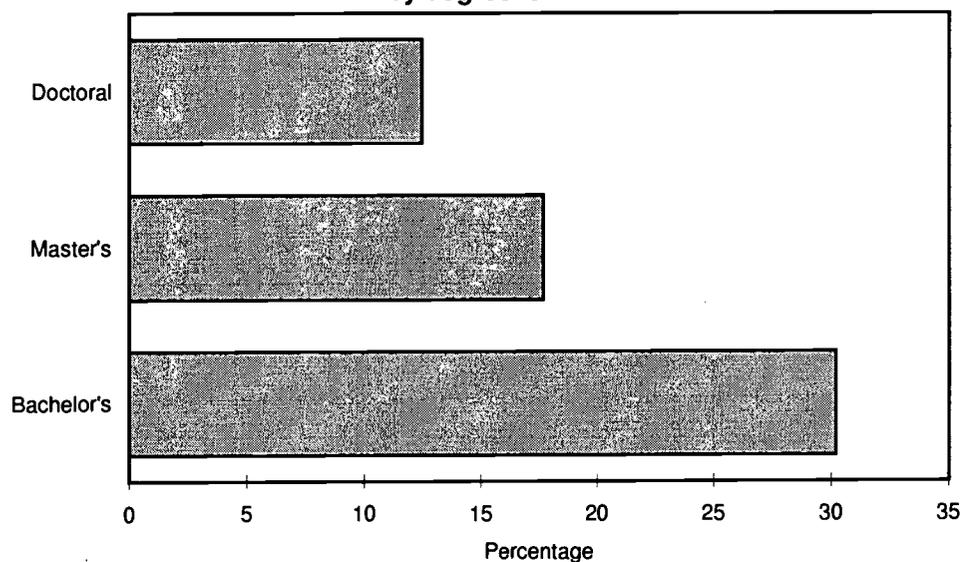
SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93

Chart 13. Number of earned science and engineering doctoral degrees awarded to minority groups: 1985-93



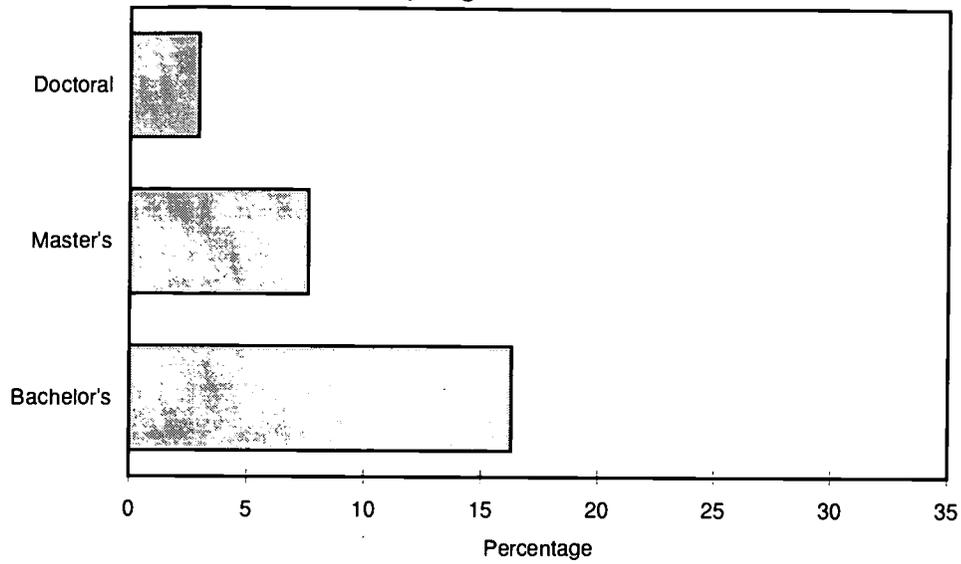
SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Chart 14. Percentage of blacks earning science and engineering degrees from historically black colleges and universities, by degree level: 1993



SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93; doctoral data from NSF/SRS Survey of Earned Doctorates

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SOURCES: Chart by National Science Foundation/SRS; data from National Center for Education Statistics: biennial data from the HEGIS Earned Degrees Survey, 1985, and IPEDS Completions Surveys, 1987-93; doctoral data from NSF/SRS Survey of Earned Doctorates

SECTION D.

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Table 1. Percentage distribution of earned bachelor's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1985-93, selected years

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|-------|-------|-------|-------|-------|-------|-------|
| Total | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 94.8 | 93.3 | 94.2 | 93.4 | 94.0 | 94.6 | 94.3 |
| White, non-Hispanics | 82.0 | 79.3 | 79.1 | 78.1 | 78.0 | 77.6 | 76.5 |
| Asians | 3.9 | 4.9 | 5.7 | 5.6 | 5.8 | 6.0 | 6.3 |
| Underrepresented minorities, total | 8.9 | 9.0 | 9.5 | 9.7 | 10.3 | 11.0 | 11.5 |
| Black, non-Hispanics | 5.0 | 5.0 | 5.2 | 5.3 | 5.6 | 6.0 | 6.3 |
| Hispanics | 3.5 | 3.6 | 3.9 | 4.0 | 4.3 | 4.6 | 4.7 |
| American Indians or Alaskan Natives | .4 | .4 | .4 | .4 | .4 | .4 | .5 |
| Nonresident aliens ² | 4.1 | 4.0 | 3.7 | 3.6 | 3.6 | 3.2 | 3.6 |
| Unknown race/ethnicity or citizenship | 1.1 | 2.7 | 2.1 | 3.0 | 2.4 | 2.1 | 2.1 |
| Men | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 93.7 | 92.5 | 93.5 | 92.6 | 93.1 | 93.8 | 93.5 |
| White, non-Hispanics | 82.4 | 79.9 | 79.8 | 78.9 | 78.8 | 78.5 | 77.5 |
| Asians | 3.9 | 5.0 | 5.8 | 5.8 | 5.9 | 6.3 | 6.6 |
| Underrepresented minorities, total | 7.3 | 7.5 | 7.9 | 8.0 | 8.5 | 9.0 | 9.4 |
| Black, non-Hispanics | 3.8 | 3.8 | 3.9 | 3.9 | 4.2 | 4.5 | 4.7 |
| Hispanics | 3.2 | 3.4 | 3.7 | 3.7 | 3.9 | 4.2 | 4.3 |
| American Indians or Alaskan Natives | .4 | .4 | .3 | .3 | .3 | .4 | .4 |
| Nonresident aliens ² | 5.1 | 4.9 | 4.6 | 4.5 | 4.5 | 4.0 | 4.4 |
| Unknown race/ethnicity or citizenship | 1.2 | 2.6 | 1.9 | 2.9 | 2.4 | 2.2 | 2.2 |
| Women | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 96.6 | 94.5 | 95.2 | 94.5 | 95.2 | 95.6 | 95.4 |
| White, non-Hispanics | 81.4 | 78.4 | 78.1 | 77.2 | 77.0 | 76.6 | 75.3 |
| Asians | 3.8 | 4.8 | 5.5 | 5.4 | 5.5 | 5.6 | 6.0 |
| Underrepresented minorities, total | 11.3 | 11.3 | 11.7 | 12.0 | 12.7 | 13.4 | 14.1 |
| Black, non-Hispanics | 6.9 | 6.9 | 7.0 | 7.1 | 7.4 | 7.8 | 8.2 |
| Hispanics | 4.0 | 4.0 | 4.3 | 4.4 | 4.8 | 5.2 | 5.3 |
| American Indians or Alaskan Natives | .5 | .4 | .4 | .4 | .4 | .5 | .5 |
| Nonresident aliens ² | 2.5 | 2.5 | 2.4 | 2.3 | 2.4 | 2.3 | 2.5 |
| Unknown race/ethnicity or citizenship | .9 | 3.0 | 2.4 | 3.1 | 2.4 | 2.1 | 2.1 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 2. Percentage distribution of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1985-93, selected years

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|-------|-------|-------|-------|-------|-------|-------|
| Total | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 78.4 | 75.4 | 73.2 | 72.2 | 72.6 | 71.9 | 70.9 |
| White, non-Hispanics | 68.0 | 64.9 | 62.5 | 61.5 | 61.1 | 59.9 | 58.9 |
| Asians | 5.1 | 5.2 | 5.8 | 5.6 | 5.9 | 6.3 | 6.0 |
| Underrepresented minorities, total | 5.4 | 5.3 | 4.9 | 5.0 | 5.5 | 5.7 | 6.0 |
| Black, non-Hispanics | 2.7 | 2.7 | 2.3 | 2.6 | 2.9 | 3.1 | 3.1 |
| Hispanics | 2.3 | 2.4 | 2.3 | 2.2 | 2.4 | 2.4 | 2.6 |
| American Indians or Alaskan Natives | .4 | .2 | .3 | .3 | .3 | .3 | .3 |
| Nonresident aliens ² | 19.3 | 19.5 | 21.5 | 22.6 | 23.4 | 23.6 | 24.7 |
| Unknown race/ethnicity or citizenship | 2.3 | 5.1 | 5.3 | 5.2 | 4.0 | 4.5 | 4.4 |
| Men | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 74.5 | 71.9 | 69.2 | 68.3 | 68.5 | 67.8 | 66.6 |
| White, non-Hispanics | 64.4 | 61.7 | 58.9 | 58.3 | 57.9 | 56.5 | 55.5 |
| Asians | 5.5 | 5.6 | 6.2 | 5.8 | 6.2 | 6.6 | 6.1 |
| Underrepresented minorities, total | 4.6 | 4.7 | 4.2 | 4.1 | 4.5 | 4.7 | 5.0 |
| Black, non-Hispanics | 2.2 | 2.2 | 1.8 | 2.0 | 2.2 | 2.3 | 2.4 |
| Hispanics | 2.1 | 2.3 | 2.0 | 2.0 | 2.1 | 2.1 | 2.4 |
| American Indians or Alaskan Natives | .3 | .2 | .3 | .2 | .2 | .2 | .2 |
| Nonresident aliens ² | 22.9 | 23.1 | 25.2 | 26.2 | 27.4 | 27.5 | 28.9 |
| Unknown race/ethnicity or citizenship | 2.7 | 5.0 | 5.5 | 5.5 | 4.1 | 4.7 | 4.5 |
| Women | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 87.4 | 82.8 | 81.6 | 80.1 | 80.3 | 79.7 | 78.9 |
| White, non-Hispanics | 76.1 | 72.0 | 70.0 | 68.1 | 67.3 | 66.4 | 65.3 |
| Asians | 4.1 | 4.2 | 5.1 | 5.3 | 5.4 | 5.6 | 5.7 |
| Underrepresented minorities, total | 7.2 | 6.5 | 6.4 | 6.8 | 7.6 | 7.6 | 8.0 |
| Black, non-Hispanics | 3.9 | 3.8 | 3.4 | 3.8 | 4.2 | 4.5 | 4.6 |
| Hispanics | 2.9 | 2.5 | 2.7 | 2.6 | 3.0 | 2.8 | 3.0 |
| American Indians or Alaskan Natives | .4 | .2 | .3 | .4 | .4 | .3 | .4 |
| Nonresident aliens ² | 11.3 | 11.9 | 13.7 | 15.3 | 15.8 | 16.3 | 16.9 |
| Unknown race/ethnicity or citizenship | 1.4 | 5.3 | 4.7 | 4.6 | 3.9 | 4.1 | 4.2 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Details may not sum to totals due to rounding.

Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 3. Percentage distribution of earned doctoral degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1985-93, selected years

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|-------|-------|-------|-------|-------|-------|-------|
| Total | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 72.5 | 69.1 | 65.9 | 66.3 | 64.9 | 63.6 | 64.8 |
| White, non-Hispanics | 64.3 | 60.6 | 57.6 | 57.8 | 55.6 | 54.1 | 54.1 |
| Asians | 4.5 | 4.7 | 4.6 | 4.6 | 5.1 | 5.5 | 6.5 |
| Underrepresented minorities, total | 3.8 | 3.7 | 3.7 | 3.9 | 4.2 | 4.0 | 4.2 |
| Black, non-Hispanics | 2.0 | 1.6 | 1.7 | 1.7 | 1.9 | 1.6 | 1.9 |
| Hispanics | 1.6 | 1.8 | 1.8 | 2.1 | 2.1 | 2.1 | 2.1 |
| American Indians or Alaskan Natives | .2 | .3 | .2 | .2 | .2 | .3 | .2 |
| Nonresident aliens ² | 21.4 | 22.5 | 24.8 | 28.7 | 31.8 | 32.8 | 31.9 |
| Unknown race/ethnicity or citizenship | 6.1 | 8.5 | 9.3 | 5.0 | 3.3 | 3.6 | 3.4 |
| Men | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 68.5 | 64.3 | 60.6 | 60.8 | 58.8 | 57.8 | 58.8 |
| White, non-Hispanics | 60.7 | 56.4 | 52.7 | 52.7 | 50.3 | 49.1 | 49.1 |
| Asians | 4.7 | 4.8 | 4.8 | 4.8 | 4.9 | 5.3 | 6.2 |
| Underrepresented minorities, total | 3.1 | 3.0 | 3.1 | 3.3 | 3.6 | 3.4 | 3.4 |
| Black, non-Hispanics | 1.7 | 1.3 | 1.4 | 1.4 | 1.6 | 1.4 | 1.5 |
| Hispanics | 1.3 | 1.5 | 1.5 | 1.8 | 1.8 | 1.8 | 1.8 |
| American Indians or Alaskan Natives | .1 | .2 | .2 | .2 | .2 | .2 | .1 |
| Nonresident aliens ² | 25.2 | 26.8 | 29.5 | 33.9 | 37.5 | 38.3 | 37.4 |
| Unknown race/ethnicity or citizenship | 6.2 | 8.9 | 9.9 | 5.3 | 3.6 | 3.8 | 3.8 |
| Women | | | | | | | |
| Total, all recipients | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| U.S. citizens and permanent residents, total ¹ | 84.0 | 82.1 | 79.6 | 80.6 | 79.8 | 78.0 | 78.7 |
| White, non-Hispanics | 74.5 | 72.2 | 70.3 | 71.1 | 68.5 | 66.5 | 65.7 |
| Asians | 3.9 | 4.4 | 4.0 | 4.1 | 5.5 | 5.8 | 7.0 |
| Underrepresented minorities, total | 5.6 | 5.5 | 5.4 | 5.4 | 5.7 | 5.7 | 5.9 |
| Black, non-Hispanics | 2.8 | 2.5 | 2.5 | 2.3 | 2.8 | 2.3 | 2.7 |
| Hispanics | 2.3 | 2.7 | 2.5 | 2.8 | 2.7 | 3.0 | 3.0 |
| American Indians or Alaskan Natives | .4 | .4 | .3 | .3 | .3 | .4 | .2 |
| Nonresident aliens ² | 10.3 | 10.6 | 12.8 | 15.4 | 17.7 | 19.1 | 19.0 |
| Unknown race/ethnicity or citizenship | 5.7 | 7.3 | 7.6 | 4.0 | 2.5 | 2.9 | 2.3 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTE: Details may not sum to totals due to rounding.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 4. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 342,970 | 343,070 | 337,431 | 345,793 | 356,785 | 376,933 | 388,435 |
| Engineering | 77,571 | 74,423 | 66,947 | 64,703 | 62,186 | 61,898 | 62,670 |
| Sciences | 265,399 | 268,647 | 270,484 | 281,090 | 294,599 | 315,035 | 325,765 |
| Natural sciences | 130,058 | 125,371 | 109,350 | 105,234 | 105,595 | 111,108 | 116,742 |
| Physical science ¹ | 23,847 | 20,155 | 17,329 | 16,203 | 16,407 | 17,076 | 17,691 |
| Mathematical science | 15,267 | 16,515 | 15,314 | 14,674 | 14,784 | 14,851 | 14,870 |
| Computer science | 39,121 | 39,927 | 30,963 | 27,695 | 25,410 | 24,854 | 24,477 |
| Biological science | 39,405 | 39,047 | 36,949 | 38,040 | 40,351 | 43,835 | 47,877 |
| Agricultural science | 12,418 | 9,727 | 8,795 | 8,622 | 8,643 | 10,492 | 11,827 |
| Social sciences | 135,341 | 143,276 | 161,134 | 175,856 | 189,004 | 203,927 | 209,023 |
| Social science | 95,104 | 100,081 | 112,180 | 121,838 | 130,111 | 139,884 | 141,772 |
| Psychology | 40,237 | 43,195 | 48,954 | 54,018 | 58,893 | 64,043 | 67,251 |
| Non-S&E ² | 647,907 | 660,462 | 692,740 | 716,358 | 751,212 | 773,139 | 790,843 |
| Grand total | 990,877 | 1,003,532 | 1,030,171 | 1,062,151 | 1,107,997 | 1,150,072 | 1,179,278 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 281,394 | 272,090 | 266,862 | 270,225 | 278,190 | 292,614 | 297,171 |
| Engineering | 60,992 | 56,491 | 50,081 | 47,494 | 45,162 | 45,026 | 44,853 |
| Sciences | 220,402 | 215,599 | 216,781 | 222,731 | 233,028 | 247,588 | 252,318 |
| Natural sciences | 107,076 | 98,344 | 84,578 | 80,210 | 80,111 | 84,133 | 87,401 |
| Physical science ¹ | 20,541 | 16,653 | 14,238 | 13,055 | 13,145 | 13,678 | 13,941 |
| Mathematical science | 12,163 | 13,265 | 12,287 | 11,765 | 11,649 | 11,723 | 11,669 |
| Computer science | 31,321 | 29,181 | 21,711 | 18,918 | 17,349 | 16,844 | 16,155 |
| Biological science | 31,818 | 30,549 | 28,404 | 28,814 | 30,264 | 32,506 | 35,080 |
| Agricultural science | 11,233 | 8,696 | 7,938 | 7,658 | 7,704 | 9,382 | 10,556 |
| Social sciences | 113,326 | 117,255 | 132,203 | 142,521 | 152,917 | 163,455 | 164,917 |
| Social science | 79,367 | 81,494 | 91,697 | 98,385 | 104,783 | 111,389 | 111,154 |
| Psychology | 33,959 | 35,761 | 40,506 | 44,136 | 48,134 | 52,066 | 53,763 |
| Non-S&E ² | 544,962 | 547,387 | 573,464 | 586,461 | 614,173 | 628,839 | 634,432 |
| Grand total | 826,356 | 819,477 | 840,326 | 856,686 | 892,363 | 921,453 | 931,603 |
| Asians | | | | | | | |
| Total science and engineering | 13,323 | 16,934 | 19,138 | 19,437 | 20,552 | 22,635 | 24,504 |
| Engineering | 4,482 | 5,590 | 6,075 | 6,012 | 6,220 | 6,265 | 6,407 |
| Sciences | 8,841 | 11,344 | 13,063 | 13,425 | 14,332 | 16,370 | 18,097 |
| Natural sciences | 5,809 | 7,130 | 7,260 | 7,326 | 7,595 | 8,496 | 9,524 |
| Physical science ¹ | 763 | 894 | 922 | 937 | 983 | 1,001 | 1,098 |
| Mathematical science | 885 | 1,034 | 1,019 | 874 | 915 | 857 | 915 |
| Computer science | 2,044 | 2,455 | 2,268 | 2,144 | 2,010 | 2,082 | 2,245 |
| Biological science | 1,952 | 2,565 | 2,907 | 3,245 | 3,559 | 4,402 | 5,103 |
| Agricultural science | 165 | 182 | 144 | 126 | 128 | 154 | 163 |
| Social sciences | 3,032 | 4,214 | 5,803 | 6,099 | 6,737 | 7,874 | 8,573 |
| Social science | 2,187 | 3,060 | 4,228 | 4,469 | 4,852 | 5,724 | 6,035 |
| Psychology | 845 | 1,154 | 1,575 | 1,630 | 1,885 | 2,150 | 2,538 |
| Non-S&E ² | 12,239 | 14,987 | 18,435 | 18,590 | 21,173 | 23,981 | 26,083 |
| Grand total | 25,562 | 31,921 | 37,573 | 38,027 | 41,725 | 46,616 | 50,587 |

See explanatory information and SOURCES at end of table.

Table 4. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|---------|---------|---------|---------|---------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 30,455 | 30,939 | 31,950 | 33,419 | 36,682 | 41,383 | 44,682 |
| Engineering | 4,435 | 5,079 | 4,805 | 4,729 | 4,953 | 5,277 | 5,714 |
| Sciences | 26,020 | 25,860 | 27,145 | 28,690 | 31,729 | 36,106 | 38,968 |
| Natural sciences | 10,879 | 11,607 | 10,830 | 10,530 | 10,960 | 11,722 | 12,510 |
| Physical science ¹ | 1,588 | 1,480 | 1,322 | 1,245 | 1,355 | 1,425 | 1,528 |
| Mathematical science | 1,164 | 1,207 | 1,218 | 1,178 | 1,334 | 1,432 | 1,490 |
| Computer science | 3,327 | 4,307 | 3,742 | 3,416 | 3,292 | 3,342 | 3,390 |
| Biological science | 4,277 | 4,180 | 4,151 | 4,243 | 4,551 | 5,043 | 5,602 |
| Agricultural science | 523 | 433 | 397 | 448 | 428 | 480 | 500 |
| Social sciences | 15,141 | 14,253 | 16,315 | 18,160 | 20,769 | 24,384 | 26,458 |
| Social science | 10,539 | 9,920 | 11,212 | 12,394 | 14,100 | 16,647 | 17,918 |
| Psychology | 4,602 | 4,333 | 5,103 | 5,766 | 6,669 | 7,737 | 8,540 |
| Non-S&E ² | 67,745 | 66,226 | 70,215 | 73,958 | 81,840 | 88,065 | 95,404 |
| Grand total | 98,200 | 97,165 | 102,165 | 107,377 | 118,522 | 129,448 | 140,086 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 17,040 | 17,230 | 17,385 | 18,230 | 19,987 | 22,431 | 24,421 |
| Engineering | 2,039 | 2,315 | 2,067 | 2,072 | 2,229 | 2,362 | 2,577 |
| Sciences | 15,001 | 14,915 | 15,318 | 16,158 | 17,758 | 20,069 | 21,844 |
| Natural sciences | 6,009 | 6,524 | 6,005 | 5,782 | 5,834 | 6,401 | 6,972 |
| Physical science ¹ | 830 | 823 | 697 | 650 | 753 | 816 | 836 |
| Mathematical science | 770 | 834 | 792 | 720 | 811 | 904 | 965 |
| Computer science | 2,143 | 2,820 | 2,457 | 2,247 | 1,997 | 2,090 | 2,213 |
| Biological science | 2,047 | 1,890 | 1,916 | 1,994 | 2,111 | 2,385 | 2,739 |
| Agricultural science | 219 | 157 | 143 | 171 | 162 | 206 | 219 |
| Social sciences | 8,992 | 8,391 | 9,313 | 10,376 | 11,924 | 13,668 | 14,872 |
| Social science | 6,325 | 5,940 | 6,570 | 7,226 | 8,236 | 9,489 | 10,254 |
| Psychology | 2,667 | 2,451 | 2,743 | 3,150 | 3,688 | 4,179 | 4,618 |
| Non-S&E ² | 40,523 | 37,873 | 39,452 | 41,071 | 45,022 | 48,880 | 52,246 |
| Grand total | 57,563 | 55,103 | 56,837 | 59,301 | 65,009 | 71,311 | 76,667 |
| Hispanics | | | | | | | |
| Total science and engineering | 12,031 | 12,419 | 13,327 | 13,918 | 15,351 | 17,391 | 18,442 |
| Engineering | 2,187 | 2,554 | 2,561 | 2,511 | 2,566 | 2,733 | 2,961 |
| Sciences | 9,844 | 9,865 | 10,766 | 11,407 | 12,785 | 14,658 | 15,481 |
| Natural sciences | 4,359 | 4,660 | 4,417 | 4,357 | 4,705 | 4,892 | 5,034 |
| Physical science ¹ | 660 | 585 | 563 | 522 | 533 | 546 | 599 |
| Mathematical science | 335 | 321 | 373 | 413 | 480 | 482 | 470 |
| Computer science | 1,045 | 1,375 | 1,195 | 1,085 | 1,215 | 1,173 | 1,096 |
| Biological science | 2,069 | 2,146 | 2,090 | 2,119 | 2,264 | 2,477 | 2,652 |
| Agricultural science | 250 | 233 | 196 | 218 | 213 | 214 | 217 |
| Social sciences | 5,485 | 5,205 | 6,349 | 7,050 | 8,080 | 9,766 | 10,447 |
| Social science | 3,751 | 3,503 | 4,197 | 4,645 | 5,334 | 6,519 | 6,860 |
| Psychology | 1,734 | 1,702 | 2,152 | 2,405 | 2,746 | 3,247 | 3,587 |
| Non-S&E ² | 24,360 | 25,777 | 28,034 | 29,946 | 33,676 | 35,616 | 39,403 |
| Grand total | 36,391 | 38,196 | 41,361 | 43,864 | 49,027 | 53,007 | 57,845 |

See explanatory information and SOURCES at end of table.

Table 4. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|-----------|-----------|-----------|-----------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 1,384 | 1,290 | 1,238 | 1,271 | 1,344 | 1,561 | 1,819 |
| Engineering | 209 | 210 | 177 | 146 | 158 | 182 | 176 |
| Sciences | 1,175 | 1,080 | 1,061 | 1,125 | 1,186 | 1,379 | 1,643 |
| Natural sciences | 511 | 423 | 408 | 391 | 421 | 429 | 504 |
| Physical science ¹ | 98 | 72 | 62 | 73 | 69 | 63 | 93 |
| Mathematical science | 59 | 52 | 53 | 45 | 43 | 46 | 55 |
| Computer science | 139 | 112 | 90 | 84 | 80 | 79 | 81 |
| Biological science | 161 | 144 | 145 | 130 | 176 | 181 | 211 |
| Agricultural science | 54 | 43 | 58 | 59 | 53 | 60 | 64 |
| Social sciences | 664 | 657 | 653 | 734 | 765 | 950 | 1,139 |
| Social science | 463 | 477 | 445 | 523 | 530 | 639 | 804 |
| Psychology | 201 | 180 | 208 | 211 | 235 | 311 | 335 |
| Non-S&E ² | 2,862 | 2,576 | 2,729 | 2,941 | 3,142 | 3,569 | 3,755 |
| Grand total | 4,246 | 3,866 | 3,967 | 4,212 | 4,486 | 5,130 | 5,574 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 325,172 | 319,963 | 317,950 | 323,081 | 335,424 | 356,632 | 366,357 |
| Engineering | 69,909 | 67,160 | 60,961 | 58,235 | 56,335 | 56,568 | 56,974 |
| Sciences | 255,263 | 252,803 | 256,989 | 264,846 | 279,089 | 300,064 | 309,383 |
| Natural sciences | 123,764 | 117,081 | 102,668 | 98,066 | 98,666 | 104,351 | 109,435 |
| Physical science ¹ | 22,892 | 19,027 | 16,482 | 15,237 | 15,483 | 16,104 | 16,567 |
| Mathematical science | 14,212 | 15,506 | 14,524 | 13,817 | 13,898 | 14,012 | 14,074 |
| Computer science | 36,692 | 35,943 | 27,721 | 24,478 | 22,651 | 22,268 | 21,790 |
| Biological science | 38,047 | 37,294 | 35,462 | 36,302 | 38,374 | 41,951 | 45,785 |
| Agricultural science | 11,921 | 9,311 | 8,479 | 8,232 | 8,260 | 10,016 | 11,219 |
| Social sciences | 131,499 | 135,722 | 154,321 | 166,780 | 180,423 | 195,713 | 199,948 |
| Social science | 92,093 | 94,474 | 107,137 | 115,248 | 123,735 | 133,760 | 135,107 |
| Psychology | 39,406 | 41,248 | 47,184 | 51,532 | 56,688 | 61,953 | 64,841 |
| Non-S&E ² | 624,946 | 628,600 | 662,114 | 679,009 | 717,186 | 740,885 | 755,919 |
| Grand total | 950,118 | 948,563 | 980,064 | 1,002,090 | 1,052,610 | 1,097,517 | 1,122,276 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 14,071 | 13,677 | 12,323 | 12,318 | 12,724 | 12,238 | 13,802 |
| Engineering | 6,190 | 5,889 | 5,072 | 4,917 | 4,582 | 4,223 | 4,505 |
| Sciences | 7,881 | 7,788 | 7,251 | 7,401 | 8,142 | 8,015 | 9,297 |
| Natural sciences | 5,011 | 5,019 | 4,422 | 4,326 | 4,556 | 4,369 | 5,086 |
| Physical science ¹ | 780 | 635 | 605 | 595 | 608 | 607 | 764 |
| Mathematical science | 763 | 655 | 543 | 524 | 578 | 592 | 552 |
| Computer science | 2,116 | 2,578 | 2,135 | 2,066 | 2,037 | 1,974 | 2,204 |
| Biological science | 915 | 862 | 873 | 867 | 1,063 | 993 | 1,217 |
| Agricultural science | 437 | 289 | 266 | 274 | 270 | 203 | 349 |
| Social sciences | 2,870 | 2,769 | 2,829 | 3,075 | 3,586 | 3,646 | 4,211 |
| Social science | 2,327 | 2,275 | 2,318 | 2,550 | 2,895 | 2,982 | 3,381 |
| Psychology | 543 | 494 | 511 | 525 | 691 | 664 | 830 |
| Non-S&E ² | 15,187 | 14,915 | 14,134 | 14,235 | 16,933 | 16,309 | 18,569 |
| Grand total | 29,258 | 28,592 | 26,457 | 26,553 | 29,657 | 28,547 | 32,371 |

See explanatory information and SOURCES at end of table.

Table 4. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|--------|--------|--------|--------|--------|--------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 3,727 | 9,430 | 7,158 | 10,394 | 8,637 | 8,063 | 8,276 |
| Engineering | 1,472 | 1,374 | 914 | 1,551 | 1,269 | 1,107 | 1,191 |
| Sciences | 2,255 | 8,056 | 6,244 | 8,843 | 7,368 | 6,956 | 7,085 |
| Natural sciences | 1,283 | 3,271 | 2,260 | 2,842 | 2,373 | 2,388 | 2,221 |
| Physical science ¹ | 175 | 493 | 242 | 371 | 316 | 365 | 360 |
| Mathematical science | 292 | 354 | 247 | 333 | 308 | 247 | 244 |
| Computer science | 313 | 1,406 | 1,107 | 1,151 | 722 | 612 | 483 |
| Biological science | 443 | 891 | 614 | 871 | 914 | 891 | 875 |
| Agricultural science | 60 | 127 | 50 | 116 | 113 | 273 | 259 |
| Social sciences | 972 | 4,785 | 3,984 | 6,001 | 4,995 | 4,568 | 4,864 |
| Social science | 684 | 3,332 | 2,725 | 4,040 | 3,481 | 3,142 | 3,284 |
| Psychology | 288 | 1,453 | 1,259 | 1,961 | 1,514 | 1,426 | 1,580 |
| Non-S&E ² | 7,774 | 16,947 | 16,492 | 23,114 | 17,093 | 15,945 | 16,355 |
| Grand total | 11,501 | 26,377 | 23,650 | 33,508 | 25,730 | 24,008 | 24,631 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 5. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 210,347 | 207,455 | 198,728 | 199,916 | 201,499 | 209,270 | 214,388 |
| Engineering | 66,326 | 63,020 | 56,759 | 54,730 | 52,522 | 52,270 | 52,696 |
| Sciences | 144,021 | 144,435 | 141,969 | 145,186 | 148,977 | 157,000 | 161,692 |
| Natural sciences | 78,568 | 75,630 | 65,875 | 62,518 | 62,091 | 64,678 | 67,855 |
| Physical science ¹ | 17,149 | 14,422 | 12,157 | 11,109 | 11,199 | 11,466 | 11,877 |
| Mathematical science | 8,231 | 8,833 | 8,264 | 7,863 | 7,804 | 7,923 | 7,859 |
| Computer science | 24,690 | 26,038 | 21,418 | 19,321 | 17,896 | 17,670 | 17,565 |
| Biological science | 20,435 | 20,039 | 18,295 | 18,631 | 19,715 | 21,107 | 23,111 |
| Agricultural science | 8,063 | 6,298 | 5,741 | 5,594 | 5,477 | 6,512 | 7,443 |
| Social sciences | 65,453 | 68,805 | 76,094 | 82,668 | 86,886 | 92,322 | 93,837 |
| Social science | 52,638 | 55,406 | 61,803 | 67,269 | 70,731 | 75,185 | 75,808 |
| Psychology | 12,815 | 13,399 | 14,291 | 15,399 | 16,155 | 17,137 | 18,029 |
| Non-S&E ² | 276,313 | 277,548 | 288,838 | 295,951 | 307,453 | 316,125 | 323,148 |
| Grand total | 486,660 | 485,003 | 487,566 | 495,867 | 508,952 | 525,395 | 537,536 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 173,396 | 165,825 | 158,590 | 157,675 | 158,687 | 164,220 | 166,063 |
| Engineering | 52,167 | 48,015 | 42,779 | 40,533 | 38,692 | 38,513 | 38,244 |
| Sciences | 121,229 | 117,810 | 115,811 | 117,142 | 119,995 | 125,707 | 127,819 |
| Natural sciences | 65,695 | 60,575 | 52,132 | 48,848 | 48,304 | 50,126 | 52,048 |
| Physical science ¹ | 14,980 | 12,139 | 10,173 | 9,179 | 9,203 | 9,430 | 9,614 |
| Mathematical science | 6,509 | 7,050 | 6,598 | 6,253 | 6,119 | 6,255 | 6,131 |
| Computer science | 20,188 | 19,793 | 15,799 | 13,974 | 12,916 | 12,571 | 12,329 |
| Biological science | 16,809 | 15,985 | 14,377 | 14,488 | 15,174 | 16,030 | 17,293 |
| Agricultural science | 7,209 | 5,608 | 5,185 | 4,954 | 4,892 | 5,840 | 6,681 |
| Social sciences | 55,534 | 57,235 | 63,679 | 68,294 | 71,691 | 75,581 | 75,771 |
| Social science | 44,665 | 46,066 | 51,766 | 55,662 | 58,414 | 61,574 | 61,269 |
| Psychology | 10,869 | 11,169 | 11,913 | 12,632 | 13,277 | 14,007 | 14,502 |
| Non-S&E ² | 231,800 | 230,712 | 239,962 | 243,349 | 252,058 | 258,297 | 261,177 |
| Grand total | 405,196 | 396,537 | 398,552 | 401,024 | 410,745 | 422,517 | 427,240 |
| Asians | | | | | | | |
| Total science and engineering | 8,229 | 10,445 | 11,578 | 11,528 | 11,942 | 13,198 | 14,132 |
| Engineering | 3,641 | 4,522 | 4,936 | 4,827 | 4,969 | 5,067 | 5,130 |
| Sciences | 4,588 | 5,923 | 6,642 | 6,701 | 6,973 | 8,131 | 9,002 |
| Natural sciences | 3,245 | 4,029 | 4,073 | 4,054 | 4,149 | 4,783 | 5,380 |
| Physical science ¹ | 504 | 598 | 626 | 592 | 606 | 615 | 675 |
| Mathematical science | 474 | 532 | 527 | 491 | 482 | 486 | 502 |
| Computer science | 1,158 | 1,490 | 1,420 | 1,335 | 1,268 | 1,373 | 1,492 |
| Biological science | 1,024 | 1,314 | 1,442 | 1,573 | 1,736 | 2,230 | 2,633 |
| Agricultural science | 85 | 95 | 58 | 63 | 57 | 79 | 78 |
| Social sciences | 1,343 | 1,894 | 2,569 | 2,647 | 2,824 | 3,348 | 3,622 |
| Social science | 1,058 | 1,489 | 2,065 | 2,156 | 2,260 | 2,728 | 2,884 |
| Psychology | 285 | 405 | 504 | 491 | 564 | 620 | 738 |
| Non-S&E ² | 5,404 | 6,459 | 7,625 | 7,569 | 8,831 | 9,992 | 10,687 |
| Grand total | 13,633 | 16,904 | 19,203 | 19,097 | 20,773 | 23,190 | 24,819 |

See explanatory information and SOURCES at end of table.

Table 5. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 15,459 | 15,598 | 15,672 | 15,954 | 17,027 | 18,890 | 20,160 |
| Engineering | 3,511 | 3,886 | 3,638 | 3,574 | 3,654 | 3,952 | 4,261 |
| Sciences | 11,948 | 11,712 | 12,034 | 12,380 | 13,373 | 14,938 | 15,899 |
| Natural sciences | 5,515 | 5,699 | 5,411 | 5,043 | 5,226 | 5,450 | 5,766 |
| Physical science ¹ | 963 | 855 | 771 | 655 | 755 | 745 | 792 |
| Mathematical science | 601 | 627 | 636 | 614 | 657 | 675 | 744 |
| Computer science | 1,694 | 2,111 | 2,013 | 1,797 | 1,758 | 1,864 | 1,802 |
| Biological science | 1,892 | 1,818 | 1,734 | 1,685 | 1,799 | 1,885 | 2,130 |
| Agricultural science | 365 | 288 | 257 | 292 | 257 | 281 | 298 |
| Social sciences | 6,433 | 6,013 | 6,623 | 7,337 | 8,147 | 9,488 | 10,133 |
| Social science | 5,065 | 4,776 | 5,286 | 5,788 | 6,442 | 7,590 | 8,013 |
| Psychology | 1,368 | 1,237 | 1,337 | 1,549 | 1,705 | 1,898 | 2,120 |
| Non-S&E ² | 25,728 | 24,756 | 25,978 | 27,093 | 29,887 | 31,805 | 34,440 |
| Grand total | 41,187 | 40,354 | 41,650 | 43,047 | 46,914 | 50,695 | 54,600 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 7,926 | 7,886 | 7,685 | 7,830 | 8,448 | 9,375 | 10,099 |
| Engineering | 1,479 | 1,606 | 1,397 | 1,416 | 1,484 | 1,614 | 1,764 |
| Sciences | 6,447 | 6,280 | 6,288 | 6,414 | 6,964 | 7,761 | 8,335 |
| Natural sciences | 2,833 | 2,939 | 2,732 | 2,476 | 2,538 | 2,709 | 2,872 |
| Physical science ¹ | 457 | 433 | 365 | 292 | 391 | 381 | 370 |
| Mathematical science | 376 | 399 | 374 | 342 | 380 | 374 | 444 |
| Computer science | 1,036 | 1,284 | 1,205 | 1,074 | 971 | 1,092 | 1,049 |
| Biological science | 806 | 723 | 700 | 658 | 696 | 749 | 883 |
| Agricultural science | 158 | 100 | 88 | 110 | 100 | 113 | 126 |
| Social sciences | 3,614 | 3,341 | 3,556 | 3,938 | 4,426 | 5,052 | 5,463 |
| Social science | 2,863 | 2,680 | 2,911 | 3,144 | 3,547 | 4,070 | 4,364 |
| Psychology | 751 | 661 | 645 | 794 | 879 | 982 | 1,099 |
| Non-S&E ² | 15,114 | 14,056 | 14,228 | 14,760 | 15,790 | 17,143 | 18,275 |
| Grand total | 23,040 | 21,942 | 21,913 | 22,590 | 24,238 | 26,518 | 28,374 |
| Hispanics | | | | | | | |
| Total science and engineering | 6,751 | 6,974 | 7,318 | 7,434 | 7,888 | 8,730 | 9,160 |
| Engineering | 1,863 | 2,100 | 2,100 | 2,035 | 2,039 | 2,187 | 2,355 |
| Sciences | 4,888 | 4,874 | 5,218 | 5,399 | 5,849 | 6,543 | 6,805 |
| Natural sciences | 2,380 | 2,516 | 2,432 | 2,328 | 2,458 | 2,497 | 2,608 |
| Physical science ¹ | 441 | 377 | 362 | 311 | 318 | 326 | 361 |
| Mathematical science | 189 | 196 | 224 | 249 | 259 | 279 | 273 |
| Computer science | 582 | 766 | 750 | 669 | 738 | 724 | 700 |
| Biological science | 997 | 1,018 | 965 | 955 | 1,019 | 1,043 | 1,144 |
| Agricultural science | 171 | 159 | 131 | 144 | 124 | 125 | 130 |
| Social sciences | 2,508 | 2,358 | 2,786 | 3,071 | 3,391 | 4,046 | 4,197 |
| Social science | 1,966 | 1,845 | 2,153 | 2,384 | 2,634 | 3,220 | 3,269 |
| Psychology | 542 | 513 | 633 | 687 | 757 | 826 | 928 |
| Non-S&E ² | 9,398 | 9,664 | 10,684 | 11,249 | 12,893 | 13,296 | 14,665 |
| Grand total | 16,149 | 16,638 | 18,002 | 18,683 | 20,781 | 22,026 | 23,825 |

See explanatory information and SOURCES at end of table.

Table 5. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|---------|---------|---------|---------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 782 | 738 | 669 | 690 | 691 | 785 | 901 |
| Engineering | 169 | 180 | 141 | 123 | 131 | 151 | 142 |
| Sciences | 613 | 558 | 528 | 567 | 560 | 634 | 759 |
| Natural sciences | 302 | 244 | 247 | 239 | 230 | 244 | 286 |
| Physical science ¹ | 65 | 45 | 44 | 52 | 46 | 38 | 61 |
| Mathematical science | 36 | 32 | 38 | 23 | 18 | 22 | 27 |
| Computer science | 76 | 61 | 58 | 54 | 49 | 48 | 53 |
| Biological science | 89 | 77 | 69 | 72 | 84 | 93 | 103 |
| Agricultural science | 36 | 29 | 38 | 38 | 33 | 43 | 42 |
| Social sciences | 311 | 314 | 281 | 328 | 330 | 390 | 473 |
| Social science | 236 | 251 | 222 | 260 | 261 | 300 | 380 |
| Psychology | 75 | 63 | 59 | 68 | 69 | 90 | 93 |
| Non-S&E ² | 1,216 | 1,036 | 1,066 | 1,084 | 1,204 | 1,366 | 1,500 |
| Grand total | 1,998 | 1,774 | 1,735 | 1,774 | 1,895 | 2,151 | 2,401 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 197,084 | 191,868 | 185,840 | 185,157 | 187,656 | 196,308 | 200,355 |
| Engineering | 59,319 | 56,423 | 51,353 | 48,934 | 47,315 | 47,532 | 47,635 |
| Sciences | 137,765 | 135,445 | 134,487 | 136,223 | 140,341 | 148,776 | 152,720 |
| Natural sciences | 74,455 | 70,303 | 61,616 | 57,945 | 57,679 | 60,359 | 63,194 |
| Physical science ¹ | 16,447 | 13,592 | 11,570 | 10,426 | 10,564 | 10,790 | 11,081 |
| Mathematical science | 7,584 | 8,209 | 7,761 | 7,358 | 7,258 | 7,416 | 7,377 |
| Computer science | 23,040 | 23,394 | 19,232 | 17,106 | 15,942 | 15,808 | 15,623 |
| Biological science | 19,725 | 19,117 | 17,553 | 17,746 | 18,709 | 20,145 | 22,056 |
| Agricultural science | 7,659 | 5,991 | 5,500 | 5,309 | 5,206 | 6,200 | 7,057 |
| Social sciences | 63,310 | 65,142 | 72,871 | 78,278 | 82,662 | 88,417 | 89,526 |
| Social science | 50,788 | 52,331 | 59,117 | 63,606 | 67,116 | 71,892 | 72,166 |
| Psychology | 12,522 | 12,811 | 13,754 | 14,672 | 15,546 | 16,525 | 17,360 |
| Non-S&E ² | 262,932 | 261,927 | 273,565 | 278,011 | 290,776 | 300,094 | 306,304 |
| Grand total | 460,016 | 453,795 | 459,405 | 463,168 | 478,432 | 496,402 | 506,659 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 10,733 | 10,266 | 9,043 | 8,936 | 8,983 | 8,341 | 9,394 |
| Engineering | 5,708 | 5,368 | 4,599 | 4,427 | 4,112 | 3,752 | 4,041 |
| Sciences | 5,025 | 4,898 | 4,444 | 4,509 | 4,871 | 4,589 | 5,353 |
| Natural sciences | 3,371 | 3,320 | 2,902 | 2,856 | 2,995 | 2,806 | 3,271 |
| Physical science ¹ | 580 | 461 | 406 | 415 | 411 | 417 | 525 |
| Mathematical science | 476 | 421 | 347 | 324 | 374 | 358 | 345 |
| Computer science | 1,444 | 1,776 | 1,517 | 1,472 | 1,463 | 1,419 | 1,601 |
| Biological science | 504 | 433 | 426 | 431 | 544 | 479 | 569 |
| Agricultural science | 367 | 229 | 206 | 214 | 203 | 133 | 231 |
| Social sciences | 1,654 | 1,578 | 1,542 | 1,653 | 1,876 | 1,783 | 2,082 |
| Social science | 1,459 | 1,419 | 1,372 | 1,493 | 1,698 | 1,608 | 1,862 |
| Psychology | 195 | 159 | 170 | 160 | 178 | 175 | 220 |
| Non-S&E ² | 9,378 | 8,872 | 8,074 | 7,972 | 9,244 | 8,765 | 9,658 |
| Grand total | 20,111 | 19,138 | 17,117 | 16,908 | 18,227 | 17,106 | 19,052 |

See explanatory information and SOURCES at end of table.

Table 5. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---------------------------------------|-------|--------|--------|--------|--------|--------|--------|
| Unknown race/ethnicity or citizenship | | | | | | | |
| Total science and engineering | 2,530 | 5,321 | 3,845 | 5,823 | 4,860 | 4,621 | 4,639 |
| Engineering | 1,299 | 1,229 | 807 | 1,369 | 1,095 | 986 | 1,020 |
| Sciences | 1,231 | 4,092 | 3,038 | 4,454 | 3,765 | 3,635 | 3,619 |
| Natural sciences | 742 | 2,007 | 1,357 | 1,717 | 1,417 | 1,513 | 1,390 |
| Physical science ¹ | 122 | 369 | 181 | 268 | 224 | 259 | 271 |
| Mathematical science | 171 | 203 | 156 | 181 | 172 | 149 | 137 |
| Computer science | 206 | 868 | 669 | 743 | 491 | 443 | 341 |
| Biological science | 206 | 489 | 316 | 454 | 462 | 483 | 486 |
| Agricultural science | 37 | 78 | 35 | 71 | 68 | 179 | 155 |
| Social sciences | 489 | 2,085 | 1,681 | 2,737 | 2,348 | 2,122 | 2,229 |
| Social science | 391 | 1,656 | 1,314 | 2,170 | 1,917 | 1,685 | 1,780 |
| Psychology | 98 | 429 | 367 | 567 | 431 | 437 | 449 |
| Non-S&E ² | 4,003 | 6,749 | 7,199 | 9,968 | 7,433 | 7,266 | 7,186 |
| Grand total | 6,533 | 12,070 | 11,044 | 15,791 | 12,293 | 11,887 | 11,825 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 6. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 132,623 | 135,615 | 138,703 | 145,877 | 155,286 | 167,663 | 174,047 |
| Engineering | 11,245 | 11,403 | 10,188 | 9,973 | 9,664 | 9,628 | 9,974 |
| Sciences | 121,378 | 124,212 | 128,515 | 135,904 | 145,622 | 158,035 | 164,073 |
| Natural sciences | 51,490 | 49,741 | 43,475 | 42,716 | 43,504 | 46,430 | 48,887 |
| Physical science ¹ | 6,698 | 5,733 | 5,172 | 5,094 | 5,208 | 5,610 | 5,814 |
| Mathematical science | 7,036 | 7,682 | 7,050 | 6,811 | 6,980 | 6,928 | 7,011 |
| Computer science | 14,431 | 13,889 | 9,545 | 8,374 | 7,514 | 7,184 | 6,912 |
| Biological science | 18,970 | 19,008 | 18,654 | 19,409 | 20,636 | 22,728 | 24,766 |
| Agricultural science | 4,355 | 3,429 | 3,054 | 3,028 | 3,166 | 3,980 | 4,384 |
| Social sciences | 69,888 | 74,471 | 85,040 | 93,188 | 102,118 | 111,605 | 115,186 |
| Social science | 42,466 | 44,675 | 50,377 | 54,569 | 59,380 | 64,699 | 65,964 |
| Psychology | 27,422 | 29,796 | 34,663 | 38,619 | 42,738 | 46,906 | 49,222 |
| Non-S&E ² | 371,594 | 382,914 | 403,902 | 420,407 | 443,759 | 457,014 | 467,695 |
| Grand total | 504,217 | 518,529 | 542,605 | 566,284 | 599,045 | 624,677 | 641,742 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 107,998 | 106,265 | 108,272 | 112,550 | 119,503 | 128,394 | 131,108 |
| Engineering | 8,825 | 8,476 | 7,302 | 6,961 | 6,470 | 6,513 | 6,609 |
| Sciences | 99,173 | 97,789 | 100,970 | 105,589 | 113,033 | 121,881 | 124,499 |
| Natural sciences | 41,381 | 37,769 | 32,446 | 31,362 | 31,807 | 34,007 | 35,353 |
| Physical science ¹ | 5,561 | 4,514 | 4,065 | 3,876 | 3,942 | 4,248 | 4,327 |
| Mathematical science | 5,654 | 6,215 | 5,689 | 5,512 | 5,530 | 5,468 | 5,538 |
| Computer science | 11,133 | 9,388 | 5,912 | 4,944 | 4,433 | 4,273 | 3,826 |
| Biological science | 15,009 | 14,564 | 14,027 | 14,326 | 15,090 | 16,476 | 17,787 |
| Agricultural science | 4,024 | 3,088 | 2,753 | 2,704 | 2,812 | 3,542 | 3,875 |
| Social sciences | 57,792 | 60,020 | 68,524 | 74,227 | 81,226 | 87,874 | 89,146 |
| Social science | 34,702 | 35,428 | 39,931 | 42,723 | 46,369 | 49,815 | 49,885 |
| Psychology | 23,090 | 24,592 | 28,593 | 31,504 | 34,857 | 38,059 | 39,261 |
| Non-S&E ² | 313,162 | 316,675 | 333,502 | 343,112 | 362,115 | 370,542 | 373,255 |
| Grand total | 421,160 | 422,940 | 441,774 | 455,662 | 481,618 | 498,936 | 504,363 |
| Asians | | | | | | | |
| Total science and engineering | 5,094 | 6,489 | 7,560 | 7,909 | 8,610 | 9,437 | 10,372 |
| Engineering | 841 | 1,068 | 1,139 | 1,185 | 1,251 | 1,198 | 1,277 |
| Sciences | 4,253 | 5,421 | 6,421 | 6,724 | 7,359 | 8,239 | 9,095 |
| Natural sciences | 2,564 | 3,101 | 3,187 | 3,272 | 3,446 | 3,713 | 4,144 |
| Physical science ¹ | 259 | 296 | 296 | 345 | 377 | 386 | 423 |
| Mathematical science | 411 | 502 | 492 | 383 | 433 | 371 | 413 |
| Computer science | 886 | 965 | 848 | 809 | 742 | 709 | 753 |
| Biological science | 928 | 1,251 | 1,465 | 1,672 | 1,823 | 2,172 | 2,470 |
| Agricultural science | 80 | 87 | 86 | 63 | 71 | 75 | 85 |
| Social sciences | 1,689 | 2,320 | 3,234 | 3,452 | 3,913 | 4,526 | 4,951 |
| Social science | 1,129 | 1,571 | 2,163 | 2,313 | 2,592 | 2,996 | 3,151 |
| Psychology | 560 | 749 | 1,071 | 1,139 | 1,321 | 1,530 | 1,800 |
| Non-S&E ² | 6,835 | 8,528 | 10,810 | 11,021 | 12,342 | 13,989 | 15,396 |
| Grand total | 11,929 | 15,017 | 18,370 | 18,930 | 20,952 | 23,426 | 25,768 |

See explanatory information and SOURCES at end of table.

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Table 6. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 14,996 | 15,341 | 16,278 | 17,465 | 19,655 | 22,493 | 24,522 |
| Engineering | 924 | 1,193 | 1,167 | 1,155 | 1,299 | 1,325 | 1,453 |
| Sciences | 14,072 | 14,148 | 15,111 | 16,310 | 18,356 | 21,168 | 23,069 |
| Natural sciences | 5,364 | 5,908 | 5,419 | 5,487 | 5,734 | 6,272 | 6,744 |
| Physical science ¹ | 625 | 625 | 551 | 590 | 600 | 680 | 736 |
| Mathematical science | 563 | 580 | 582 | 564 | 677 | 757 | 746 |
| Computer science | 1,633 | 2,196 | 1,729 | 1,619 | 1,534 | 1,478 | 1,588 |
| Biological science | 2,385 | 2,362 | 2,417 | 2,558 | 2,752 | 3,158 | 3,472 |
| Agricultural science | 158 | 145 | 140 | 156 | 171 | 199 | 202 |
| Social sciences | 8,708 | 8,240 | 9,692 | 10,823 | 12,622 | 14,896 | 16,325 |
| Social science | 5,474 | 5,144 | 5,926 | 6,606 | 7,658 | 9,057 | 9,905 |
| Psychology | 3,234 | 3,096 | 3,766 | 4,217 | 4,964 | 5,839 | 6,420 |
| Non-S&E ² | 42,017 | 41,470 | 44,237 | 46,865 | 51,953 | 56,260 | 60,964 |
| Grand total | 57,013 | 56,811 | 60,515 | 64,330 | 71,608 | 78,753 | 85,486 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 9,114 | 9,344 | 9,700 | 10,400 | 11,539 | 13,056 | 14,322 |
| Engineering | 560 | 709 | 670 | 656 | 745 | 748 | 813 |
| Sciences | 8,554 | 8,635 | 9,030 | 9,744 | 10,794 | 12,308 | 13,509 |
| Natural sciences | 3,176 | 3,585 | 3,273 | 3,306 | 3,296 | 3,692 | 4,100 |
| Physical science ¹ | 373 | 390 | 332 | 358 | 362 | 435 | 466 |
| Mathematical science | 394 | 435 | 418 | 378 | 431 | 530 | 521 |
| Computer science | 1,107 | 1,536 | 1,252 | 1,173 | 1,026 | 998 | 1,164 |
| Biological science | 1,241 | 1,167 | 1,216 | 1,336 | 1,415 | 1,636 | 1,856 |
| Agricultural science | 61 | 57 | 55 | 61 | 62 | 93 | 93 |
| Social sciences | 5,378 | 5,050 | 5,757 | 6,438 | 7,498 | 8,616 | 9,409 |
| Social science | 3,462 | 3,260 | 3,659 | 4,082 | 4,689 | 5,419 | 5,890 |
| Psychology | 1,916 | 1,790 | 2,098 | 2,356 | 2,809 | 3,197 | 3,519 |
| Non-S&E ² | 25,409 | 23,817 | 25,224 | 26,311 | 29,232 | 31,737 | 33,971 |
| Grand total | 34,523 | 33,161 | 34,924 | 36,711 | 40,771 | 44,793 | 48,293 |
| Hispanics | | | | | | | |
| Total science and engineering | 5,280 | 5,445 | 6,009 | 6,484 | 7,463 | 8,661 | 9,282 |
| Engineering | 324 | 454 | 461 | 476 | 527 | 546 | 606 |
| Sciences | 4,956 | 4,991 | 5,548 | 6,008 | 6,936 | 8,115 | 8,676 |
| Natural sciences | 1,979 | 2,144 | 1,985 | 2,029 | 2,247 | 2,395 | 2,426 |
| Physical science ¹ | 219 | 208 | 201 | 211 | 215 | 220 | 238 |
| Mathematical science | 146 | 125 | 149 | 164 | 221 | 203 | 197 |
| Computer science | 463 | 609 | 445 | 416 | 477 | 449 | 396 |
| Biological science | 1,072 | 1,128 | 1,125 | 1,164 | 1,245 | 1,434 | 1,508 |
| Agricultural science | 79 | 74 | 65 | 74 | 89 | 89 | 87 |
| Social sciences | 2,977 | 2,847 | 3,563 | 3,979 | 4,689 | 5,720 | 6,250 |
| Social science | 1,785 | 1,658 | 2,044 | 2,261 | 2,700 | 3,299 | 3,591 |
| Psychology | 1,192 | 1,189 | 1,519 | 1,718 | 1,989 | 2,421 | 2,659 |
| Non-S&E ² | 14,962 | 16,113 | 17,350 | 18,697 | 20,783 | 22,320 | 24,738 |
| Grand total | 20,242 | 21,558 | 23,359 | 25,181 | 28,246 | 30,981 | 34,020 |

See explanatory information and SOURCES at end of table.

Table 6. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|---------|---------|---------|---------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 602 | 552 | 569 | 581 | 653 | 776 | 918 |
| Engineering | 40 | 30 | 36 | 23 | 27 | 31 | 34 |
| Sciences | 562 | 522 | 533 | 558 | 626 | 745 | 884 |
| Natural sciences | 209 | 179 | 161 | 152 | 191 | 185 | 218 |
| Physical science ¹ | 33 | 27 | 18 | 21 | 23 | 25 | 32 |
| Mathematical science | 23 | 20 | 15 | 22 | 25 | 24 | 28 |
| Computer science | 63 | 51 | 32 | 30 | 31 | 31 | 28 |
| Biological science | 72 | 67 | 76 | 58 | 92 | 88 | 108 |
| Agricultural science | 18 | 14 | 20 | 21 | 20 | 17 | 22 |
| Social sciences | 353 | 343 | 372 | 406 | 435 | 560 | 666 |
| Social science | 227 | 226 | 223 | 263 | 269 | 339 | 424 |
| Psychology | 126 | 117 | 149 | 143 | 166 | 221 | 242 |
| Non-S&E ² | 1,646 | 1,540 | 1,663 | 1,857 | 1,938 | 2,203 | 2,255 |
| Grand total | 2,248 | 2,092 | 2,232 | 2,438 | 2,591 | 2,979 | 3,173 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 128,088 | 128,095 | 132,110 | 137,924 | 147,768 | 160,324 | 166,002 |
| Engineering | 10,590 | 10,737 | 9,608 | 9,301 | 9,020 | 9,036 | 9,339 |
| Sciences | 117,498 | 117,358 | 122,502 | 128,623 | 138,748 | 151,288 | 156,663 |
| Natural sciences | 49,309 | 46,778 | 41,052 | 40,121 | 40,987 | 43,992 | 46,241 |
| Physical science ¹ | 6,445 | 5,435 | 4,912 | 4,811 | 4,919 | 5,314 | 5,486 |
| Mathematical science | 6,628 | 7,297 | 6,763 | 6,459 | 6,640 | 6,596 | 6,697 |
| Computer science | 13,652 | 12,549 | 8,489 | 7,372 | 6,709 | 6,460 | 6,167 |
| Biological science | 18,322 | 18,177 | 17,909 | 18,556 | 19,665 | 21,806 | 23,729 |
| Agricultural science | 4,262 | 3,320 | 2,979 | 2,923 | 3,054 | 3,816 | 4,162 |
| Social sciences | 68,189 | 70,580 | 81,450 | 88,502 | 97,761 | 107,296 | 110,422 |
| Social science | 41,305 | 42,143 | 48,020 | 51,642 | 56,619 | 61,868 | 62,941 |
| Psychology | 26,884 | 28,437 | 33,430 | 36,860 | 41,142 | 45,428 | 47,481 |
| Non-S&E ² | 362,014 | 366,673 | 388,549 | 400,998 | 426,410 | 440,791 | 449,615 |
| Grand total | 490,102 | 494,768 | 520,659 | 538,922 | 574,178 | 601,115 | 615,617 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 3,338 | 3,411 | 3,280 | 3,382 | 3,741 | 3,897 | 4,408 |
| Engineering | 482 | 521 | 473 | 490 | 470 | 471 | 464 |
| Sciences | 2,856 | 2,890 | 2,807 | 2,892 | 3,271 | 3,426 | 3,944 |
| Natural sciences | 1,640 | 1,699 | 1,520 | 1,470 | 1,561 | 1,563 | 1,815 |
| Physical science ¹ | 200 | 174 | 199 | 180 | 197 | 190 | 239 |
| Mathematical science | 287 | 234 | 196 | 200 | 204 | 234 | 207 |
| Computer science | 672 | 802 | 618 | 594 | 574 | 555 | 603 |
| Biological science | 411 | 429 | 447 | 436 | 519 | 514 | 648 |
| Agricultural science | 70 | 60 | 60 | 60 | 67 | 70 | 118 |
| Social sciences | 1,216 | 1,191 | 1,287 | 1,422 | 1,710 | 1,863 | 2,129 |
| Social science | 868 | 856 | 946 | 1,057 | 1,197 | 1,374 | 1,519 |
| Psychology | 348 | 335 | 341 | 365 | 513 | 489 | 610 |
| Non-S&E ² | 5,809 | 6,043 | 6,060 | 6,263 | 7,689 | 7,544 | 8,911 |
| Grand total | 9,147 | 9,454 | 9,340 | 9,645 | 11,430 | 11,441 | 13,319 |

See explanatory information and SOURCES at end of table.

Table 6. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---------------------------------------|-------|--------|--------|--------|--------|--------|--------|
| Unknown race/ethnicity or citizenship | | | | | | | |
| Total science and engineering | 1,197 | 4,109 | 3,313 | 4,571 | 3,777 | 3,442 | 3,637 |
| Engineering | 173 | 145 | 107 | 182 | 174 | 121 | 171 |
| Sciences | 1,024 | 3,964 | 3,206 | 4,389 | 3,603 | 3,321 | 3,466 |
| Natural sciences | 541 | 1,264 | 903 | 1,125 | 956 | 875 | 831 |
| Physical science ¹ | 53 | 124 | 61 | 103 | 92 | 106 | 89 |
| Mathematical science | 121 | 151 | 91 | 152 | 136 | 98 | 107 |
| Computer science | 107 | 538 | 438 | 408 | 231 | 169 | 142 |
| Biological science | 237 | 402 | 298 | 417 | 452 | 408 | 389 |
| Agricultural science | 23 | 49 | 15 | 45 | 45 | 94 | 104 |
| Social sciences | 483 | 2,700 | 2,303 | 3,264 | 2,647 | 2,446 | 2,635 |
| Social science | 293 | 1,676 | 1,411 | 1,870 | 1,564 | 1,457 | 1,504 |
| Psychology | 190 | 1,024 | 892 | 1,394 | 1,083 | 989 | 1,131 |
| Non-S&E ² | 3,771 | 10,198 | 9,293 | 13,146 | 9,660 | 8,679 | 9,169 |
| Grand total | 4,968 | 14,307 | 12,606 | 17,717 | 13,437 | 12,121 | 12,806 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 7. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 64,726 | 66,774 | 70,333 | 72,228 | 72,828 | 76,184 | 81,415 |
| Engineering | 20,935 | 22,057 | 23,735 | 23,985 | 24,007 | 25,010 | 27,658 |
| Sciences | 43,791 | 44,717 | 46,598 | 48,243 | 48,821 | 51,174 | 53,757 |
| Natural sciences | 24,034 | 25,269 | 26,089 | 26,293 | 25,669 | 26,775 | 27,713 |
| Physical science ¹ | 5,802 | 5,638 | 5,703 | 5,411 | 5,282 | 5,352 | 5,365 |
| Mathematical science | 2,888 | 3,327 | 3,430 | 3,684 | 3,632 | 4,019 | 4,084 |
| Computer science | 7,101 | 8,481 | 9,399 | 9,643 | 9,324 | 9,530 | 10,167 |
| Biological science | 5,091 | 4,999 | 4,953 | 4,893 | 4,806 | 4,816 | 4,798 |
| Agricultural science | 3,152 | 2,824 | 2,604 | 2,662 | 2,625 | 3,058 | 3,299 |
| Social sciences | 19,757 | 19,448 | 20,509 | 21,950 | 23,152 | 24,399 | 26,044 |
| Social science | 11,276 | 11,283 | 11,857 | 12,642 | 13,350 | 14,119 | 15,024 |
| Psychology | 8,481 | 8,165 | 8,652 | 9,308 | 9,802 | 10,280 | 11,020 |
| Non-S&E ² | 222,487 | 223,758 | 240,717 | 252,719 | 265,670 | 278,023 | 289,558 |
| Grand total | 287,213 | 290,532 | 311,050 | 324,947 | 338,498 | 354,207 | 370,973 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 43,982 | 43,360 | 43,945 | 44,450 | 44,513 | 45,649 | 47,975 |
| Engineering | 12,186 | 12,837 | 12,832 | 12,859 | 12,635 | 12,752 | 13,920 |
| Sciences | 31,796 | 30,523 | 31,113 | 31,591 | 31,878 | 32,897 | 34,055 |
| Natural sciences | 16,735 | 16,352 | 16,080 | 15,742 | 15,005 | 15,136 | 15,322 |
| Physical science ¹ | 4,133 | 3,834 | 3,766 | 3,401 | 3,129 | 3,067 | 3,078 |
| Mathematical science | 1,873 | 2,012 | 2,032 | 2,169 | 2,068 | 2,336 | 2,354 |
| Computer science | 4,303 | 4,717 | 4,786 | 4,851 | 4,637 | 4,407 | 4,464 |
| Biological science | 4,081 | 3,745 | 3,679 | 3,501 | 3,353 | 3,251 | 3,144 |
| Agricultural science | 2,345 | 2,044 | 1,817 | 1,820 | 1,818 | 2,075 | 2,282 |
| Social sciences | 15,061 | 14,171 | 15,033 | 15,849 | 16,873 | 17,761 | 18,733 |
| Social science | 7,841 | 7,473 | 7,958 | 8,360 | 8,900 | 9,523 | 9,923 |
| Psychology | 7,220 | 6,698 | 7,075 | 7,489 | 7,973 | 8,238 | 8,810 |
| Non-S&E ² | 179,667 | 173,447 | 186,377 | 192,424 | 203,011 | 211,413 | 217,693 |
| Grand total | 223,649 | 216,807 | 230,322 | 236,874 | 247,524 | 257,062 | 265,668 |
| Asians | | | | | | | |
| Total science and engineering | 3,285 | 3,455 | 4,100 | 4,055 | 4,310 | 4,763 | 4,846 |
| Engineering | 1,551 | 1,650 | 1,992 | 1,863 | 2,008 | 2,223 | 2,260 |
| Sciences | 1,734 | 1,805 | 2,108 | 2,192 | 2,302 | 2,540 | 2,586 |
| Natural sciences | 1,229 | 1,426 | 1,617 | 1,629 | 1,735 | 1,916 | 1,918 |
| Physical science ¹ | 213 | 227 | 278 | 234 | 251 | 295 | 249 |
| Mathematical science | 164 | 183 | 178 | 184 | 189 | 201 | 197 |
| Computer science | 615 | 779 | 894 | 941 | 1,014 | 1,105 | 1,106 |
| Biological science | 179 | 190 | 223 | 225 | 231 | 264 | 305 |
| Agricultural science | 58 | 47 | 44 | 45 | 50 | 51 | 61 |
| Social sciences | 505 | 379 | 491 | 563 | 567 | 624 | 668 |
| Social science | 376 | 266 | 360 | 404 | 397 | 441 | 477 |
| Psychology | 129 | 113 | 131 | 159 | 170 | 183 | 191 |
| Non-S&E ² | 4,520 | 4,674 | 6,074 | 5,939 | 6,760 | 7,530 | 8,323 |
| Grand total | 7,805 | 8,129 | 10,174 | 9,994 | 11,070 | 12,293 | 13,169 |

See explanatory information and SOURCES at end of table.

Table 7. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 3,484 | 3,515 | 3,446 | 3,615 | 4,026 | 4,360 | 4,899 |
| Engineering | 723 | 953 | 856 | 868 | 906 | 996 | 1,195 |
| Sciences | 2,761 | 2,562 | 2,590 | 2,747 | 3,120 | 3,364 | 3,704 |
| Natural sciences | 1,097 | 1,122 | 1,025 | 1,002 | 1,195 | 1,258 | 1,358 |
| Physical science ¹ | 237 | 210 | 188 | 194 | 182 | 209 | 231 |
| Mathematical science | 115 | 136 | 99 | 127 | 194 | 147 | 184 |
| Computer science | 315 | 352 | 381 | 357 | 425 | 480 | 484 |
| Biological science | 308 | 304 | 267 | 244 | 286 | 307 | 312 |
| Agricultural science | 122 | 120 | 90 | 80 | 108 | 115 | 147 |
| Social sciences | 1,664 | 1,440 | 1,565 | 1,745 | 1,925 | 2,106 | 2,346 |
| Social science | 857 | 758 | 777 | 868 | 1,031 | 1,118 | 1,282 |
| Psychology | 807 | 682 | 788 | 877 | 894 | 988 | 1,064 |
| Non-S&E ² | 19,463 | 18,488 | 19,224 | 20,403 | 22,640 | 24,544 | 26,713 |
| Grand total | 22,947 | 22,003 | 22,670 | 24,018 | 26,666 | 28,904 | 31,612 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 1,742 | 1,784 | 1,652 | 1,847 | 2,090 | 2,356 | 2,554 |
| Engineering | 330 | 403 | 355 | 387 | 398 | 466 | 564 |
| Sciences | 1,412 | 1,381 | 1,297 | 1,460 | 1,692 | 1,890 | 1,990 |
| Natural sciences | 523 | 581 | 495 | 527 | 644 | 699 | 716 |
| Physical science ¹ | 89 | 79 | 78 | 87 | 73 | 98 | 105 |
| Mathematical science | 53 | 73 | 59 | 70 | 100 | 77 | 98 |
| Computer science | 180 | 207 | 198 | 232 | 283 | 316 | 308 |
| Biological science | 151 | 167 | 124 | 110 | 137 | 149 | 135 |
| Agricultural science | 50 | 55 | 36 | 28 | 51 | 59 | 70 |
| Social sciences | 889 | 800 | 802 | 933 | 1,048 | 1,191 | 1,274 |
| Social science | 463 | 424 | 407 | 462 | 594 | 660 | 730 |
| Psychology | 426 | 376 | 395 | 471 | 454 | 531 | 544 |
| Non-S&E ² | 12,218 | 11,389 | 11,803 | 12,626 | 13,767 | 15,064 | 16,343 |
| Grand total | 13,960 | 13,173 | 13,455 | 14,473 | 15,857 | 17,420 | 18,897 |
| Hispanics | | | | | | | |
| Total science and engineering | 1,514 | 1,584 | 1,585 | 1,587 | 1,736 | 1,806 | 2,092 |
| Engineering | 346 | 512 | 468 | 446 | 468 | 488 | 581 |
| Sciences | 1,168 | 1,072 | 1,117 | 1,141 | 1,268 | 1,318 | 1,511 |
| Natural sciences | 481 | 493 | 444 | 431 | 494 | 503 | 574 |
| Physical science ¹ | 127 | 122 | 92 | 98 | 96 | 93 | 114 |
| Mathematical science | 55 | 60 | 34 | 51 | 85 | 66 | 78 |
| Computer science | 94 | 123 | 144 | 118 | 128 | 149 | 162 |
| Biological science | 139 | 126 | 126 | 120 | 136 | 146 | 151 |
| Agricultural science | 66 | 62 | 48 | 44 | 49 | 49 | 69 |
| Social sciences | 687 | 579 | 673 | 710 | 774 | 815 | 937 |
| Social science | 343 | 308 | 313 | 341 | 383 | 396 | 474 |
| Psychology | 344 | 271 | 360 | 369 | 391 | 419 | 463 |
| Non-S&E ² | 6,216 | 6,197 | 6,548 | 6,908 | 7,948 | 8,450 | 9,279 |
| Grand total | 7,730 | 7,781 | 8,133 | 8,495 | 9,684 | 10,256 | 11,371 |

See explanatory information and SOURCES at end of table.

Table 7. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|---------|---------|---------|---------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 228 | 147 | 209 | 181 | 200 | 198 | 253 |
| Engineering | 47 | 38 | 33 | 35 | 40 | 42 | 50 |
| Sciences | 181 | 109 | 176 | 146 | 160 | 156 | 203 |
| Natural sciences | 93 | 48 | 86 | 44 | 57 | 56 | 68 |
| Physical science ¹ | 21 | 9 | 18 | 9 | 13 | 18 | 12 |
| Mathematical science | 7 | 3 | 6 | 6 | 9 | 4 | 8 |
| Computer science | 41 | 22 | 39 | 7 | 14 | 15 | 14 |
| Biological science | 18 | 11 | 17 | 14 | 13 | 12 | 26 |
| Agricultural science | 6 | 3 | 6 | 8 | 8 | 7 | 8 |
| Social sciences | 88 | 61 | 90 | 102 | 103 | 100 | 135 |
| Social science | 51 | 26 | 57 | 65 | 54 | 62 | 78 |
| Psychology | 37 | 35 | 33 | 37 | 49 | 38 | 57 |
| Non-S&E ² | 1,029 | 902 | 873 | 869 | 925 | 1,030 | 1,091 |
| Grand total | 1,257 | 1,049 | 1,082 | 1,050 | 1,125 | 1,228 | 1,344 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 50,751 | 50,330 | 51,491 | 52,120 | 52,849 | 54,772 | 57,220 |
| Engineering | 14,460 | 15,440 | 15,680 | 15,590 | 15,549 | 15,971 | 17,375 |
| Sciences | 36,291 | 34,890 | 35,811 | 36,530 | 37,300 | 38,801 | 40,345 |
| Natural sciences | 19,061 | 18,900 | 18,722 | 18,373 | 17,935 | 18,310 | 18,598 |
| Physical science ¹ | 4,583 | 4,271 | 4,232 | 3,829 | 3,562 | 3,571 | 3,558 |
| Mathematical science | 2,152 | 2,331 | 2,309 | 2,480 | 2,451 | 2,684 | 2,735 |
| Computer science | 5,233 | 5,848 | 6,061 | 6,149 | 6,076 | 5,992 | 6,054 |
| Biological science | 4,568 | 4,239 | 4,169 | 3,970 | 3,870 | 3,822 | 3,761 |
| Agricultural science | 2,525 | 2,211 | 1,951 | 1,945 | 1,976 | 2,241 | 2,490 |
| Social sciences | 17,230 | 15,990 | 17,089 | 18,157 | 19,365 | 20,491 | 21,747 |
| Social science | 9,074 | 8,497 | 9,095 | 9,632 | 10,328 | 11,082 | 11,682 |
| Psychology | 8,156 | 7,493 | 7,994 | 8,525 | 9,037 | 9,409 | 10,065 |
| Non-S&E ² | 203,650 | 196,609 | 211,675 | 218,766 | 232,411 | 243,487 | 252,729 |
| Grand total | 254,401 | 246,939 | 263,166 | 270,886 | 285,260 | 298,259 | 310,449 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 12,506 | 13,045 | 15,143 | 16,338 | 17,049 | 18,007 | 20,150 |
| Engineering | 5,694 | 5,781 | 6,747 | 7,239 | 7,520 | 7,899 | 9,119 |
| Sciences | 6,812 | 7,264 | 8,396 | 9,099 | 9,529 | 10,108 | 11,031 |
| Natural sciences | 4,572 | 5,035 | 5,922 | 6,330 | 6,734 | 7,316 | 8,062 |
| Physical science ¹ | 1,098 | 1,056 | 1,238 | 1,364 | 1,504 | 1,538 | 1,602 |
| Mathematical science | 685 | 836 | 976 | 1,035 | 1,059 | 1,112 | 1,138 |
| Computer science | 1,709 | 2,067 | 2,442 | 2,563 | 2,819 | 3,169 | 3,779 |
| Biological science | 474 | 509 | 636 | 729 | 749 | 795 | 849 |
| Agricultural science | 606 | 567 | 630 | 639 | 603 | 702 | 694 |
| Social sciences | 2,240 | 2,229 | 2,474 | 2,769 | 2,795 | 2,792 | 2,969 |
| Social science | 1,944 | 2,009 | 2,215 | 2,384 | 2,478 | 2,490 | 2,637 |
| Psychology | 296 | 220 | 259 | 385 | 317 | 302 | 332 |
| Non-S&E ² | 14,446 | 15,219 | 16,980 | 18,264 | 20,562 | 21,645 | 23,959 |
| Grand total | 26,952 | 28,264 | 32,123 | 34,602 | 37,611 | 39,652 | 44,109 |

See explanatory information and SOURCES at end of table.

Table 7. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|--------|--------|--------|--------|--------|--------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 1,469 | 3,399 | 3,699 | 3,770 | 2,930 | 3,405 | 3,545 |
| Engineering | 781 | 836 | 1,308 | 1,156 | 938 | 1,140 | 1,164 |
| Sciences | 688 | 2,563 | 2,391 | 2,614 | 1,992 | 2,265 | 2,381 |
| Natural sciences | 401 | 1,334 | 1,445 | 1,590 | 1,000 | 1,149 | 1,053 |
| Physical science ¹ | 121 | 311 | 233 | 218 | 216 | 243 | 205 |
| Mathematical science | 51 | 160 | 145 | 169 | 122 | 223 | 211 |
| Computer science | 159 | 566 | 896 | 931 | 429 | 369 | 334 |
| Biological science | 49 | 251 | 148 | 194 | 187 | 199 | 188 |
| Agricultural science | 21 | 46 | 23 | 78 | 46 | 115 | 115 |
| Social sciences | 287 | 1,229 | 946 | 1,024 | 992 | 1,116 | 1,328 |
| Social science | 258 | 777 | 547 | 626 | 544 | 547 | 705 |
| Psychology | 29 | 452 | 399 | 398 | 448 | 569 | 623 |
| Non-S&E ² | 4,391 | 11,930 | 12,062 | 15,689 | 12,697 | 12,891 | 12,870 |
| Grand total | 5,860 | 15,329 | 15,761 | 19,459 | 15,627 | 16,296 | 16,415 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 44,928 | 45,611 | 47,724 | 48,424 | 47,748 | 49,768 | 53,102 |
| Engineering | 18,692 | 19,290 | 20,654 | 20,717 | 20,650 | 21,345 | 23,565 |
| Sciences | 26,236 | 26,321 | 27,070 | 27,707 | 27,098 | 28,423 | 29,537 |
| Natural sciences | 16,300 | 16,714 | 17,250 | 17,258 | 16,530 | 17,480 | 18,076 |
| Physical science ¹ | 4,450 | 4,225 | 4,180 | 3,981 | 3,825 | 3,895 | 3,803 |
| Mathematical science | 1,877 | 2,026 | 2,060 | 2,208 | 2,146 | 2,457 | 2,468 |
| Computer science | 5,064 | 5,985 | 6,773 | 6,968 | 6,563 | 6,884 | 7,411 |
| Biological science | 2,662 | 2,555 | 2,491 | 2,393 | 2,315 | 2,316 | 2,365 |
| Agricultural science | 2,247 | 1,923 | 1,746 | 1,708 | 1,681 | 1,928 | 2,029 |
| Social sciences | 9,936 | 9,607 | 9,820 | 10,449 | 10,568 | 10,943 | 11,461 |
| Social science | 6,872 | 6,769 | 7,006 | 7,424 | 7,574 | 7,939 | 8,419 |
| Psychology | 3,064 | 2,838 | 2,814 | 3,025 | 2,994 | 3,004 | 3,042 |
| Non-S&E ² | 98,788 | 96,044 | 101,675 | 105,601 | 109,147 | 112,531 | 116,651 |
| Grand total | 143,716 | 141,655 | 149,399 | 154,025 | 156,895 | 162,299 | 169,753 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 28,918 | 28,120 | 28,115 | 28,250 | 27,634 | 28,113 | 29,493 |
| Engineering | 10,646 | 10,963 | 10,874 | 10,922 | 10,742 | 10,775 | 11,777 |
| Sciences | 18,272 | 17,157 | 17,241 | 17,328 | 16,892 | 17,338 | 17,716 |
| Natural sciences | 11,096 | 10,523 | 10,357 | 10,116 | 9,491 | 9,675 | 9,837 |
| Physical science ¹ | 3,135 | 2,855 | 2,750 | 2,518 | 2,299 | 2,234 | 2,229 |
| Mathematical science | 1,170 | 1,187 | 1,173 | 1,275 | 1,169 | 1,389 | 1,332 |
| Computer science | 3,052 | 3,229 | 3,430 | 3,474 | 3,260 | 3,236 | 3,326 |
| Biological science | 2,126 | 1,932 | 1,830 | 1,711 | 1,629 | 1,566 | 1,593 |
| Agricultural science | 1,613 | 1,320 | 1,174 | 1,138 | 1,134 | 1,250 | 1,357 |
| Social sciences | 7,176 | 6,634 | 6,884 | 7,212 | 7,401 | 7,663 | 7,879 |
| Social science | 4,575 | 4,309 | 4,592 | 4,781 | 4,981 | 5,276 | 5,453 |
| Psychology | 2,601 | 2,325 | 2,292 | 2,431 | 2,420 | 2,387 | 2,426 |
| Non-S&E ² | 77,149 | 71,939 | 75,927 | 77,825 | 80,283 | 82,684 | 84,224 |
| Grand total | 106,067 | 100,059 | 104,042 | 106,075 | 107,917 | 110,797 | 113,717 |
| Asians | | | | | | | |
| Total science and engineering | 2,475 | 2,559 | 2,939 | 2,799 | 2,959 | 3,276 | 3,237 |
| Engineering | 1,374 | 1,455 | 1,699 | 1,557 | 1,685 | 1,816 | 1,819 |
| Sciences | 1,101 | 1,104 | 1,240 | 1,242 | 1,274 | 1,460 | 1,418 |
| Natural sciences | 804 | 908 | 990 | 976 | 1,031 | 1,169 | 1,149 |
| Physical science ¹ | 154 | 164 | 179 | 140 | 165 | 206 | 150 |
| Mathematical science | 108 | 110 | 117 | 106 | 108 | 103 | 121 |
| Computer science | 414 | 522 | 565 | 609 | 627 | 705 | 710 |
| Biological science | 86 | 85 | 105 | 97 | 104 | 125 | 136 |
| Agricultural science | 42 | 27 | 24 | 24 | 27 | 30 | 32 |
| Social sciences | 297 | 196 | 250 | 266 | 243 | 291 | 269 |
| Social science | 249 | 163 | 206 | 224 | 196 | 229 | 219 |
| Psychology | 48 | 33 | 44 | 42 | 47 | 62 | 50 |
| Non-S&E ² | 2,377 | 2,419 | 2,978 | 2,871 | 3,261 | 3,547 | 3,888 |
| Grand total | 4,852 | 4,978 | 5,917 | 5,670 | 6,220 | 6,823 | 7,125 |

See explanatory information and SOURCES at end of table.

Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|-------|-------|-------|-------|--------|--------|--------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 2,064 | 2,130 | 1,990 | 2,005 | 2,129 | 2,340 | 2,637 |
| Engineering | 621 | 791 | 685 | 687 | 711 | 775 | 924 |
| Sciences | 1,443 | 1,339 | 1,305 | 1,318 | 1,418 | 1,565 | 1,713 |
| Natural sciences | 670 | 688 | 639 | 610 | 664 | 728 | 764 |
| Physical science ¹ | 175 | 140 | 133 | 130 | 124 | 144 | 142 |
| Mathematical science | 69 | 87 | 58 | 74 | 112 | 92 | 102 |
| Computer science | 201 | 236 | 255 | 238 | 244 | 283 | 308 |
| Biological science | 137 | 137 | 129 | 120 | 116 | 137 | 132 |
| Agricultural science | 88 | 88 | 64 | 48 | 68 | 72 | 80 |
| Social sciences | 773 | 651 | 666 | 708 | 754 | 837 | 949 |
| Social science | 478 | 427 | 416 | 429 | 482 | 556 | 672 |
| Psychology | 295 | 224 | 250 | 279 | 272 | 281 | 277 |
| Non-S&E ² | 7,072 | 6,768 | 7,049 | 7,316 | 8,078 | 8,336 | 9,266 |
| Grand total | 9,136 | 8,898 | 9,039 | 9,321 | 10,207 | 10,676 | 11,903 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 973 | 990 | 878 | 950 | 1,028 | 1,166 | 1,253 |
| Engineering | 274 | 315 | 262 | 287 | 299 | 332 | 407 |
| Sciences | 699 | 675 | 616 | 663 | 729 | 834 | 846 |
| Natural sciences | 300 | 338 | 290 | 307 | 338 | 382 | 386 |
| Physical science ¹ | 61 | 45 | 56 | 61 | 43 | 66 | 58 |
| Mathematical science | 34 | 45 | 32 | 37 | 53 | 44 | 48 |
| Computer science | 108 | 126 | 119 | 140 | 150 | 175 | 193 |
| Biological science | 67 | 80 | 59 | 51 | 58 | 61 | 47 |
| Agricultural science | 30 | 42 | 24 | 18 | 34 | 36 | 40 |
| Social sciences | 399 | 337 | 326 | 356 | 391 | 452 | 460 |
| Social science | 253 | 221 | 206 | 223 | 262 | 315 | 345 |
| Psychology | 146 | 116 | 120 | 133 | 129 | 137 | 115 |
| Non-S&E ² | 4,238 | 3,895 | 4,086 | 4,219 | 4,591 | 4,628 | 5,219 |
| Grand total | 5,211 | 4,885 | 4,964 | 5,169 | 5,619 | 5,794 | 6,472 |
| Hispanics | | | | | | | |
| Total science and engineering | 939 | 1,045 | 970 | 959 | 992 | 1,066 | 1,255 |
| Engineering | 304 | 444 | 394 | 373 | 378 | 408 | 480 |
| Sciences | 635 | 601 | 576 | 586 | 614 | 658 | 775 |
| Natural sciences | 307 | 318 | 282 | 275 | 294 | 309 | 341 |
| Physical science ¹ | 95 | 88 | 65 | 63 | 73 | 64 | 76 |
| Mathematical science | 31 | 41 | 21 | 33 | 52 | 47 | 50 |
| Computer science | 65 | 91 | 100 | 93 | 84 | 98 | 104 |
| Biological science | 62 | 53 | 62 | 61 | 54 | 69 | 76 |
| Agricultural science | 54 | 45 | 34 | 25 | 31 | 31 | 35 |
| Social sciences | 328 | 283 | 294 | 311 | 320 | 349 | 434 |
| Social science | 195 | 187 | 176 | 178 | 196 | 218 | 282 |
| Psychology | 133 | 96 | 118 | 133 | 124 | 131 | 152 |
| Non-S&E ² | 2,403 | 2,476 | 2,627 | 2,754 | 3,132 | 3,315 | 3,620 |
| Grand total | 3,342 | 3,521 | 3,597 | 3,713 | 4,124 | 4,381 | 4,875 |

See explanatory information and SOURCES at end of table.

Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|---------|---------|---------|---------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 152 | 95 | 142 | 96 | 109 | 108 | 129 |
| Engineering | 43 | 32 | 29 | 27 | 34 | 35 | 37 |
| Sciences | 109 | 63 | 113 | 69 | 75 | 73 | 92 |
| Natural sciences | 63 | 32 | 67 | 28 | 32 | 37 | 37 |
| Physical science ¹ | 19 | 7 | 12 | 6 | 8 | 14 | 8 |
| Mathematical science | 4 | 1 | 5 | 4 | 7 | 1 | 4 |
| Computer science | 28 | 19 | 36 | 5 | 10 | 10 | 11 |
| Biological science | 8 | 4 | 8 | 8 | 4 | 7 | 9 |
| Agricultural science | 4 | 1 | 6 | 5 | 3 | 5 | 5 |
| Social sciences | 46 | 31 | 46 | 41 | 43 | 36 | 55 |
| Social science | 30 | 19 | 34 | 28 | 24 | 23 | 45 |
| Psychology | 16 | 12 | 12 | 13 | 19 | 13 | 10 |
| Non-S&E ² | 431 | 397 | 336 | 343 | 355 | 393 | 427 |
| Grand total | 583 | 492 | 478 | 439 | 464 | 501 | 556 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 33,457 | 32,809 | 33,044 | 33,054 | 32,722 | 33,729 | 35,367 |
| Engineering | 12,641 | 13,209 | 13,258 | 13,166 | 13,138 | 13,366 | 14,520 |
| Sciences | 20,816 | 19,600 | 19,786 | 19,888 | 19,584 | 20,363 | 20,847 |
| Natural sciences | 12,570 | 12,119 | 11,986 | 11,702 | 11,186 | 11,572 | 11,750 |
| Physical science ¹ | 3,464 | 3,159 | 3,062 | 2,788 | 2,588 | 2,584 | 2,521 |
| Mathematical science | 1,347 | 1,384 | 1,348 | 1,455 | 1,389 | 1,584 | 1,555 |
| Computer science | 3,667 | 3,987 | 4,250 | 4,321 | 4,131 | 4,224 | 4,344 |
| Biological science | 2,349 | 2,154 | 2,064 | 1,928 | 1,849 | 1,828 | 1,861 |
| Agricultural science | 1,743 | 1,435 | 1,262 | 1,210 | 1,229 | 1,352 | 1,469 |
| Social sciences | 8,246 | 7,481 | 7,800 | 8,186 | 8,398 | 8,791 | 9,097 |
| Social science | 5,302 | 4,899 | 5,214 | 5,434 | 5,659 | 6,061 | 6,344 |
| Psychology | 2,944 | 2,582 | 2,586 | 2,752 | 2,739 | 2,730 | 2,753 |
| Non-S&E ² | 86,598 | 81,126 | 85,954 | 88,012 | 91,622 | 94,567 | 97,378 |
| Grand total | 120,055 | 113,935 | 118,998 | 121,066 | 124,344 | 128,296 | 132,745 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 10,278 | 10,518 | 12,043 | 12,702 | 13,081 | 13,705 | 15,365 |
| Engineering | 5,342 | 5,344 | 6,208 | 6,543 | 6,673 | 6,995 | 8,023 |
| Sciences | 4,936 | 5,174 | 5,835 | 6,159 | 6,408 | 6,710 | 7,342 |
| Natural sciences | 3,434 | 3,678 | 4,265 | 4,439 | 4,691 | 5,087 | 5,572 |
| Physical science ¹ | 889 | 834 | 954 | 1,028 | 1,070 | 1,111 | 1,118 |
| Mathematical science | 499 | 544 | 632 | 649 | 683 | 712 | 751 |
| Computer science | 1,269 | 1,575 | 1,848 | 1,933 | 2,144 | 2,380 | 2,811 |
| Biological science | 286 | 268 | 357 | 379 | 370 | 385 | 406 |
| Agricultural science | 491 | 457 | 474 | 450 | 424 | 499 | 486 |
| Social sciences | 1,502 | 1,496 | 1,570 | 1,720 | 1,717 | 1,623 | 1,770 |
| Social science | 1,384 | 1,407 | 1,471 | 1,584 | 1,613 | 1,528 | 1,659 |
| Psychology | 118 | 89 | 99 | 136 | 104 | 95 | 111 |
| Non-S&E ² | 9,396 | 9,801 | 10,579 | 10,997 | 12,069 | 12,532 | 13,456 |
| Grand total | 19,674 | 20,319 | 22,622 | 23,699 | 25,150 | 26,237 | 28,821 |

See explanatory information and SOURCES at end of table.

Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|-------|-------|-------|-------|-------|-------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 1,193 | 2,284 | 2,637 | 2,668 | 1,945 | 2,334 | 2,370 |
| Engineering | 709 | 737 | 1,188 | 1,008 | 839 | 984 | 1,022 |
| Sciences | 484 | 1,547 | 1,449 | 1,660 | 1,106 | 1,350 | 1,348 |
| Natural sciences | 296 | 917 | 999 | 1,117 | 653 | 821 | 754 |
| Physical science ¹ | 97 | 232 | 164 | 165 | 167 | 200 | 164 |
| Mathematical science | 31 | 98 | 80 | 104 | 74 | 161 | 162 |
| Computer science | 128 | 423 | 675 | 714 | 288 | 280 | 256 |
| Biological science | 27 | 133 | 70 | 86 | 96 | 103 | 98 |
| Agricultural science | 13 | 31 | 10 | 48 | 28 | 77 | 74 |
| Social sciences | 188 | 630 | 450 | 543 | 453 | 529 | 594 |
| Social science | 186 | 463 | 321 | 406 | 302 | 350 | 416 |
| Psychology | 2 | 167 | 129 | 137 | 151 | 179 | 178 |
| Non-S&E ² | 2,794 | 5,117 | 5,142 | 6,592 | 5,456 | 5,432 | 5,817 |
| Grand total | 3,987 | 7,401 | 7,779 | 9,260 | 7,401 | 7,766 | 8,187 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 9. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 19,798 | 21,163 | 22,609 | 23,804 | 25,080 | 26,416 | 28,313 |
| Engineering | 2,243 | 2,767 | 3,081 | 3,268 | 3,357 | 3,665 | 4,093 |
| Sciences | 17,555 | 18,396 | 19,528 | 20,536 | 21,723 | 22,751 | 24,220 |
| Natural sciences | 7,734 | 8,555 | 8,839 | 9,035 | 9,139 | 9,295 | 9,637 |
| Physical science ¹ | 1,352 | 1,413 | 1,523 | 1,430 | 1,457 | 1,457 | 1,562 |
| Mathematical science | 1,011 | 1,301 | 1,370 | 1,476 | 1,486 | 1,562 | 1,616 |
| Computer science | 2,037 | 2,496 | 2,626 | 2,675 | 2,761 | 2,646 | 2,756 |
| Biological science | 2,429 | 2,444 | 2,462 | 2,500 | 2,491 | 2,500 | 2,433 |
| Agricultural science | 905 | 901 | 858 | 954 | 944 | 1,130 | 1,270 |
| Social sciences | 9,821 | 9,841 | 10,689 | 11,501 | 12,584 | 13,456 | 14,583 |
| Social science | 4,404 | 4,514 | 4,851 | 5,218 | 5,776 | 6,180 | 6,605 |
| Psychology | 5,417 | 5,327 | 5,838 | 6,283 | 6,808 | 7,276 | 7,978 |
| Non-S&E ² | 123,699 | 127,714 | 139,042 | 147,118 | 156,523 | 165,492 | 172,907 |
| Grand total | 143,497 | 148,877 | 161,651 | 170,922 | 181,603 | 191,908 | 201,220 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 15,064 | 15,240 | 15,830 | 16,200 | 16,879 | 17,536 | 18,482 |
| Engineering | 1,540 | 1,874 | 1,958 | 1,937 | 1,893 | 1,977 | 2,143 |
| Sciences | 13,524 | 13,366 | 13,872 | 14,263 | 14,986 | 15,559 | 16,339 |
| Natural sciences | 5,639 | 5,829 | 5,723 | 5,626 | 5,514 | 5,461 | 5,485 |
| Physical science ¹ | 998 | 979 | 1,016 | 883 | 830 | 833 | 849 |
| Mathematical science | 703 | 825 | 859 | 894 | 899 | 947 | 1,022 |
| Computer science | 1,251 | 1,488 | 1,356 | 1,377 | 1,377 | 1,171 | 1,138 |
| Biological science | 1,955 | 1,813 | 1,849 | 1,790 | 1,724 | 1,685 | 1,551 |
| Agricultural science | 732 | 724 | 643 | 682 | 684 | 825 | 925 |
| Social sciences | 7,885 | 7,537 | 8,149 | 8,637 | 9,472 | 10,098 | 10,854 |
| Social science | 3,266 | 3,164 | 3,366 | 3,579 | 3,919 | 4,247 | 4,470 |
| Psychology | 4,619 | 4,373 | 4,783 | 5,058 | 5,553 | 5,851 | 6,384 |
| Non-S&E ² | 102,518 | 101,508 | 110,450 | 114,599 | 122,728 | 128,729 | 133,469 |
| Grand total | 117,582 | 116,748 | 126,280 | 130,799 | 139,607 | 146,265 | 151,951 |
| Asians | | | | | | | |
| Total science and engineering | 810 | 896 | 1,161 | 1,256 | 1,351 | 1,487 | 1,609 |
| Engineering | 177 | 195 | 293 | 306 | 323 | 407 | 441 |
| Sciences | 633 | 701 | 868 | 950 | 1,028 | 1,080 | 1,168 |
| Natural sciences | 425 | 518 | 627 | 653 | 704 | 747 | 769 |
| Physical science ¹ | 59 | 63 | 99 | 94 | 86 | 89 | 99 |
| Mathematical science | 56 | 73 | 61 | 78 | 81 | 98 | 76 |
| Computer science | 201 | 257 | 329 | 332 | 387 | 400 | 396 |
| Biological science | 93 | 105 | 118 | 128 | 127 | 139 | 169 |
| Agricultural science | 16 | 20 | 20 | 21 | 23 | 21 | 29 |
| Social sciences | 208 | 183 | 241 | 297 | 324 | 333 | 399 |
| Social science | 127 | 103 | 154 | 180 | 201 | 212 | 258 |
| Psychology | 81 | 80 | 87 | 117 | 123 | 121 | 141 |
| Non-S&E ² | 2,143 | 2,255 | 3,096 | 3,068 | 3,499 | 3,983 | 4,435 |
| Grand total | 2,953 | 3,151 | 4,257 | 4,324 | 4,850 | 5,470 | 6,044 |

See explanatory information and SOURCES at end of table.

Table 9. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 1,420 | 1,385 | 1,456 | 1,610 | 1,897 | 2,020 | 2,262 |
| Engineering | 102 | 162 | 171 | 181 | 195 | 221 | 271 |
| Sciences | 1,318 | 1,223 | 1,285 | 1,429 | 1,702 | 1,799 | 1,991 |
| Natural sciences | 427 | 434 | 386 | 392 | 531 | 530 | 594 |
| Physical science ¹ | 62 | 70 | 55 | 64 | 58 | 65 | 89 |
| Mathematical science | 46 | 49 | 41 | 53 | 82 | 55 | 82 |
| Computer science | 114 | 116 | 126 | 119 | 181 | 197 | 176 |
| Biological science | 171 | 167 | 138 | 124 | 170 | 170 | 180 |
| Agricultural science | 34 | 32 | 26 | 32 | 40 | 43 | 67 |
| Social sciences | 891 | 789 | 899 | 1,037 | 1,171 | 1,269 | 1,397 |
| Social science | 379 | 331 | 361 | 439 | 549 | 562 | 610 |
| Psychology | 512 | 458 | 538 | 598 | 622 | 707 | 787 |
| Non-S&E ² | 12,391 | 11,720 | 12,175 | 13,087 | 14,562 | 16,208 | 17,447 |
| Grand total | 13,811 | 13,105 | 13,631 | 14,697 | 16,459 | 18,228 | 19,709 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 769 | 794 | 774 | 897 | 1,062 | 1,190 | 1,301 |
| Engineering | 56 | 88 | 93 | 100 | 99 | 134 | 157 |
| Sciences | 713 | 706 | 681 | 797 | 963 | 1,056 | 1,144 |
| Natural sciences | 223 | 243 | 205 | 220 | 306 | 317 | 330 |
| Physical science ¹ | 28 | 34 | 22 | 26 | 30 | 32 | 47 |
| Mathematical science | 19 | 28 | 27 | 33 | 47 | 33 | 50 |
| Computer science | 72 | 81 | 79 | 92 | 133 | 141 | 115 |
| Biological science | 84 | 87 | 65 | 59 | 79 | 88 | 88 |
| Agricultural science | 20 | 13 | 12 | 10 | 17 | 23 | 30 |
| Social sciences | 490 | 463 | 476 | 577 | 657 | 739 | 814 |
| Social science | 210 | 203 | 201 | 239 | 332 | 345 | 385 |
| Psychology | 280 | 260 | 275 | 338 | 325 | 394 | 429 |
| Non-S&E ² | 7,980 | 7,494 | 7,717 | 8,407 | 9,176 | 10,436 | 11,124 |
| Grand total | 8,749 | 8,288 | 8,491 | 9,304 | 10,238 | 11,626 | 12,425 |
| Hispanics | | | | | | | |
| Total science and engineering | 575 | 539 | 615 | 628 | 744 | 740 | 837 |
| Engineering | 42 | 68 | 74 | 73 | 90 | 80 | 101 |
| Sciences | 533 | 471 | 541 | 555 | 654 | 660 | 736 |
| Natural sciences | 174 | 175 | 162 | 156 | 200 | 194 | 233 |
| Physical science ¹ | 32 | 34 | 27 | 35 | 23 | 29 | 38 |
| Mathematical science | 24 | 19 | 13 | 18 | 33 | 19 | 28 |
| Computer science | 29 | 32 | 44 | 25 | 44 | 51 | 58 |
| Biological science | 77 | 73 | 64 | 59 | 82 | 77 | 75 |
| Agricultural science | 12 | 17 | 14 | 19 | 18 | 18 | 34 |
| Social sciences | 359 | 296 | 379 | 399 | 454 | 466 | 503 |
| Social science | 148 | 121 | 137 | 163 | 187 | 178 | 192 |
| Psychology | 211 | 175 | 242 | 236 | 267 | 288 | 311 |
| Non-S&E ² | 3,813 | 3,721 | 3,921 | 4,154 | 4,816 | 5,135 | 5,659 |
| Grand total | 4,388 | 4,260 | 4,536 | 4,782 | 5,560 | 5,875 | 6,496 |

See explanatory information and SOURCES at end of table.

Table 9. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|---------|---------|---------|---------|---------|---------|---------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 76 | 52 | 67 | 85 | 91 | 90 | 124 |
| Engineering | 4 | 6 | 4 | 8 | 6 | 7 | 13 |
| Sciences | 72 | 46 | 63 | 77 | 85 | 83 | 111 |
| Natural sciences | 30 | 16 | 19 | 16 | 25 | 19 | 31 |
| Physical science ¹ | 2 | 2 | 6 | 3 | 5 | 4 | 4 |
| Mathematical science | 3 | 2 | 1 | 2 | 2 | 3 | 4 |
| Computer science | 13 | 3 | 3 | 2 | 4 | 5 | 3 |
| Biological science | 10 | 7 | 9 | 6 | 9 | 5 | 17 |
| Agricultural science | 2 | 2 | 0 | 3 | 5 | 2 | 3 |
| Social sciences | 42 | 30 | 44 | 61 | 60 | 64 | 80 |
| Social science | 21 | 7 | 23 | 37 | 30 | 39 | 33 |
| Psychology | 21 | 23 | 21 | 24 | 30 | 25 | 47 |
| Non-S&E ² | 598 | 505 | 537 | 526 | 570 | 637 | 664 |
| Grand total | 674 | 557 | 604 | 611 | 661 | 727 | 788 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 17,294 | 17,521 | 18,447 | 19,066 | 20,127 | 21,043 | 22,353 |
| Engineering | 1,819 | 2,231 | 2,422 | 2,424 | 2,411 | 2,605 | 2,855 |
| Sciences | 15,475 | 15,290 | 16,025 | 16,642 | 17,716 | 18,438 | 19,498 |
| Natural sciences | 6,491 | 6,781 | 6,736 | 6,671 | 6,749 | 6,738 | 6,848 |
| Physical science ¹ | 1,119 | 1,112 | 1,170 | 1,041 | 974 | 987 | 1,037 |
| Mathematical science | 805 | 947 | 961 | 1,025 | 1,062 | 1,100 | 1,180 |
| Computer science | 1,566 | 1,861 | 1,811 | 1,828 | 1,945 | 1,768 | 1,710 |
| Biological science | 2,219 | 2,085 | 2,105 | 2,042 | 2,021 | 1,994 | 1,900 |
| Agricultural science | 782 | 776 | 689 | 735 | 747 | 889 | 1,021 |
| Social sciences | 8,984 | 8,509 | 9,289 | 9,971 | 10,967 | 11,700 | 12,650 |
| Social science | 3,772 | 3,598 | 3,881 | 4,198 | 4,669 | 5,021 | 5,338 |
| Psychology | 5,212 | 4,911 | 5,408 | 5,773 | 6,298 | 6,679 | 7,312 |
| Non-S&E ² | 117,052 | 115,483 | 125,721 | 130,754 | 140,789 | 148,920 | 155,351 |
| Grand total | 134,346 | 133,004 | 144,168 | 149,820 | 160,916 | 169,963 | 177,704 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 2,228 | 2,527 | 3,100 | 3,636 | 3,968 | 4,302 | 4,785 |
| Engineering | 352 | 437 | 539 | 696 | 847 | 904 | 1,096 |
| Sciences | 1,876 | 2,090 | 2,561 | 2,940 | 3,121 | 3,398 | 3,689 |
| Natural sciences | 1,138 | 1,357 | 1,657 | 1,891 | 2,043 | 2,229 | 2,490 |
| Physical science ¹ | 209 | 222 | 284 | 336 | 434 | 427 | 484 |
| Mathematical science | 186 | 292 | 344 | 386 | 376 | 400 | 387 |
| Computer science | 440 | 492 | 594 | 630 | 675 | 789 | 968 |
| Biological science | 188 | 241 | 279 | 350 | 379 | 410 | 443 |
| Agricultural science | 115 | 110 | 156 | 189 | 179 | 203 | 208 |
| Social sciences | 738 | 733 | 904 | 1,049 | 1,078 | 1,169 | 1,199 |
| Social science | 560 | 602 | 744 | 800 | 865 | 962 | 978 |
| Psychology | 178 | 131 | 160 | 249 | 213 | 207 | 221 |
| Non-S&E ² | 5,050 | 5,418 | 6,401 | 7,267 | 8,493 | 9,113 | 10,503 |
| Grand total | 7,278 | 7,945 | 9,501 | 10,903 | 12,461 | 13,415 | 15,288 |

See explanatory information and SOURCES at end of table.

Table 9. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|-------|-------|--------|-------|-------|-------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 276 | 1,115 | 1,062 | 1,102 | 985 | 1,071 | 1,175 |
| Engineering | 72 | 99 | 120 | 148 | 99 | 156 | 142 |
| Sciences | 204 | 1,016 | 942 | 954 | 886 | 915 | 1,033 |
| Natural sciences | 105 | 417 | 446 | 473 | 347 | 328 | 299 |
| Physical science ¹ | 24 | 79 | 69 | 53 | 49 | 43 | 41 |
| Mathematical science | 20 | 62 | 65 | 65 | 48 | 62 | 49 |
| Computer science | 31 | 143 | 221 | 217 | 141 | 89 | 78 |
| Biological science | 22 | 118 | 78 | 108 | 91 | 96 | 90 |
| Agricultural science | 8 | 15 | 13 | 30 | 18 | 38 | 41 |
| Social sciences | 99 | 599 | 496 | 481 | 539 | 587 | 734 |
| Social science | 72 | 314 | 226 | 220 | 242 | 197 | 289 |
| Psychology | 27 | 285 | 270 | 261 | 297 | 390 | 445 |
| Non-S&E ² | 1,597 | 6,813 | 6,920 | 9,097 | 7,241 | 7,459 | 7,053 |
| Grand total | 1,873 | 7,928 | 7,982 | 10,199 | 8,226 | 8,530 | 8,228 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 18,936 | 19,894 | 21,731 | 22,868 | 24,018 | 24,676 | 25,438 |
| Engineering | 3,166 | 3,712 | 4,543 | 4,894 | 5,215 | 5,439 | 5,696 |
| Sciences | 15,770 | 16,182 | 17,188 | 17,974 | 18,803 | 19,237 | 19,742 |
| Natural sciences | 9,435 | 9,845 | 10,656 | 11,360 | 11,997 | 12,363 | 12,554 |
| Physical science ¹ | 3,533 | 3,840 | 3,984 | 4,262 | 4,440 | 4,575 | 4,472 |
| Mathematical science | 688 | 740 | 859 | 892 | 1,039 | 1,058 | 1,146 |
| Computer science | 310 | 450 | 612 | 705 | 800 | 869 | 878 |
| Biological science | 3,793 | 3,839 | 4,115 | 4,327 | 4,645 | 4,798 | 5,090 |
| Agricultural science | 1,111 | 976 | 1,086 | 1,174 | 1,073 | 1,063 | 968 |
| Social sciences | 6,335 | 6,337 | 6,532 | 6,614 | 6,806 | 6,874 | 7,188 |
| Social science | 3,217 | 3,164 | 3,324 | 3,332 | 3,556 | 3,610 | 3,769 |
| Psychology | 3,118 | 3,173 | 3,208 | 3,282 | 3,250 | 3,264 | 3,419 |
| Non-S&E ² | 12,362 | 12,473 | 12,593 | 13,200 | 13,499 | 14,177 | 14,316 |
| Grand total | 31,298 | 32,367 | 34,324 | 36,068 | 37,517 | 38,853 | 39,754 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 12,172 | 12,064 | 12,517 | 13,218 | 13,352 | 13,353 | 13,767 |
| Engineering | 1,188 | 1,460 | 1,730 | 1,847 | 1,843 | 1,885 | 2,030 |
| Sciences | 10,984 | 10,604 | 10,787 | 11,371 | 11,509 | 11,468 | 11,737 |
| Natural sciences | 6,433 | 6,218 | 6,492 | 6,817 | 6,893 | 6,830 | 6,846 |
| Physical science ¹ | 2,331 | 2,353 | 2,327 | 2,509 | 2,526 | 2,463 | 2,372 |
| Mathematical science | 350 | 319 | 369 | 375 | 422 | 425 | 479 |
| Computer science | 177 | 230 | 320 | 343 | 355 | 379 | 411 |
| Biological science | 2,915 | 2,761 | 2,906 | 2,980 | 3,044 | 3,070 | 3,146 |
| Agricultural science | 660 | 555 | 570 | 610 | 546 | 493 | 438 |
| Social sciences | 4,551 | 4,386 | 4,295 | 4,554 | 4,616 | 4,638 | 4,891 |
| Social science | 1,961 | 1,868 | 1,836 | 1,902 | 1,950 | 1,993 | 2,068 |
| Psychology | 2,590 | 2,518 | 2,459 | 2,652 | 2,666 | 2,645 | 2,823 |
| Non-S&E ² | 9,141 | 9,074 | 9,086 | 9,737 | 9,871 | 10,292 | 10,326 |
| Grand total | 21,313 | 21,138 | 21,603 | 22,955 | 23,223 | 23,645 | 24,093 |
| Asians | | | | | | | |
| Total science and engineering | 849 | 940 | 994 | 1,052 | 1,218 | 1,352 | 1,646 |
| Engineering | 306 | 331 | 362 | 375 | 416 | 455 | 542 |
| Sciences | 543 | 609 | 632 | 677 | 802 | 897 | 1,104 |
| Natural sciences | 403 | 445 | 484 | 506 | 614 | 705 | 855 |
| Physical science ¹ | 174 | 166 | 182 | 184 | 200 | 258 | 293 |
| Mathematical science | 34 | 41 | 24 | 28 | 57 | 51 | 79 |
| Computer science | 17 | 27 | 53 | 52 | 66 | 86 | 81 |
| Biological science | 152 | 173 | 200 | 207 | 262 | 272 | 372 |
| Agricultural science | 26 | 38 | 25 | 35 | 29 | 38 | 30 |
| Social sciences | 140 | 164 | 148 | 171 | 188 | 192 | 249 |
| Social science | 96 | 116 | 93 | 118 | 126 | 136 | 175 |
| Psychology | 44 | 48 | 55 | 53 | 62 | 56 | 74 |
| Non-S&E ² | 267 | 253 | 284 | 309 | 357 | 420 | 412 |
| Grand total | 1,116 | 1,193 | 1,278 | 1,361 | 1,575 | 1,772 | 2,058 |

See explanatory information and SOURCES at end of table.

Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 713 | 736 | 814 | 892 | 1,011 | 997 | 1,061 |
| Engineering | 57 | 67 | 89 | 98 | 122 | 131 | 118 |
| Sciences | 656 | 669 | 725 | 794 | 889 | 866 | 943 |
| Natural sciences | 256 | 289 | 316 | 333 | 374 | 379 | 420 |
| Physical science ¹ | 71 | 91 | 120 | 123 | 128 | 134 | 148 |
| Mathematical science | 19 | 22 | 19 | 16 | 20 | 18 | 25 |
| Computer science | 9 | 9 | 7 | 6 | 21 | 15 | 14 |
| Biological science | 125 | 135 | 135 | 144 | 167 | 176 | 195 |
| Agricultural science | 32 | 32 | 35 | 44 | 38 | 36 | 38 |
| Social sciences | 400 | 380 | 409 | 461 | 515 | 487 | 523 |
| Social science | 216 | 176 | 208 | 218 | 251 | 233 | 256 |
| Psychology | 184 | 204 | 201 | 243 | 264 | 254 | 267 |
| Non-S&E ² | 1,068 | 1,008 | 952 | 1,105 | 1,159 | 1,183 | 1,321 |
| Grand total | 1,781 | 1,744 | 1,766 | 1,997 | 2,170 | 2,180 | 2,382 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 375 | 320 | 376 | 379 | 459 | 406 | 472 |
| Engineering | 34 | 25 | 35 | 40 | 55 | 49 | 51 |
| Sciences | 341 | 295 | 341 | 339 | 404 | 357 | 421 |
| Natural sciences | 110 | 109 | 115 | 106 | 131 | 117 | 150 |
| Physical science ¹ | 31 | 22 | 35 | 33 | 34 | 32 | 45 |
| Mathematical science | 7 | 11 | 8 | 4 | 11 | 4 | 8 |
| Computer science | 3 | 2 | 1 | 1 | 8 | 5 | 6 |
| Biological science | 53 | 60 | 57 | 51 | 60 | 61 | 74 |
| Agricultural science | 16 | 14 | 14 | 17 | 18 | 15 | 17 |
| Social sciences | 231 | 186 | 226 | 233 | 273 | 240 | 271 |
| Social science | 126 | 93 | 129 | 117 | 144 | 137 | 152 |
| Psychology | 105 | 93 | 97 | 116 | 129 | 103 | 119 |
| Non-S&E ² | 670 | 593 | 597 | 680 | 706 | 705 | 815 |
| Grand total | 1,045 | 913 | 973 | 1,059 | 1,165 | 1,111 | 1,287 |
| Hispanics | | | | | | | |
| Total science and engineering | 297 | 363 | 385 | 471 | 496 | 522 | 546 |
| Engineering | 22 | 35 | 47 | 54 | 61 | 71 | 65 |
| Sciences | 275 | 328 | 338 | 417 | 435 | 451 | 481 |
| Natural sciences | 125 | 157 | 174 | 214 | 215 | 232 | 251 |
| Physical science ¹ | 36 | 62 | 69 | 86 | 81 | 89 | 94 |
| Mathematical science | 12 | 11 | 11 | 11 | 9 | 12 | 16 |
| Computer science | 6 | 4 | 4 | 5 | 12 | 8 | 7 |
| Biological science | 59 | 64 | 71 | 89 | 97 | 102 | 114 |
| Agricultural science | 12 | 16 | 19 | 23 | 16 | 21 | 20 |
| Social sciences | 150 | 171 | 164 | 203 | 220 | 219 | 230 |
| Social science | 81 | 76 | 71 | 94 | 98 | 83 | 97 |
| Psychology | 69 | 95 | 93 | 109 | 122 | 136 | 133 |
| Non-S&E ² | 343 | 353 | 314 | 371 | 377 | 397 | 430 |
| Grand total | 640 | 716 | 699 | 842 | 873 | 919 | 976 |

See explanatory information and SOURCES at end of table.

Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|--------|--------|--------|--------|--------|--------|--------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 41 | 53 | 53 | 42 | 56 | 69 | 43 |
| Engineering | 1 | 7 | 7 | 4 | 6 | 11 | 2 |
| Sciences | 40 | 46 | 46 | 38 | 50 | 58 | 41 |
| Natural sciences | 21 | 23 | 27 | 13 | 28 | 30 | 19 |
| Physical science ¹ | 4 | 7 | 16 | 4 | 13 | 13 | 9 |
| Mathematical science | 0 | 0 | 0 | 1 | 0 | 2 | 1 |
| Computer science | 0 | 3 | 2 | 0 | 1 | 2 | 1 |
| Biological science | 13 | 11 | 7 | 4 | 10 | 13 | 7 |
| Agricultural science | 4 | 2 | 2 | 4 | 4 | 0 | 1 |
| Social sciences | 19 | 23 | 19 | 25 | 22 | 28 | 22 |
| Social science | 9 | 7 | 8 | 7 | 9 | 13 | 7 |
| Psychology | 10 | 16 | 11 | 18 | 13 | 15 | 15 |
| Non-S&E ² | 55 | 62 | 41 | 54 | 76 | 81 | 76 |
| Grand total | 96 | 115 | 94 | 96 | 132 | 150 | 119 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 13,734 | 13,740 | 14,325 | 15,162 | 15,581 | 15,702 | 16,474 |
| Engineering | 1,551 | 1,858 | 2,181 | 2,320 | 2,381 | 2,471 | 2,690 |
| Sciences | 12,183 | 11,882 | 12,144 | 12,842 | 13,200 | 13,231 | 13,784 |
| Natural sciences | 7,092 | 6,952 | 7,292 | 7,656 | 7,881 | 7,914 | 8,121 |
| Physical science ¹ | 2,576 | 2,610 | 2,629 | 2,816 | 2,854 | 2,855 | 2,813 |
| Mathematical science | 403 | 382 | 412 | 419 | 499 | 494 | 583 |
| Computer science | 203 | 266 | 380 | 401 | 442 | 480 | 506 |
| Biological science | 3,192 | 3,069 | 3,241 | 3,331 | 3,473 | 3,518 | 3,713 |
| Agricultural science | 718 | 625 | 630 | 689 | 613 | 567 | 506 |
| Social sciences | 5,091 | 4,930 | 4,852 | 5,186 | 5,319 | 5,317 | 5,663 |
| Social science | 2,273 | 2,160 | 2,137 | 2,238 | 2,327 | 2,362 | 2,499 |
| Psychology | 2,818 | 2,770 | 2,715 | 2,948 | 2,992 | 2,955 | 3,164 |
| Non-S&E ² | 10,476 | 10,335 | 10,322 | 11,151 | 11,387 | 11,895 | 12,059 |
| Grand total | 24,210 | 24,075 | 24,647 | 26,313 | 26,968 | 27,597 | 28,533 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 4,048 | 4,468 | 5,391 | 6,571 | 7,642 | 8,092 | 8,111 |
| Engineering | 1,419 | 1,532 | 1,940 | 2,277 | 2,634 | 2,743 | 2,783 |
| Sciences | 2,629 | 2,936 | 3,451 | 4,294 | 5,008 | 5,349 | 5,328 |
| Natural sciences | 1,845 | 2,149 | 2,499 | 3,232 | 3,782 | 4,089 | 4,056 |
| Physical science ¹ | 739 | 923 | 1,012 | 1,244 | 1,442 | 1,582 | 1,497 |
| Mathematical science | 238 | 302 | 346 | 424 | 506 | 511 | 517 |
| Computer science | 89 | 143 | 178 | 271 | 340 | 365 | 349 |
| Biological science | 424 | 492 | 608 | 853 | 1,059 | 1,159 | 1,246 |
| Agricultural science | 355 | 289 | 355 | 440 | 435 | 472 | 447 |
| Social sciences | 784 | 787 | 952 | 1,062 | 1,226 | 1,260 | 1,272 |
| Social science | 703 | 702 | 846 | 945 | 1,093 | 1,104 | 1,124 |
| Psychology | 81 | 85 | 106 | 117 | 133 | 156 | 148 |
| Non-S&E ² | 1,180 | 1,142 | 1,255 | 1,522 | 1,667 | 1,858 | 1,812 |
| Grand total | 5,228 | 5,610 | 6,646 | 8,093 | 9,309 | 9,950 | 9,923 |

See explanatory information and SOURCES at end of table.

Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Unknown race/ethnicity or citizenship | | | | | | | |
| Total science and engineering | 1,154 | 1,686 | 2,015 | 1,135 | 795 | 882 | 853 |
| Engineering | 196 | 322 | 422 | 297 | 200 | 225 | 223 |
| Sciences | 958 | 1,364 | 1,593 | 838 | 595 | 657 | 630 |
| Natural sciences | 498 | 744 | 865 | 472 | 334 | 360 | 377 |
| Physical science ¹ | 218 | 307 | 343 | 202 | 144 | 138 | 162 |
| Mathematical science | 47 | 56 | 101 | 49 | 34 | 53 | 46 |
| Computer science | 18 | 41 | 54 | 33 | 18 | 24 | 23 |
| Biological science | 177 | 278 | 266 | 143 | 113 | 121 | 131 |
| Agricultural science | 38 | 62 | 101 | 45 | 25 | 24 | 15 |
| Social sciences | 460 | 620 | 728 | 366 | 261 | 297 | 253 |
| Social science | 241 | 302 | 341 | 149 | 136 | 144 | 146 |
| Psychology | 219 | 318 | 387 | 217 | 125 | 153 | 107 |
| Non-S&E ² | 706 | 996 | 1,016 | 527 | 445 | 424 | 445 |
| Grand total | 1,860 | 2,682 | 3,031 | 1,662 | 1,240 | 1,306 | 1,298 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 11. Number of earned doctoral degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 14,045 | 14,582 | 15,622 | 16,498 | 17,087 | 17,594 | 17,786 |
| Engineering | 2,968 | 3,470 | 4,168 | 4,479 | 4,748 | 4,933 | 5,175 |
| Sciences | 11,077 | 11,112 | 11,454 | 12,019 | 12,339 | 12,661 | 12,611 |
| Natural sciences | 7,312 | 7,484 | 7,857 | 8,430 | 8,842 | 9,015 | 8,932 |
| Physical science ¹ | 2,958 | 3,200 | 3,217 | 3,460 | 3,582 | 3,616 | 3,529 |
| Mathematical science | 582 | 615 | 704 | 734 | 840 | 853 | 882 |
| Computer science | 277 | 385 | 504 | 595 | 683 | 749 | 741 |
| Biological science | 2,555 | 2,479 | 2,573 | 2,713 | 2,873 | 2,967 | 3,040 |
| Agricultural science | 940 | 805 | 859 | 928 | 864 | 830 | 740 |
| Social sciences | 3,765 | 3,628 | 3,597 | 3,589 | 3,497 | 3,646 | 3,679 |
| Social science | 2,188 | 2,153 | 2,189 | 2,221 | 2,243 | 2,311 | 2,349 |
| Psychology | 1,577 | 1,475 | 1,408 | 1,368 | 1,254 | 1,335 | 1,330 |
| Non-S&E ² | 6,509 | 6,357 | 6,190 | 6,464 | 6,560 | 6,839 | 6,860 |
| Grand total | 20,554 | 20,939 | 21,812 | 22,962 | 23,647 | 24,433 | 24,646 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 8,528 | 8,231 | 8,225 | 8,692 | 8,602 | 8,642 | 8,739 |
| Engineering | 1,082 | 1,316 | 1,506 | 1,621 | 1,608 | 1,645 | 1,767 |
| Sciences | 7,446 | 6,915 | 6,719 | 7,071 | 6,994 | 6,997 | 6,972 |
| Natural sciences | 4,907 | 4,588 | 4,583 | 4,861 | 4,916 | 4,783 | 4,713 |
| Physical science ¹ | 1,960 | 1,935 | 1,843 | 2,014 | 2,000 | 1,929 | 1,872 |
| Mathematical science | 280 | 258 | 281 | 296 | 337 | 332 | 354 |
| Computer science | 156 | 184 | 253 | 263 | 282 | 310 | 328 |
| Biological science | 1,964 | 1,765 | 1,785 | 1,825 | 1,874 | 1,848 | 1,836 |
| Agricultural science | 547 | 446 | 421 | 463 | 423 | 364 | 323 |
| Social sciences | 2,539 | 2,327 | 2,136 | 2,210 | 2,078 | 2,214 | 2,259 |
| Social science | 1,237 | 1,156 | 1,068 | 1,132 | 1,081 | 1,130 | 1,160 |
| Psychology | 1,302 | 1,171 | 1,068 | 1,078 | 997 | 1,084 | 1,099 |
| Non-S&E ² | 4,662 | 4,394 | 4,228 | 4,526 | 4,572 | 4,650 | 4,628 |
| Grand total | 13,190 | 12,625 | 12,453 | 13,218 | 13,174 | 13,292 | 13,367 |
| Asians | | | | | | | |
| Total science and engineering | 657 | 707 | 750 | 790 | 836 | 939 | 1,107 |
| Engineering | 284 | 309 | 328 | 340 | 367 | 394 | 481 |
| Sciences | 373 | 398 | 422 | 450 | 469 | 545 | 626 |
| Natural sciences | 293 | 303 | 334 | 349 | 388 | 443 | 510 |
| Physical science ¹ | 132 | 126 | 141 | 141 | 145 | 171 | 187 |
| Mathematical science | 28 | 30 | 21 | 21 | 39 | 33 | 43 |
| Computer science | 17 | 21 | 43 | 44 | 51 | 74 | 62 |
| Biological science | 95 | 95 | 110 | 115 | 133 | 139 | 198 |
| Agricultural science | 21 | 31 | 19 | 28 | 20 | 26 | 20 |
| Social sciences | 80 | 95 | 88 | 101 | 81 | 102 | 116 |
| Social science | 57 | 78 | 60 | 79 | 66 | 83 | 94 |
| Psychology | 23 | 17 | 28 | 22 | 15 | 19 | 22 |
| Non-S&E ² | 151 | 137 | 163 | 164 | 169 | 210 | 211 |
| Grand total | 808 | 844 | 913 | 954 | 1,005 | 1,149 | 1,318 |

See explanatory information and SOURCES at end of table.

Table 11. Number of earned doctoral degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|------|------|------|------|-------|-------|-------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 441 | 443 | 485 | 548 | 614 | 595 | 609 |
| Engineering | 53 | 61 | 76 | 83 | 102 | 107 | 95 |
| Sciences | 388 | 382 | 409 | 465 | 512 | 488 | 514 |
| Natural sciences | 176 | 198 | 220 | 225 | 260 | 258 | 275 |
| Physical science ¹ | 56 | 67 | 89 | 83 | 106 | 99 | 112 |
| Mathematical science | 14 | 18 | 12 | 11 | 12 | 14 | 22 |
| Computer science | 7 | 7 | 2 | 5 | 16 | 13 | 8 |
| Biological science | 72 | 82 | 87 | 89 | 92 | 104 | 104 |
| Agricultural science | 27 | 24 | 30 | 37 | 34 | 28 | 29 |
| Social sciences | 212 | 184 | 189 | 240 | 252 | 230 | 239 |
| Social science | 137 | 114 | 120 | 138 | 151 | 140 | 144 |
| Psychology | 75 | 70 | 69 | 102 | 101 | 90 | 95 |
| Non-S&E ² | 448 | 448 | 405 | 444 | 474 | 495 | 556 |
| Grand total | 889 | 891 | 890 | 992 | 1,088 | 1,090 | 1,165 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 237 | 189 | 222 | 231 | 268 | 240 | 265 |
| Engineering | 30 | 24 | 32 | 34 | 47 | 43 | 40 |
| Sciences | 207 | 165 | 190 | 197 | 221 | 197 | 225 |
| Natural sciences | 81 | 73 | 78 | 74 | 85 | 82 | 99 |
| Physical science ¹ | 24 | 18 | 27 | 24 | 28 | 25 | 35 |
| Mathematical science | 7 | 9 | 5 | 3 | 7 | 4 | 7 |
| Computer science | 3 | 1 | 0 | 1 | 4 | 4 | 2 |
| Biological science | 32 | 35 | 33 | 30 | 29 | 37 | 42 |
| Agricultural science | 15 | 10 | 13 | 16 | 17 | 12 | 13 |
| Social sciences | 126 | 92 | 112 | 123 | 136 | 115 | 126 |
| Social science | 84 | 58 | 76 | 79 | 92 | 87 | 82 |
| Psychology | 42 | 34 | 36 | 44 | 44 | 28 | 44 |
| Non-S&E ² | 260 | 251 | 240 | 258 | 284 | 280 | 324 |
| Grand total | 497 | 440 | 462 | 489 | 552 | 520 | 589 |
| Hispanics | | | | | | | |
| Total science and engineering | 183 | 222 | 230 | 292 | 309 | 313 | 319 |
| Engineering | 22 | 30 | 39 | 45 | 51 | 56 | 53 |
| Sciences | 161 | 192 | 191 | 247 | 258 | 257 | 266 |
| Natural sciences | 83 | 109 | 122 | 140 | 154 | 154 | 162 |
| Physical science ¹ | 28 | 44 | 48 | 56 | 68 | 63 | 70 |
| Mathematical science | 7 | 9 | 7 | 7 | 5 | 9 | 14 |
| Computer science | 4 | 4 | 1 | 4 | 11 | 7 | 6 |
| Biological science | 36 | 40 | 50 | 56 | 57 | 59 | 57 |
| Agricultural science | 8 | 12 | 16 | 17 | 13 | 16 | 15 |
| Social sciences | 78 | 83 | 69 | 107 | 104 | 103 | 104 |
| Social science | 50 | 51 | 39 | 55 | 52 | 47 | 59 |
| Psychology | 28 | 32 | 30 | 52 | 52 | 56 | 45 |
| Non-S&E ² | 169 | 167 | 149 | 159 | 153 | 175 | 197 |
| Grand total | 352 | 389 | 379 | 451 | 462 | 488 | 516 |

See explanatory information and SOURCES at end of table.

Table 11. Number of earned doctoral degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|--------|--------|--------|--------|--------|--------|--------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 21 | 32 | 33 | 25 | 37 | 42 | 25 |
| Engineering | 1 | 7 | 5 | 4 | 4 | 8 | 2 |
| Sciences | 20 | 25 | 28 | 21 | 33 | 34 | 23 |
| Natural sciences | 12 | 16 | 20 | 11 | 21 | 22 | 14 |
| Physical science ¹ | 4 | 5 | 14 | 3 | 10 | 11 | 7 |
| Mathematical science | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| Computer science | 0 | 2 | 1 | 0 | 1 | 2 | 0 |
| Biological science | 4 | 7 | 4 | 3 | 6 | 8 | 5 |
| Agricultural science | 4 | 2 | 1 | 4 | 4 | 0 | 1 |
| Social sciences | 8 | 9 | 8 | 10 | 12 | 12 | 9 |
| Social science | 3 | 5 | 5 | 4 | 7 | 6 | 3 |
| Psychology | 5 | 4 | 3 | 6 | 5 | 6 | 6 |
| Non-S&E ² | 19 | 30 | 16 | 27 | 37 | 40 | 35 |
| Grand total | 40 | 62 | 49 | 52 | 74 | 82 | 60 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 9,626 | 9,381 | 9,460 | 10,030 | 10,052 | 10,176 | 10,455 |
| Engineering | 1,419 | 1,686 | 1,910 | 2,044 | 2,077 | 2,146 | 2,343 |
| Sciences | 8,207 | 7,695 | 7,550 | 7,986 | 7,975 | 8,030 | 8,112 |
| Natural sciences | 5,376 | 5,089 | 5,137 | 5,435 | 5,564 | 5,484 | 5,498 |
| Physical science ¹ | 2,148 | 2,128 | 2,073 | 2,238 | 2,251 | 2,199 | 2,171 |
| Mathematical science | 322 | 306 | 314 | 328 | 388 | 379 | 419 |
| Computer science | 180 | 212 | 298 | 312 | 349 | 397 | 398 |
| Biological science | 2,131 | 1,942 | 1,982 | 2,029 | 2,099 | 2,091 | 2,138 |
| Agricultural science | 595 | 501 | 470 | 528 | 477 | 418 | 372 |
| Social sciences | 2,831 | 2,606 | 2,413 | 2,551 | 2,411 | 2,546 | 2,614 |
| Social science | 1,431 | 1,348 | 1,248 | 1,349 | 1,298 | 1,353 | 1,398 |
| Psychology | 1,400 | 1,258 | 1,165 | 1,202 | 1,113 | 1,193 | 1,216 |
| Non-S&E ² | 5,261 | 4,979 | 4,796 | 5,134 | 5,215 | 5,355 | 5,395 |
| Grand total | 14,887 | 14,360 | 14,256 | 15,164 | 15,267 | 15,531 | 15,850 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 3,542 | 3,904 | 4,609 | 5,590 | 6,413 | 6,741 | 6,657 |
| Engineering | 1,363 | 1,478 | 1,850 | 2,157 | 2,485 | 2,574 | 2,622 |
| Sciences | 2,179 | 2,426 | 2,759 | 3,433 | 3,928 | 4,167 | 4,035 |
| Natural sciences | 1,536 | 1,794 | 2,011 | 2,608 | 3,003 | 3,230 | 3,127 |
| Physical science ¹ | 631 | 815 | 852 | 1,048 | 1,206 | 1,296 | 1,216 |
| Mathematical science | 216 | 260 | 299 | 363 | 420 | 427 | 422 |
| Computer science | 81 | 138 | 160 | 256 | 317 | 329 | 323 |
| Biological science | 293 | 333 | 400 | 582 | 694 | 787 | 809 |
| Agricultural science | 315 | 248 | 300 | 359 | 366 | 391 | 357 |
| Social sciences | 643 | 632 | 748 | 825 | 925 | 937 | 908 |
| Social science | 590 | 584 | 688 | 763 | 848 | 856 | 844 |
| Psychology | 53 | 48 | 60 | 62 | 77 | 81 | 64 |
| Non-S&E ² | 853 | 818 | 833 | 1,042 | 1,103 | 1,219 | 1,200 |
| Grand total | 4,395 | 4,722 | 5,442 | 6,632 | 7,516 | 7,960 | 7,857 |

See explanatory information and SOURCES at end of table.

Table 11. Number of earned doctoral degrees, by field and by race/ethnicity of male recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|-------|-------|-------|------|------|------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 877 | 1,297 | 1,553 | 878 | 622 | 677 | 674 |
| Engineering | 186 | 306 | 408 | 278 | 186 | 213 | 210 |
| Sciences | 691 | 991 | 1,145 | 600 | 436 | 464 | 464 |
| Natural sciences | 400 | 601 | 709 | 387 | 275 | 301 | 307 |
| Physical science ¹ | 179 | 257 | 292 | 174 | 125 | 121 | 142 |
| Mathematical science | 44 | 49 | 91 | 43 | 32 | 47 | 41 |
| Computer science | 16 | 35 | 46 | 27 | 17 | 23 | 20 |
| Biological science | 131 | 204 | 191 | 102 | 80 | 89 | 93 |
| Agricultural science | 30 | 56 | 89 | 41 | 21 | 21 | 11 |
| Social sciences | 291 | 390 | 436 | 213 | 161 | 163 | 157 |
| Social science | 167 | 221 | 253 | 109 | 97 | 102 | 107 |
| Psychology | 124 | 169 | 183 | 104 | 64 | 61 | 50 |
| Non-S&E ² | 395 | 560 | 561 | 288 | 242 | 265 | 265 |
| Grand total | 1,272 | 1,857 | 2,114 | 1,166 | 864 | 942 | 939 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 12. Number of earned doctoral degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all recipients | | | | | | | |
| Total science and engineering | 4,891 | 5,312 | 6,109 | 6,370 | 6,931 | 7,082 | 7,652 |
| Engineering | 198 | 242 | 375 | 415 | 467 | 506 | 521 |
| Sciences | 4,693 | 5,070 | 5,734 | 5,955 | 6,464 | 6,576 | 7,131 |
| Natural sciences | 2,123 | 2,361 | 2,799 | 2,930 | 3,155 | 3,348 | 3,622 |
| Physical science ¹ | 575 | 640 | 767 | 802 | 858 | 959 | 943 |
| Mathematical science | 106 | 125 | 155 | 158 | 199 | 205 | 264 |
| Computer science | 33 | 65 | 108 | 110 | 117 | 120 | 137 |
| Biological science | 1,238 | 1,360 | 1,542 | 1,614 | 1,772 | 1,831 | 2,050 |
| Agricultural science | 171 | 171 | 227 | 246 | 209 | 233 | 228 |
| Social sciences | 2,570 | 2,709 | 2,935 | 3,025 | 3,309 | 3,228 | 3,509 |
| Social science | 1,029 | 1,011 | 1,135 | 1,111 | 1,313 | 1,299 | 1,420 |
| Psychology | 1,541 | 1,698 | 1,800 | 1,914 | 1,996 | 1,929 | 2,089 |
| Non-S&E ² | 5,853 | 6,116 | 6,403 | 6,736 | 6,939 | 7,338 | 7,456 |
| Grand total | 10,744 | 11,428 | 12,512 | 13,106 | 13,870 | 14,420 | 15,108 |
| White, non-Hispanics | | | | | | | |
| Total science and engineering | 3,644 | 3,833 | 4,292 | 4,526 | 4,750 | 4,711 | 5,028 |
| Engineering | 106 | 144 | 224 | 226 | 235 | 240 | 263 |
| Sciences | 3,538 | 3,689 | 4,068 | 4,300 | 4,515 | 4,471 | 4,765 |
| Natural sciences | 1,526 | 1,630 | 1,909 | 1,956 | 1,977 | 2,047 | 2,133 |
| Physical science ¹ | 371 | 418 | 484 | 495 | 526 | 534 | 500 |
| Mathematical science | 70 | 61 | 88 | 79 | 85 | 93 | 125 |
| Computer science | 21 | 46 | 67 | 80 | 73 | 69 | 83 |
| Biological science | 951 | 996 | 1,121 | 1,155 | 1,170 | 1,222 | 1,310 |
| Agricultural science | 113 | 109 | 149 | 147 | 123 | 129 | 115 |
| Social sciences | 2,012 | 2,059 | 2,159 | 2,344 | 2,538 | 2,424 | 2,632 |
| Social science | 724 | 712 | 768 | 770 | 869 | 863 | 908 |
| Psychology | 1,288 | 1,347 | 1,391 | 1,574 | 1,669 | 1,561 | 1,724 |
| Non-S&E ² | 4,479 | 4,680 | 4,858 | 5,211 | 5,299 | 5,642 | 5,698 |
| Grand total | 8,123 | 8,513 | 9,150 | 9,737 | 10,049 | 10,353 | 10,726 |
| Asians | | | | | | | |
| Total science and engineering | 192 | 233 | 244 | 262 | 382 | 413 | 539 |
| Engineering | 22 | 22 | 34 | 35 | 49 | 61 | 61 |
| Sciences | 170 | 211 | 210 | 227 | 333 | 352 | 478 |
| Natural sciences | 110 | 142 | 150 | 157 | 226 | 262 | 345 |
| Physical science ¹ | 42 | 40 | 41 | 43 | 55 | 87 | 106 |
| Mathematical science | 6 | 11 | 3 | 7 | 18 | 18 | 36 |
| Computer science | 0 | 6 | 10 | 8 | 15 | 12 | 19 |
| Biological science | 57 | 78 | 90 | 92 | 129 | 133 | 174 |
| Agricultural science | 5 | 7 | 6 | 7 | 9 | 12 | 10 |
| Social sciences | 60 | 69 | 60 | 70 | 107 | 90 | 133 |
| Social science | 39 | 38 | 33 | 39 | 60 | 53 | 81 |
| Psychology | 21 | 31 | 27 | 31 | 47 | 37 | 52 |
| Non-S&E ² | 116 | 116 | 121 | 145 | 188 | 210 | 201 |
| Grand total | 308 | 349 | 365 | 407 | 570 | 623 | 740 |

See explanatory information and SOURCES at end of table.

Table 12. Number of earned doctoral degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|------|------|------|-------|-------|-------|-------|
| Underrepresented minorities, total | | | | | | | |
| Total science and engineering | 272 | 293 | 329 | 344 | 397 | 402 | 452 |
| Engineering | 4 | 6 | 13 | 15 | 20 | 24 | 23 |
| Sciences | 268 | 287 | 316 | 329 | 377 | 378 | 429 |
| Natural sciences | 80 | 91 | 96 | 108 | 114 | 121 | 145 |
| Physical science ¹ | 15 | 24 | 31 | 40 | 22 | 35 | 36 |
| Mathematical science | 5 | 4 | 7 | 5 | 8 | 4 | 3 |
| Computer science | 2 | 2 | 5 | 1 | 5 | 2 | 6 |
| Biological science | 53 | 53 | 48 | 55 | 75 | 72 | 91 |
| Agricultural science | 5 | 8 | 5 | 7 | 4 | 8 | 9 |
| Social sciences | 188 | 196 | 220 | 221 | 263 | 257 | 284 |
| Social science | 79 | 62 | 88 | 80 | 100 | 93 | 112 |
| Psychology | 109 | 134 | 132 | 141 | 163 | 164 | 172 |
| Non-S&E ² | 620 | 560 | 547 | 661 | 685 | 688 | 765 |
| Grand total | 892 | 853 | 876 | 1,005 | 1,082 | 1,090 | 1,217 |
| Black, non-Hispanics | | | | | | | |
| Total science and engineering | 138 | 131 | 154 | 148 | 191 | 166 | 207 |
| Engineering | 4 | 1 | 3 | 6 | 8 | 6 | 11 |
| Sciences | 134 | 130 | 151 | 142 | 183 | 160 | 196 |
| Natural sciences | 29 | 36 | 37 | 32 | 46 | 35 | 51 |
| Physical science ¹ | 7 | 4 | 8 | 9 | 6 | 7 | 10 |
| Mathematical science | 0 | 2 | 3 | 1 | 4 | 0 | 1 |
| Computer science | 0 | 1 | 1 | 0 | 4 | 1 | 4 |
| Biological science | 21 | 25 | 24 | 21 | 31 | 24 | 32 |
| Agricultural science | 1 | 4 | 1 | 1 | 1 | 3 | 4 |
| Social sciences | 105 | 94 | 114 | 110 | 137 | 125 | 145 |
| Social science | 42 | 35 | 53 | 38 | 52 | 50 | 70 |
| Psychology | 63 | 59 | 61 | 72 | 85 | 75 | 75 |
| Non-S&E ² | 410 | 342 | 357 | 422 | 422 | 425 | 491 |
| Grand total | 548 | 473 | 511 | 570 | 613 | 591 | 698 |
| Hispanics | | | | | | | |
| Total science and engineering | 114 | 141 | 155 | 179 | 187 | 209 | 227 |
| Engineering | 0 | 5 | 8 | 9 | 10 | 15 | 12 |
| Sciences | 114 | 136 | 147 | 170 | 177 | 194 | 215 |
| Natural sciences | 42 | 48 | 52 | 74 | 61 | 78 | 89 |
| Physical science ¹ | 8 | 18 | 21 | 30 | 13 | 26 | 24 |
| Mathematical science | 5 | 2 | 4 | 4 | 4 | 3 | 2 |
| Computer science | 2 | 0 | 3 | 1 | 1 | 1 | 1 |
| Biological science | 23 | 24 | 21 | 33 | 40 | 43 | 57 |
| Agricultural science | 4 | 4 | 3 | 6 | 3 | 5 | 5 |
| Social sciences | 72 | 88 | 95 | 96 | 116 | 116 | 126 |
| Social science | 31 | 25 | 32 | 39 | 46 | 36 | 38 |
| Psychology | 41 | 63 | 63 | 57 | 70 | 80 | 88 |
| Non-S&E ² | 174 | 186 | 165 | 212 | 224 | 222 | 233 |
| Grand total | 288 | 327 | 320 | 391 | 411 | 431 | 460 |

See explanatory information and SOURCES at end of table.

Table 12. Number of earned doctoral degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|-------|-------|--------|--------|--------|--------|--------|
| American Indians or Alaskan Natives | | | | | | | |
| Total science and engineering | 20 | 21 | 20 | 17 | 19 | 27 | 18 |
| Engineering | 0 | 0 | 2 | 0 | 2 | 3 | 0 |
| Sciences | 20 | 21 | 18 | 17 | 17 | 24 | 18 |
| Natural sciences | 9 | 7 | 7 | 2 | 7 | 8 | 5 |
| Physical science ¹ | 0 | 2 | 2 | 1 | 3 | 2 | 2 |
| Mathematical science | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Computer science | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| Biological science | 9 | 4 | 3 | 1 | 4 | 5 | 2 |
| Agricultural science | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Social sciences | 11 | 14 | 11 | 15 | 10 | 16 | 13 |
| Social science | 6 | 2 | 3 | 3 | 2 | 7 | 4 |
| Psychology | 5 | 12 | 8 | 12 | 8 | 9 | 9 |
| Non-S&E ² | 36 | 32 | 25 | 27 | 39 | 41 | 41 |
| Grand total | 56 | 53 | 45 | 44 | 58 | 68 | 59 |
| U.S. citizens and permanent residents, total | | | | | | | |
| Total science and engineering | 4,108 | 4,359 | 4,865 | 5,132 | 5,529 | 5,526 | 6,019 |
| Engineering | 132 | 172 | 271 | 276 | 304 | 325 | 347 |
| Sciences | 3,976 | 4,187 | 4,594 | 4,856 | 5,225 | 5,201 | 5,672 |
| Natural sciences | 1,716 | 1,863 | 2,155 | 2,221 | 2,317 | 2,430 | 2,623 |
| Physical science ¹ | 428 | 482 | 556 | 578 | 603 | 656 | 642 |
| Mathematical science | 81 | 76 | 98 | 91 | 111 | 115 | 164 |
| Computer science | 23 | 54 | 82 | 89 | 93 | 83 | 108 |
| Biological science | 1,061 | 1,127 | 1,259 | 1,302 | 1,374 | 1,427 | 1,575 |
| Agricultural science | 123 | 124 | 160 | 161 | 136 | 149 | 134 |
| Social sciences | 2,260 | 2,324 | 2,439 | 2,635 | 2,908 | 2,771 | 3,049 |
| Social science | 842 | 812 | 889 | 889 | 1,029 | 1,009 | 1,101 |
| Psychology | 1,418 | 1,512 | 1,550 | 1,746 | 1,879 | 1,762 | 1,948 |
| Non-S&E ² | 5,215 | 5,356 | 5,526 | 6,017 | 6,172 | 6,540 | 6,664 |
| Grand total | 9,323 | 9,715 | 10,391 | 11,149 | 11,701 | 12,066 | 12,683 |
| Nonresident aliens ³ | | | | | | | |
| Total science and engineering | 506 | 564 | 782 | 981 | 1,229 | 1,351 | 1,454 |
| Engineering | 56 | 54 | 90 | 120 | 149 | 169 | 161 |
| Sciences | 450 | 510 | 692 | 861 | 1,080 | 1,182 | 1,293 |
| Natural sciences | 309 | 355 | 488 | 624 | 779 | 859 | 929 |
| Physical science ¹ | 108 | 108 | 160 | 196 | 236 | 286 | 281 |
| Mathematical science | 22 | 42 | 47 | 61 | 86 | 84 | 95 |
| Computer science | 8 | 5 | 18 | 15 | 23 | 36 | 26 |
| Biological science | 131 | 159 | 208 | 271 | 365 | 372 | 437 |
| Agricultural science | 40 | 41 | 55 | 81 | 69 | 81 | 90 |
| Social sciences | 141 | 155 | 204 | 237 | 301 | 323 | 364 |
| Social science | 113 | 118 | 158 | 182 | 245 | 248 | 280 |
| Psychology | 28 | 37 | 46 | 55 | 56 | 75 | 84 |
| Non-S&E ² | 327 | 324 | 422 | 480 | 564 | 639 | 612 |
| Grand total | 833 | 888 | 1,204 | 1,461 | 1,793 | 1,990 | 2,066 |

See explanatory information and SOURCES at end of table.

Table 12. Number of earned doctoral degrees, by field and by race/ethnicity of female recipients: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|---------------------------------------|------|------|------|------|------|------|
| | Unknown race/ethnicity or citizenship | | | | | | |
| Total science and engineering | 277 | 389 | 462 | 257 | 173 | 205 | 179 |
| Engineering | 10 | 16 | 14 | 19 | 14 | 12 | 13 |
| Sciences | 267 | 373 | 448 | 238 | 159 | 193 | 166 |
| Natural sciences | 98 | 143 | 156 | 85 | 59 | 59 | 70 |
| Physical science ¹ | 39 | 50 | 51 | 28 | 19 | 17 | 20 |
| Mathematical science | 3 | 7 | 10 | 6 | 2 | 6 | 5 |
| Computer science | 2 | 6 | 8 | 6 | 1 | 1 | 3 |
| Biological science | 46 | 74 | 75 | 41 | 33 | 32 | 38 |
| Agricultural science | 8 | 6 | 12 | 4 | 4 | 3 | 4 |
| Social sciences | 169 | 230 | 292 | 153 | 100 | 134 | 96 |
| Social science | 74 | 81 | 88 | 40 | 39 | 42 | 39 |
| Psychology | 95 | 149 | 204 | 113 | 61 | 92 | 57 |
| Non-S&E ² | 311 | 436 | 455 | 239 | 203 | 159 | 180 |
| Grand total | 588 | 825 | 917 | 496 | 376 | 364 | 359 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

³ Nonresident aliens include foreign citizens on temporary visas only.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 13. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 17,040 | 17,230 | 17,385 | 18,230 | 19,987 | 22,431 | 24,421 |
| Engineering | 2,039 | 2,315 | 2,067 | 2,072 | 2,229 | 2,362 | 2,577 |
| Sciences | 15,001 | 14,915 | 15,318 | 16,158 | 17,758 | 20,069 | 21,844 |
| Natural sciences | 6,009 | 6,524 | 6,005 | 5,782 | 5,834 | 6,401 | 6,972 |
| Physical science ¹ | 830 | 823 | 697 | 650 | 753 | 816 | 836 |
| Mathematical science | 770 | 834 | 792 | 720 | 811 | 904 | 965 |
| Computer science | 2,143 | 2,820 | 2,457 | 2,247 | 1,997 | 2,090 | 2,213 |
| Biological science | 2,047 | 1,890 | 1,916 | 1,994 | 2,111 | 2,385 | 2,739 |
| Agricultural science | 219 | 157 | 143 | 171 | 162 | 206 | 219 |
| Social sciences | 8,992 | 8,391 | 9,313 | 10,376 | 11,924 | 13,668 | 14,872 |
| Social science | 6,325 | 5,940 | 6,570 | 7,226 | 8,236 | 9,489 | 10,254 |
| Psychology | 2,667 | 2,451 | 2,743 | 3,150 | 3,688 | 4,179 | 4,618 |
| Non-S&E ² | 39,246 | 36,604 | 38,244 | 39,871 | 43,795 | 47,641 | 51,114 |
| Grand total | 56,286 | 53,834 | 55,629 | 58,101 | 63,782 | 70,072 | 75,535 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 4,933 | 5,229 | 5,054 | 5,190 | 5,679 | 6,363 | 7,368 |
| Engineering | 438 | 557 | 474 | 524 | 589 | 594 | 700 |
| Sciences | 4,495 | 4,672 | 4,580 | 4,666 | 5,090 | 5,769 | 6,668 |
| Natural sciences | 2,369 | 2,750 | 2,513 | 2,353 | 2,363 | 2,599 | 3,021 |
| Physical science ¹ | 363 | 346 | 320 | 296 | 358 | 376 | 390 |
| Mathematical science | 382 | 425 | 381 | 307 | 369 | 420 | 463 |
| Computer science | 740 | 1,187 | 1,048 | 899 | 748 | 780 | 904 |
| Biological science | 783 | 714 | 693 | 764 | 792 | 906 | 1,155 |
| Agricultural science | 101 | 78 | 71 | 87 | 96 | 117 | 109 |
| Social sciences | 2,126 | 1,922 | 2,067 | 2,313 | 2,727 | 3,170 | 3,647 |
| Social science | 1,581 | 1,457 | 1,517 | 1,651 | 1,886 | 2,201 | 2,507 |
| Psychology | 545 | 465 | 550 | 662 | 841 | 969 | 1,140 |
| Non-S&E ² | 11,808 | 10,853 | 10,435 | 10,744 | 11,910 | 12,899 | 14,073 |
| Grand total | 16,741 | 16,082 | 15,489 | 15,934 | 17,589 | 19,262 | 21,441 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 28.9 | 30.3 | 29.1 | 28.5 | 28.4 | 28.4 | 30.2 |
| Engineering | 21.5 | 24.1 | 22.9 | 25.3 | 26.4 | 25.1 | 27.2 |
| Sciences | 30.0 | 31.3 | 29.9 | 28.9 | 28.7 | 28.7 | 30.5 |
| Natural sciences | 39.4 | 42.2 | 41.8 | 40.7 | 40.5 | 40.6 | 43.3 |
| Physical science ¹ | 43.7 | 42.0 | 45.9 | 45.5 | 47.5 | 46.1 | 46.7 |
| Mathematical science | 49.6 | 51.0 | 48.1 | 42.6 | 45.5 | 46.5 | 48.0 |
| Computer science | 34.5 | 42.1 | 42.7 | 40.0 | 37.5 | 37.3 | 40.8 |
| Biological science | 38.3 | 37.8 | 36.2 | 38.3 | 37.5 | 38.0 | 42.2 |
| Agricultural science | 46.1 | 49.7 | 49.7 | 50.9 | 59.3 | 56.8 | 49.8 |
| Social sciences | 23.6 | 22.9 | 22.2 | 22.3 | 22.9 | 23.2 | 24.5 |
| Social science | 25.0 | 24.5 | 23.1 | 22.8 | 22.9 | 23.2 | 24.4 |
| Psychology | 20.4 | 19.0 | 20.1 | 21.0 | 22.8 | 23.2 | 24.7 |
| Non-S&E ² | 30.1 | 29.6 | 27.3 | 26.9 | 27.2 | 27.1 | 27.5 |
| Grand total | 29.7 | 29.9 | 27.8 | 27.4 | 27.6 | 27.5 | 28.4 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 14. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 7,926 | 7,886 | 7,685 | 7,830 | 8,448 | 9,375 | 10,099 |
| Engineering | 1,479 | 1,606 | 1,397 | 1,416 | 1,484 | 1,614 | 1,764 |
| Sciences | 6,447 | 6,280 | 6,288 | 6,414 | 6,964 | 7,761 | 8,335 |
| Natural sciences | 2,833 | 2,939 | 2,732 | 2,476 | 2,538 | 2,709 | 2,872 |
| Physical science ¹ | 457 | 433 | 365 | 292 | 391 | 381 | 370 |
| Mathematical science | 376 | 399 | 374 | 342 | 380 | 374 | 444 |
| Computer science | 1,036 | 1,284 | 1,205 | 1,074 | 971 | 1,092 | 1,049 |
| Biological science | 806 | 723 | 700 | 658 | 696 | 749 | 883 |
| Agricultural science | 158 | 100 | 88 | 110 | 100 | 113 | 126 |
| Social sciences | 3,614 | 3,341 | 3,556 | 3,938 | 4,426 | 5,052 | 5,463 |
| Social science | 2,863 | 2,680 | 2,911 | 3,144 | 3,547 | 4,070 | 4,364 |
| Psychology | 751 | 661 | 645 | 794 | 879 | 982 | 1,099 |
| Non-S&E ² | 14,105 | 13,073 | 13,287 | 13,807 | 14,822 | 16,194 | 17,383 |
| Grand total | 22,031 | 20,959 | 20,972 | 21,637 | 23,270 | 25,569 | 27,482 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 2,240 | 2,337 | 2,112 | 2,086 | 2,211 | 2,450 | 2,761 |
| Engineering | 310 | 371 | 308 | 331 | 359 | 380 | 430 |
| Sciences | 1,930 | 1,966 | 1,804 | 1,755 | 1,852 | 2,070 | 2,331 |
| Natural sciences | 1,081 | 1,193 | 1,056 | 935 | 951 | 972 | 1,089 |
| Physical science ¹ | 190 | 156 | 160 | 127 | 163 | 145 | 150 |
| Mathematical science | 184 | 213 | 179 | 134 | 164 | 150 | 196 |
| Computer science | 328 | 502 | 460 | 377 | 333 | 364 | 361 |
| Biological science | 299 | 264 | 206 | 231 | 231 | 238 | 317 |
| Agricultural science | 80 | 58 | 51 | 66 | 60 | 75 | 65 |
| Social sciences | 849 | 773 | 748 | 820 | 901 | 1,098 | 1,242 |
| Social science | 682 | 661 | 621 | 657 | 720 | 868 | 989 |
| Psychology | 167 | 112 | 127 | 163 | 181 | 230 | 253 |
| Non-S&E ² | 4,168 | 3,833 | 3,532 | 3,668 | 3,945 | 4,316 | 4,798 |
| Grand total | 6,408 | 6,170 | 5,644 | 5,754 | 6,156 | 6,766 | 7,559 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 28.3 | 29.6 | 27.5 | 26.6 | 26.2 | 26.1 | 27.3 |
| Engineering | 21.0 | 23.1 | 22.0 | 23.4 | 24.2 | 23.5 | 24.4 |
| Sciences | 29.9 | 31.3 | 28.7 | 27.4 | 26.6 | 26.7 | 28.0 |
| Natural sciences | 38.2 | 40.6 | 38.7 | 37.8 | 37.5 | 35.9 | 37.9 |
| Physical science ¹ | 41.6 | 36.0 | 43.8 | 43.5 | 41.7 | 38.1 | 40.5 |
| Mathematical science | 48.9 | 53.4 | 47.9 | 39.2 | 43.2 | 40.1 | 44.1 |
| Computer science | 31.7 | 39.1 | 38.2 | 35.1 | 34.3 | 33.3 | 34.4 |
| Biological science | 37.1 | 36.5 | 29.4 | 35.1 | 33.2 | 31.8 | 35.9 |
| Agricultural science | 50.6 | 58.0 | 58.0 | 60.0 | 60.0 | 66.4 | 51.6 |
| Social sciences | 23.5 | 23.1 | 21.0 | 20.8 | 20.4 | 21.7 | 22.7 |
| Social science | 23.8 | 24.7 | 21.3 | 20.9 | 20.3 | 21.3 | 22.7 |
| Psychology | 22.2 | 16.9 | 19.7 | 20.5 | 20.6 | 23.4 | 23.0 |
| Non-S&E ² | 29.5 | 29.3 | 26.6 | 26.6 | 26.6 | 26.7 | 27.6 |
| Grand total | 29.1 | 29.4 | 26.9 | 26.6 | 26.5 | 26.5 | 27.5 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 15. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 9,114 | 9,344 | 9,700 | 10,400 | 11,539 | 13,056 | 14,322 |
| Engineering | 560 | 709 | 670 | 656 | 745 | 748 | 813 |
| Sciences | 8,554 | 8,635 | 9,030 | 9,744 | 10,794 | 12,308 | 13,509 |
| Natural sciences | 3,176 | 3,585 | 3,273 | 3,306 | 3,296 | 3,692 | 4,100 |
| Physical science ¹ | 373 | 390 | 332 | 358 | 362 | 435 | 466 |
| Mathematical science | 394 | 435 | 418 | 378 | 431 | 530 | 521 |
| Computer science | 1,107 | 1,536 | 1,252 | 1,173 | 1,026 | 998 | 1,164 |
| Biological science | 1,241 | 1,167 | 1,216 | 1,336 | 1,415 | 1,636 | 1,856 |
| Agricultural science | 61 | 57 | 55 | 61 | 62 | 93 | 93 |
| Social sciences | 5,378 | 5,050 | 5,757 | 6,438 | 7,498 | 8,616 | 9,409 |
| Social science | 3,462 | 3,260 | 3,659 | 4,082 | 4,689 | 5,419 | 5,890 |
| Psychology | 1,916 | 1,790 | 2,098 | 2,356 | 2,809 | 3,197 | 3,519 |
| Non-S&E ² | 25,141 | 23,531 | 24,957 | 26,064 | 28,973 | 31,447 | 33,731 |
| Grand total | 34,255 | 32,875 | 34,657 | 36,464 | 40,512 | 44,503 | 48,053 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 2,693 | 2,892 | 2,942 | 3,104 | 3,468 | 3,913 | 4,607 |
| Engineering | 128 | 186 | 166 | 193 | 230 | 214 | 270 |
| Sciences | 2,565 | 2,706 | 2,776 | 2,911 | 3,238 | 3,699 | 4,337 |
| Natural sciences | 1,288 | 1,557 | 1,457 | 1,418 | 1,412 | 1,627 | 1,932 |
| Physical science ¹ | 173 | 190 | 160 | 169 | 195 | 231 | 240 |
| Mathematical science | 198 | 212 | 202 | 173 | 205 | 270 | 267 |
| Computer science | 412 | 685 | 588 | 522 | 415 | 416 | 543 |
| Biological science | 484 | 450 | 487 | 533 | 561 | 668 | 838 |
| Agricultural science | 21 | 20 | 20 | 21 | 36 | 42 | 44 |
| Social sciences | 1,277 | 1,149 | 1,319 | 1,493 | 1,826 | 2,072 | 2,405 |
| Social science | 899 | 796 | 896 | 994 | 1,166 | 1,333 | 1,518 |
| Psychology | 378 | 353 | 423 | 499 | 660 | 739 | 887 |
| Non-S&E ² | 7,640 | 7,020 | 6,903 | 7,076 | 7,965 | 8,583 | 9,275 |
| Grand total | 10,333 | 9,912 | 9,845 | 10,180 | 11,433 | 12,496 | 13,882 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 29.5 | 31.0 | 30.3 | 29.8 | 30.1 | 30.0 | 32.2 |
| Engineering | 22.9 | 26.2 | 24.8 | 29.4 | 30.9 | 28.6 | 33.2 |
| Sciences | 30.0 | 31.3 | 30.7 | 29.9 | 30.0 | 30.1 | 32.1 |
| Natural sciences | 40.6 | 43.4 | 44.5 | 42.9 | 42.8 | 44.1 | 47.1 |
| Physical science ¹ | 46.4 | 48.7 | 48.2 | 47.2 | 53.9 | 53.1 | 51.5 |
| Mathematical science | 50.3 | 48.7 | 48.3 | 45.8 | 47.6 | 50.9 | 51.2 |
| Computer science | 37.2 | 44.6 | 47.0 | 44.5 | 40.4 | 41.7 | 46.6 |
| Biological science | 39.0 | 38.6 | 40.0 | 39.9 | 39.6 | 40.8 | 45.2 |
| Agricultural science | 34.4 | 35.1 | 36.4 | 34.4 | 58.1 | 45.2 | 47.3 |
| Social sciences | 23.7 | 22.8 | 22.9 | 23.2 | 24.4 | 24.0 | 25.6 |
| Social science | 26.0 | 24.4 | 24.5 | 24.4 | 24.9 | 24.6 | 25.8 |
| Psychology | 19.7 | 19.7 | 20.2 | 21.2 | 23.5 | 23.1 | 25.2 |
| Non-S&E ² | 30.4 | 29.8 | 27.7 | 27.1 | 27.5 | 27.3 | 27.5 |
| Grand total | 30.2 | 30.2 | 28.4 | 27.9 | 28.2 | 28.1 | 28.9 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 16. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 1,742 | 1,784 | 1,652 | 1,847 | 2,090 | 2,356 | 2,554 |
| Engineering | 330 | 403 | 355 | 387 | 398 | 466 | 564 |
| Sciences | 1,412 | 1,381 | 1,297 | 1,460 | 1,692 | 1,890 | 1,990 |
| Natural sciences | 523 | 581 | 495 | 527 | 644 | 699 | 716 |
| Physical science ¹ | 89 | 79 | 78 | 87 | 73 | 98 | 105 |
| Mathematical science | 53 | 73 | 59 | 70 | 100 | 77 | 98 |
| Computer science | 180 | 207 | 198 | 232 | 283 | 316 | 308 |
| Biological science | 151 | 167 | 124 | 110 | 137 | 149 | 135 |
| Agricultural science | 50 | 55 | 36 | 28 | 51 | 59 | 70 |
| Social sciences | 889 | 800 | 802 | 933 | 1,048 | 1,191 | 1,274 |
| Social science | 463 | 424 | 407 | 462 | 594 | 660 | 730 |
| Psychology | 426 | 376 | 395 | 471 | 454 | 531 | 544 |
| Non-S&E ² | 12,181 | 11,347 | 11,748 | 12,582 | 13,720 | 15,000 | 16,282 |
| Grand total | 13,923 | 13,131 | 13,400 | 14,429 | 15,810 | 17,356 | 18,836 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 284 | 318 | 314 | 339 | 391 | 426 | 453 |
| Engineering | 34 | 27 | 38 | 42 | 37 | 41 | 41 |
| Sciences | 250 | 291 | 276 | 297 | 354 | 385 | 412 |
| Natural sciences | 157 | 177 | 143 | 153 | 180 | 188 | 204 |
| Physical science ¹ | 28 | 23 | 23 | 24 | 24 | 21 | 36 |
| Mathematical science | 16 | 17 | 13 | 17 | 21 | 17 | 23 |
| Computer science | 32 | 39 | 42 | 63 | 59 | 76 | 75 |
| Biological science | 58 | 67 | 47 | 37 | 46 | 47 | 38 |
| Agricultural science | 23 | 31 | 18 | 12 | 30 | 27 | 32 |
| Social sciences | 93 | 114 | 133 | 144 | 174 | 197 | 208 |
| Social science | 56 | 67 | 78 | 69 | 114 | 125 | 107 |
| Psychology | 37 | 47 | 55 | 75 | 60 | 72 | 101 |
| Non-S&E ² | 2,316 | 2,115 | 2,047 | 2,016 | 2,127 | 2,199 | 2,324 |
| Grand total | 2,600 | 2,433 | 2,361 | 2,355 | 2,518 | 2,625 | 2,777 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 16.3 | 17.8 | 19.0 | 18.4 | 18.7 | 18.1 | 17.7 |
| Engineering | 10.3 | 6.7 | 10.7 | 10.9 | 9.3 | 8.8 | 7.3 |
| Sciences | 17.7 | 21.1 | 21.3 | 20.3 | 20.9 | 20.4 | 20.7 |
| Natural sciences | 30.0 | 30.5 | 28.9 | 29.0 | 28.0 | 26.9 | 28.5 |
| Physical science ¹ | 31.5 | 29.1 | 29.5 | 27.6 | 32.9 | 21.4 | 34.3 |
| Mathematical science | 30.2 | 23.3 | 22.0 | 24.3 | 21.0 | 22.1 | 23.5 |
| Computer science | 17.8 | 18.8 | 21.2 | 27.2 | 20.8 | 24.1 | 24.4 |
| Biological science | 38.4 | 40.1 | 37.9 | 33.6 | 33.6 | 31.5 | 28.1 |
| Agricultural science | 46.0 | 56.4 | 50.0 | 42.9 | 58.8 | 45.8 | 45.7 |
| Social sciences | 10.5 | 14.2 | 16.6 | 15.4 | 16.6 | 16.5 | 16.3 |
| Social science | 12.1 | 15.8 | 19.2 | 14.9 | 19.2 | 18.9 | 14.7 |
| Psychology | 8.7 | 12.5 | 13.9 | 15.9 | 13.2 | 13.6 | 18.6 |
| Non-S&E ² | 19.0 | 18.6 | 17.4 | 16.0 | 15.5 | 14.7 | 14.3 |
| Grand total | 18.7 | 18.5 | 17.6 | 16.3 | 15.9 | 15.1 | 14.7 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 17. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 973 | 990 | 878 | 950 | 1,028 | 1,166 | 1,253 |
| Engineering | 274 | 315 | 262 | 287 | 299 | 332 | 407 |
| Sciences | 699 | 675 | 616 | 663 | 729 | 834 | 846 |
| Natural sciences | 300 | 338 | 290 | 307 | 338 | 382 | 386 |
| Physical science ¹ | 61 | 45 | 56 | 61 | 43 | 66 | 58 |
| Mathematical science | 34 | 45 | 32 | 37 | 53 | 44 | 48 |
| Computer science | 108 | 126 | 119 | 140 | 150 | 175 | 193 |
| Biological science | 67 | 80 | 59 | 51 | 58 | 61 | 47 |
| Agricultural science | 30 | 42 | 24 | 18 | 34 | 36 | 40 |
| Social sciences | 399 | 337 | 326 | 356 | 391 | 452 | 460 |
| Social science | 253 | 221 | 206 | 223 | 262 | 315 | 345 |
| Psychology | 146 | 116 | 120 | 133 | 129 | 137 | 115 |
| Non-S&E ² | 4,210 | 3,860 | 4,046 | 4,187 | 4,562 | 4,582 | 5,187 |
| Grand total | 5,183 | 4,850 | 4,924 | 5,137 | 5,590 | 5,748 | 6,440 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 141 | 155 | 154 | 164 | 172 | 195 | 191 |
| Engineering | 30 | 15 | 26 | 32 | 29 | 27 | 23 |
| Sciences | 111 | 140 | 128 | 132 | 143 | 168 | 168 |
| Natural sciences | 75 | 93 | 76 | 84 | 90 | 100 | 106 |
| Physical science ¹ | 17 | 14 | 14 | 14 | 14 | 16 | 19 |
| Mathematical science | 10 | 10 | 8 | 9 | 7 | 7 | 9 |
| Computer science | 15 | 19 | 24 | 35 | 33 | 46 | 44 |
| Biological science | 22 | 28 | 19 | 17 | 15 | 15 | 11 |
| Agricultural science | 11 | 22 | 11 | 9 | 21 | 16 | 23 |
| Social sciences | 36 | 47 | 52 | 48 | 53 | 68 | 62 |
| Social science | 26 | 36 | 39 | 28 | 39 | 47 | 40 |
| Psychology | 10 | 11 | 13 | 20 | 14 | 21 | 22 |
| Non-S&E ² | 739 | 620 | 572 | 581 | 594 | 583 | 630 |
| Grand total | 880 | 775 | 726 | 745 | 766 | 778 | 821 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 14.5 | 15.7 | 17.5 | 17.3 | 16.7 | 16.7 | 15.2 |
| Engineering | 10.9 | 4.8 | 9.9 | 11.1 | 9.7 | 8.1 | 5.7 |
| Sciences | 15.9 | 20.7 | 20.8 | 19.9 | 19.6 | 20.1 | 19.9 |
| Natural sciences | 25.0 | 27.5 | 26.2 | 27.4 | 26.6 | 26.2 | 27.5 |
| Physical science ¹ | 27.9 | 31.1 | 25.0 | 23.0 | 32.6 | 24.2 | 32.8 |
| Mathematical science | 29.4 | 22.2 | 25.0 | 24.3 | 13.2 | 15.9 | 18.8 |
| Computer science | 13.9 | 15.1 | 20.2 | 25.0 | 22.0 | 26.3 | 22.8 |
| Biological science | 32.8 | 35.0 | 32.2 | 33.3 | 25.9 | 24.6 | 23.4 |
| Agricultural science | 36.7 | 52.4 | 45.8 | 50.0 | 61.8 | 44.4 | 57.5 |
| Social sciences | 9.0 | 13.9 | 16.0 | 13.5 | 13.6 | 15.0 | 13.5 |
| Social science | 10.3 | 16.3 | 18.9 | 12.6 | 14.9 | 14.9 | 11.6 |
| Psychology | 6.8 | 9.5 | 10.8 | 15.0 | 10.9 | 15.3 | 19.1 |
| Non-S&E ² | 17.6 | 16.1 | 14.1 | 13.9 | 13.0 | 12.7 | 12.1 |
| Grand total | 17.0 | 16.0 | 14.7 | 14.5 | 13.7 | 13.5 | 12.7 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 18. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|-------|-------|-------|-------|--------|--------|--------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 769 | 794 | 774 | 897 | 1,062 | 1,190 | 1,301 |
| Engineering | 56 | 88 | 93 | 100 | 99 | 134 | 157 |
| Sciences | 713 | 706 | 681 | 797 | 963 | 1,056 | 1,144 |
| Natural sciences | 223 | 243 | 205 | 220 | 306 | 317 | 330 |
| Physical science ¹ | 28 | 34 | 22 | 26 | 30 | 32 | 47 |
| Mathematical science | 19 | 28 | 27 | 33 | 47 | 33 | 50 |
| Computer science | 72 | 81 | 79 | 92 | 133 | 141 | 115 |
| Biological science | 84 | 87 | 65 | 59 | 79 | 88 | 88 |
| Agricultural science | 20 | 13 | 12 | 10 | 17 | 23 | 30 |
| Social sciences | 490 | 463 | 476 | 577 | 657 | 739 | 814 |
| Social science | 210 | 203 | 201 | 239 | 332 | 345 | 385 |
| Psychology | 280 | 260 | 275 | 338 | 325 | 394 | 429 |
| Non-S&E ² | 7,971 | 7,487 | 7,702 | 8,395 | 9,158 | 10,418 | 11,095 |
| Grand total | 8,740 | 8,281 | 8,476 | 9,292 | 10,220 | 11,608 | 12,396 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 143 | 163 | 160 | 175 | 219 | 231 | 262 |
| Engineering | 4 | 12 | 12 | 10 | 8 | 14 | 18 |
| Sciences | 139 | 151 | 148 | 165 | 211 | 217 | 244 |
| Natural sciences | 82 | 84 | 67 | 69 | 90 | 88 | 98 |
| Physical science ¹ | 11 | 9 | 9 | 10 | 10 | 5 | 17 |
| Mathematical science | 6 | 7 | 5 | 8 | 14 | 10 | 14 |
| Computer science | 17 | 20 | 18 | 28 | 26 | 30 | 31 |
| Biological science | 36 | 39 | 28 | 20 | 31 | 32 | 27 |
| Agricultural science | 12 | 9 | 7 | 3 | 9 | 11 | 9 |
| Social sciences | 57 | 67 | 81 | 96 | 121 | 129 | 146 |
| Social science | 30 | 31 | 39 | 41 | 75 | 78 | 67 |
| Psychology | 27 | 36 | 42 | 55 | 46 | 51 | 79 |
| Non-S&E ² | 1,577 | 1,495 | 1,475 | 1,435 | 1,533 | 1,616 | 1,694 |
| Grand total | 1,720 | 1,658 | 1,635 | 1,610 | 1,752 | 1,847 | 1,956 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 18.6 | 20.5 | 20.7 | 19.5 | 20.6 | 19.4 | 20.1 |
| Engineering | 7.1 | 13.6 | 12.9 | 10.0 | 8.1 | 10.4 | 11.5 |
| Sciences | 19.5 | 21.4 | 21.7 | 20.7 | 21.9 | 20.5 | 21.3 |
| Natural sciences | 36.8 | 34.6 | 32.7 | 31.4 | 29.4 | 27.8 | 29.7 |
| Physical science ¹ | 39.3 | 26.5 | 40.9 | 38.5 | 33.3 | 15.6 | 36.2 |
| Mathematical science | 31.6 | 25.0 | 18.5 | 24.2 | 29.8 | 30.3 | 28.0 |
| Computer science | 23.6 | 24.7 | 22.8 | 30.4 | 19.5 | 21.3 | 27.0 |
| Biological science | 42.9 | 44.8 | 43.1 | 33.9 | 39.2 | 36.4 | 30.7 |
| Agricultural science | 60.0 | 69.2 | 58.3 | 30.0 | 52.9 | 47.8 | 30.0 |
| Social sciences | 11.6 | 14.5 | 17.0 | 16.6 | 18.4 | 17.5 | 17.9 |
| Social science | 14.3 | 15.3 | 19.4 | 17.2 | 22.6 | 22.6 | 17.4 |
| Psychology | 9.6 | 13.8 | 15.3 | 16.3 | 14.2 | 12.9 | 18.4 |
| Non-S&E ² | 19.8 | 20.0 | 19.2 | 17.1 | 16.7 | 15.5 | 15.3 |
| Grand total | 19.7 | 20.0 | 19.3 | 17.3 | 17.1 | 15.9 | 15.8 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 19. Number of earned doctoral degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|-------|------|------|-------|-------|-------|-------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 375 | 320 | 376 | 379 | 459 | 406 | 472 |
| Engineering | 34 | 25 | 35 | 40 | 55 | 49 | 51 |
| Sciences | 341 | 295 | 341 | 339 | 404 | 357 | 421 |
| Natural sciences | 110 | 109 | 115 | 106 | 131 | 117 | 150 |
| Physical science ¹ | 31 | 22 | 35 | 33 | 34 | 32 | 45 |
| Mathematical science | 7 | 11 | 8 | 4 | 11 | 4 | 8 |
| Computer science | 3 | 2 | 1 | 1 | 8 | 5 | 6 |
| Biological science | 53 | 60 | 57 | 51 | 60 | 61 | 74 |
| Agricultural science | 16 | 14 | 14 | 17 | 18 | 15 | 17 |
| Social sciences | 231 | 186 | 226 | 233 | 273 | 240 | 271 |
| Social science | 126 | 93 | 129 | 117 | 144 | 137 | 152 |
| Psychology | 105 | 93 | 97 | 116 | 129 | 103 | 119 |
| Non-S&E ² | 670 | 593 | 597 | 680 | 706 | 705 | 815 |
| Grand total | 1,045 | 913 | 973 | 1,059 | 1,165 | 1,111 | 1,287 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 38 | 35 | 35 | 37 | 48 | 42 | 59 |
| Engineering | 0 | 0 | 1 | 0 | 3 | 2 | 0 |
| Sciences | 38 | 35 | 34 | 37 | 45 | 40 | 59 |
| Natural sciences | 20 | 15 | 15 | 15 | 16 | 11 | 25 |
| Physical science ¹ | 5 | 1 | 3 | 4 | 5 | 0 | 6 |
| Mathematical science | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 15 | 14 | 9 | 11 | 11 | 11 | 18 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Social sciences | 18 | 20 | 19 | 22 | 29 | 29 | 34 |
| Social science | 11 | 11 | 13 | 14 | 10 | 19 | 22 |
| Psychology | 7 | 9 | 6 | 8 | 19 | 10 | 12 |
| Non-S&E ² | 40 | 43 | 52 | 106 | 63 | 62 | 75 |
| Grand total | 78 | 78 | 87 | 143 | 111 | 104 | 134 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 10.1 | 10.9 | 9.3 | 9.8 | 10.5 | 10.3 | 12.5 |
| Engineering | .0 | .0 | 2.9 | .0 | 5.5 | 4.1 | .0 |
| Sciences | 11.1 | 11.9 | 10.0 | 10.9 | 11.1 | 11.2 | 14.0 |
| Natural sciences | 18.2 | 13.8 | 13.0 | 14.2 | 12.2 | 9.4 | 16.7 |
| Physical science ¹ | 16.1 | 4.5 | 8.6 | 12.1 | 14.7 | .0 | 13.3 |
| Mathematical science | .0 | .0 | 37.5 | .0 | .0 | .0 | .0 |
| Computer science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Biological science | 28.3 | 23.3 | 15.8 | 21.6 | 18.3 | 18.0 | 24.3 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | 5.9 |
| Social sciences | 7.8 | 10.8 | 8.4 | 9.4 | 10.6 | 12.1 | 12.5 |
| Social science | 8.7 | 11.8 | 10.1 | 12.0 | 6.9 | 13.9 | 14.5 |
| Psychology | 6.7 | 9.7 | 6.2 | 6.9 | 14.7 | 9.7 | 10.1 |
| Non-S&E ² | 6.0 | 7.3 | 8.7 | 15.6 | 8.9 | 8.8 | 9.2 |
| Grand total | 7.5 | 8.5 | 8.9 | 13.5 | 9.5 | 9.4 | 10.4 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 20. Number of earned doctoral degrees conferred by historically black colleges and universities (HBCUs) to black men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|------|------|------|------|------|------|------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 237 | 189 | 222 | 231 | 268 | 240 | 265 |
| Engineering | 30 | 24 | 32 | 34 | 47 | 43 | 40 |
| Sciences | 207 | 165 | 190 | 197 | 221 | 197 | 225 |
| Natural sciences | 81 | 73 | 78 | 74 | 85 | 82 | 99 |
| Physical science ¹ | 24 | 18 | 27 | 24 | 28 | 25 | 35 |
| Mathematical science | 7 | 9 | 5 | 3 | 7 | 4 | 7 |
| Computer science | 3 | 1 | 0 | 1 | 4 | 4 | 2 |
| Biological science | 32 | 35 | 33 | 30 | 29 | 37 | 42 |
| Agricultural science | 15 | 10 | 13 | 16 | 17 | 12 | 13 |
| Social sciences | 126 | 92 | 112 | 123 | 136 | 115 | 126 |
| Social science | 84 | 58 | 76 | 79 | 92 | 87 | 82 |
| Psychology | 42 | 34 | 36 | 44 | 44 | 28 | 44 |
| Non-S&E ² | 260 | 251 | 240 | 258 | 284 | 280 | 324 |
| Grand total | 497 | 440 | 462 | 489 | 552 | 520 | 589 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 25 | 20 | 20 | 23 | 28 | 22 | 29 |
| Engineering | 0 | 0 | 1 | 0 | 3 | 2 | 0 |
| Sciences | 25 | 20 | 19 | 23 | 25 | 20 | 29 |
| Natural sciences | 14 | 8 | 9 | 8 | 11 | 4 | 14 |
| Physical science ¹ | 5 | 1 | 2 | 2 | 4 | 0 | 5 |
| Mathematical science | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 9 | 7 | 5 | 6 | 7 | 4 | 8 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Social sciences | 11 | 12 | 10 | 15 | 14 | 16 | 15 |
| Social science | 7 | 9 | 9 | 11 | 8 | 14 | 12 |
| Psychology | 4 | 3 | 1 | 4 | 6 | 2 | 3 |
| Non-S&E ² | 15 | 18 | 20 | 40 | 27 | 25 | 26 |
| Grand total | 40 | 38 | 40 | 63 | 55 | 47 | 55 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 10.5 | 10.6 | 9.0 | 10.0 | 10.4 | 9.2 | 10.9 |
| Engineering | .0 | .0 | 3.1 | .0 | 6.4 | 4.7 | .0 |
| Sciences | 12.1 | 12.1 | 10.0 | 11.7 | 11.3 | 10.2 | 12.9 |
| Natural sciences | 17.3 | 11.0 | 11.5 | 10.8 | 12.9 | 4.9 | 14.1 |
| Physical science ¹ | 20.8 | 5.6 | 7.4 | 8.3 | 14.3 | .0 | 14.3 |
| Mathematical science | .0 | .0 | 40.0 | .0 | .0 | .0 | .0 |
| Computer science | .0 | .0 | 0 | .0 | .0 | .0 | .0 |
| Biological science | 28.1 | 20.0 | 15.2 | 20.0 | 24.1 | 10.8 | 19.0 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | 7.7 |
| Social sciences | 8.7 | 13.0 | 8.9 | 12.2 | 10.3 | 13.9 | 11.9 |
| Social science | 8.3 | 15.5 | 11.8 | 13.9 | 8.7 | 16.1 | 14.6 |
| Psychology | 9.5 | 8.8 | 2.8 | 9.1 | 13.6 | 7.1 | 6.8 |
| Non-S&E ² | 5.8 | 7.2 | 8.3 | 15.5 | 9.5 | 8.9 | 8.0 |
| Grand total | 8.0 | 8.6 | 8.7 | 12.9 | 10.0 | 9.0 | 9.3 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 21. Number of earned doctoral degrees conferred by historically black colleges and universities (HBCUs) to black women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-------------------------------------|------|------|------|------|------|------|------|
| Total, all black recipients | | | | | | | |
| Total science and engineering | 138 | 131 | 154 | 148 | 191 | 166 | 207 |
| Engineering | 4 | 1 | 3 | 6 | 8 | 6 | 11 |
| Sciences | 134 | 130 | 151 | 142 | 183 | 160 | 196 |
| Natural sciences | 29 | 36 | 37 | 32 | 46 | 35 | 51 |
| Physical science ¹ | 7 | 4 | 8 | 9 | 6 | 7 | 10 |
| Mathematical science | 0 | 2 | 3 | 1 | 4 | 0 | 1 |
| Computer science | 0 | 1 | 1 | 0 | 4 | 1 | 4 |
| Biological science | 21 | 25 | 24 | 21 | 31 | 24 | 32 |
| Agricultural science | 1 | 4 | 1 | 1 | 1 | 3 | 4 |
| Social sciences | 105 | 94 | 114 | 110 | 137 | 125 | 145 |
| Social science | 42 | 35 | 53 | 38 | 52 | 50 | 70 |
| Psychology | 63 | 59 | 61 | 72 | 85 | 75 | 75 |
| Non-S&E ² | 410 | 342 | 357 | 422 | 422 | 425 | 491 |
| Grand total | 548 | 473 | 511 | 570 | 613 | 591 | 698 |
| Black recipients from HBCUs | | | | | | | |
| Total science and engineering | 13 | 15 | 15 | 14 | 20 | 20 | 30 |
| Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sciences | 13 | 15 | 15 | 14 | 20 | 20 | 30 |
| Natural sciences | 6 | 7 | 6 | 7 | 5 | 7 | 11 |
| Physical science ¹ | 0 | 0 | 1 | 2 | 1 | 0 | 1 |
| Mathematical science | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 6 | 7 | 4 | 5 | 4 | 7 | 10 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social sciences | 7 | 8 | 9 | 7 | 15 | 13 | 19 |
| Social science | 4 | 2 | 4 | 3 | 2 | 5 | 10 |
| Psychology | 3 | 6 | 5 | 4 | 13 | 8 | 9 |
| Non-S&E ² | 25 | 25 | 32 | 66 | 36 | 37 | 49 |
| Grand total | 38 | 40 | 47 | 80 | 56 | 57 | 79 |
| Percent from HBCUs | | | | | | | |
| Total science and engineering | 9.4 | 11.5 | 9.7 | 9.5 | 10.5 | 12.0 | 14.5 |
| Engineering | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Sciences | 9.7 | 11.5 | 9.9 | 9.9 | 10.9 | 12.5 | 15.3 |
| Natural sciences | 20.7 | 19.4 | 16.2 | 21.9 | 10.9 | 20.0 | 21.6 |
| Physical science ¹ | .0 | .0 | 12.5 | 22.2 | 16.7 | .0 | 10.0 |
| Mathematical science | 0 | .0 | 33.3 | .0 | .0 | 0 | .0 |
| Computer science | 0 | .0 | .0 | 0 | .0 | .0 | .0 |
| Biological science | 28.6 | 28.0 | 16.7 | 23.8 | 12.9 | 29.2 | 31.3 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Social sciences | 6.7 | 8.5 | 7.9 | 6.4 | 10.9 | 10.4 | 13.1 |
| Social science | 9.5 | 5.7 | 7.5 | 7.9 | 3.8 | 10.0 | 14.3 |
| Psychology | 4.8 | 10.2 | 8.2 | 5.6 | 15.3 | 10.7 | 12.0 |
| Non-S&E ² | 6.1 | 7.3 | 9.0 | 15.6 | 8.5 | 8.7 | 10.0 |
| Grand total | 6.9 | 8.5 | 9.2 | 14.0 | 9.1 | 9.6 | 11.3 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 22. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 12,031 | 12,419 | 13,327 | 13,918 | 15,351 | 17,391 | 18,442 |
| Engineering | 2,187 | 2,554 | 2,561 | 2,511 | 2,566 | 2,733 | 2,961 |
| Sciences | 9,844 | 9,865 | 10,766 | 11,407 | 12,785 | 14,658 | 15,481 |
| Natural sciences | 4,359 | 4,660 | 4,417 | 4,357 | 4,705 | 4,892 | 5,034 |
| Physical science ¹ | 660 | 585 | 563 | 522 | 533 | 546 | 599 |
| Mathematical science | 335 | 321 | 373 | 413 | 480 | 482 | 470 |
| Computer science | 1,045 | 1,375 | 1,195 | 1,085 | 1,215 | 1,173 | 1,096 |
| Biological science | 2,069 | 2,146 | 2,090 | 2,119 | 2,264 | 2,477 | 2,652 |
| Agricultural science | 250 | 233 | 196 | 218 | 213 | 214 | 217 |
| Social sciences | 5,485 | 5,205 | 6,349 | 7,050 | 8,080 | 9,766 | 10,447 |
| Social science | 3,751 | 3,503 | 4,197 | 4,645 | 5,334 | 6,519 | 6,860 |
| Psychology | 1,734 | 1,702 | 2,152 | 2,405 | 2,746 | 3,247 | 3,587 |
| Non-S&E ² | 23,835 | 25,113 | 27,400 | 29,162 | 32,945 | 34,869 | 38,550 |
| Grand total | 35,866 | 37,532 | 40,727 | 43,080 | 48,296 | 52,260 | 56,992 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 2,994 | 3,065 | 3,056 | 2,983 | 2,952 | 3,007 | 3,001 |
| Engineering | 412 | 584 | 651 | 626 | 554 | 686 | 697 |
| Sciences | 2,582 | 2,481 | 2,405 | 2,357 | 2,398 | 2,321 | 2,304 |
| Natural sciences | 1,442 | 1,556 | 1,479 | 1,447 | 1,446 | 1,339 | 1,300 |
| Physical science ¹ | 244 | 173 | 184 | 184 | 154 | 172 | 172 |
| Mathematical science | 78 | 58 | 69 | 69 | 108 | 34 | 41 |
| Computer science | 219 | 337 | 326 | 261 | 327 | 296 | 254 |
| Biological science | 828 | 916 | 858 | 862 | 797 | 837 | 833 |
| Agricultural science | 73 | 72 | 42 | 71 | 60 | 0 | 0 |
| Social sciences | 1,140 | 925 | 926 | 910 | 952 | 982 | 1,004 |
| Social science | 737 | 576 | 501 | 495 | 523 | 496 | 508 |
| Psychology | 403 | 349 | 425 | 415 | 429 | 486 | 496 |
| Non-S&E ² | 7,483 | 8,776 | 9,038 | 9,074 | 9,421 | 9,557 | 10,137 |
| Grand total | 10,477 | 11,841 | 12,094 | 12,057 | 12,373 | 12,564 | 13,138 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 24.9 | 24.7 | 22.9 | 21.4 | 19.2 | 17.3 | 16.3 |
| Engineering | 18.8 | 22.9 | 25.4 | 24.9 | 21.6 | 25.1 | 23.5 |
| Sciences | 26.2 | 25.1 | 22.3 | 20.7 | 18.8 | 15.8 | 14.9 |
| Natural sciences | 33.1 | 33.4 | 33.5 | 33.2 | 30.7 | 27.4 | 25.8 |
| Physical science ¹ | 37.0 | 29.6 | 32.7 | 35.2 | 28.9 | 31.5 | 28.7 |
| Mathematical science | 23.3 | 18.1 | 18.5 | 16.7 | 22.5 | 7.1 | 8.7 |
| Computer science | 21.0 | 24.5 | 27.3 | 24.1 | 26.9 | 25.2 | 23.2 |
| Biological science | 40.0 | 42.7 | 41.1 | 40.7 | 35.2 | 33.8 | 31.4 |
| Agricultural science | 29.2 | 30.9 | 21.4 | 32.6 | 28.2 | 0 | 0 |
| Social sciences | 20.8 | 17.8 | 14.6 | 12.9 | 11.8 | 10.1 | 9.6 |
| Social science | 19.6 | 16.4 | 11.9 | 10.7 | 9.8 | 7.6 | 7.4 |
| Psychology | 23.2 | 20.5 | 19.7 | 17.3 | 15.6 | 15.0 | 13.8 |
| Non-S&E ² | 31.4 | 34.9 | 33.0 | 31.1 | 28.6 | 27.4 | 26.3 |
| Grand total | 29.2 | 31.5 | 29.7 | 28.0 | 25.6 | 24.0 | 23.1 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 23. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 6,751 | 6,974 | 7,318 | 7,434 | 7,888 | 8,730 | 9,160 |
| Engineering | 1,863 | 2,100 | 2,100 | 2,035 | 2,039 | 2,187 | 2,355 |
| Sciences | 4,888 | 4,874 | 5,218 | 5,399 | 5,849 | 6,543 | 6,805 |
| Natural sciences | 2,380 | 2,516 | 2,432 | 2,328 | 2,458 | 2,497 | 2,608 |
| Physical science ¹ | 441 | 377 | 362 | 311 | 318 | 326 | 361 |
| Mathematical science | 189 | 196 | 224 | 249 | 259 | 279 | 273 |
| Computer science | 582 | 766 | 750 | 669 | 738 | 724 | 700 |
| Biological science | 997 | 1,018 | 965 | 955 | 1,019 | 1,043 | 1,144 |
| Agricultural science | 171 | 159 | 131 | 144 | 124 | 125 | 130 |
| Social sciences | 2,508 | 2,358 | 2,786 | 3,071 | 3,391 | 4,046 | 4,197 |
| Social science | 1,966 | 1,845 | 2,153 | 2,384 | 2,634 | 3,220 | 3,269 |
| Psychology | 542 | 513 | 633 | 687 | 757 | 826 | 928 |
| Non-S&E ² | 8,923 | 9,070 | 10,117 | 10,527 | 12,238 | 12,667 | 13,955 |
| Grand total | 15,674 | 16,044 | 17,435 | 17,961 | 20,126 | 21,397 | 23,115 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 1,457 | 1,524 | 1,559 | 1,462 | 1,365 | 1,362 | 1,339 |
| Engineering | 362 | 453 | 525 | 481 | 398 | 498 | 511 |
| Sciences | 1,095 | 1,071 | 1,034 | 981 | 967 | 864 | 828 |
| Natural sciences | 644 | 730 | 671 | 626 | 612 | 520 | 496 |
| Physical science ¹ | 132 | 98 | 91 | 90 | 70 | 78 | 70 |
| Mathematical science | 41 | 30 | 39 | 47 | 50 | 20 | 24 |
| Computer science | 98 | 172 | 197 | 143 | 170 | 159 | 147 |
| Biological science | 316 | 377 | 322 | 302 | 293 | 263 | 255 |
| Agricultural science | 57 | 53 | 22 | 44 | 29 | 0 | 0 |
| Social sciences | 451 | 341 | 363 | 355 | 355 | 344 | 332 |
| Social science | 341 | 272 | 257 | 252 | 245 | 243 | 211 |
| Psychology | 110 | 69 | 106 | 103 | 110 | 101 | 121 |
| Non-S&E ² | 2,255 | 2,492 | 2,710 | 2,689 | 3,073 | 2,746 | 2,869 |
| Grand total | 3,712 | 4,016 | 4,269 | 4,151 | 4,438 | 4,108 | 4,208 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 21.6 | 21.9 | 21.3 | 19.7 | 17.3 | 15.6 | 14.6 |
| Engineering | 19.4 | 21.6 | 25.0 | 23.6 | 19.5 | 22.8 | 21.7 |
| Sciences | 22.4 | 22.0 | 19.8 | 18.2 | 16.5 | 13.2 | 12.2 |
| Natural sciences | 27.1 | 29.0 | 27.6 | 26.9 | 24.9 | 20.8 | 19.0 |
| Physical science ¹ | 29.9 | 26.0 | 25.1 | 28.9 | 22.0 | 23.9 | 19.4 |
| Mathematical science | 21.7 | 15.3 | 17.4 | 18.9 | 19.3 | 7.2 | 8.8 |
| Computer science | 16.8 | 22.5 | 26.3 | 21.4 | 23.0 | 22.0 | 21.0 |
| Biological science | 31.7 | 37.0 | 33.4 | 31.6 | 28.8 | 25.2 | 22.3 |
| Agricultural science | 33.3 | 33.3 | 16.8 | 30.6 | 23.4 | .0 | .0 |
| Social sciences | 18.0 | 14.5 | 13.0 | 11.6 | 10.5 | 8.5 | 7.9 |
| Social science | 17.3 | 14.7 | 11.9 | 10.6 | 9.3 | 7.5 | 6.5 |
| Psychology | 20.3 | 13.5 | 16.7 | 15.0 | 14.5 | 12.2 | 13.0 |
| Non-S&E ² | 25.3 | 27.5 | 26.8 | 25.5 | 25.1 | 21.7 | 20.6 |
| Grand total | 23.7 | 25.0 | 24.5 | 23.1 | 22.1 | 19.2 | 18.2 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 24. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 5,280 | 5,445 | 6,009 | 6,484 | 7,463 | 8,661 | 9,282 |
| Engineering | 324 | 454 | 461 | 476 | 527 | 546 | 606 |
| Sciences | 4,956 | 4,991 | 5,548 | 6,008 | 6,936 | 8,115 | 8,676 |
| Natural sciences | 1,979 | 2,144 | 1,985 | 2,029 | 2,247 | 2,395 | 2,426 |
| Physical science ¹ | 219 | 208 | 201 | 211 | 215 | 220 | 238 |
| Mathematical science | 146 | 125 | 149 | 164 | 221 | 203 | 197 |
| Computer science | 463 | 609 | 445 | 416 | 477 | 449 | 396 |
| Biological science | 1,072 | 1,128 | 1,125 | 1,164 | 1,245 | 1,434 | 1,508 |
| Agricultural science | 79 | 74 | 65 | 74 | 89 | 89 | 87 |
| Social sciences | 2,977 | 2,847 | 3,563 | 3,979 | 4,689 | 5,720 | 6,250 |
| Social science | 1,785 | 1,658 | 2,044 | 2,261 | 2,700 | 3,299 | 3,591 |
| Psychology | 1,192 | 1,189 | 1,519 | 1,718 | 1,989 | 2,421 | 2,659 |
| Non-S&E ² | 14,912 | 16,043 | 17,283 | 18,635 | 20,707 | 22,202 | 24,595 |
| Grand total | 20,192 | 21,488 | 23,292 | 25,119 | 28,170 | 30,863 | 33,877 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 1,537 | 1,541 | 1,497 | 1,521 | 1,587 | 1,645 | 1,662 |
| Engineering | 50 | 131 | 126 | 145 | 156 | 188 | 186 |
| Sciences | 1,487 | 1,410 | 1,371 | 1,376 | 1,431 | 1,457 | 1,476 |
| Natural sciences | 798 | 826 | 808 | 821 | 834 | 819 | 804 |
| Physical science ¹ | 112 | 75 | 93 | 94 | 84 | 94 | 102 |
| Mathematical science | 37 | 28 | 30 | 22 | 58 | 14 | 17 |
| Computer science | 121 | 165 | 129 | 118 | 157 | 137 | 107 |
| Biological science | 512 | 539 | 536 | 560 | 504 | 574 | 578 |
| Agricultural science | 16 | 19 | 20 | 27 | 31 | 0 | 0 |
| Social sciences | 689 | 584 | 563 | 555 | 597 | 638 | 672 |
| Social science | 396 | 304 | 244 | 243 | 278 | 253 | 297 |
| Psychology | 293 | 280 | 319 | 312 | 319 | 385 | 375 |
| Non-S&E ² | 5,228 | 6,284 | 6,328 | 6,385 | 6,348 | 6,811 | 7,268 |
| Grand total | 6,765 | 7,825 | 7,825 | 7,906 | 7,935 | 8,456 | 8,930 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 29.1 | 28.3 | 24.9 | 23.5 | 21.3 | 19.0 | 17.9 |
| Engineering | 15.4 | 28.9 | 27.3 | 30.5 | 29.6 | 34.4 | 30.7 |
| Sciences | 30.0 | 28.3 | 24.7 | 22.9 | 20.6 | 18.0 | 17.0 |
| Natural sciences | 40.3 | 38.5 | 40.7 | 40.5 | 37.1 | 34.2 | 33.1 |
| Physical science ¹ | 51.1 | 36.1 | 46.3 | 44.5 | 39.1 | 42.7 | 42.9 |
| Mathematical science | 25.3 | 22.4 | 20.1 | 13.4 | 26.2 | 6.9 | 8.6 |
| Computer science | 26.1 | 27.1 | 29.0 | 28.4 | 32.9 | 30.5 | 27.0 |
| Biological science | 47.8 | 47.8 | 47.6 | 48.1 | 40.5 | 40.0 | 38.3 |
| Agricultural science | 20.3 | 25.7 | 30.8 | 36.5 | 34.8 | .0 | .0 |
| Social sciences | 23.1 | 20.5 | 15.8 | 13.9 | 12.7 | 11.2 | 10.8 |
| Social science | 22.2 | 18.3 | 11.9 | 10.7 | 10.3 | 7.7 | 8.3 |
| Psychology | 24.6 | 23.5 | 21.0 | 18.2 | 16.0 | 15.9 | 14.1 |
| Non-S&E ² | 35.1 | 39.2 | 36.6 | 34.3 | 30.7 | 30.7 | 29.6 |
| Grand total | 33.5 | 36.4 | 33.6 | 31.5 | 28.2 | 27.4 | 26.4 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 25. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|-------|-------|-------|-------|-------|--------|--------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 1,514 | 1,584 | 1,585 | 1,587 | 1,736 | 1,806 | 2,092 |
| Engineering | 346 | 512 | 468 | 446 | 468 | 488 | 581 |
| Sciences | 1,168 | 1,072 | 1,117 | 1,141 | 1,268 | 1,318 | 1,511 |
| Natural sciences | 481 | 493 | 444 | 431 | 494 | 503 | 574 |
| Physical science ¹ | 127 | 122 | 92 | 98 | 96 | 93 | 114 |
| Mathematical science | 55 | 60 | 34 | 51 | 85 | 66 | 78 |
| Computer science | 94 | 123 | 144 | 118 | 128 | 149 | 162 |
| Biological science | 139 | 126 | 126 | 120 | 136 | 146 | 151 |
| Agricultural science | 66 | 62 | 48 | 44 | 49 | 49 | 69 |
| Social sciences | 687 | 579 | 673 | 710 | 774 | 815 | 937 |
| Social science | 343 | 308 | 313 | 341 | 383 | 396 | 474 |
| Psychology | 344 | 271 | 360 | 369 | 391 | 419 | 463 |
| Non-S&E ² | 6,210 | 6,180 | 6,538 | 6,899 | 7,929 | 8,427 | 9,254 |
| Grand total | 7,724 | 7,764 | 8,123 | 8,486 | 9,665 | 10,233 | 11,346 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 169 | 184 | 214 | 207 | 214 | 140 | 160 |
| Engineering | 9 | 11 | 22 | 32 | 23 | 0 | 1 |
| Sciences | 160 | 173 | 192 | 175 | 191 | 140 | 159 |
| Natural sciences | 72 | 99 | 62 | 65 | 83 | 27 | 47 |
| Physical science ¹ | 20 | 13 | 19 | 21 | 16 | 9 | 12 |
| Mathematical science | 6 | 8 | 6 | 7 | 17 | 7 | 14 |
| Computer science | 0 | 0 | 7 | 0 | 0 | 0 | 4 |
| Biological science | 30 | 44 | 17 | 30 | 39 | 11 | 17 |
| Agricultural science | 16 | 34 | 13 | 7 | 11 | 0 | 0 |
| Social sciences | 88 | 74 | 130 | 110 | 108 | 113 | 112 |
| Social science | 17 | 33 | 25 | 25 | 31 | 32 | 30 |
| Psychology | 71 | 41 | 105 | 85 | 77 | 81 | 82 |
| Non-S&E ² | 696 | 936 | 1,033 | 855 | 1,009 | 1,084 | 1,081 |
| Grand total | 865 | 1,120 | 1,247 | 1,062 | 1,223 | 1,224 | 1,241 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 11.2 | 11.6 | 13.5 | 13.0 | 12.3 | 7.8 | 7.6 |
| Engineering | 2.6 | 2.1 | 4.7 | 7.2 | 4.9 | .0 | .2 |
| Sciences | 13.7 | 16.1 | 17.2 | 15.3 | 15.1 | 10.6 | 10.5 |
| Natural sciences | 15.0 | 20.1 | 14.0 | 15.1 | 16.8 | 5.4 | 8.2 |
| Physical science ¹ | 15.7 | 10.7 | 20.7 | 21.4 | 16.7 | 9.7 | 10.5 |
| Mathematical science | 10.9 | 13.3 | 17.6 | 13.7 | 20.0 | 10.6 | 17.9 |
| Computer science | .0 | .0 | 4.9 | .0 | .0 | .0 | 2.5 |
| Biological science | 21.6 | 34.9 | 13.5 | 25.0 | 28.7 | 7.5 | 11.3 |
| Agricultural science | 24.2 | 54.8 | 27.1 | 15.9 | 22.4 | .0 | .0 |
| Social sciences | 12.8 | 12.8 | 19.3 | 15.5 | 14.0 | 13.9 | 12.0 |
| Social science | 5.0 | 10.7 | 8.0 | 7.3 | 8.1 | 8.1 | 6.3 |
| Psychology | 20.6 | 15.1 | 29.2 | 23.0 | 19.7 | 19.3 | 17.7 |
| Non-S&E ² | 11.2 | 15.1 | 15.8 | 12.4 | 12.7 | 12.9 | 11.7 |
| Grand total | 11.2 | 14.4 | 15.4 | 12.5 | 12.7 | 12.0 | 10.9 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 26. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|-------|-------|-------|-------|-------|-------|-------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 939 | 1,045 | 970 | 959 | 992 | 1,066 | 1,255 |
| Engineering | 304 | 444 | 394 | 373 | 378 | 408 | 480 |
| Sciences | 635 | 601 | 576 | 586 | 614 | 658 | 775 |
| Natural sciences | 307 | 318 | 282 | 275 | 294 | 309 | 341 |
| Physical science ¹ | 95 | 88 | 65 | 63 | 73 | 64 | 76 |
| Mathematical science | 31 | 41 | 21 | 33 | 52 | 47 | 50 |
| Computer science | 65 | 91 | 100 | 93 | 84 | 98 | 104 |
| Biological science | 62 | 53 | 62 | 61 | 54 | 69 | 76 |
| Agricultural science | 54 | 45 | 34 | 25 | 31 | 31 | 35 |
| Social sciences | 328 | 283 | 294 | 311 | 320 | 349 | 434 |
| Social science | 195 | 187 | 176 | 178 | 196 | 218 | 282 |
| Psychology | 133 | 96 | 118 | 133 | 124 | 131 | 152 |
| Non-S&E ² | 2,398 | 2,465 | 2,620 | 2,747 | 3,115 | 3,299 | 3,602 |
| Grand total | 3,337 | 3,510 | 3,590 | 3,706 | 4,107 | 4,365 | 4,857 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 75 | 93 | 103 | 103 | 80 | 48 | 56 |
| Engineering | 8 | 11 | 21 | 26 | 15 | 0 | 1 |
| Sciences | 67 | 82 | 82 | 77 | 65 | 48 | 55 |
| Natural sciences | 40 | 54 | 35 | 33 | 39 | 12 | 23 |
| Physical science ¹ | 8 | 8 | 14 | 11 | 9 | 4 | 6 |
| Mathematical science | 3 | 4 | 2 | 3 | 9 | 4 | 11 |
| Computer science | 0 | 0 | 4 | 0 | 0 | 0 | 1 |
| Biological science | 14 | 15 | 5 | 14 | 13 | 4 | 5 |
| Agricultural science | 15 | 27 | 10 | 5 | 8 | 0 | 0 |
| Social sciences | 27 | 28 | 47 | 44 | 26 | 36 | 32 |
| Social science | 8 | 18 | 16 | 10 | 8 | 14 | 16 |
| Psychology | 19 | 10 | 31 | 34 | 18 | 22 | 16 |
| Non-S&E ² | 208 | 276 | 313 | 262 | 306 | 350 | 346 |
| Grand total | 283 | 369 | 416 | 365 | 386 | 398 | 402 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 8.0 | 8.9 | 10.6 | 10.7 | 8.1 | 4.5 | 4.5 |
| Engineering | 2.6 | 2.5 | 5.3 | 7.0 | 4.0 | .0 | .2 |
| Sciences | 10.6 | 13.6 | 14.2 | 13.1 | 10.6 | 7.3 | 7.1 |
| Natural sciences | 13.0 | 17.0 | 12.4 | 12.0 | 13.3 | 3.9 | 6.7 |
| Physical science ¹ | 8.4 | 9.1 | 21.5 | 17.5 | 12.3 | 6.3 | 7.9 |
| Mathematical science | 9.7 | 9.8 | 9.5 | 9.1 | 17.3 | 8.5 | 22.0 |
| Computer science | .0 | .0 | 4.0 | .0 | .0 | .0 | 1.0 |
| Biological science | 22.6 | 28.3 | 8.1 | 23.0 | 24.1 | 5.8 | 6.6 |
| Agricultural science | 27.8 | 60.0 | 29.4 | 20.0 | 25.8 | .0 | .0 |
| Social sciences | 8.2 | 9.9 | 16.0 | 14.1 | 8.1 | 10.3 | 7.4 |
| Social science | 4.1 | 9.6 | 9.1 | 5.6 | 4.1 | 6.4 | 5.7 |
| Psychology | 14.3 | 10.4 | 26.3 | 25.6 | 14.5 | 16.8 | 10.5 |
| Non-S&E ² | 8.7 | 11.2 | 11.9 | 9.5 | 9.8 | 10.6 | 9.6 |
| Grand total | 8.5 | 10.5 | 11.6 | 9.8 | 9.4 | 9.1 | 8.3 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 27. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|-------|-------|-------|-------|-------|-------|-------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 575 | 539 | 615 | 628 | 744 | 740 | 837 |
| Engineering | 42 | 68 | 74 | 73 | 90 | 80 | 101 |
| Sciences | 533 | 471 | 541 | 555 | 654 | 660 | 736 |
| Natural sciences | 174 | 175 | 162 | 156 | 200 | 194 | 233 |
| Physical science ¹ | 32 | 34 | 27 | 35 | 23 | 29 | 38 |
| Mathematical science | 24 | 19 | 13 | 18 | 33 | 19 | 28 |
| Computer science | 29 | 32 | 44 | 25 | 44 | 51 | 58 |
| Biological science | 77 | 73 | 64 | 59 | 82 | 77 | 75 |
| Agricultural science | 12 | 17 | 14 | 19 | 18 | 18 | 34 |
| Social sciences | 359 | 296 | 379 | 399 | 454 | 466 | 503 |
| Social science | 148 | 121 | 137 | 163 | 187 | 178 | 192 |
| Psychology | 211 | 175 | 242 | 236 | 267 | 288 | 311 |
| Non-S&E ² | 3,812 | 3,715 | 3,918 | 4,152 | 4,814 | 5,128 | 5,652 |
| Grand total | 4,387 | 4,254 | 4,533 | 4,780 | 5,558 | 5,868 | 6,489 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 94 | 91 | 111 | 104 | 134 | 92 | 104 |
| Engineering | 1 | 0 | 1 | 6 | 8 | 0 | 0 |
| Sciences | 93 | 91 | 110 | 98 | 126 | 92 | 104 |
| Natural sciences | 32 | 45 | 27 | 32 | 44 | 15 | 24 |
| Physical science ¹ | 12 | 5 | 5 | 10 | 7 | 5 | 6 |
| Mathematical science | 3 | 4 | 4 | 4 | 8 | 3 | 3 |
| Computer science | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| Biological science | 16 | 29 | 12 | 16 | 26 | 7 | 12 |
| Agricultural science | 1 | 7 | 3 | 2 | 3 | 0 | 0 |
| Social sciences | 61 | 46 | 83 | 66 | 82 | 77 | 80 |
| Social science | 9 | 15 | 9 | 15 | 23 | 18 | 14 |
| Psychology | 52 | 31 | 74 | 51 | 59 | 59 | 66 |
| Non-S&E ² | 488 | 660 | 720 | 593 | 703 | 734 | 735 |
| Grand total | 582 | 751 | 831 | 697 | 837 | 826 | 839 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 16.3 | 16.9 | 18.0 | 16.6 | 18.0 | 12.4 | 12.4 |
| Engineering | 2.4 | .0 | 1.4 | 8.2 | 8.9 | .0 | .0 |
| Sciences | 17.4 | 19.3 | 20.3 | 17.7 | 19.3 | 13.9 | 14.1 |
| Natural sciences | 18.4 | 25.7 | 16.7 | 20.5 | 22.0 | 7.7 | 10.3 |
| Physical science ¹ | 37.5 | 14.7 | 18.5 | 28.6 | 30.4 | 17.2 | 15.8 |
| Mathematical science | 12.5 | 21.1 | 30.8 | 22.2 | 24.2 | 15.8 | 10.7 |
| Computer science | .0 | .0 | 6.8 | .0 | .0 | .0 | 5.2 |
| Biological science | 20.8 | 39.7 | 18.8 | 27.1 | 31.7 | 9.1 | 16.0 |
| Agricultural science | 8.3 | 41.2 | 21.4 | 10.5 | 16.7 | .0 | .0 |
| Social sciences | 17.0 | 15.5 | 21.9 | 16.5 | 18.1 | 16.5 | 15.9 |
| Social science | 6.1 | 12.4 | 6.6 | 9.2 | 12.3 | 10.1 | 7.3 |
| Psychology | 24.6 | 17.7 | 30.6 | 21.6 | 22.1 | 20.5 | 21.2 |
| Non-S&E ² | 12.8 | 17.8 | 18.4 | 14.3 | 14.6 | 14.3 | 13.0 |
| Grand total | 13.3 | 17.7 | 18.3 | 14.6 | 15.1 | 14.1 | 12.9 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 28. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|------|------|------|------|------|------|------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 297 | 363 | 385 | 471 | 496 | 522 | 546 |
| Engineering | 22 | 35 | 47 | 54 | 61 | 71 | 65 |
| Sciences | 275 | 328 | 338 | 417 | 435 | 451 | 481 |
| Natural sciences | 125 | 157 | 174 | 214 | 215 | 232 | 251 |
| Physical science ¹ | 36 | 62 | 69 | 86 | 81 | 89 | 94 |
| Mathematical science | 12 | 11 | 11 | 11 | 9 | 12 | 16 |
| Computer science | 6 | 4 | 4 | 5 | 12 | 8 | 7 |
| Biological science | 59 | 64 | 71 | 89 | 97 | 102 | 114 |
| Agricultural science | 12 | 16 | 19 | 23 | 16 | 21 | 20 |
| Social sciences | 150 | 171 | 164 | 203 | 220 | 219 | 230 |
| Social science | 81 | 76 | 71 | 94 | 98 | 83 | 97 |
| Psychology | 69 | 95 | 93 | 109 | 122 | 136 | 133 |
| Non-S&E ² | 343 | 353 | 314 | 371 | 377 | 397 | 430 |
| Grand total | 640 | 716 | 699 | 842 | 873 | 919 | 976 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 5 | 6 | 12 | 18 | 12 | 29 | 16 |
| Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sciences | 5 | 6 | 12 | 18 | 12 | 29 | 16 |
| Natural sciences | 4 | 5 | 5 | 8 | 5 | 5 | 8 |
| Physical science ¹ | 3 | 4 | 4 | 6 | 3 | 4 | 6 |
| Mathematical science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 1 | 1 | 1 | 2 | 2 | 1 | 2 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social sciences | 1 | 1 | 7 | 10 | 7 | 24 | 8 |
| Social science | 1 | 1 | 1 | 0 | 1 | 5 | 0 |
| Psychology | 0 | 0 | 6 | 10 | 6 | 19 | 8 |
| Non-S&E ² | 4 | 7 | 5 | 16 | 13 | 24 | 24 |
| Grand total | 9 | 13 | 17 | 34 | 25 | 53 | 40 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 1.7 | 1.7 | 3.1 | 3.8 | 2.4 | 5.6 | 2.9 |
| Engineering | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Sciences | 1.8 | 1.8 | 3.6 | 4.3 | 2.8 | 6.4 | 3.3 |
| Natural sciences | 3.2 | 3.2 | 2.9 | 3.7 | 2.3 | 2.2 | 3.2 |
| Physical science ¹ | 8.3 | 6.5 | 5.8 | 7.0 | 3.7 | 4.5 | 6.4 |
| Mathematical science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Computer science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Biological science | 1.7 | 1.6 | 1.4 | 2.2 | 2.1 | 1.0 | 1.8 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Social sciences | .7 | .6 | 4.3 | 4.9 | 3.2 | 11.0 | 3.5 |
| Social science | 1.2 | 1.3 | 1.4 | .0 | 1.0 | 6.0 | .0 |
| Psychology | .0 | .0 | 6.5 | 9.2 | 4.9 | 14.0 | 6.0 |
| Non-S&E ² | 1.2 | 2.0 | 1.6 | 4.3 | 3.4 | 6.0 | 5.6 |
| Grand total | 1.4 | 1.8 | 2.4 | 4.0 | 2.9 | 5.8 | 4.1 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 29. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|------|------|------|------|------|------|------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 183 | 222 | 230 | 292 | 309 | 313 | 319 |
| Engineering | 22 | 30 | 39 | 45 | 51 | 56 | 53 |
| Sciences | 161 | 192 | 191 | 247 | 258 | 257 | 266 |
| Natural sciences | 83 | 109 | 122 | 140 | 154 | 154 | 162 |
| Physical science ¹ | 28 | 44 | 48 | 56 | 68 | 63 | 70 |
| Mathematical science | 7 | 9 | 7 | 7 | 5 | 9 | 14 |
| Computer science | 4 | 4 | 1 | 4 | 11 | 7 | 6 |
| Biological science | 36 | 40 | 50 | 56 | 57 | 59 | 57 |
| Agricultural science | 8 | 12 | 16 | 17 | 13 | 16 | 15 |
| Social sciences | 78 | 83 | 69 | 107 | 104 | 103 | 104 |
| Social science | 50 | 51 | 39 | 55 | 52 | 47 | 59 |
| Psychology | 28 | 32 | 30 | 52 | 52 | 56 | 45 |
| Non-S&E ² | 169 | 167 | 149 | 159 | 153 | 175 | 197 |
| Grand total | 352 | 389 | 379 | 451 | 462 | 488 | 516 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 1 | 4 | 3 | 6 | 3 | 12 | 7 |
| Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sciences | 1 | 4 | 3 | 6 | 3 | 12 | 7 |
| Natural sciences | 1 | 4 | 2 | 2 | 2 | 4 | 4 |
| Physical science ¹ | 0 | 3 | 2 | 1 | 2 | 3 | 2 |
| Mathematical science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 1 | 1 | 0 | 1 | 0 | 1 | 2 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social sciences | 0 | 0 | 1 | 4 | 1 | 8 | 3 |
| Social science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Psychology | 0 | 0 | 1 | 4 | 1 | 8 | 3 |
| Non-S&E ² | 0 | 2 | 2 | 3 | 4 | 3 | 5 |
| Grand total | 1 | 6 | 5 | 9 | 7 | 15 | 12 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 0.5 | 1.8 | 1.3 | 2.1 | 1.0 | 3.8 | 2.2 |
| Engineering | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Sciences | .6 | 2.1 | 1.6 | 2.4 | 1.2 | 4.7 | 2.6 |
| Natural sciences | 1.2 | 3.7 | 1.6 | 1.4 | 1.3 | 2.6 | 2.5 |
| Physical science ¹ | .0 | 6.8 | 4.2 | 1.8 | 2.9 | 4.8 | 2.9 |
| Mathematical science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Computer science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Biological science | 2.8 | 2.5 | .0 | 1.8 | .0 | 1.7 | 3.5 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Social sciences | .0 | .0 | 1.4 | 3.7 | 1.0 | 7.8 | 2.9 |
| Social science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Psychology | .0 | .0 | 3.3 | 7.7 | 1.9 | 14.3 | 6.7 |
| Non-S&E ² | .0 | 1.2 | 1.3 | 1.9 | 2.6 | 1.7 | 2.5 |
| Grand total | .3 | 1.5 | 1.3 | 2.0 | 1.5 | 3.1 | 2.3 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 30. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1985-93, selected years

| Field | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|--|------|------|------|------|------|------|------|
| Total, all Hispanic recipients | | | | | | | |
| Total science and engineering | 114 | 141 | 155 | 179 | 187 | 209 | 227 |
| Engineering | 0 | 5 | 8 | 9 | 10 | 15 | 12 |
| Sciences | 114 | 136 | 147 | 170 | 177 | 194 | 215 |
| Natural sciences | 42 | 48 | 52 | 74 | 61 | 78 | 89 |
| Physical science ¹ | 8 | 18 | 21 | 30 | 13 | 26 | 24 |
| Mathematical science | 5 | 2 | 4 | 4 | 4 | 3 | 2 |
| Computer science | 2 | 0 | 3 | 1 | 1 | 1 | 1 |
| Biological science | 23 | 24 | 21 | 33 | 40 | 43 | 57 |
| Agricultural science | 4 | 4 | 3 | 6 | 3 | 5 | 5 |
| Social sciences | 72 | 88 | 95 | 96 | 116 | 116 | 126 |
| Social science | 31 | 25 | 32 | 39 | 46 | 36 | 38 |
| Psychology | 41 | 63 | 63 | 57 | 70 | 80 | 88 |
| Non-S&E ² | 174 | 186 | 165 | 212 | 224 | 222 | 233 |
| Grand total | 288 | 327 | 320 | 391 | 411 | 431 | 460 |
| Hispanic recipients from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 4 | 2 | 9 | 12 | 9 | 17 | 9 |
| Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sciences | 4 | 2 | 9 | 12 | 9 | 17 | 9 |
| Natural sciences | 3 | 1 | 3 | 6 | 3 | 1 | 4 |
| Physical science ¹ | 3 | 1 | 2 | 5 | 1 | 1 | 4 |
| Mathematical science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Computer science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biological science | 0 | 0 | 1 | 1 | 2 | 0 | 0 |
| Agricultural science | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social sciences | 1 | 1 | 6 | 6 | 6 | 16 | 5 |
| Social science | 1 | 1 | 1 | 0 | 1 | 5 | 0 |
| Psychology | 0 | 0 | 5 | 6 | 5 | 11 | 5 |
| Non-S&E ² | 4 | 5 | 3 | 13 | 9 | 21 | 19 |
| Grand total | 8 | 7 | 12 | 25 | 18 | 38 | 28 |
| Percent from institutions in Puerto Rico | | | | | | | |
| Total science and engineering | 3.5 | 1.4 | 5.8 | 6.7 | 4.8 | 8.1 | 4.0 |
| Engineering | 0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Sciences | 3.5 | 1.5 | 6.1 | 7.1 | 5.1 | 8.8 | 4.2 |
| Natural sciences | 7.1 | 2.1 | 5.8 | 8.1 | 4.9 | 1.3 | 4.5 |
| Physical science ¹ | 37.5 | 5.6 | 9.5 | 16.7 | 7.7 | 3.8 | 16.7 |
| Mathematical science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Computer science | .0 | 0 | .0 | .0 | .0 | .0 | .0 |
| Biological science | .0 | .0 | 4.8 | 3.0 | 5.0 | .0 | .0 |
| Agricultural science | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Social sciences | 1.4 | 1.1 | 6.3 | 6.3 | 5.2 | 13.8 | 4.0 |
| Social science | 3.2 | 4.0 | 3.1 | .0 | 2.2 | 13.9 | .0 |
| Psychology | .0 | .0 | 7.9 | 10.5 | 7.1 | 13.7 | 5.7 |
| Non-S&E ² | 2.3 | 2.7 | 1.8 | 6.1 | 4.0 | 9.5 | 8.2 |
| Grand total | 2.8 | 2.1 | 3.7 | 6.4 | 4.4 | 8.8 | 6.1 |

¹ In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.

² Non-S&E refers to non-science and non-engineering.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 31. Number of earned bachelor's degrees awarded in engineering technologies, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 20,533 | 20,577 | 20,098 | 19,150 | 18,294 | 17,113 | 16,987 |
| U.S. citizens and permanent residents, total ¹ | 19,120 | 19,359 | 18,942 | 18,059 | 17,080 | 16,138 | 16,109 |
| White, non-Hispanics | 16,673 | 16,541 | 16,156 | 15,251 | 14,279 | 13,286 | 13,245 |
| Asians | 542 | 807 | 839 | 755 | 768 | 778 | 768 |
| Underrepresented minorities, total | 1,905 | 2,011 | 1,947 | 2,053 | 2,033 | 2,074 | 2,096 |
| Black, non-Hispanics | 1,277 | 1,269 | 1,208 | 1,200 | 1,227 | 1,239 | 1,132 |
| Hispanics | 525 | 664 | 634 | 784 | 731 | 747 | 853 |
| American Indians or Alaskan Natives | 103 | 78 | 105 | 69 | 75 | 88 | 111 |
| Nonresident aliens ² | 1,277 | 986 | 659 | 727 | 712 | 516 | 441 |
| Unknown race/ethnicity or citizenship | 136 | 232 | 497 | 364 | 502 | 459 | 437 |
| Men | | | | | | | |
| Total, all recipients | 18,278 | 18,429 | 17,999 | 17,113 | 16,329 | 15,309 | 15,089 |
| U.S. citizens and permanent residents, total ¹ | 16,979 | 17,301 | 16,922 | 16,091 | 15,211 | 14,418 | 14,280 |
| White, non-Hispanics | 14,911 | 14,933 | 14,578 | 13,679 | 12,819 | 12,069 | 11,908 |
| Asians | 492 | 727 | 743 | 679 | 700 | 690 | 678 |
| Underrepresented minorities, total | 1,576 | 1,641 | 1,601 | 1,733 | 1,692 | 1,659 | 1,694 |
| Black, non-Hispanics | 1,009 | 983 | 941 | 953 | 968 | 949 | 892 |
| Hispanics | 475 | 594 | 567 | 722 | 655 | 629 | 710 |
| American Indians or Alaskan Natives | 92 | 64 | 93 | 58 | 69 | 81 | 92 |
| Nonresident aliens ² | 1,194 | 920 | 616 | 682 | 669 | 468 | 402 |
| Unknown race/ethnicity or citizenship | 105 | 208 | 461 | 340 | 449 | 423 | 407 |
| Women | | | | | | | |
| Total, all recipients | 2,255 | 2,148 | 2,099 | 2,037 | 1,965 | 1,804 | 1,898 |
| U.S. citizens and permanent residents, total ¹ | 2,141 | 2,058 | 2,020 | 1,968 | 1,869 | 1,720 | 1,829 |
| White, non-Hispanics | 1,762 | 1,608 | 1,578 | 1,572 | 1,460 | 1,217 | 1,337 |
| Asians | 50 | 80 | 96 | 76 | 68 | 88 | 90 |
| Underrepresented minorities, total | 329 | 370 | 346 | 320 | 341 | 415 | 402 |
| Black, non-Hispanics | 268 | 286 | 267 | 247 | 259 | 290 | 240 |
| Hispanics | 50 | 70 | 67 | 62 | 76 | 118 | 143 |
| American Indians or Alaskan Natives | 11 | 14 | 12 | 11 | 6 | 7 | 19 |
| Nonresident aliens ² | 83 | 66 | 43 | 45 | 43 | 48 | 39 |
| Unknown race/ethnicity or citizenship | 31 | 24 | 36 | 24 | 53 | 36 | 30 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are a summary of instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 32. Number of earned master's degrees awarded in engineering technologies, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|------|------|-------|-------|-------|-------|-------|
| Total | | | | | | | |
| Total, all recipients | 816 | 883 | 1,135 | 1,194 | 1,188 | 1,278 | 1,555 |
| U.S. citizens and permanent residents, total ¹ | 596 | 712 | 909 | 960 | 959 | 967 | 1,175 |
| White, non-Hispanics | 526 | 581 | 802 | 823 | 830 | 817 | 1,041 |
| Asians | 25 | 46 | 40 | 79 | 60 | 58 | 40 |
| Underrepresented minorities, total | 45 | 85 | 67 | 58 | 69 | 92 | 94 |
| Black, non-Hispanics | 37 | 42 | 55 | 44 | 47 | 64 | 61 |
| Hispanics | 6 | 17 | 10 | 9 | 19 | 23 | 25 |
| American Indians or Alaskan Natives | 2 | 26 | 2 | 5 | 3 | 5 | 8 |
| Nonresident aliens ² | 124 | 127 | 131 | 162 | 172 | 215 | 279 |
| Unknown race/ethnicity or citizenship | 96 | 44 | 95 | 72 | 57 | 96 | 101 |
| Men | | | | | | | |
| Total, all recipients | 674 | 678 | 892 | 888 | 888 | 971 | 1,172 |
| U.S. citizens and permanent residents, total ¹ | 481 | 549 | 715 | 690 | 705 | 730 | 868 |
| White, non-Hispanics | 423 | 436 | 631 | 607 | 619 | 619 | 783 |
| Asians | 23 | 41 | 36 | 40 | 39 | 45 | 28 |
| Underrepresented minorities, total | 35 | 72 | 48 | 43 | 47 | 66 | 57 |
| Black, non-Hispanics | 28 | 35 | 40 | 32 | 29 | 46 | 32 |
| Hispanics | 5 | 11 | 7 | 7 | 17 | 16 | 18 |
| American Indians or Alaskan Natives | 2 | 26 | 1 | 4 | 1 | 4 | 7 |
| Nonresident aliens ² | 115 | 105 | 103 | 131 | 131 | 156 | 211 |
| Unknown race/ethnicity or citizenship | 78 | 24 | 74 | 67 | 52 | 85 | 93 |
| Women | | | | | | | |
| Total, all recipients | 142 | 205 | 243 | 306 | 300 | 307 | 383 |
| U.S. citizens and permanent residents, total ¹ | 115 | 163 | 194 | 270 | 254 | 237 | 307 |
| White, non-Hispanics | 103 | 145 | 171 | 216 | 211 | 198 | 258 |
| Asians | 2 | 5 | 4 | 39 | 21 | 13 | 12 |
| Underrepresented minorities, total | 10 | 13 | 19 | 15 | 22 | 26 | 37 |
| Black, non-Hispanics | 9 | 7 | 15 | 12 | 18 | 18 | 29 |
| Hispanics | 1 | 6 | 3 | 2 | 2 | 7 | 7 |
| American Indians or Alaskan Natives | 0 | 0 | 1 | 1 | 2 | 1 | 1 |
| Nonresident aliens ² | 9 | 22 | 28 | 31 | 41 | 59 | 68 |
| Unknown race/ethnicity or citizenship | 18 | 20 | 21 | 5 | 5 | 11 | 8 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Engineering technologies are a summary of instructional programs that prepare individuals to support and assist engineering and related professionals or to independently provide such services. Programs stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 33. Number of earned bachelor's degrees awarded in health fields, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 65,612 | 64,399 | 60,114 | 59,852 | 60,228 | 62,655 | 67,942 |
| U.S. citizens and permanent residents, total ¹ | 63,502 | 61,894 | 58,026 | 57,118 | 57,660 | 60,605 | 65,709 |
| White, non-Hispanics | 55,520 | 53,903 | 49,854 | 48,405 | 48,798 | 51,328 | 55,482 |
| Asians | 1,311 | 1,535 | 1,698 | 1,823 | 1,981 | 2,229 | 2,469 |
| Underrepresented minorities, total | 6,671 | 6,456 | 6,474 | 6,890 | 6,881 | 7,048 | 7,758 |
| Black, non-Hispanics | 3,836 | 3,725 | 3,886 | 4,056 | 4,122 | 4,151 | 4,670 |
| Hispanics | 2,562 | 2,464 | 2,348 | 2,580 | 2,481 | 2,571 | 2,747 |
| American Indians or Alaskan Natives | 273 | 267 | 240 | 254 | 278 | 326 | 341 |
| Nonresident aliens ² | 819 | 777 | 747 | 796 | 978 | 863 | 1,013 |
| Unknown race/ethnicity or citizenship | 1,291 | 1,728 | 1,341 | 1,938 | 1,590 | 1,187 | 1,220 |
| Men | | | | | | | |
| Total, all recipients | 9,931 | 9,346 | 9,068 | 9,418 | 9,855 | 10,305 | 11,467 |
| U.S. citizens and permanent residents, total ¹ | 9,386 | 8,857 | 8,636 | 8,943 | 9,279 | 9,803 | 10,927 |
| White, non-Hispanics | 8,117 | 7,597 | 7,339 | 7,521 | 7,717 | 8,230 | 9,081 |
| Asians | 298 | 329 | 398 | 392 | 468 | 541 | 561 |
| Underrepresented minorities, total | 971 | 931 | 899 | 1,030 | 1,094 | 1,032 | 1,285 |
| Black, non-Hispanics | 484 | 469 | 451 | 502 | 525 | 530 | 673 |
| Hispanics | 438 | 417 | 401 | 491 | 519 | 441 | 545 |
| American Indians or Alaskan Natives | 49 | 45 | 47 | 37 | 50 | 61 | 67 |
| Nonresident aliens ² | 280 | 261 | 226 | 242 | 283 | 248 | 278 |
| Unknown race/ethnicity or citizenship | 265 | 228 | 206 | 233 | 293 | 254 | 262 |
| Women | | | | | | | |
| Total, all recipients | 55,681 | 55,053 | 51,046 | 50,434 | 50,373 | 52,350 | 56,475 |
| U.S. citizens and permanent residents, total ¹ | 54,116 | 53,037 | 49,390 | 48,175 | 48,381 | 50,802 | 54,782 |
| White, non-Hispanics | 47,403 | 46,306 | 42,515 | 40,884 | 41,081 | 43,098 | 46,401 |
| Asians | 1,013 | 1,206 | 1,300 | 1,431 | 1,513 | 1,688 | 1,908 |
| Underrepresented minorities, total | 5,700 | 5,525 | 5,575 | 5,860 | 5,787 | 6,016 | 6,473 |
| Black, non-Hispanics | 3,352 | 3,256 | 3,435 | 3,554 | 3,597 | 3,621 | 3,997 |
| Hispanics | 2,124 | 2,047 | 1,947 | 2,089 | 1,962 | 2,130 | 2,202 |
| American Indians or Alaskan Natives | 224 | 222 | 193 | 217 | 228 | 265 | 274 |
| Nonresident aliens ² | 539 | 516 | 521 | 554 | 695 | 615 | 735 |
| Unknown race/ethnicity or citizenship | 1,026 | 1,500 | 1,135 | 1,705 | 1,297 | 933 | 958 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 34. Number of earned master's degrees awarded in health fields, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 17,525 | 18,580 | 19,410 | 20,482 | 21,398 | 23,213 | 25,823 |
| U.S. citizens and permanent residents, total ¹ | 16,359 | 16,754 | 17,441 | 18,407 | 19,269 | 21,040 | 23,423 |
| White, non-Hispanics | 14,565 | 14,902 | 15,474 | 16,284 | 17,002 | 18,464 | 20,509 |
| Asians | 476 | 464 | 537 | 600 | 600 | 709 | 830 |
| Underrepresented minorities, total | 1,318 | 1,388 | 1,430 | 1,523 | 1,667 | 1,867 | 2,084 |
| Black, non-Hispanics | 819 | 811 | 814 | 886 | 1,004 | 1,092 | 1,251 |
| Hispanics | 438 | 518 | 535 | 558 | 572 | 685 | 718 |
| American Indians or Alaskan Natives | 61 | 59 | 81 | 79 | 91 | 90 | 115 |
| Nonresident aliens ² | 845 | 869 | 1,073 | 1,082 | 1,238 | 1,310 | 1,466 |
| Unknown race/ethnicity or citizenship | 321 | 957 | 896 | 993 | 891 | 863 | 934 |
| Men | | | | | | | |
| Total, all recipients | 4,155 | 3,915 | 4,239 | 4,554 | 4,499 | 4,714 | 5,248 |
| U.S. citizens and permanent residents, total ¹ | 3,646 | 3,322 | 3,577 | 3,803 | 3,747 | 3,966 | 4,428 |
| White, non-Hispanics | 3,170 | 2,931 | 3,094 | 3,309 | 3,215 | 3,399 | 3,807 |
| Asians | 174 | 146 | 162 | 181 | 170 | 215 | 222 |
| Underrepresented minorities, total | 302 | 245 | 321 | 313 | 362 | 352 | 399 |
| Black, non-Hispanics | 179 | 134 | 173 | 158 | 194 | 171 | 207 |
| Hispanics | 109 | 99 | 128 | 135 | 146 | 158 | 172 |
| American Indians or Alaskan Natives | 14 | 12 | 20 | 20 | 22 | 23 | 20 |
| Nonresident aliens ² | 426 | 444 | 519 | 474 | 543 | 539 | 610 |
| Unknown race/ethnicity or citizenship | 83 | 149 | 143 | 277 | 209 | 209 | 210 |
| Women | | | | | | | |
| Total, all recipients | 13,370 | 14,665 | 15,171 | 15,928 | 16,899 | 18,499 | 20,575 |
| U.S. citizens and permanent residents, total ¹ | 12,713 | 13,432 | 13,864 | 14,604 | 15,522 | 17,074 | 18,995 |
| White, non-Hispanics | 11,395 | 11,971 | 12,380 | 12,975 | 13,787 | 15,065 | 16,702 |
| Asians | 302 | 318 | 375 | 419 | 430 | 494 | 608 |
| Underrepresented minorities, total | 1,016 | 1,143 | 1,109 | 1,210 | 1,305 | 1,515 | 1,685 |
| Black, non-Hispanics | 640 | 677 | 641 | 728 | 810 | 921 | 1,044 |
| Hispanics | 329 | 419 | 407 | 423 | 426 | 527 | 546 |
| American Indians or Alaskan Natives | 47 | 47 | 61 | 59 | 69 | 67 | 95 |
| Nonresident aliens ² | 419 | 425 | 554 | 608 | 695 | 771 | 856 |
| Unknown race/ethnicity or citizenship | 238 | 808 | 753 | 716 | 682 | 654 | 724 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 35. Number of earned doctoral degrees awarded in health fields, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|------|------|------|------|-------|-------|-------|
| Total | | | | | | | |
| Total, all recipients | 729 | 800 | 974 | 956 | 1,042 | 1,112 | 1,201 |
| U.S. citizens and permanent residents, total ¹ | 575 | 635 | 751 | 756 | 828 | 844 | 943 |
| White, non-Hispanics | 502 | 554 | 685 | 667 | 722 | 735 | 806 |
| Asians | 34 | 36 | 23 | 39 | 45 | 53 | 48 |
| Underrepresented minorities, total | 39 | 45 | 43 | 50 | 61 | 56 | 89 |
| Black, non-Hispanics | 23 | 31 | 29 | 32 | 40 | 38 | 59 |
| Hispanics | 14 | 11 | 11 | 17 | 16 | 13 | 24 |
| American Indians or Alaskan Natives | 2 | 3 | 3 | 1 | 5 | 5 | 6 |
| Nonresident aliens ² | 99 | 96 | 134 | 166 | 171 | 226 | 214 |
| Unknown race/ethnicity or citizenship | 55 | 69 | 89 | 34 | 43 | 42 | 44 |
| Men | | | | | | | |
| Total, all recipients | 289 | 325 | 345 | 364 | 373 | 402 | 424 |
| U.S. citizens and permanent residents, total ¹ | 190 | 226 | 221 | 239 | 248 | 221 | 260 |
| White, non-Hispanics | 152 | 191 | 195 | 205 | 200 | 177 | 209 |
| Asians | 20 | 19 | 13 | 17 | 21 | 23 | 25 |
| Underrepresented minorities, total | 18 | 16 | 13 | 17 | 27 | 21 | 26 |
| Black, non-Hispanics | 11 | 12 | 9 | 14 | 17 | 14 | 18 |
| Hispanics | 6 | 3 | 4 | 2 | 7 | 4 | 8 |
| American Indians or Alaskan Natives | 1 | 1 | 0 | 1 | 3 | 3 | 0 |
| Nonresident aliens ² | 63 | 61 | 87 | 101 | 101 | 159 | 138 |
| Unknown race/ethnicity or citizenship | 36 | 38 | 37 | 24 | 24 | 22 | 26 |
| Women | | | | | | | |
| Total, all recipients | 440 | 475 | 629 | 592 | 669 | 710 | 777 |
| U.S. citizens and permanent residents, total ¹ | 385 | 409 | 530 | 517 | 580 | 623 | 683 |
| White, non-Hispanics | 350 | 363 | 490 | 462 | 522 | 558 | 597 |
| Asians | 14 | 17 | 10 | 22 | 24 | 30 | 23 |
| Underrepresented minorities, total | 21 | 29 | 30 | 33 | 34 | 35 | 63 |
| Black, non-Hispanics | 12 | 19 | 20 | 18 | 23 | 24 | 41 |
| Hispanics | 8 | 8 | 7 | 15 | 9 | 9 | 16 |
| American Indians or Alaskan Natives | 1 | 2 | 3 | 0 | 2 | 2 | 6 |
| Nonresident aliens ² | 36 | 35 | 47 | 65 | 70 | 67 | 76 |
| Unknown race/ethnicity or citizenship | 19 | 31 | 52 | 10 | 19 | 20 | 18 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 36. First-professional degrees awarded, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 75,562 | 72,120 | 71,318 | 71,551 | 72,636 | 74,801 | 76,068 |
| U.S. citizens and permanent residents, total ¹ | 70,677 | 69,643 | 68,525 | 69,224 | 70,448 | 71,960 | 73,520 |
| White, non-Hispanics | 63,225 | 61,291 | 59,597 | 59,376 | 59,692 | 59,869 | 60,338 |
| Asians | 1,816 | 2,222 | 2,903 | 3,299 | 3,772 | 4,757 | 5,107 |
| Underrepresented minorities, total | 5,636 | 6,130 | 6,025 | 6,549 | 6,984 | 7,334 | 8,075 |
| Black, non-Hispanics | 3,029 | 3,341 | 3,017 | 3,337 | 3,535 | 3,568 | 4,078 |
| Hispanics | 2,359 | 2,491 | 2,746 | 2,959 | 3,191 | 3,472 | 3,632 |
| American Indians or Alaskan Natives | 248 | 298 | 262 | 253 | 258 | 294 | 365 |
| Nonresident aliens ² | 862 | 872 | 960 | 1,036 | 1,086 | 1,342 | 1,548 |
| Unknown race/ethnicity | 4,023 | 1,605 | 1,833 | 1,291 | 1,102 | 1,499 | 1,000 |
| Men | | | | | | | |
| Total, all recipients | 50,780 | 46,841 | 45,399 | 44,309 | 44,226 | 45,459 | 45,565 |
| U.S. citizens and permanent residents, total ¹ | 47,138 | 45,266 | 43,646 | 42,814 | 42,760 | 43,648 | 43,849 |
| White, non-Hispanics | 42,635 | 40,314 | 38,499 | 37,367 | 36,926 | 37,089 | 36,896 |
| Asians | 1,152 | 1,391 | 1,772 | 1,946 | 2,171 | 2,728 | 2,831 |
| Underrepresented minorities, total | 3,351 | 3,561 | 3,375 | 3,501 | 3,663 | 3,831 | 4,122 |
| Black, non-Hispanics | 1,623 | 1,798 | 1,568 | 1,627 | 1,653 | 1,620 | 1,777 |
| Hispanics | 1,552 | 1,583 | 1,661 | 1,738 | 1,868 | 2,054 | 2,156 |
| American Indians or Alaskan Natives | 176 | 180 | 146 | 136 | 142 | 157 | 189 |
| Nonresident aliens ² | 681 | 624 | 671 | 702 | 762 | 948 | 1,103 |
| Unknown race/ethnicity | 2,961 | 951 | 1,082 | 793 | 704 | 863 | 613 |
| Women | | | | | | | |
| Total, all recipients | 24,782 | 25,279 | 25,919 | 27,242 | 28,410 | 29,342 | 30,503 |
| U.S. citizens and permanent residents, total ¹ | 23,539 | 24,377 | 24,879 | 26,410 | 27,688 | 28,312 | 29,671 |
| White, non-Hispanics | 20,590 | 20,977 | 21,098 | 22,009 | 22,766 | 22,780 | 23,442 |
| Asians | 664 | 831 | 1,131 | 1,353 | 1,601 | 2,029 | 2,276 |
| Underrepresented minorities, total | 2,285 | 2,569 | 2,650 | 3,048 | 3,321 | 3,503 | 3,953 |
| Black, non-Hispanics | 1,406 | 1,543 | 1,449 | 1,710 | 1,882 | 1,948 | 2,301 |
| Hispanics | 807 | 908 | 1,085 | 1,221 | 1,323 | 1,418 | 1,476 |
| American Indians or Alaskan Natives | 72 | 118 | 116 | 117 | 116 | 137 | 176 |
| Nonresident aliens ² | 181 | 248 | 289 | 334 | 324 | 394 | 445 |
| Unknown race/ethnicity | 1,062 | 654 | 751 | 498 | 398 | 636 | 387 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTE: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of preprofessional training.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 37. First-professional degrees awarded in health fields, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 30,601 | 29,400 | 29,518 | 28,787 | 28,183 | 28,303 | 29,475 |
| U.S. citizens and permanent residents, total ¹ | 28,273 | 28,484 | 28,663 | 28,041 | 27,207 | 27,082 | 28,308 |
| White, non-Hispanics | 24,856 | 24,467 | 24,094 | 23,027 | 21,958 | 21,333 | 22,076 |
| Asians | 1,142 | 1,394 | 1,978 | 2,290 | 2,472 | 2,909 | 3,317 |
| Underrepresented minorities, total | 2,275 | 2,623 | 2,591 | 2,724 | 2,777 | 2,840 | 2,915 |
| Black, non-Hispanics | 1,073 | 1,269 | 1,159 | 1,251 | 1,285 | 1,288 | 1,350 |
| Hispanics | 1,057 | 1,217 | 1,323 | 1,373 | 1,381 | 1,417 | 1,426 |
| American Indians or Alaskan Natives | 145 | 137 | 109 | 100 | 111 | 135 | 139 |
| Nonresident aliens ² | 420 | 462 | 482 | 535 | 506 | 703 | 782 |
| Unknown race/ethnicity | 1,908 | 454 | 373 | 211 | 470 | 518 | 385 |
| Men | | | | | | | |
| Total, all recipients | 21,675 | 20,011 | 19,596 | 18,562 | 17,777 | 17,694 | 17,704 |
| U.S. citizens and permanent residents, total ¹ | 19,963 | 19,394 | 19,021 | 18,105 | 17,126 | 16,912 | 16,957 |
| White, non-Hispanics | 17,796 | 16,925 | 16,298 | 15,232 | 14,207 | 13,607 | 13,608 |
| Asians | 749 | 870 | 1,217 | 1,363 | 1,440 | 1,718 | 1,859 |
| Underrepresented minorities, total | 1,418 | 1,599 | 1,506 | 1,510 | 1,479 | 1,587 | 1,490 |
| Black, non-Hispanics | 585 | 691 | 581 | 606 | 573 | 604 | 556 |
| Hispanics | 728 | 822 | 861 | 847 | 841 | 907 | 858 |
| American Indians or Alaskan Natives | 105 | 86 | 64 | 57 | 65 | 76 | 76 |
| Nonresident aliens ² | 311 | 303 | 313 | 327 | 328 | 474 | 510 |
| Unknown race/ethnicity | 1,401 | 314 | 262 | 130 | 323 | 308 | 237 |
| Women | | | | | | | |
| Total, all recipients | 8,926 | 9,389 | 9,922 | 10,225 | 10,406 | 10,609 | 11,771 |
| U.S. citizens and permanent residents, total ¹ | 8,310 | 9,090 | 9,642 | 9,936 | 10,081 | 10,170 | 11,351 |
| White, non-Hispanics | 7,060 | 7,542 | 7,796 | 7,795 | 7,751 | 7,726 | 8,468 |
| Asians | 393 | 524 | 761 | 927 | 1,032 | 1,191 | 1,458 |
| Underrepresented minorities, total | 857 | 1,024 | 1,085 | 1,214 | 1,298 | 1,253 | 1,425 |
| Black, non-Hispanics | 488 | 578 | 578 | 645 | 712 | 684 | 794 |
| Hispanics | 329 | 395 | 462 | 526 | 540 | 510 | 568 |
| American Indians or Alaskan Natives | 40 | 51 | 45 | 43 | 46 | 59 | 63 |
| Nonresident aliens ² | 109 | 159 | 169 | 208 | 178 | 229 | 272 |
| Unknown race/ethnicity | 507 | 140 | 111 | 81 | 147 | 210 | 148 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of preprofessional training.

Health fields include: Chiropractic, Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry, and Veterinary Medicine.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

Table 38. First-professional degrees awarded in non-health fields, by race/ethnicity and sex of recipient: 1985-93

| Citizenship and race/ethnicity | 1985 | 1987 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|--------|--------|--------|
| Total | | | | | | | |
| Total, all recipients | 44,961 | 42,720 | 41,800 | 42,764 | 44,453 | 46,498 | 46,593 |
| U.S. citizens and permanent residents, total ¹ | 42,404 | 41,159 | 39,862 | 41,183 | 43,241 | 44,878 | 45,212 |
| White, non-Hispanics | 38,369 | 36,824 | 35,503 | 36,349 | 37,734 | 38,536 | 38,262 |
| Asians | 674 | 828 | 925 | 1,009 | 1,300 | 1,848 | 1,790 |
| Underrepresented minorities, total | 3,361 | 3,507 | 3,434 | 3,825 | 4,207 | 4,494 | 5,160 |
| Black, non-Hispanics | 1,956 | 2,072 | 1,858 | 2,086 | 2,250 | 2,280 | 2,728 |
| Hispanics | 1,302 | 1,274 | 1,423 | 1,586 | 1,810 | 2,055 | 2,206 |
| American Indians or Alaskan Natives | 103 | 161 | 153 | 153 | 147 | 159 | 226 |
| Nonresident aliens ² | 442 | 410 | 478 | 501 | 580 | 639 | 766 |
| Unknown race/ethnicity | 2,115 | 1,151 | 1,460 | 1,080 | 632 | 981 | 615 |
| Men | | | | | | | |
| Total, all recipients | 29,105 | 26,830 | 25,803 | 25,747 | 26,449 | 27,765 | 27,861 |
| U.S. citizens and permanent residents, total ¹ | 27,175 | 25,872 | 24,625 | 24,709 | 25,634 | 26,736 | 26,892 |
| White, non-Hispanics | 24,839 | 23,389 | 22,201 | 22,135 | 22,719 | 23,482 | 23,288 |
| Asians | 403 | 521 | 555 | 583 | 731 | 1,010 | 972 |
| Underrepresented minorities, total | 1,933 | 1,962 | 1,869 | 1,991 | 2,184 | 2,244 | 2,632 |
| Black, non-Hispanics | 1,038 | 1,107 | 987 | 1,021 | 1,080 | 1,016 | 1,221 |
| Hispanics | 824 | 761 | 800 | 891 | 1,027 | 1,147 | 1,298 |
| American Indians or Alaskan Natives | 71 | 94 | 82 | 79 | 77 | 81 | 113 |
| Nonresident aliens ² | 370 | 321 | 358 | 375 | 434 | 474 | 593 |
| Unknown race/ethnicity | 1,560 | 637 | 820 | 663 | 381 | 555 | 376 |
| Women | | | | | | | |
| Total, all recipients | 15,856 | 15,890 | 15,997 | 17,017 | 18,004 | 18,733 | 18,732 |
| U.S. citizens and permanent residents, total ¹ | 15,229 | 15,287 | 15,237 | 16,474 | 17,607 | 18,142 | 18,320 |
| White, non-Hispanics | 13,530 | 13,435 | 13,302 | 14,214 | 15,015 | 15,054 | 14,974 |
| Asians | 271 | 307 | 370 | 426 | 569 | 838 | 818 |
| Underrepresented minorities, total | 1,428 | 1,545 | 1,565 | 1,834 | 2,023 | 2,250 | 2,528 |
| Black, non-Hispanics | 918 | 965 | 871 | 1,065 | 1,170 | 1,264 | 1,507 |
| Hispanics | 478 | 513 | 623 | 695 | 783 | 908 | 908 |
| American Indians or Alaskan Natives | 32 | 67 | 71 | 74 | 70 | 78 | 113 |
| Nonresident aliens ² | 72 | 89 | 120 | 126 | 146 | 165 | 173 |
| Unknown race/ethnicity | 555 | 514 | 640 | 417 | 251 | 426 | 239 |

¹ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

² Nonresident aliens include foreign citizens on temporary visas only.

NOTES: First-professional degrees are defined as those that require at least 6 years of college work for completion and 2 years of preprofessional training.

Non-health fields include: Law, Divinity/Ministry, and Rabbinical and Talmudic Studies.

SOURCES: Tabulations by National Science Foundation/SRS; data from National Center for Education Statistics; data from the HEGIS Earned Degrees Surveys, 1985, and IPEDS Completions Surveys, 1987-93

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