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## ABSTRACT

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. Data cover earned degrees conferred in the aggregate United States. Degree data are compiled for a 12-month period, July of one year through June of the following year. In this report the racial and ethnic categories among U.S. citizens who received degrees during the 1987-94 period are charted and tabulated. Findings indicate that 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. (JRH)

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# Science and Engineering Degrees, by Race/Ethnicity of Recipients:

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1987-94

Detailed Statistical Tables

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Division of Science Resources Studies  
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National Science Foundation



NSF 96-329

# Science and Engineering Degrees, by Race/Ethnicity of Recipients:

1987-94

Detailed Statistical Tables

Susan T. Hill, Author

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



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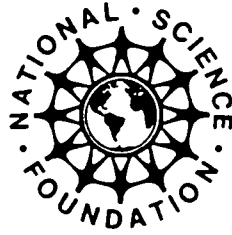
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## Contributors

Data collection, preparation, and tabulations were performed by Quantum Research Corp. for the National Science Foundation. The Project Officer for this report was Susan T. Hill.



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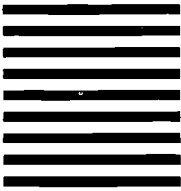
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# GENERAL NOTES

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., 1994 means the 12-month period ending June 1994.

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.

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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 1994, the number of baccalaureate recipients with degrees in S&E increased

44 percent for blacks, 47 percent for Hispanics, and 58 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 (36 percent) (table A).

In 1994 there were similar numbers of black bachelor's degree recipients in S&E (26,289) and Asian recipients (26,420). The number of Hispanics earning bachelor's degrees in S&E fields hit an all-time high of 20,529, as did American Indians, 2,004.

Even with this growth, minority students still comprised 28 percent of the "college-age" population (18-24 years old) in 1994, whereas baccalaureates earned by underrepresented minority students accounted for only 12 percent of the total S&E degrees in 1994.

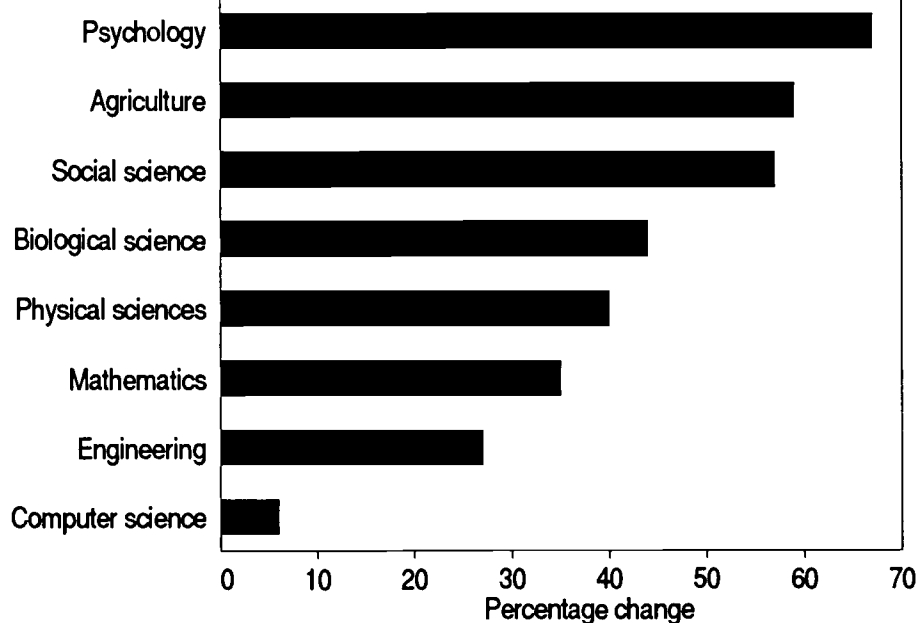
Among underrepresented minority groups, the increases in baccalaureate degrees vary by field of science or engineering. From 1990 to 1994 the percentage increases in baccalaureates awarded to underrepresented groups ranged from a 6-percent increase in computer science degrees to an increase of 67 percent in psychology degrees (chart A).

**Table A. Science and engineering bachelor's degrees, by race/ethnicity of recipients: percentage change, 1985-90 and 1990-94**

Race/ethnicity	1985-90	1990-94
White, non-Hispanics .....	-4	10
Asians or Pacific Islanders .....	46	36
Underrepresented minorities, total .....	10	46
Black, non-Hispanics .....	7	44
Hispanics .....	16	47
American Indians or Alaskan Natives .....	-8	58

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

**Chart A. Science and engineering degrees awarded to underrepresented minorities, by field: percentage change, 1990-94**



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

**Table. S&E bachelor's degree recipients, by broad field: percentage distribution, 1994**

Race/ethnicity	Engineering	Natural sciences	Social sciences
Underrepresented minorities .....	12	29	59
Whites .....	15	31	54
Asians .....	25	39	36

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

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 (54 percent).

Among S&E baccalaureate recipients in 1994, a slightly lower percentage of underrepresented minorities majored in engineering (12 percent) than did whites (15 percent), and the natural sciences (29 percent) than did whites (21 percent) (table B).

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 48 percent) chose S&E fields in 1994.

## 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 likely to contain 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 1987-94 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."<sup>1</sup>

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.

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<sup>1</sup> 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 a survey conducted by NCES—the Completions Survey.

This survey 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 1987 through 1989 and annually since then. A major limitation is that data are collected only at the broad field level<sup>2</sup> 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

<sup>2</sup> 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).

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 97 percent between 1987 and 1994.

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 1987 through 1994 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 1994, by award level and racial/ethnic category.

Race/ethnicity	Bachelor's	Master's
White .....	1.6	1.7
Black .....	1.5	1.4
Hispanic .....	1.2	1.9
Asian .....	1.8	4.6
American Indian .....	1.1	1.2
Nonresident alien .....	2.2	2.8
Unknown .....	1.9	5.6

In the second case, wherein racial/ethnic data were reported but did not add to the total degree recipients, NCES used to distribute 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 1987–94 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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
<p align="center"><b>SCIENCE AND ENGINEERING (S&amp;E)</b></p> <p><b>ENGINEERING</b> 14 Engineering</p>	<p align="center"><b>SCIENCE AND ENGINEERING (S&amp;E)</b></p> <p><b>ENGINEERING</b> 14 Engineering</p>	<p align="center"><b>SCIENCE AND ENGINEERING (S&amp;E)</b></p> <p><b>ENGINEERING</b></p> <p><b>Aeronautical/Astronautical Engineering</b> 300 Aerospace, Aeronautical, and Astronautical Engineering</p> <p><b>Chemical Engineering</b> 312 Chemical Engineering 366 Petroleum Engineering 369 Polymer and Plastics Engineering 547 Fuel Technology and Petroleum Engineering</p> <p><b>Civil Engineering</b> 315 Civil Engineering 336 Environmental Health Engineering</p> <p><b>Electrical Engineering</b> 318 Communications Engineering 321 Computer Engineering 322 Electrical Engineering 323 Electronics Engineering 324 Electrical and Electronics Engineering</p> <p><b>Industrial Engineering</b> 339 Industrial and Manufacturing Engineering</p> <p><b>Mechanical Engineering</b> 327 Engineering Mechanics 345 Mechanical Engineering</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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
<p><b>SCIENCES</b></p> <p><b>NATURAL SCIENCES</b> <b>Physical Science</b> 40 Physical Sciences (Includes Earth/Atmospheric/Oceanographic Sciences)</p>	<p><b>SCIENCES</b></p> <p><b>NATURAL SCIENCES</b> <b>Physical Science</b> 40 Physical Sciences (Includes Earth/Atmospheric/Oceanographic Sciences)</p>	<p><b>Materials/Metallurgical Engineering</b> 309 Ceramic Sciences 342 Materials Science 348 Metallurgical Engineering</p> <p><b>Other Engineering</b> 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><b>SCIENCES</b></p> <p><b>PHYSICAL SCIENCES</b> <b>Astronomy</b> 500 Astronomy 505 Astrophysics 506 Astronomy and Astrophysics</p> <p><b>Chemistry</b> 520 Analytical Chemistry 521 Agricultural and Food Chemistry 522 Inorganic Chemistry 524 Nuclear Chemistry 526 Organic Chemistry 528 Pharmaceutical Chemistry 530 Physical Chemistry 532 Polymer Chemistry 534 Theoretical 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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
		538 Chemistry, General 539 Chemistry, Other  <b>Physics</b> 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  <b>Other Physical Sciences</b> 599 Physical Sciences, Other  <b>Atmospheric Sciences</b> 510 Atmospheric Physics and Chemistry 512 Atmospheric Dynamics 514 Meteorology 518 Atmospheric Science/ Meteorology, General 519 Atmospheric Science/ Meteorology, Other  <b>Geosciences</b> 540 Geology 542 Geochemistry 544 Geophysics and Seismology 545 Geophysics (Solid Earth) 546 Paleontology 548 Mineralogy and Petrology

**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, 1992–94	Fields of study from the Survey of Earned Doctorates classification
<p><b>Mathematical Science</b> 27 Mathematics</p>	<p><b>Mathematical Science</b> 27 Mathematics</p>	<p>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><b>Oceanography</b> 590 Oceanography 595 Marine Sciences</p> <p><b>Other Environmental Sciences</b> 580 Environmental Science</p> <p><b>MATHEMATICAL/COMPUTER SCIENCES</b> <b>Mathematics</b> 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 498 Mathematics, General 499 Mathematics, Other</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, 1992–94	Fields of study from the Survey of Earned Doctorates classification
<p><b>Computer Science</b> 11 Computer and Information Sciences</p> <p><b>Agricultural Science</b> 02 Agricultural Sciences 03 Renewable Natural Resources</p>	<p><b>Computer Science</b> 11 Computer and Information Sciences</p> <p><b>Agricultural Science</b> 02 Agricultural Sciences 03 Conservation and Renewable Natural Resources</p>	<p><b>Computer Science</b> 400 Computer Science 410 Information Science and Systems</p> <p><b>BIOLOGICAL/AGRICULTURAL SCIENCES</b> <b>Agricultural Sciences</b> 005 Animal Breeding and Genetics 007 Animal Husbandry 010 Animal Nutrition 012 Dairy Science 014 Poultry Science 019 Animal Sciences, Other 020 Agronomy and Crop Science 025 Plant Breeding and Genetics 030 Plant Pathology 032 Plant Protection/Pest Management 039 Plant Sciences, Other 040 Food Sciences 042 Food Distribution 043 Food Engineering 044 Food Sciences, Other 045 Soil Sciences 046 Soil Chemistry and Microbiology 049 Soil Sciences, Other 050 Horticulture Science 054 Fish and Wildlife 055 Fisheries Science and Management 060 Wildlife Management 065 Forestry Sciences 066 Forest Biology 068 Forest Engineering 070 Forest Management 072 Wood Science and Pulp/ Paper Technology 074 Conservation and Renewable Natural Resources 079 Forestry and Related Sciences</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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
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**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, 1992–94	Fields of study from the Survey of Earned Doctorates classification
<p><b>SOCIAL SCIENCES</b></p> <p><b>Social Science</b> 05 Area and Ethnic Studies 45 Social Sciences</p> <p><b>Psychology</b> 42 Psychology</p>	<p><b>SOCIAL SCIENCES</b></p> <p><b>Social Science</b> 05 Area, Ethnic, and Cultural   Studies 45 Social Sciences and History</p> <p><b>Psychology</b> 42 Psychology</p>	<p><b>SOCIAL SCIENCES</b></p> <p><b>Economics</b> 000 Agricultural Economics 666 Economics 668 Econometrics</p> <p><b>Political Science</b> 674 International Relations/Affairs 678 Political Science and   Government 679 Political Science and Public   Administration 682 Public Policy Analysis 976 Public Administration</p> <p><b>Sociology</b> 662 Demography and Population   Studies 686 Sociology</p> <p><b>Other Social Sciences</b> 650 Anthropology 652 Area Studies 658 Criminology 670 Geography 690 Statistics 694 Urban Affairs/Studies 698 Social Sciences, General 699 Social Sciences, Other 710 History and Philosophy of   Science and Technology 729 Linguistics 770 American Studies 773 Archeology</p> <p><b>Psychology</b> 600 Clinical Psychology 603 Cognitive Psychology and   Psycholinguistics 606 Comparative Psychology 609 Counseling Psychology 612 Developmental and Child   Psychology 615 Experimental Psychology</p>



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Integrated Postsecondary Education Data System (IPEDS)  
Classification System—continued**

Fields of study collected in HEGIS/IPEDS, 1985-91	Fields of study from the IPEDS, 1992-94	Fields of study from the Survey of Earned Doctorates classification
		616 Experimental, 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
<b>NON-S&amp;E</b>	<b>NON-S&amp;E</b>	<b>NON-S&amp;E</b>
01 Agribusiness and Agricultural Production 04 Architecture and Environmental Design 06 Business and Management 07 Business (Administrative Support), Other 08 Marketing and Distribution 09 Communications 12 Consumer, Personal, and Miscellaneous Services 13 Education 16 Foreign Languages 17 Allied Health 18 Health Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropractic, Veterinary Medicine, Chiropractic) 19 Home Economics 20 Vocational Home Economics	01 Agricultural Business and Production 04 Architecture and Related Programs 08 Marketing Operations/Marketing and Distribution 09 Communications 10 Communications Technologies 12 Personal and Miscellaneous Services 13 Education 15 Engineering-Related Technologies 16 Foreign Languages and Literatures 17 Allied Health	<b>MEDICAL SCIENCES</b> 205 Dentistry 210 Environmental Health 215 Public Health 219 Public Health and Epidemiology 220 Epidemiology 225 Medicine and Surgery 235 Optometry and Ophthalmology 240 Pharmacy 250 Veterinary Science  <b>OTHER SCIENCES</b> 200 Speech/Language Pathology and Audiology 212 Health Systems/Services Administration 224 Hospital Administration 230 Nursing 245 Rehabilitation/Therapeutic Services 298 Health Sciences, General 299 Health Sciences, Other

**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, 1992–94	Fields of study from the Survey of Earned Doctorates classification
22 Law 23 Letters 24 Liberal/General Studies 25 Library and Archival Sciences 28 Military Sciences 29 Military Technologies 30 Multi-/Interdisciplinary Studies 31 Parks and Recreation 38 Philosophy and Religion 39 Theology 41 Science Technologies 44 Public Affairs (Does not include Parks and Recreation Management, and Law Enforcement and Correction) 43 Protective Services 46 Construction Trades 47 Mechanics and Repairers 48 Precision Production 49 Transportation and Material Moving 50 Visual and Performing Arts	18 Health Professions and Related Sciences (Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic, Allied Health) 19 Home Economics 20 Vocational Home Economics 22 Law and Legal Studies 23 English Language and Literature/Letters 24 Liberal/General Studies 25 Library and Archival Sciences 28 Reserve Officer Training Corps (ROTC) 29 Military Technologies 30 Multi-/Interdisciplinary Studies 31 Parks, Recreation, Leisure, and Fitness Studies 38 Philosophy and Religion 39 Theological Studies and Religious Vocations 41 Science Technologies 43 Protective Services 44 Public Administration and Services (Does not include Parks and Recreation Management, and Law Enforcement and Correction) 46 Construction Trades 47 Mechanics and Repairers 48 Precision Production Trades 49 Transportation and Materials Moving Workers 50 Visual and Performing Arts 52 Business Management and Administrative Services	<p><b>HISTORY</b></p> 700 History, American 705 History, European 718 History, General 719 History, Other
		<p><b>ENGLISH AND LITERATURE</b></p> 720 Classics 723 Comparative Literature 725 English and American Literature 732 Literature, American 733 Literature, English 734 English Language 736 Speech and Rhetorical Studies 738 Letters, General 739 Letters, Other
		<p><b>FOREIGN LANGUAGES</b></p> 740 French 743 German 746 Italian 749 Spanish 752 Russian 755 Slavic (Other than Russian) 758 Chinese 762 Japanese 765 Hebrew 768 Arabic 769 Other Languages and Literature
		<p><b>OTHER HUMANITIES</b></p> 785 Philosophy (See also 440) 798 Humanities, General 799 Humanities, Other
		<p><b>RELIGION AND THEOLOGY</b></p> 790 Religion (See also 984) 791 Religion and Theology 984 Theology/Religious Education (See also 790)

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**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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
		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
		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

**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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
		<p><b>BUSINESS AND MANAGEMENT</b></p> <p>002 Agricultural Business and Management</p> <p>900 Accounting</p> <p>905 Banking/Financial Support Services</p> <p>910 Business Administration and Management</p> <p>915 Business/Managerial Economics</p> <p>917 Management Information Systems/Business Data Processing</p> <p>920 Marketing Management and Research</p> <p>925 Business Statistics</p> <p>930 Operations Research (See also 363, 465)</p> <p>935 Organizational Behavior (See also 621)</p> <p>938 Business Management/ Administrative Services, General</p> <p>939 Business Management/ Administrative Services, Other</p> <p><b>INFORMATION FIELDS (JOURNALISM, BROADCASTING, LIBRARIANSHIP)</b></p> <p>940 Communications Research</p> <p>945 Journalism</p> <p>947 Mass Communications</p> <p>950 Radio and Television</p> <p>957 Communication Theory</p> <p>958 Communications, General</p> <p>959 Communications, Other</p> <p>972 Library Science</p> <p><b>LAW</b></p> <p>968 Law</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, 1992-94	Fields of study from the Survey of Earned Doctorates classification
		<p><b>SOCIAL SERVICE PROFESSIONS</b> 980 Social Service Professions</p> <p><b>VOCATIONAL STUDIES AND HOME ECONOMICS</b> 964 Home Economics</p> <p><b>OTHER NON-SCIENCE FIELDS</b> 974 Parks/Recreation/ Leisure/Fitness 988 Professional Fields, General 989 Professional Fields, Other 999 Other Fields</p>

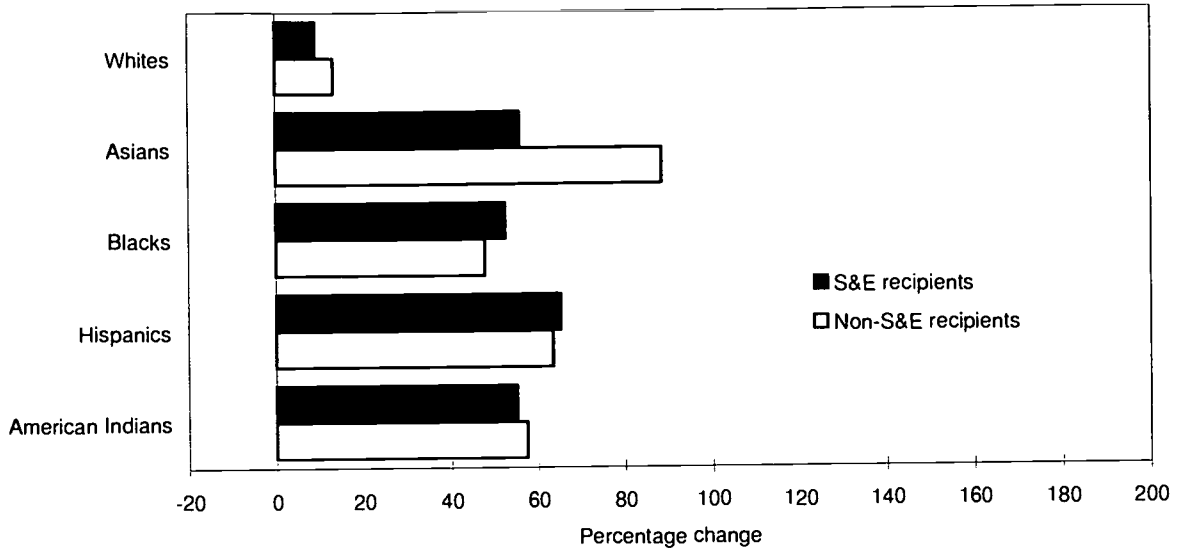
## SECTION C.

# STATISTICAL CHARTS

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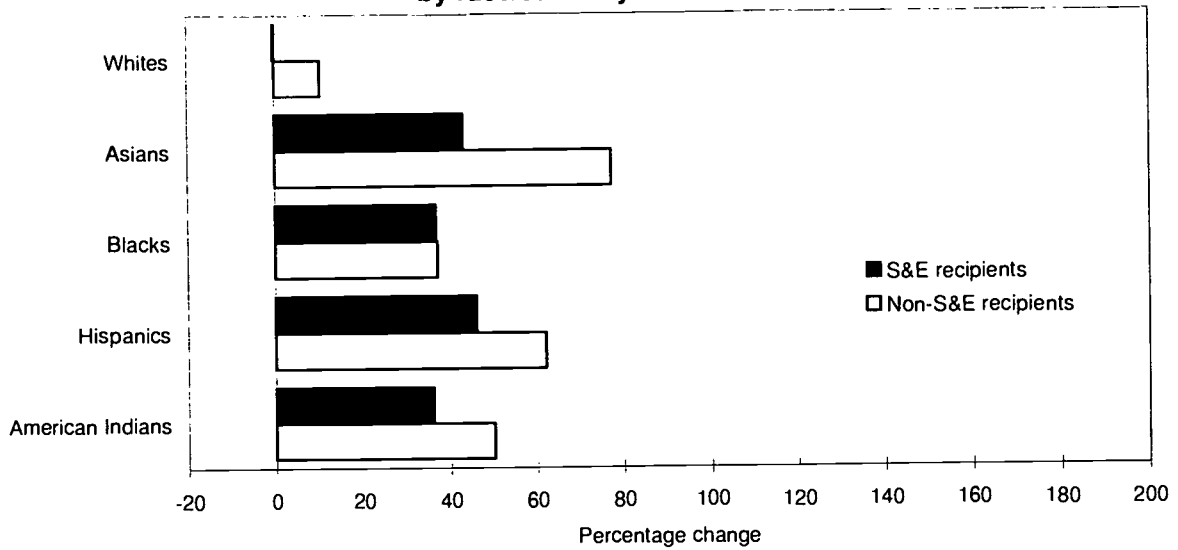
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**Chart 1. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees, by race/ethnicity: 1987-94**



**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

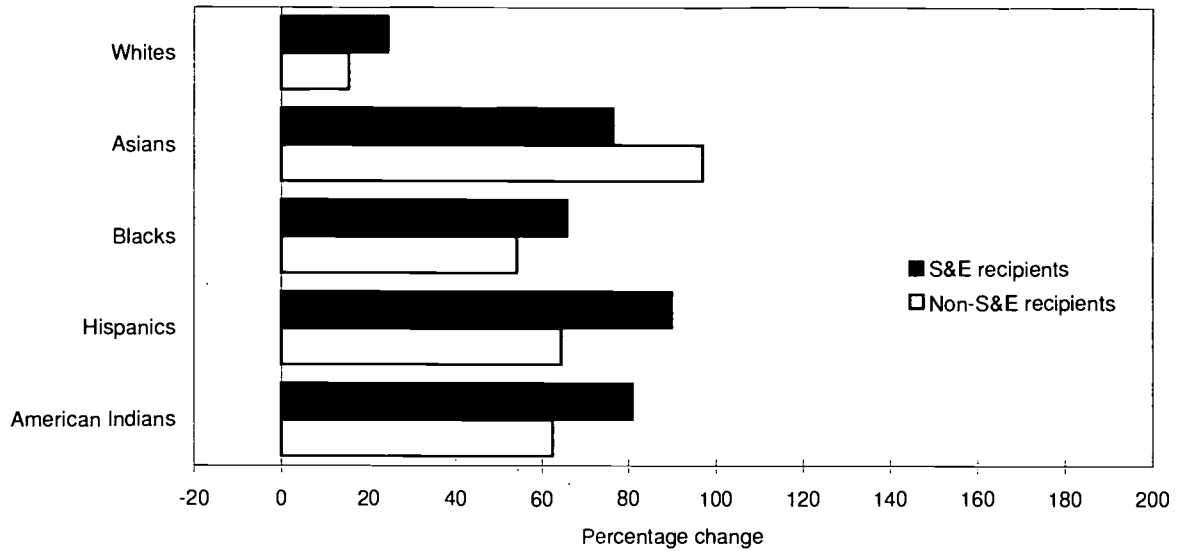
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**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

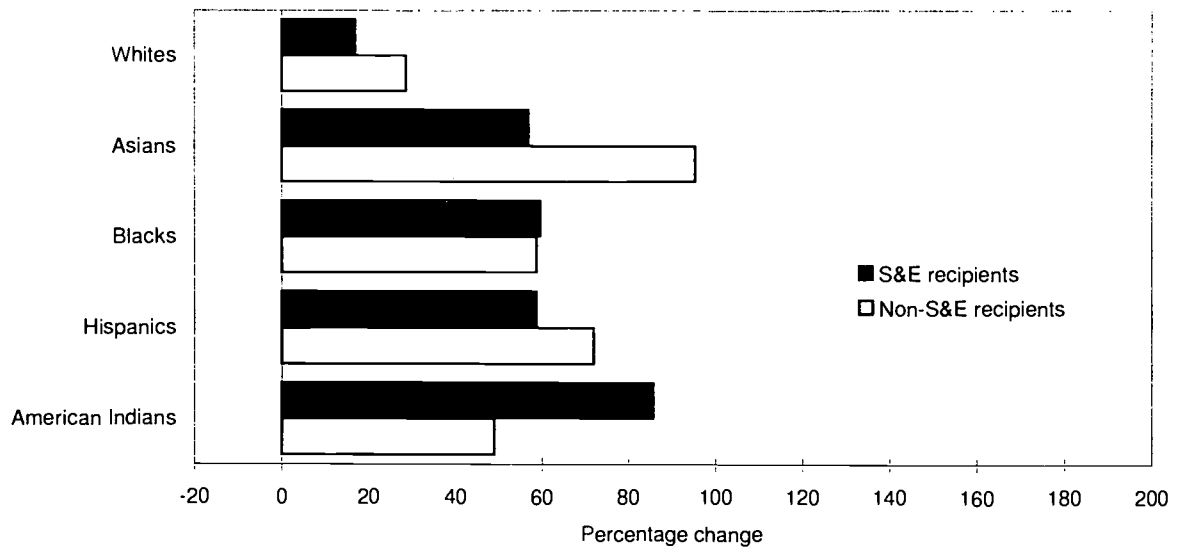


**Chart 3. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees awarded to women, by race/ethnicity: 1987-94**



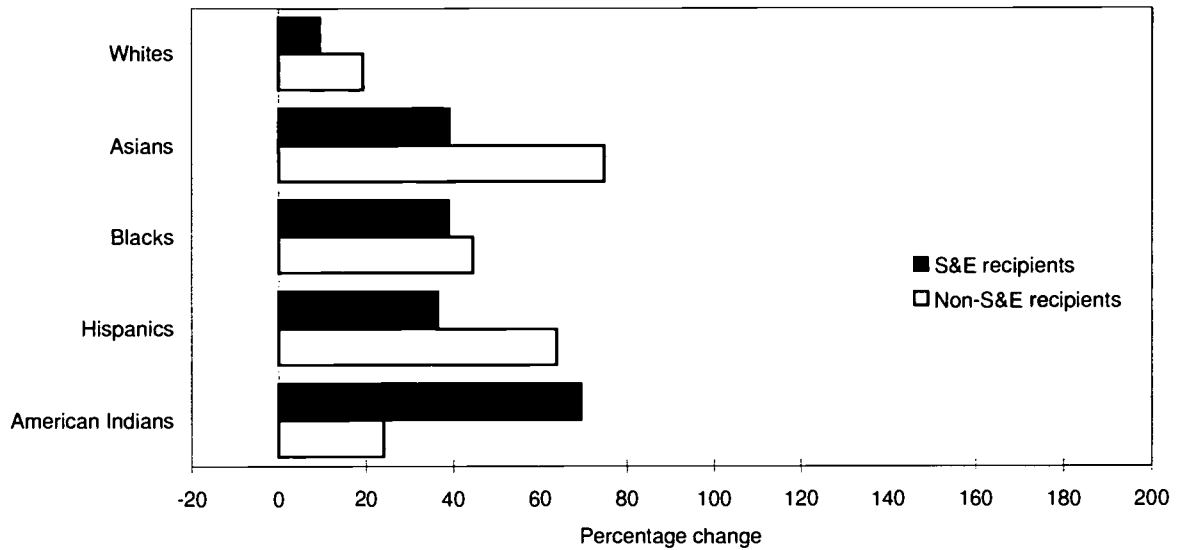
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

**Chart 4. Percentage change in science and engineering (S&E) and non-S&E master's degrees, by race/ethnicity: 1987-94**



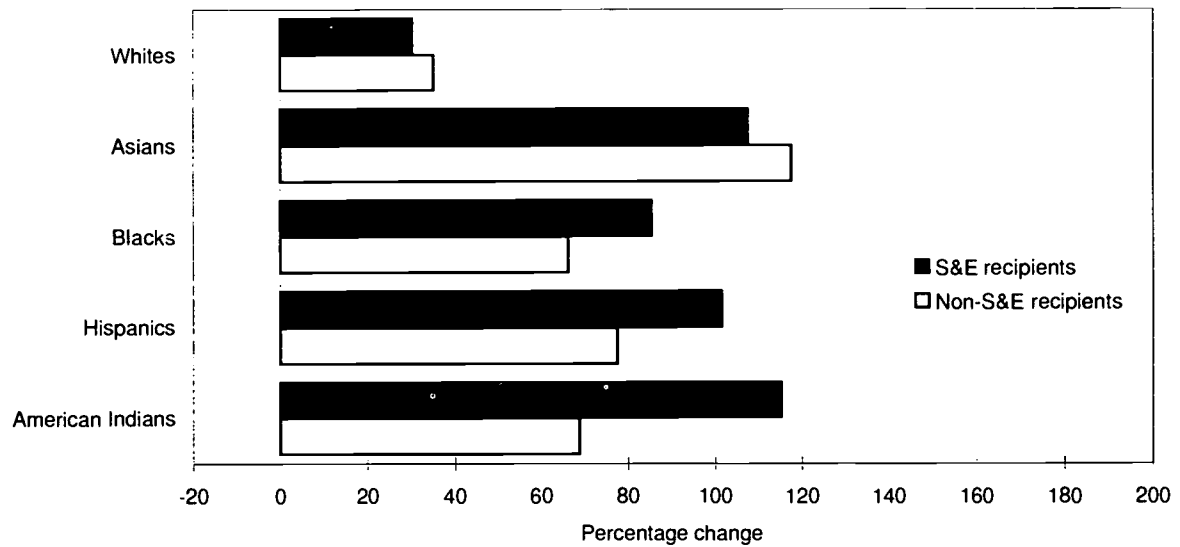
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

**Chart 5. Percentage change in science and engineering (S&E) and non-S&E master's degrees awarded to men, by race/ethnicity: 1987-94**



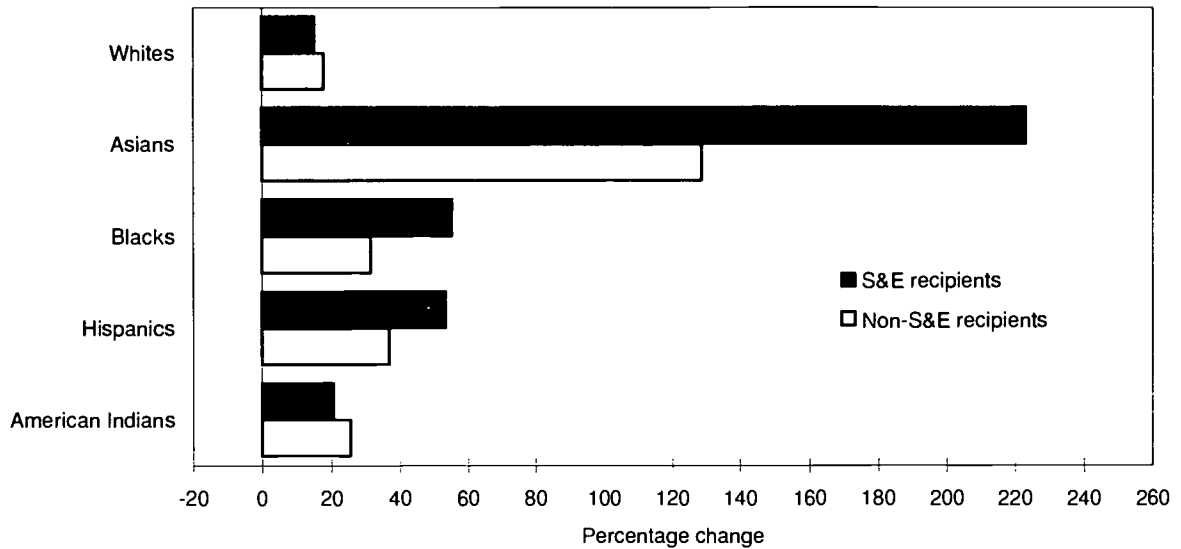
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

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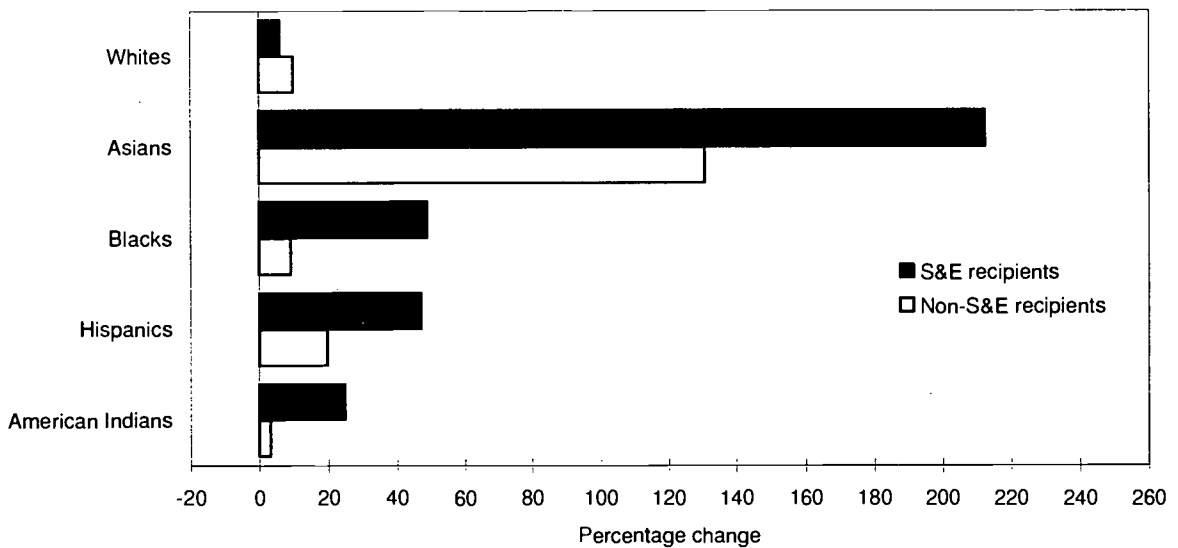
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

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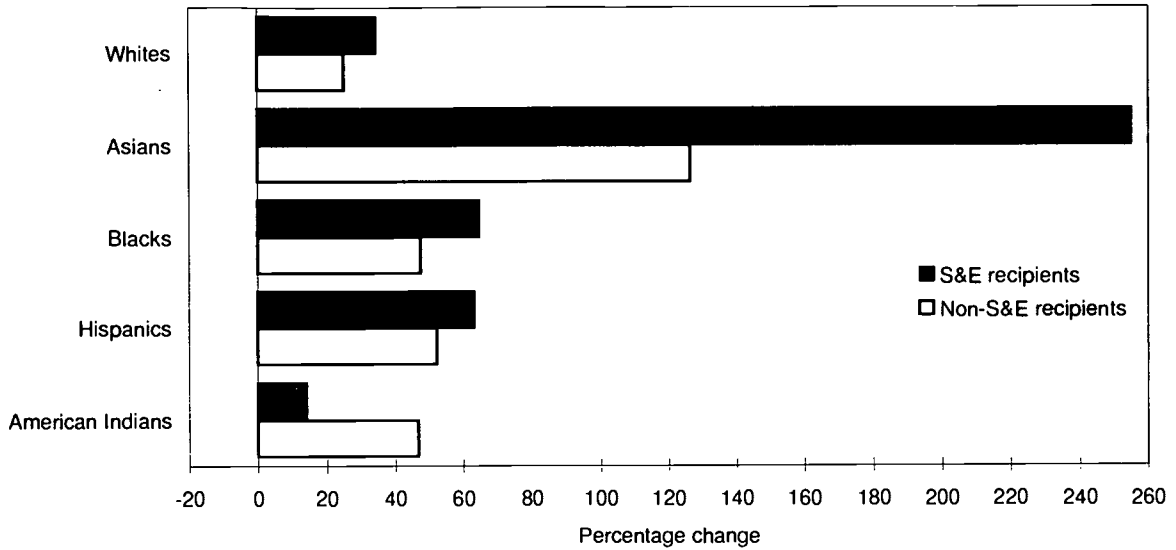
**SOURCE:** National Science Foundation/SRS, Survey of Earned Doctorates

**Chart 8. Percentage change in science and engineering (S&E) and non-S&E doctoral degrees awarded to men, by race/ethnicity: 1987-94**



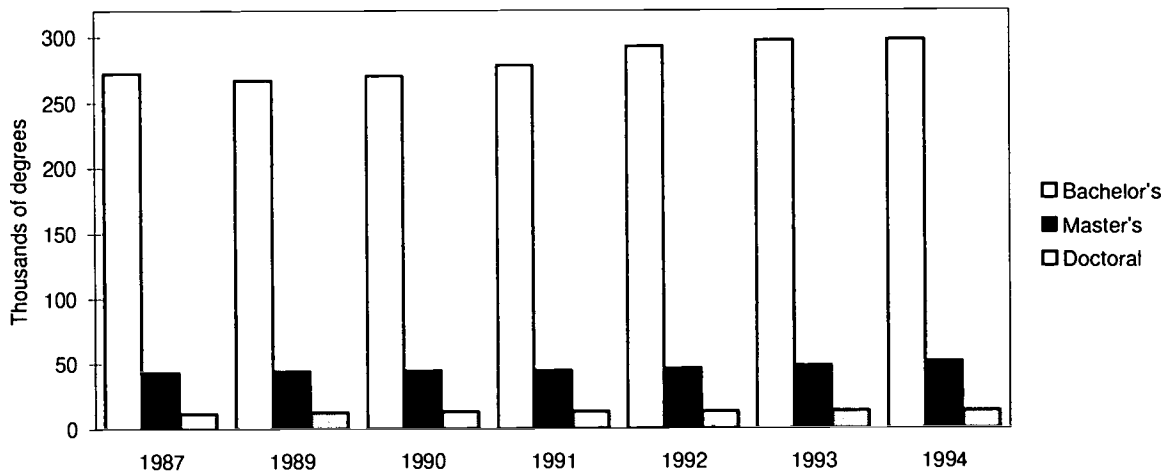
**SOURCE:** National Science Foundation/SRS, Survey of Earned Doctorates

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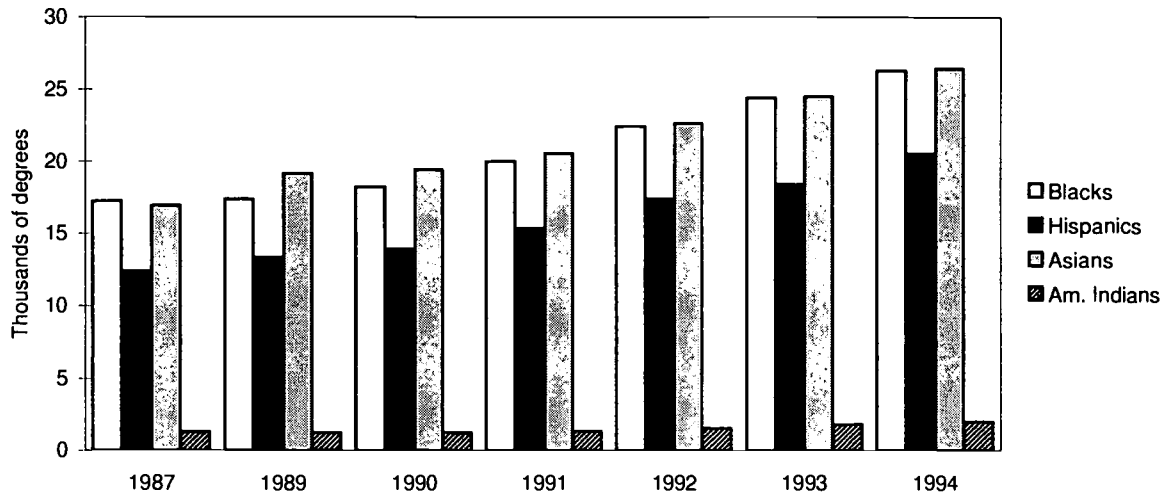
**SOURCE:** National Science Foundation/SRS, Survey of Earned Doctorates

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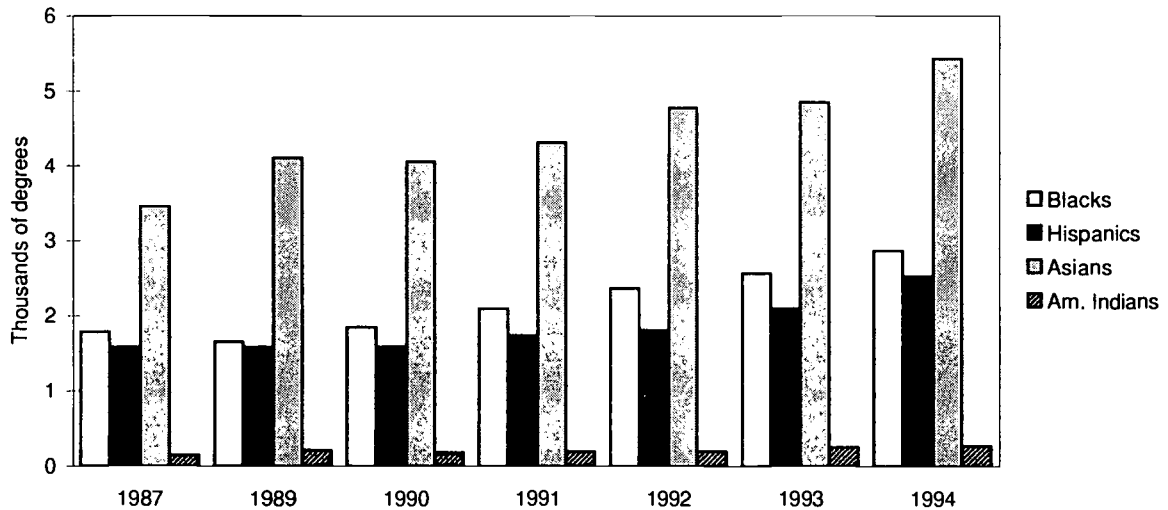
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; IPEDS Completions Surveys, 1987-94; doctoral data from NSF/SRS Survey of Earned Doctorates

**Chart 11. Number of earned science and engineering bachelor's degrees awarded to minority groups: 1987-94**



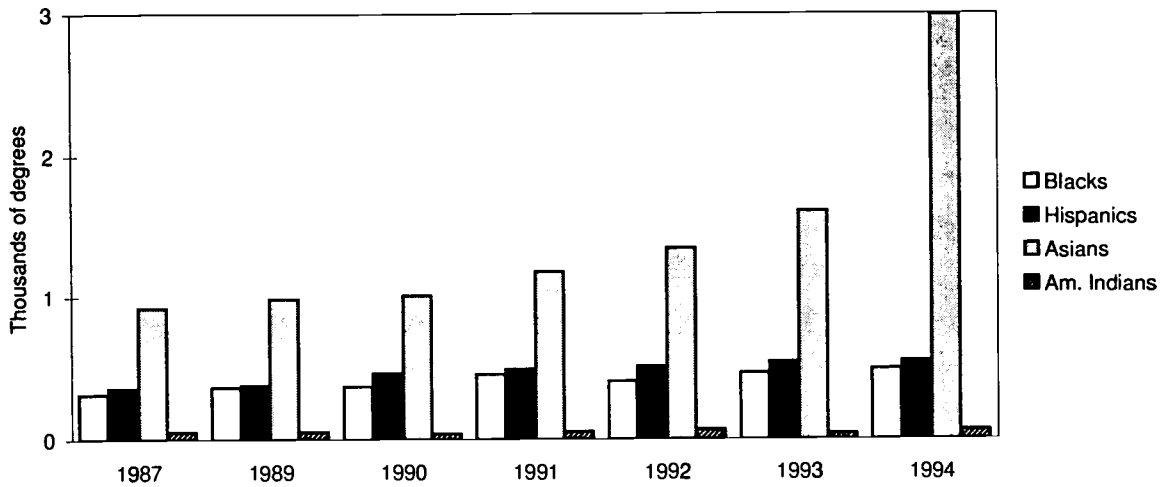
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

**Chart 12. Number of earned science and engineering master's degrees awarded to minority groups: 1987-94**



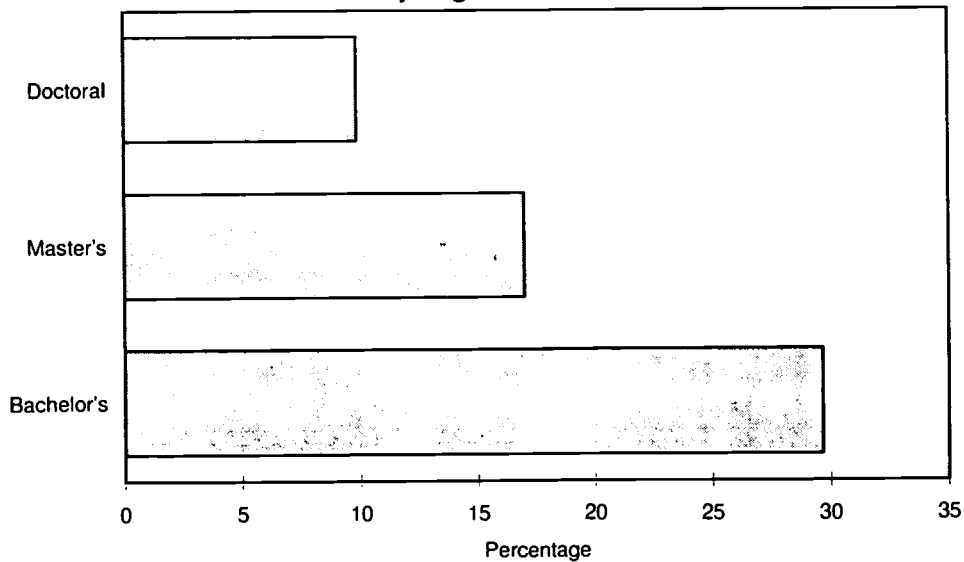
**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; and IPEDS Completions Surveys, 1987-94

**Chart 13. Number of earned science and engineering doctoral degrees awarded to minority groups: 1987-94**



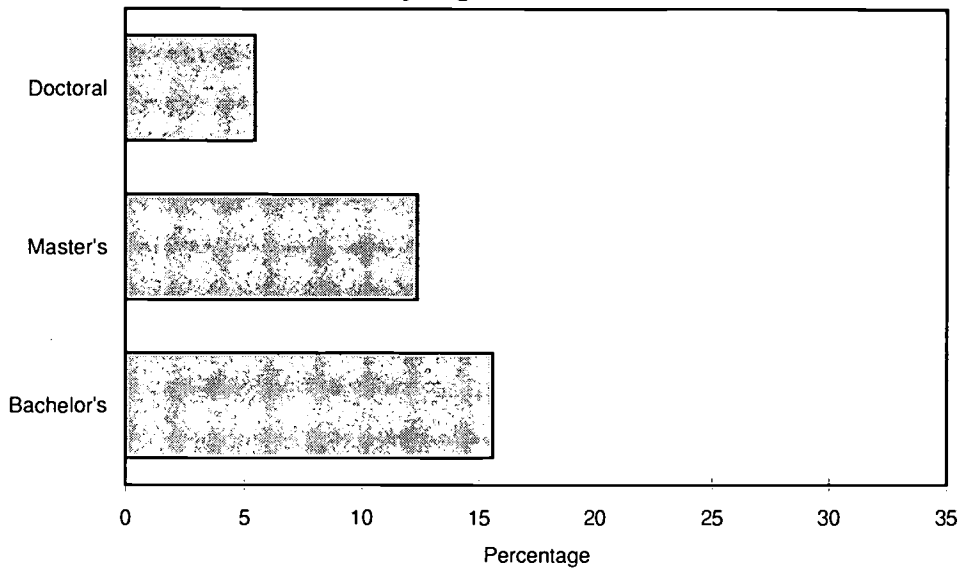
**SOURCE:** National Science Foundation/SRS, Survey of Earned Doctorates

**Chart 14. Percentage of blacks earning science and engineering degrees from historically black colleges and universities, by degree level: 1994**



**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; IPEDS Completions Surveys, 1987-94; doctoral data from NSF/SRS Survey of Earned Doctorates

**Chart 15. Percentage of Hispanics earning science and engineering degrees from institutions in Puerto Rico, by degree level: 1994**



**SOURCES:** Chart by National Science Foundation/SRS; data from National Center for Education Statistics; IPEDS Completions Surveys, 1987-94; doctoral data from NSF/SRS Survey of Earned Doctorates

## SECTION D.

# DETAILED STATISTICAL TABLES



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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: 1987-94, selected years**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
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 <sup>1</sup> .....	96.0	96.3	96.4	96.4	96.8	96.4	96.5
White, non-Hispanics .....	79.3	79.1	78.1	78.0	77.6	76.5	75.3
Asians .....	4.9	5.7	5.6	5.8	6.0	6.3	6.7
Underrepresented minorities, total .....	9.0	9.5	9.7	10.3	11.0	11.5	12.3
Black, non-Hispanics .....	5.0	5.2	5.3	5.6	6.0	6.3	6.6
Hispanics .....	3.6	3.9	4.0	4.3	4.6	4.7	5.2
American Indians or Alaskan Natives .....	.4	.4	.4	.4	.4	.5	.5
U.S. citizens and permanent residents, unknown race/ethnicity .....	2.7	2.1	3.0	2.4	2.1	2.1	2.2
Nonresident aliens <sup>2</sup> .....	4.0	3.7	3.6	3.6	3.2	3.6	3.5
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 <sup>1</sup> .....	95.1	95.4	95.5	95.5	96.0	95.6	95.6
White, non-Hispanics .....	79.9	79.8	78.9	78.8	78.5	77.5	76.3
Asians .....	5.0	5.8	5.8	5.9	6.3	6.6	6.9
Underrepresented minorities, total .....	7.5	7.9	8.0	8.5	9.0	9.4	10.2
Black, non-Hispanics .....	3.8	3.9	3.9	4.2	4.5	4.7	5.0
Hispanics .....	3.4	3.7	3.7	3.9	4.2	4.3	4.7
American Indians or Alaskan Natives .....	.4	.3	.3	.3	.4	.4	.5
U.S. citizens and permanent residents, unknown race/ethnicity .....	2.6	1.9	2.9	2.4	2.2	2.2	2.2
Nonresident aliens <sup>2</sup> .....	4.9	4.6	4.5	4.5	4.0	4.4	4.4
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 <sup>1</sup> .....	97.5	97.6	97.7	97.6	97.7	97.5	97.5
White, non-Hispanics .....	78.4	78.1	77.2	77.0	76.6	75.3	74.0
Asians .....	4.8	5.5	5.4	5.5	5.6	6.0	6.4
Underrepresented minorities, total .....	11.3	11.7	12.0	12.7	13.4	14.1	15.0
Black, non-Hispanics .....	6.9	7.0	7.1	7.4	7.8	8.2	8.7
Hispanics .....	4.0	4.3	4.4	4.8	5.2	5.3	5.8
American Indians or Alaskan Natives .....	.4	.4	.4	.4	.5	.5	.6
U.S. citizens and permanent residents, unknown race/ethnicity .....	3.0	2.4	3.1	2.4	2.1	2.1	2.1
Nonresident aliens <sup>2</sup> .....	2.5	2.4	2.3	2.4	2.3	2.5	2.5

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 2. Percentage distribution of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1987-94, selected years**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
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 <sup>1</sup> .....	80.5	78.5	77.4	76.6	76.4	75.3	75.7
White, non-Hispanics .....	64.9	62.5	61.5	61.1	59.9	58.9	58.9
Asians .....	5.2	5.8	5.6	5.9	6.3	6.0	6.3
Underrepresented minorities, total .....	5.3	4.9	5.0	5.5	5.7	6.0	6.5
Black, non-Hispanics .....	2.7	2.3	2.6	2.9	3.1	3.1	3.3
Hispanics .....	2.4	2.3	2.2	2.4	2.4	2.6	2.9
American Indians or Alaskan Natives .....	.2	.3	.3	.3	.3	.3	.3
U.S. citizens and permanent residents, unknown race/ethnicity .....	5.1	5.3	5.2	4.0	4.5	4.4	4.0
Nonresident aliens <sup>2</sup> .....	19.5	21.5	22.6	23.4	23.6	24.7	24.3
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 <sup>1</sup> .....	76.9	74.8	73.8	72.6	72.5	71.1	71.6
White, non-Hispanics .....	61.7	58.9	58.3	57.9	56.5	55.5	55.6
Asians .....	5.6	6.2	5.8	6.2	6.6	6.1	6.4
Underrepresented minorities, total .....	4.7	4.2	4.1	4.5	4.7	5.0	5.3
Black, non-Hispanics .....	2.2	1.8	2.0	2.2	2.3	2.4	2.5
Hispanics .....	2.3	2.0	2.0	2.1	2.1	2.4	2.6
American Indians or Alaskan Natives .....	.2	.3	.2	.2	.2	.2	.3
U.S. citizens and permanent residents, unknown race/ethnicity .....	5.0	5.5	5.5	4.1	4.7	4.5	4.2
Nonresident aliens <sup>2</sup> .....	23.1	25.2	26.2	27.4	27.5	28.9	28.4
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 <sup>1</sup> .....	88.1	86.3	84.7	84.2	83.7	83.1	83.3
White, non-Hispanics .....	72.0	70.0	68.1	67.3	66.4	65.3	64.9
Asians .....	4.2	5.1	5.3	5.4	5.6	5.7	6.1
Underrepresented minorities, total .....	6.5	6.4	6.8	7.6	7.6	8.0	8.7
Black, non-Hispanics .....	3.8	3.4	3.8	4.2	4.5	4.6	4.8
Hispanics .....	2.5	2.7	2.6	3.0	2.8	3.0	3.6
American Indians or Alaskan Natives .....	.2	.3	.4	.4	.3	.4	.4
U.S. citizens and permanent residents, unknown race/ethnicity .....	5.3	4.7	4.6	3.9	4.1	4.2	3.6
Nonresident aliens <sup>2</sup> .....	11.9	13.7	15.3	15.8	16.3	16.9	16.7

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 3. Percentage distribution of earned doctoral degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1987-94, selected years**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
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 <sup>1</sup> .....	70.6	67.1	67.2	66.2	64.6	65.1	69.4
White, non-Hispanics .....	60.6	57.5	57.6	55.5	54.0	54.0	53.0
Asians .....	4.6	4.5	4.4	4.9	5.4	6.3	11.4
Underrepresented minorities, total .....	3.7	3.7	3.9	4.2	4.0	4.1	4.2
Black, non-Hispanics .....	1.6	1.7	1.6	1.9	1.6	1.8	1.9
Hispanics .....	1.8	1.8	2.0	2.0	2.1	2.1	2.1
American Indians or Alaskan Natives .....	.3	.2	.2	.2	.3	.2	.2
U.S. citizens and permanent residents, unknown race/ethnicity .....	1.8	1.4	1.3	1.7	1.1	.7	.8
Nonresident aliens <sup>2</sup> .....	22.5	24.8	28.7	31.8	32.8	31.9	28.7
Citizenship unknown .....	6.9	8.0	4.1	1.9	2.6	3.0	1.9
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 <sup>1</sup> .....	66.0	61.9	61.7	60.4	58.9	59.3	63.9
White, non-Hispanics .....	56.4	52.6	52.4	50.2	49.0	49.0	47.8
Asians .....	4.8	4.8	4.6	4.7	5.3	6.1	11.9
Underrepresented minorities, total .....	3.0	3.0	3.3	3.6	3.3	3.4	3.5
Black, non-Hispanics .....	1.3	1.4	1.4	1.6	1.3	1.5	1.5
Hispanics .....	1.5	1.5	1.8	1.8	1.8	1.8	1.7
American Indians or Alaskan Natives .....	.2	.2	.2	.2	.2	.1	.2
U.S. citizens and permanent residents, unknown race/ethnicity .....	1.9	1.5	1.4	1.8	1.3	.8	.8
Nonresident aliens <sup>2</sup> .....	26.8	29.5	33.9	37.5	38.3	37.4	33.9
Citizenship unknown .....	7.2	8.6	4.4	2.1	2.8	3.3	2.1
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 <sup>1</sup> .....	83.3	80.6	81.3	80.7	78.8	78.7	82.0
White, non-Hispanics .....	72.1	70.2	71.0	68.4	66.4	65.5	65.1
Asians .....	4.3	3.9	4.0	5.4	5.9	6.9	10.4
Underrepresented minorities, total .....	5.5	5.4	5.4	5.7	5.7	5.9	5.9
Black, non-Hispanics .....	2.4	2.5	2.3	2.8	2.4	2.7	2.7
Hispanics .....	2.7	2.5	2.8	2.7	2.9	2.9	2.9
American Indians or Alaskan Natives .....	.4	.3	.3	.3	.4	.2	.3
U.S. citizens and permanent residents, unknown race/ethnicity .....	1.3	1.0	1.0	1.2	.8	.4	.6
Nonresident aliens <sup>2</sup> .....	10.6	12.8	15.4	17.7	19.1	19.0	16.7
Citizenship unknown .....	6.1	6.6	3.3	1.5	2.1	2.3	1.3

<sup>1</sup> 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).

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	343,070	337,431	345,793	356,785	376,933	388,435	395,380
Engineering .....	74,423	66,947	64,703	62,186	61,898	62,670	62,962
Sciences .....	268,647	270,484	281,090	294,599	315,035	325,765	332,418
Natural sciences .....	125,371	109,350	105,234	105,595	111,108	116,742	122,792
Physical science <sup>1</sup> .....	20,155	17,329	16,203	16,407	17,076	17,691	18,525
Mathematical science .....	16,515	15,314	14,674	14,784	14,851	14,870	14,431
Computer science .....	39,927	30,963	27,695	25,410	24,854	24,477	24,458
Biological science .....	39,047	36,949	38,040	40,351	43,835	47,877	52,213
Agricultural science .....	9,727	8,795	8,622	8,643	10,492	11,827	13,165
Social sciences .....	143,276	161,134	175,856	189,004	203,927	209,023	209,626
Social science .....	100,081	112,180	121,838	130,111	139,884	141,772	139,858
Psychology .....	43,195	48,954	54,018	58,893	64,043	67,251	69,768
Non-S&E <sup>2</sup> .....	660,462	692,740	716,358	751,212	773,139	790,843	787,761
Grand total .....	1,003,532	1,030,171	1,062,151	1,107,997	1,150,072	1,179,278	1,183,141
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	329,393	325,108	333,475	344,061	364,695	374,633	381,451
Engineering .....	68,534	61,875	59,786	57,604	57,675	58,165	58,422
Sciences .....	260,859	263,233	273,689	286,457	307,020	316,468	323,029
Natural sciences .....	120,352	104,928	100,908	101,039	106,739	111,656	117,843
Physical science <sup>1</sup> .....	19,520	16,724	15,608	15,799	16,469	16,927	17,812
Mathematical science .....	15,860	14,771	14,150	14,206	14,259	14,318	13,869
Computer science .....	37,349	28,828	25,629	23,373	22,880	22,273	22,185
Biological science .....	38,185	36,076	37,173	39,288	42,842	46,660	51,058
Agricultural science .....	9,438	8,529	8,348	8,373	10,289	11,478	12,919
Social sciences .....	140,507	158,305	172,781	185,418	200,281	204,812	205,186
Social science .....	97,806	109,862	119,288	127,216	136,902	138,391	136,273
Psychology .....	42,701	48,443	53,493	58,202	63,379	66,421	68,913
Non-S&E <sup>2</sup> .....	645,547	678,606	702,123	734,279	756,830	772,274	767,463
Grand total .....	974,940	1,003,714	1,035,598	1,078,340	1,121,525	1,146,907	1,148,914
White, non-Hispanics							
Total science and engineering .....	272,090	266,862	270,225	278,190	292,614	297,171	297,616
Engineering .....	56,491	50,081	47,494	45,162	45,026	44,853	44,687
Sciences .....	215,599	216,781	222,731	233,028	247,588	252,318	252,929
Natural sciences .....	98,344	84,578	80,210	80,111	84,133	87,401	91,196
Physical science <sup>1</sup> .....	16,653	14,238	13,055	13,145	13,678	13,941	14,616
Mathematical science .....	13,265	12,287	11,765	11,649	11,723	11,669	11,089
Computer science .....	29,181	21,711	18,918	17,349	16,844	16,155	15,816
Biological science .....	30,549	28,404	28,814	30,264	32,506	35,080	37,942
Agricultural science .....	8,696	7,938	7,658	7,704	9,382	10,556	11,733
Social sciences .....	117,255	132,203	142,521	152,917	163,455	164,917	161,733
Social science .....	81,494	91,697	98,385	104,783	111,389	111,154	106,863
Psychology .....	35,761	40,506	44,136	48,134	52,066	53,763	54,870
Non-S&E <sup>2</sup> .....	547,387	573,464	586,461	614,173	628,839	634,432	620,508
Grand total .....	819,477	840,326	856,686	892,363	921,453	931,603	918,124

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	16,934	19,138	19,437	20,552	22,635	24,504	26,420
Engineering .....	5,590	6,075	6,012	6,220	6,265	6,407	6,516
Sciences .....	11,344	13,063	13,425	14,332	16,370	18,097	19,904
Natural sciences .....	7,130	7,260	7,326	7,595	8,496	9,524	10,401
Physical science <sup>1</sup> .....	894	922	937	983	1,001	1,098	1,096
Mathematical science .....	1,034	1,019	874	915	857	915	926
Computer science .....	2,455	2,268	2,144	2,010	2,082	2,245	2,247
Biological science .....	2,565	2,907	3,245	3,559	4,402	5,103	5,959
Agricultural science .....	182	144	126	128	154	163	173
Social sciences .....	4,214	5,803	6,099	6,737	7,874	8,573	9,503
Social science .....	3,060	4,228	4,469	4,852	5,724	6,035	6,726
Psychology .....	1,154	1,575	1,630	1,885	2,150	2,538	2,777
Non-S&E <sup>2</sup> .....	14,987	18,435	18,590	21,173	23,981	26,083	28,255
Grand total .....	31,921	37,573	38,027	41,725	46,616	50,587	54,675
Underrepresented minorities, total							
Total science and engineering .....	30,939	31,950	33,419	36,682	41,383	44,682	48,822
Engineering .....	5,079	4,805	4,729	4,953	5,277	5,714	6,020
Sciences .....	25,860	27,145	28,690	31,729	36,106	38,968	42,802
Natural sciences .....	11,607	10,830	10,530	10,960	11,722	12,510	13,782
Physical science <sup>1</sup> .....	1,480	1,322	1,245	1,355	1,425	1,528	1,737
Mathematical science .....	1,207	1,218	1,178	1,334	1,432	1,490	1,594
Computer science .....	4,307	3,742	3,416	3,292	3,342	3,390	3,611
Biological science .....	4,180	4,151	4,243	4,551	5,043	5,602	6,127
Agricultural science .....	433	397	448	428	480	500	713
Social sciences .....	14,253	16,315	18,160	20,769	24,384	26,458	29,020
Social science .....	9,920	11,212	12,394	14,100	16,647	17,918	19,400
Psychology .....	4,333	5,103	5,766	6,669	7,737	8,540	9,620
Non-S&E <sup>2</sup> .....	66,226	70,215	73,958	81,840	88,065	95,404	102,241
Grand total .....	97,165	102,165	107,377	118,522	129,448	140,086	151,063
Black, non-Hispanics							
Total science and engineering .....	17,230	17,385	18,230	19,987	22,431	24,421	26,289
Engineering .....	2,315	2,067	2,072	2,229	2,362	2,577	2,659
Sciences .....	14,915	15,318	16,158	17,758	20,069	21,844	23,630
Natural sciences .....	6,524	6,005	5,782	5,834	6,401	6,972	7,559
Physical science <sup>1</sup> .....	823	697	650	753	816	836	921
Mathematical science .....	834	792	720	811	904	965	992
Computer science .....	2,820	2,457	2,247	1,997	2,090	2,213	2,398
Biological science .....	1,890	1,916	1,994	2,111	2,385	2,739	2,980
Agricultural science .....	157	143	171	162	206	219	268
Social sciences .....	8,391	9,313	10,376	11,924	13,668	14,872	16,071
Social science .....	5,940	6,570	7,226	8,236	9,489	10,254	10,835
Psychology .....	2,451	2,743	3,150	3,688	4,179	4,618	5,236
Non-S&E <sup>2</sup> .....	37,873	39,452	41,071	45,022	48,880	52,246	56,027
Grand total .....	55,103	56,837	59,301	65,009	71,311	76,667	82,316

See explanatory information and SOURCES at end of table.

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**Table 4. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	12,419	13,327	13,918	15,351	17,391	18,442	20,529
Engineering .....	2,554	2,561	2,511	2,566	2,733	2,961	3,143
Sciences .....	9,865	10,766	11,407	12,785	14,658	15,481	17,386
Natural sciences .....	4,660	4,417	4,357	4,705	4,892	5,034	5,648
Physical science <sup>1</sup> .....	585	563	522	533	546	599	733
Mathematical science .....	321	373	413	480	482	470	543
Computer science .....	1,375	1,195	1,085	1,215	1,173	1,096	1,135
Biological science .....	2,146	2,090	2,119	2,264	2,477	2,652	2,901
Agricultural science .....	233	196	218	213	214	217	336
Social sciences .....	5,205	6,349	7,050	8,080	9,766	10,447	11,738
Social science .....	3,503	4,197	4,645	5,334	6,519	6,860	7,748
Psychology .....	1,702	2,152	2,405	2,746	3,247	3,587	3,990
Non-S&E <sup>2</sup> .....	25,777	28,034	29,946	33,676	35,616	39,403	42,154
Grand total .....	38,196	41,361	43,864	49,027	53,007	57,845	62,683
American Indians or Alaskan Natives							
Total science and engineering .....	1,290	1,238	1,271	1,344	1,561	1,819	2,004
Engineering .....	210	177	146	158	182	176	218
Sciences .....	1,080	1,061	1,125	1,186	1,379	1,643	1,786
Natural sciences .....	423	408	391	421	429	504	575
Physical science <sup>1</sup> .....	72	62	73	69	63	93	83
Mathematical science .....	52	53	45	43	46	55	59
Computer science .....	112	90	84	80	79	81	78
Biological science .....	144	145	130	176	181	211	246
Agricultural science .....	43	58	59	53	60	64	109
Social sciences .....	657	653	734	765	950	1,139	1,211
Social science .....	477	445	523	530	639	804	817
Psychology .....	180	208	211	235	311	335	394
Non-S&E <sup>2</sup> .....	2,576	2,729	2,941	3,142	3,569	3,755	4,060
Grand total .....	3,866	3,967	4,212	4,486	5,130	5,574	6,064
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	9,430	7,158	10,394	8,637	8,063	8,276	8,593
Engineering .....	1,374	914	1,551	1,269	1,107	1,191	1,199
Sciences .....	8,056	6,244	8,843	7,368	6,956	7,085	7,394
Natural sciences .....	3,271	2,260	2,842	2,373	2,388	2,221	2,464
Physical science <sup>1</sup> .....	493	242	371	316	365	360	363
Mathematical science .....	354	247	333	308	247	244	260
Computer science .....	1,406	1,107	1,151	722	612	483	511
Biological science .....	891	614	871	914	891	875	1,030
Agricultural science .....	127	50	116	113	273	259	300
Social sciences .....	4,785	3,984	6,001	4,995	4,568	4,864	4,930
Social science .....	3,332	2,725	4,040	3,481	3,142	3,284	3,284
Psychology .....	1,453	1,259	1,961	1,514	1,426	1,580	1,646
Non-S&E <sup>2</sup> .....	16,947	16,492	23,114	17,093	15,945	16,355	16,459
Grand total .....	26,377	23,650	33,508	25,730	24,008	24,631	25,052

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	13,677	12,323	12,318	12,724	12,238	13,802	13,929
Engineering .....	5,889	5,072	4,917	4,582	4,223	4,505	4,540
Sciences .....	7,788	7,251	7,401	8,142	8,015	9,297	9,389
Natural sciences .....	5,019	4,422	4,326	4,556	4,369	5,086	4,949
Physical science <sup>1</sup> .....	635	605	595	608	607	764	713
Mathematical science .....	655	543	524	578	592	552	562
Computer science .....	2,578	2,135	2,066	2,037	1,974	2,204	2,273
Biological science .....	862	873	867	1,063	993	1,217	1,155
Agricultural science .....	289	266	274	270	203	349	246
Social sciences .....	2,769	2,829	3,075	3,586	3,646	4,211	4,440
Social science .....	2,275	2,318	2,550	2,895	2,982	3,381	3,585
Psychology .....	494	511	525	691	664	830	855
Non-S&E <sup>2</sup> .....	14,915	14,134	14,235	16,933	16,309	18,569	20,298
Grand total .....	28,592	26,457	26,553	29,657	28,547	32,371	34,227

- 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 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).
- 4 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; and IPEDS Completions Surveys, 1987-94

**Table 5. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	207,455	198,728	199,916	201,499	209,270	214,388	216,492
Engineering .....	63,020	56,759	54,730	52,522	52,270	52,696	52,569
Sciences .....	144,435	141,969	145,186	148,977	157,000	161,692	163,923
Natural sciences .....	75,630	65,875	62,518	62,091	64,678	67,855	70,956
Physical science <sup>1</sup> .....	14,422	12,157	11,109	11,199	11,466	11,877	12,253
Mathematical science .....	8,833	8,264	7,863	7,804	7,923	7,859	7,754
Computer science .....	26,038	21,418	19,321	17,896	17,670	17,565	17,466
Biological science .....	20,039	18,295	18,631	19,715	21,107	23,111	25,314
Agricultural science .....	6,298	5,741	5,594	5,477	6,512	7,443	8,169
Social sciences .....	68,805	76,094	82,668	86,886	92,322	93,837	92,967
Social science .....	55,406	61,803	67,269	70,731	75,185	75,808	74,218
Psychology .....	13,399	14,291	15,399	16,155	17,137	18,029	18,749
Non-S&E <sup>2</sup> .....	277,548	288,838	295,951	307,453	316,125	323,148	320,569
Grand total .....	485,003	487,566	495,867	508,952	525,395	537,536	537,061
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	197,189	189,685	190,980	192,516	200,929	204,994	207,030
Engineering .....	57,652	52,160	50,303	48,410	48,518	48,655	48,577
Sciences .....	139,537	137,525	140,677	144,106	152,411	156,339	158,453
Natural sciences .....	72,310	62,973	59,662	59,096	61,872	64,584	67,726
Physical science <sup>1</sup> .....	13,961	11,751	10,694	10,788	11,049	11,352	11,786
Mathematical science .....	8,412	7,917	7,539	7,430	7,565	7,514	7,390
Computer science .....	24,262	19,901	17,849	16,433	16,251	15,964	15,799
Biological science .....	19,606	17,869	18,200	19,171	20,628	22,542	24,739
Agricultural science .....	6,069	5,535	5,380	5,274	6,379	7,212	8,012
Social sciences .....	67,227	74,552	81,015	85,010	90,539	91,755	90,727
Social science .....	53,987	60,431	65,776	69,033	73,577	73,946	72,185
Psychology .....	13,240	14,121	15,239	15,977	16,962	17,809	18,542
Non-S&E <sup>2</sup> .....	268,676	280,764	287,979	298,209	307,360	313,490	310,288
Grand total .....	465,865	470,449	478,959	490,725	508,289	518,484	517,318
White, non-Hispanics							
Total science and engineering .....	165,825	158,590	157,675	158,687	164,220	166,063	165,245
Engineering .....	48,015	42,779	40,533	38,692	38,513	38,244	37,830
Sciences .....	117,810	115,811	117,142	119,995	125,707	127,819	127,415
Natural sciences .....	60,575	52,132	48,848	48,304	50,126	52,048	54,115
Physical science <sup>1</sup> .....	12,139	10,173	9,179	9,203	9,430	9,614	9,958
Mathematical science .....	7,050	6,598	6,253	6,119	6,255	6,131	5,920
Computer science .....	19,793	15,799	13,974	12,916	12,571	12,329	12,022
Biological science .....	15,985	14,377	14,488	15,174	16,030	17,293	18,882
Agricultural science .....	5,608	5,185	4,954	4,892	5,840	6,681	7,333
Social sciences .....	57,235	63,679	68,294	71,691	75,581	75,771	73,300
Social science .....	46,066	51,766	55,662	58,414	61,574	61,269	58,409
Psychology .....	11,169	11,913	12,632	13,277	14,007	14,502	14,891
Non-S&E <sup>2</sup> .....	230,712	239,962	243,349	252,058	258,297	261,177	254,966
Grand total .....	396,537	398,552	401,024	410,745	422,517	427,240	420,211

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	10,445	11,578	11,528	11,942	13,198	14,132	14,967
Engineering .....	4,522	4,936	4,827	4,969	5,067	5,130	5,235
Sciences .....	5,923	6,642	6,701	6,973	8,131	9,002	9,732
Natural sciences .....	4,029	4,073	4,054	4,149	4,783	5,380	5,721
Physical science <sup>1</sup> .....	598	626	592	606	615	675	648
Mathematical science .....	532	527	491	482	486	502	523
Computer science .....	1,490	1,420	1,335	1,268	1,373	1,492	1,476
Biological science .....	1,314	1,442	1,573	1,736	2,230	2,633	2,992
Agricultural science .....	95	58	63	57	79	78	82
Social sciences .....	1,894	2,569	2,647	2,824	3,348	3,622	4,011
Social science .....	1,489	2,065	2,156	2,260	2,728	2,884	3,204
Psychology .....	405	504	491	564	620	738	807
Non-S&E <sup>2</sup> .....	6,459	7,625	7,569	8,831	9,992	10,687	11,453
Grand total .....	16,904	19,203	19,097	20,773	23,190	24,819	26,420
Underrepresented minorities, total							
Total science and engineering .....	15,598	15,672	15,954	17,027	18,890	20,160	22,001
Engineering .....	3,886	3,638	3,574	3,654	3,952	4,261	4,458
Sciences .....	11,712	12,034	12,380	13,373	14,938	15,899	17,543
Natural sciences .....	5,699	5,411	5,043	5,226	5,450	5,766	6,389
Physical science <sup>1</sup> .....	855	771	655	755	745	792	931
Mathematical science .....	627	636	614	657	675	744	786
Computer science .....	2,111	2,013	1,797	1,758	1,864	1,802	1,939
Biological science .....	1,818	1,734	1,685	1,799	1,885	2,130	2,337
Agricultural science .....	288	257	292	257	281	298	396
Social sciences .....	6,013	6,623	7,337	8,147	9,488	10,133	11,154
Social science .....	4,776	5,286	5,788	6,442	7,590	8,013	8,813
Psychology .....	1,237	1,337	1,549	1,705	1,898	2,120	2,341
Non-S&E <sup>2</sup> .....	24,756	25,978	27,093	29,887	31,805	34,440	36,527
Grand total .....	40,354	41,650	43,047	46,914	50,695	54,600	58,528
Black, non-Hispanics							
Total science and engineering .....	7,886	7,685	7,830	8,448	9,375	10,099	10,806
Engineering .....	1,606	1,397	1,416	1,484	1,614	1,764	1,784
Sciences .....	6,280	6,288	6,414	6,964	7,761	8,335	9,022
Natural sciences .....	2,939	2,732	2,476	2,538	2,709	2,872	3,146
Physical science <sup>1</sup> .....	433	365	292	391	381	370	464
Mathematical science .....	399	374	342	380	374	444	457
Computer science .....	1,284	1,205	1,074	971	1,092	1,049	1,161
Biological science .....	723	700	658	696	749	883	927
Agricultural science .....	100	88	110	100	113	126	137
Social sciences .....	3,341	3,556	3,938	4,426	5,052	5,463	5,876
Social science .....	2,680	2,911	3,144	3,547	4,070	4,364	4,644
Psychology .....	661	645	794	879	982	1,099	1,232
Non-S&E <sup>2</sup> .....	14,056	14,228	14,760	15,790	17,143	18,275	19,300
Grand total .....	21,942	21,913	22,590	24,238	26,518	28,374	30,106

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	6,974	7,318	7,434	7,888	8,730	9,160	10,190
Engineering .....	2,100	2,100	2,035	2,039	2,187	2,355	2,495
Sciences .....	4,874	5,218	5,399	5,849	6,543	6,805	7,695
Natural sciences .....	2,516	2,432	2,328	2,458	2,497	2,608	2,925
Physical science <sup>1</sup> .....	377	362	311	318	326	361	415
Mathematical science .....	196	224	249	259	279	273	300
Computer science .....	766	750	669	738	724	700	719
Biological science .....	1,018	965	955	1,019	1,043	1,144	1,298
Agricultural science .....	159	131	144	124	125	130	193
Social sciences .....	2,358	2,786	3,071	3,391	4,046	4,197	4,770
Social science .....	1,845	2,153	2,384	2,634	3,220	3,269	3,774
Psychology .....	513	633	687	757	826	928	996
Non-S&E <sup>2</sup> .....	9,664	10,684	11,249	12,893	13,296	14,665	15,670
Grand total .....	16,638	18,002	18,683	20,781	22,026	23,825	25,860
American Indians or Alaskan Natives							
Total science and engineering .....	738	669	690	691	785	901	1,005
Engineering .....	180	141	123	131	151	142	179
Sciences .....	558	528	567	560	634	759	826
Natural sciences .....	244	247	239	230	244	286	318
Physical science <sup>1</sup> .....	45	44	52	46	38	61	52
Mathematical science .....	32	38	23	18	22	27	29
Computer science .....	61	58	54	49	48	53	59
Biological science .....	77	69	72	84	93	103	112
Agricultural science .....	29	38	38	33	43	42	66
Social sciences .....	314	281	328	330	390	473	508
Social science .....	251	222	260	261	300	380	395
Psychology .....	63	59	68	69	90	93	113
Non-S&E <sup>2</sup> .....	1,036	1,066	1,084	1,204	1,366	1,500	1,557
Grand total .....	1,774	1,735	1,774	1,895	2,151	2,401	2,562
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	5,321	3,845	5,823	4,860	4,621	4,639	4,817
Engineering .....	1,229	807	1,369	1,095	986	1,020	1,054
Sciences .....	4,092	3,038	4,454	3,765	3,635	3,619	3,763
Natural sciences .....	2,007	1,357	1,717	1,417	1,513	1,390	1,501
Physical science <sup>1</sup> .....	369	181	268	224	259	271	249
Mathematical science .....	203	156	181	172	149	137	161
Computer science .....	868	669	743	491	443	341	362
Biological science .....	489	316	454	462	483	486	528
Agricultural science .....	78	35	71	68	179	155	201
Social sciences .....	2,085	1,681	2,737	2,348	2,122	2,229	2,262
Social science .....	1,656	1,314	2,170	1,917	1,685	1,780	1,759
Psychology .....	429	367	567	431	437	449	503
Non-S&E <sup>2</sup> .....	6,749	7,199	9,968	7,433	7,266	7,186	7,342
Grand total .....	12,070	11,044	15,791	12,293	11,887	11,825	12,159

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	10,266	9,043	8,936	8,983	8,341	9,394	9,462
Engineering .....	5,368	4,599	4,427	4,112	3,752	4,041	3,992
Sciences .....	4,898	4,444	4,509	4,871	4,589	5,353	5,470
Natural sciences .....	3,320	2,902	2,856	2,995	2,806	3,271	3,230
Physical science <sup>1</sup> .....	461	406	415	411	417	525	467
Mathematical science .....	421	347	324	374	358	345	364
Computer science .....	1,776	1,517	1,472	1,463	1,419	1,601	1,667
Biological science .....	433	426	431	544	479	569	575
Agricultural science .....	229	206	214	203	133	231	157
Social sciences .....	1,578	1,542	1,653	1,876	1,783	2,082	2,240
Social science .....	1,419	1,372	1,493	1,698	1,608	1,862	2,033
Psychology .....	159	170	160	178	175	220	207
Non-S&E <sup>2</sup> .....	8,872	8,074	7,972	9,244	8,765	9,658	10,281
Grand total .....	19,138	17,117	16,908	18,227	17,106	19,052	19,743

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

<sup>2</sup> Non-S&E refers to non-science and non-engineering.

<sup>3</sup> 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).

<sup>4</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 6. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	135,615	138,703	145,877	155,286	167,663	174,047	178,888
Engineering .....	11,403	10,188	9,973	9,664	9,628	9,974	10,393
Sciences .....	124,212	128,515	135,904	145,622	158,035	164,073	168,495
Natural sciences .....	49,741	43,475	42,716	43,504	46,430	48,887	51,836
Physical science <sup>1</sup> .....	5,733	5,172	5,094	5,208	5,610	5,814	6,272
Mathematical science .....	7,682	7,050	6,811	6,980	6,928	7,011	6,677
Computer science .....	13,889	9,545	8,374	7,514	7,184	6,912	6,992
Biological science .....	19,008	18,654	19,409	20,636	22,728	24,766	26,899
Agricultural science .....	3,429	3,054	3,028	3,166	3,980	4,384	4,996
Social sciences .....	74,471	85,040	93,188	102,118	111,605	115,186	116,659
Social science .....	44,675	50,377	54,569	59,380	64,699	65,964	65,640
Psychology .....	29,796	34,663	38,619	42,738	46,906	49,222	51,019
Non-S&E <sup>2</sup> .....	382,914	403,902	420,407	443,759	457,014	467,695	467,192
Grand total .....	518,529	542,605	566,284	599,045	624,677	641,742	646,080
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	132,204	135,423	142,495	151,545	163,766	169,639	174,421
Engineering .....	10,882	9,715	9,483	9,194	9,157	9,510	9,845
Sciences .....	121,322	125,708	133,012	142,351	154,609	160,129	164,576
Natural sciences .....	48,042	41,955	41,246	41,943	44,867	47,072	50,117
Physical science <sup>1</sup> .....	5,559	4,973	4,914	5,011	5,420	5,575	6,026
Mathematical science .....	7,448	6,854	6,611	6,776	6,694	6,804	6,479
Computer science .....	13,087	8,927	7,780	6,940	6,629	6,309	6,386
Biological science .....	18,579	18,207	18,973	20,117	22,214	24,118	26,319
Agricultural science .....	3,369	2,994	2,968	3,099	3,910	4,266	4,907
Social sciences .....	73,280	83,753	91,766	100,408	109,742	113,057	114,459
Social science .....	43,819	49,431	53,512	58,183	63,325	64,445	64,088
Psychology .....	29,461	34,322	38,254	42,225	46,417	48,612	50,371
Non-S&E <sup>2</sup> .....	376,871	397,842	414,144	436,070	449,470	458,784	457,175
Grand total .....	509,075	533,265	556,639	587,615	613,236	628,423	631,596
White, non-Hispanics							
Total science and engineering .....	106,265	108,272	112,550	119,503	128,394	131,108	132,371
Engineering .....	8,476	7,302	6,961	6,470	6,513	6,609	6,857
Sciences .....	97,789	100,970	105,589	113,033	121,881	124,499	125,514
Natural sciences .....	37,769	32,446	31,362	31,807	34,007	35,353	37,081
Physical science <sup>1</sup> .....	4,514	4,065	3,876	3,942	4,248	4,327	4,658
Mathematical science .....	6,215	5,689	5,512	5,530	5,468	5,538	5,169
Computer science .....	9,388	5,912	4,944	4,433	4,273	3,826	3,794
Biological science .....	14,564	14,027	14,326	15,090	16,476	17,787	19,060
Agricultural science .....	3,088	2,753	2,704	2,812	3,542	3,875	4,400
Social sciences .....	60,020	68,524	74,227	81,226	87,874	89,146	88,433
Social science .....	35,428	39,931	42,723	46,369	49,815	49,885	48,454
Psychology .....	24,592	28,593	31,504	34,857	38,059	39,261	39,979
Non-S&E <sup>2</sup> .....	316,675	333,502	343,112	362,115	370,542	373,255	365,542
Grand total .....	422,940	441,774	455,662	481,618	498,936	504,363	497,913

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
<b>Asians</b>							
Total science and engineering .....	6,489	7,560	7,909	8,610	9,437	10,372	11,453
Engineering .....	1,068	1,139	1,185	1,251	1,198	1,277	1,281
Sciences .....	5,421	6,421	6,724	7,359	8,239	9,095	10,172
Natural sciences .....	3,101	3,187	3,272	3,446	3,713	4,144	4,680
Physical science <sup>1</sup> .....	296	296	345	377	386	423	448
Mathematical science .....	502	492	383	433	371	413	403
Computer science .....	965	848	809	742	709	753	771
Biological science .....	1,251	1,465	1,672	1,823	2,172	2,470	2,967
Agricultural science .....	87	86	63	71	75	85	91
Social sciences .....	2,320	3,234	3,452	3,913	4,526	4,951	5,492
Social science .....	1,571	2,163	2,313	2,592	2,996	3,151	3,522
Psychology .....	749	1,071	1,139	1,321	1,530	1,800	1,970
Non-S&E <sup>2</sup> .....	8,528	10,810	11,021	12,342	13,989	15,396	16,802
Grand total .....	15,017	18,370	18,930	20,952	23,426	25,768	28,255
<b>Underrepresented minorities, total</b>							
Total science and engineering .....	15,341	16,278	17,465	19,655	22,493	24,522	26,821
Engineering .....	1,193	1,167	1,155	1,299	1,325	1,453	1,562
Sciences .....	14,148	15,111	16,310	18,356	21,168	23,069	25,259
Natural sciences .....	5,908	5,419	5,487	5,734	6,272	6,744	7,393
Physical science <sup>1</sup> .....	625	551	590	600	680	736	806
Mathematical science .....	580	582	564	677	757	746	808
Computer science .....	2,196	1,729	1,619	1,534	1,478	1,588	1,672
Biological science .....	2,362	2,417	2,558	2,752	3,158	3,472	3,790
Agricultural science .....	145	140	156	171	199	202	317
Social sciences .....	8,240	9,692	10,823	12,622	14,896	16,325	17,866
Social science .....	5,144	5,926	6,606	7,658	9,057	9,905	10,587
Psychology .....	3,096	3,766	4,217	4,964	5,839	6,420	7,279
Non-S&E <sup>2</sup> .....	41,470	44,237	46,865	51,953	56,260	60,964	65,714
Grand total .....	56,811	60,515	64,330	71,608	78,753	85,486	92,535
<b>Black, non-Hispanics</b>							
Total science and engineering .....	9,344	9,700	10,400	11,539	13,056	14,322	15,483
Engineering .....	709	670	656	745	748	813	875
Sciences .....	8,635	9,030	9,744	10,794	12,308	13,509	14,608
Natural sciences .....	3,585	3,273	3,306	3,296	3,692	4,100	4,413
Physical science <sup>1</sup> .....	390	332	358	362	435	466	457
Mathematical science .....	435	418	378	431	530	521	535
Computer science .....	1,536	1,252	1,173	1,026	998	1,164	1,237
Biological science .....	1,167	1,216	1,336	1,415	1,636	1,856	2,053
Agricultural science .....	57	55	61	62	93	93	131
Social sciences .....	5,050	5,757	6,438	7,498	8,616	9,409	10,195
Social science .....	3,260	3,659	4,082	4,689	5,419	5,890	6,191
Psychology .....	1,790	2,098	2,356	2,809	3,197	3,519	4,004
Non-S&E <sup>2</sup> .....	23,817	25,224	26,311	29,232	31,737	33,971	36,727
Grand total .....	33,161	34,924	36,711	40,771	44,793	48,293	52,210

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	5,445	6,009	6,484	7,463	8,661	9,282	10,339
Engineering .....	454	461	476	527	546	606	648
Sciences .....	4,991	5,548	6,008	6,936	8,115	8,676	9,691
Natural sciences .....	2,144	1,985	2,029	2,247	2,395	2,426	2,723
Physical science <sup>1</sup> .....	208	201	211	215	220	238	318
Mathematical science .....	125	149	164	221	203	197	243
Computer science .....	609	445	416	477	449	396	416
Biological science .....	1,128	1,125	1,164	1,245	1,434	1,508	1,603
Agricultural science .....	74	65	74	89	89	87	143
Social sciences .....	2,847	3,563	3,979	4,689	5,720	6,250	6,968
Social science .....	1,658	2,044	2,261	2,700	3,299	3,591	3,974
Psychology .....	1,189	1,519	1,718	1,989	2,421	2,659	2,994
Non-S&E <sup>2</sup> .....	16,113	17,350	18,697	20,783	22,320	24,738	26,484
Grand total .....	21,558	23,359	25,181	28,246	30,981	34,020	36,823
American Indians or Alaskan Natives							
Total science and engineering .....	552	569	581	653	776	918	999
Engineering .....	30	36	23	27	31	34	39
Sciences .....	522	533	558	626	745	884	960
Natural sciences .....	179	161	152	191	185	218	257
Physical science <sup>1</sup> .....	27	18	21	23	25	32	31
Mathematical science .....	20	15	22	25	24	28	30
Computer science .....	51	32	30	31	31	28	19
Biological science .....	67	76	58	92	88	108	134
Agricultural science .....	14	20	21	20	17	22	43
Social sciences .....	343	372	406	435	560	666	703
Social science .....	226	223	263	269	339	424	422
Psychology .....	117	149	143	166	221	242	281
Non-S&E <sup>2</sup> .....	1,540	1,663	1,857	1,938	2,203	2,255	2,503
Grand total .....	2,092	2,232	2,438	2,591	2,979	3,173	3,502
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	4,109	3,313	4,571	3,777	3,442	3,637	3,776
Engineering .....	145	107	182	174	121	171	145
Sciences .....	3,964	3,206	4,389	3,603	3,321	3,466	3,631
Natural sciences .....	1,264	903	1,125	956	875	831	963
Physical science <sup>1</sup> .....	124	61	103	92	106	89	114
Mathematical science .....	151	91	152	136	98	107	99
Computer science .....	538	438	408	231	169	142	149
Biological science .....	402	298	417	452	408	389	502
Agricultural science .....	49	15	45	45	94	104	99
Social sciences .....	2,700	2,303	3,264	2,647	2,446	2,635	2,668
Social science .....	1,676	1,411	1,870	1,564	1,457	1,504	1,525
Psychology .....	1,024	892	1,394	1,083	989	1,131	1,143
Non-S&E <sup>2</sup> .....	10,198	9,293	13,146	9,660	8,679	9,169	9,117
Grand total .....	14,307	12,606	17,717	13,437	12,121	12,806	12,893

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	3,411	3,280	3,382	3,741	3,897	4,408	4,467
Engineering .....	521	473	490	470	471	464	548
Sciences .....	2,890	2,807	2,892	3,271	3,426	3,944	3,919
Natural sciences .....	1,699	1,520	1,470	1,561	1,563	1,815	1,719
Physical science <sup>1</sup> .....	174	199	180	197	190	239	246
Mathematical science .....	234	196	200	204	234	207	198
Computer science .....	802	618	594	574	555	603	606
Biological science .....	429	447	436	519	514	648	580
Agricultural science .....	60	60	60	67	70	118	89
Social sciences .....	1,191	1,287	1,422	1,710	1,863	2,129	2,200
Social science .....	856	946	1,057	1,197	1,374	1,519	1,552
Psychology .....	335	341	365	513	489	610	648
Non-S&E <sup>2</sup> .....	6,043	6,060	6,263	7,689	7,544	8,911	10,017
Grand total .....	9,454	9,340	9,645	11,430	11,441	13,319	14,484

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

<sup>2</sup> Non-S&E refers to non-science and non-engineering.

<sup>3</sup> 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).

<sup>4</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 7. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	66,774	70,333	72,228	72,828	76,184	81,415	86,080
Engineering .....	22,057	23,735	23,985	24,007	25,010	27,658	28,707
Sciences .....	44,717	46,598	48,243	48,821	51,174	53,757	57,373
Natural sciences .....	25,269	26,089	26,293	25,669	26,775	27,713	28,869
Physical science <sup>1</sup> .....	5,638	5,703	5,411	5,282	5,352	5,365	5,688
Mathematical science .....	3,327	3,430	3,684	3,632	4,019	4,084	4,108
Computer science .....	8,481	9,399	9,643	9,324	9,530	10,167	10,421
Biological science .....	4,999	4,953	4,893	4,806	4,816	4,798	5,217
Agricultural science .....	2,824	2,604	2,662	2,625	3,058	3,299	3,435
Social sciences .....	19,448	20,509	21,950	23,152	24,399	26,044	28,504
Social science .....	11,283	11,857	12,642	13,350	14,119	15,024	16,230
Psychology .....	8,165	8,652	9,308	9,802	10,280	11,020	12,274
Non-S&E <sup>2</sup> .....	223,758	240,717	252,719	265,670	278,023	289,558	302,928
Grand total .....	290,532	311,050	324,947	338,498	354,207	370,973	389,008
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	53,729	55,190	55,890	55,779	58,177	61,265	65,201
Engineering .....	16,276	16,988	16,746	16,487	17,111	18,539	19,350
Sciences .....	37,453	38,202	39,144	39,292	41,066	42,726	45,851
Natural sciences .....	20,234	20,167	19,963	18,935	19,459	19,651	20,451
Physical science <sup>1</sup> .....	4,582	4,465	4,047	3,778	3,814	3,763	3,918
Mathematical science .....	2,491	2,454	2,649	2,573	2,907	2,946	3,013
Computer science .....	6,414	6,957	7,080	6,505	6,361	6,388	6,509
Biological science .....	4,490	4,317	4,164	4,057	4,021	3,949	4,284
Agricultural science .....	2,257	1,974	2,023	2,022	2,356	2,605	2,727
Social sciences .....	17,219	18,035	19,181	20,357	21,607	23,075	25,400
Social science .....	9,274	9,642	10,258	10,872	11,629	12,387	13,487
Psychology .....	7,945	8,393	8,923	9,485	9,978	10,688	11,913
Non-S&E <sup>2</sup> .....	208,539	223,737	234,455	245,108	256,378	265,599	277,301
Grand total .....	262,268	278,927	290,345	300,887	314,555	326,864	342,502
White, non-Hispanics							
Total science and engineering .....	43,360	43,945	44,450	44,513	45,649	47,975	50,711
Engineering .....	12,837	12,832	12,859	12,635	12,752	13,920	14,469
Sciences .....	30,523	31,113	31,591	31,878	32,897	34,055	36,242
Natural sciences .....	16,352	16,080	15,742	15,005	15,136	15,322	15,524
Physical science <sup>1</sup> .....	3,834	3,766	3,401	3,129	3,067	3,078	3,145
Mathematical science .....	2,012	2,032	2,169	2,068	2,336	2,354	2,379
Computer science .....	4,717	4,786	4,851	4,637	4,407	4,464	4,286
Biological science .....	3,745	3,679	3,501	3,353	3,251	3,144	3,453
Agricultural science .....	2,044	1,817	1,820	1,818	2,075	2,282	2,261
Social sciences .....	14,171	15,033	15,849	16,873	17,761	18,733	20,718
Social science .....	7,473	7,958	8,360	8,900	9,523	9,923	10,758
Psychology .....	6,698	7,075	7,489	7,973	8,238	8,810	9,960
Non-S&E <sup>2</sup> .....	173,447	186,377	192,424	203,011	211,413	217,693	223,202
Grand total .....	216,807	230,322	236,874	247,524	257,062	265,668	273,913

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	3,455	4,100	4,055	4,310	4,763	4,846	5,422
Engineering .....	1,650	1,992	1,863	2,008	2,223	2,260	2,443
Sciences .....	1,805	2,108	2,192	2,302	2,540	2,586	2,979
Natural sciences .....	1,426	1,617	1,629	1,735	1,916	1,918	2,159
Physical science <sup>1</sup> .....	227	278	234	251	295	249	284
Mathematical science .....	183	178	184	189	201	197	233
Computer science .....	779	894	941	1,014	1,105	1,106	1,228
Biological science .....	190	223	225	231	264	305	332
Agricultural science .....	47	44	45	50	51	61	82
Social sciences .....	379	491	563	567	624	668	820
Social science .....	266	360	404	397	441	477	550
Psychology .....	113	131	159	170	183	191	270
Non-S&E <sup>2</sup> .....	4,674	6,074	5,939	6,760	7,530	8,323	9,137
Grand total .....	8,129	10,174	9,994	11,070	12,293	13,169	14,559
Underrepresented minorities, total							
Total science and engineering .....	3,515	3,446	3,615	4,026	4,360	4,899	5,636
Engineering .....	953	856	868	906	996	1,195	1,368
Sciences .....	2,562	2,590	2,747	3,120	3,364	3,704	4,268
Natural sciences .....	1,122	1,025	1,002	1,195	1,258	1,358	1,569
Physical science <sup>1</sup> .....	210	188	194	182	209	231	257
Mathematical science .....	136	99	127	194	147	184	190
Computer science .....	352	381	357	425	480	484	552
Biological science .....	304	267	244	286	307	312	297
Agricultural science .....	120	90	80	108	115	147	273
Social sciences .....	1,440	1,565	1,745	1,925	2,106	2,346	2,699
Social science .....	758	777	868	1,031	1,118	1,282	1,443
Psychology .....	682	788	877	894	988	1,064	1,256
Non-S&E <sup>2</sup> .....	18,488	19,224	20,403	22,640	24,544	26,713	30,095
Grand total .....	22,003	22,670	24,018	26,666	28,904	31,612	35,731
Black, non-Hispanics							
Total science and engineering .....	1,784	1,652	1,847	2,090	2,356	2,554	2,849
Engineering .....	403	355	387	398	466	564	589
Sciences .....	1,381	1,297	1,460	1,692	1,890	1,990	2,260
Natural sciences .....	581	495	527	644	699	716	821
Physical science <sup>1</sup> .....	79	78	87	73	98	105	127
Mathematical science .....	73	59	70	100	77	98	109
Computer science .....	207	198	232	283	316	308	365
Biological science .....	167	124	110	137	149	135	142
Agricultural science .....	55	36	28	51	59	70	78
Social sciences .....	800	802	933	1,048	1,191	1,274	1,439
Social science .....	424	407	462	594	660	730	803
Psychology .....	376	395	471	454	531	544	636
Non-S&E <sup>2</sup> .....	11,389	11,803	12,626	13,767	15,064	16,343	18,087
Grand total .....	13,173	13,455	14,473	15,857	17,420	18,897	20,936

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	1,584	1,585	1,587	1,736	1,806	2,092	2,514
Engineering .....	512	468	446	468	488	581	719
Sciences .....	1,072	1,117	1,141	1,268	1,318	1,511	1,795
Natural sciences .....	493	444	431	494	503	574	680
Physical science <sup>1</sup> .....	122	92	98	96	93	114	114
Mathematical science .....	60	34	51	85	66	78	75
Computer science .....	123	144	118	128	149	162	169
Biological science .....	126	126	120	136	146	151	138
Agricultural science .....	62	48	44	49	49	69	184
Social sciences .....	579	673	710	774	815	937	1,115
Social science .....	308	313	341	383	396	474	557
Psychology .....	271	360	369	391	419	463	558
Non-S&E <sup>2</sup> .....	6,197	6,548	6,908	7,948	8,450	9,279	10,663
Grand total .....	7,781	8,133	8,495	9,684	10,256	11,371	13,177
American Indians or Alaskan Natives							
Total science and engineering .....	147	209	181	200	198	253	273
Engineering .....	38	33	35	40	42	50	60
Sciences .....	109	176	146	160	156	203	213
Natural sciences .....	48	86	44	57	56	68	68
Physical science <sup>1</sup> .....	9	18	9	13	18	12	16
Mathematical science .....	3	6	6	9	4	8	6
Computer science .....	22	39	7	14	15	14	18
Biological science .....	11	17	14	13	12	26	17
Agricultural science .....	3	6	8	8	7	8	11
Social sciences .....	61	90	102	103	100	135	145
Social science .....	26	57	65	54	62	78	83
Psychology .....	35	33	37	49	38	57	62
Non-S&E <sup>2</sup> .....	902	873	869	925	1,030	1,091	1,345
Grand total .....	1,049	1,082	1,050	1,125	1,228	1,344	1,618
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	3,399	3,699	3,770	2,930	3,405	3,545	3,432
Engineering .....	836	1,308	1,156	938	1,140	1,164	1,070
Sciences .....	2,563	2,391	2,614	1,992	2,265	2,381	2,362
Natural sciences .....	1,334	1,445	1,590	1,000	1,149	1,053	1,199
Physical science <sup>1</sup> .....	311	233	218	216	243	205	232
Mathematical science .....	160	145	169	122	223	211	211
Computer science .....	566	896	931	429	369	334	443
Biological science .....	251	148	194	187	199	188	202
Agricultural science .....	46	23	78	46	115	115	111
Social sciences .....	1,229	946	1,024	992	1,116	1,328	1,163
Social science .....	777	547	626	544	547	705	736
Psychology .....	452	399	398	448	569	623	427
Non-S&E <sup>2</sup> .....	11,930	12,062	15,689	12,697	12,891	12,870	14,867
Grand total .....	15,329	15,761	19,459	15,627	16,296	16,415	18,299

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	13,045	15,143	16,338	17,049	18,007	20,150	20,879
Engineering .....	5,781	6,747	7,239	7,520	7,899	9,119	9,357
Sciences .....	7,264	8,396	9,099	9,529	10,108	11,031	11,522
Natural sciences .....	5,035	5,922	6,330	6,734	7,316	8,062	8,418
Physical science <sup>1</sup> .....	1,056	1,238	1,364	1,504	1,538	1,602	1,770
Mathematical science .....	836	976	1,035	1,059	1,112	1,138	1,095
Computer science .....	2,067	2,442	2,563	2,819	3,169	3,779	3,912
Biological science .....	509	636	729	749	795	849	933
Agricultural science .....	567	630	639	603	702	694	708
Social sciences .....	2,229	2,474	2,769	2,795	2,792	2,969	3,104
Social science .....	2,009	2,215	2,384	2,478	2,490	2,637	2,743
Psychology .....	220	259	385	317	302	332	361
Non-S&E <sup>2</sup> .....	15,219	16,980	18,264	20,562	21,645	23,959	25,627
Grand total .....	28,264	32,123	34,602	37,611	39,652	44,109	46,506

- 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 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).
- 4 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; and IPEDS Completions Surveys, 1987-94

**Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	45,611	47,724	48,424	47,748	49,768	53,102	55,461
Engineering .....	19,290	20,654	20,717	20,650	21,345	23,565	24,286
Sciences .....	26,321	27,070	27,707	27,098	28,423	29,537	31,175
Natural sciences .....	16,714	17,250	17,258	16,530	17,480	18,076	18,813
Physical science <sup>1</sup> .....	4,225	4,180	3,981	3,825	3,895	3,803	4,030
Mathematical science .....	2,026	2,060	2,208	2,146	2,457	2,468	2,541
Computer science .....	5,985	6,773	6,968	6,563	6,884	7,411	7,727
Biological science .....	2,555	2,491	2,393	2,315	2,316	2,365	2,475
Agricultural science .....	1,923	1,746	1,708	1,681	1,928	2,029	2,040
Social sciences .....	9,607	9,820	10,449	10,568	10,943	11,461	12,362
Social science .....	6,769	7,006	7,424	7,574	7,939	8,419	8,945
Psychology .....	2,838	2,814	3,025	2,994	3,004	3,042	3,417
Non-S&E <sup>2</sup> .....	96,044	101,675	105,601	109,147	112,531	116,651	121,301
Grand total .....	141,655	149,399	154,025	156,895	162,299	169,753	176,762
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	35,093	35,681	35,722	34,667	36,063	37,737	39,700
Engineering .....	13,946	14,446	14,174	13,977	14,350	15,542	16,140
Sciences .....	21,147	21,235	21,548	20,690	21,713	22,195	23,560
Natural sciences .....	13,036	12,985	12,819	11,839	12,393	12,504	12,985
Physical science <sup>1</sup> .....	3,391	3,226	2,953	2,755	2,784	2,685	2,794
Mathematical science .....	1,482	1,428	1,559	1,463	1,745	1,717	1,803
Computer science .....	4,410	4,925	5,035	4,419	4,504	4,600	4,779
Biological science .....	2,287	2,134	2,014	1,945	1,931	1,959	2,013
Agricultural science .....	1,466	1,272	1,258	1,257	1,429	1,543	1,596
Social sciences .....	8,111	8,250	8,729	8,851	9,320	9,691	10,575
Social science .....	5,362	5,535	5,840	5,961	6,411	6,760	7,288
Psychology .....	2,749	2,715	2,889	2,890	2,909	2,931	3,287
Non-S&E <sup>2</sup> .....	86,243	91,096	94,604	97,078	99,999	103,195	106,921
Grand total .....	121,336	126,777	130,326	131,745	136,062	140,932	146,621
White, non-Hispanics							
Total science and engineering .....	28,120	28,115	28,250	27,634	28,113	29,493	30,846
Engineering .....	10,963	10,874	10,922	10,742	10,775	11,777	12,232
Sciences .....	17,157	17,241	17,328	16,892	17,338	17,716	18,614
Natural sciences .....	10,523	10,357	10,116	9,491	9,675	9,837	9,964
Physical science <sup>1</sup> .....	2,855	2,750	2,518	2,299	2,234	2,229	2,252
Mathematical science .....	1,187	1,173	1,275	1,169	1,389	1,332	1,420
Computer science .....	3,229	3,430	3,474	3,260	3,236	3,326	3,309
Biological science .....	1,932	1,830	1,711	1,629	1,566	1,593	1,643
Agricultural science .....	1,320	1,174	1,138	1,134	1,250	1,357	1,340
Social sciences .....	6,634	6,884	7,212	7,401	7,663	7,879	8,650
Social science .....	4,309	4,592	4,781	4,981	5,276	5,453	5,880
Psychology .....	2,325	2,292	2,431	2,420	2,387	2,426	2,770
Non-S&E <sup>2</sup> .....	71,939	75,927	77,825	80,283	82,684	84,224	85,912
Grand total .....	100,059	104,042	106,075	107,917	110,797	113,717	116,758

See explanatory information and SOURCES at end of table.

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**Table 8. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	2,559	2,939	2,799	2,959	3,276	3,237	3,561
Engineering .....	1,455	1,699	1,557	1,685	1,816	1,819	1,932
Sciences .....	1,104	1,240	1,242	1,274	1,460	1,418	1,629
Natural sciences .....	908	990	976	1,031	1,169	1,149	1,279
Physical science <sup>1</sup> .....	164	179	140	165	206	150	182
Mathematical science .....	110	117	106	108	103	121	126
Computer science .....	522	565	609	627	705	710	785
Biological science .....	85	105	97	104	125	136	151
Agricultural science .....	27	24	24	27	30	32	35
Social sciences .....	196	250	266	243	291	269	350
Social science .....	163	206	224	196	229	219	276
Psychology .....	33	44	42	47	62	50	74
Non-S&E <sup>2</sup> .....	2,419	2,978	2,871	3,261	3,547	3,888	4,230
Grand total .....	4,978	5,917	5,670	6,220	6,823	7,125	7,791
Underrepresented minorities, total							
Total science and engineering .....	2,130	1,990	2,005	2,129	2,340	2,637	2,964
Engineering .....	791	685	687	711	775	924	1,052
Sciences .....	1,339	1,305	1,318	1,418	1,565	1,713	1,912
Natural sciences .....	688	639	610	664	728	764	899
Physical science <sup>1</sup> .....	140	133	130	124	144	142	167
Mathematical science .....	87	58	74	112	92	102	111
Computer science .....	236	255	238	244	283	308	337
Biological science .....	137	129	120	116	137	132	125
Agricultural science .....	88	64	48	68	72	80	159
Social sciences .....	651	666	708	754	837	949	1,013
Social science .....	427	416	429	482	556	672	692
Psychology .....	224	250	279	272	281	277	321
Non-S&E <sup>2</sup> .....	6,768	7,049	7,316	8,078	8,336	9,266	10,180
Grand total .....	8,898	9,039	9,321	10,207	10,676	11,903	13,144
Black, non-Hispanics							
Total science and engineering .....	990	878	950	1,028	1,166	1,253	1,376
Engineering .....	315	262	287	299	332	407	422
Sciences .....	675	616	663	729	834	846	954
Natural sciences .....	338	290	307	338	382	386	435
Physical science <sup>1</sup> .....	45	56	61	43	66	58	74
Mathematical science .....	45	32	37	53	44	48	62
Computer science .....	126	119	140	150	175	193	205
Biological science .....	80	59	51	58	61	47	48
Agricultural science .....	42	24	18	34	36	40	46
Social sciences .....	337	326	356	391	452	460	519
Social science .....	221	206	223	262	315	345	358
Psychology .....	116	120	133	129	137	115	161
Non-S&E <sup>2</sup> .....	3,895	4,086	4,219	4,591	4,628	5,219	5,631
Grand total .....	4,885	4,964	5,169	5,619	5,794	6,472	7,007

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	1,045	970	959	992	1,066	1,255	1,427
Engineering .....	444	394	373	378	408	480	582
Sciences .....	601	576	586	614	658	775	845
Natural sciences .....	318	282	275	294	309	341	414
Physical science <sup>1</sup> .....	88	65	63	73	64	76	80
Mathematical science .....	41	21	33	52	47	50	44
Computer science .....	91	100	93	84	98	104	120
Biological science .....	53	62	61	54	69	76	65
Agricultural science .....	45	34	25	31	31	35	105
Social sciences .....	283	294	311	320	349	434	431
Social science .....	187	176	178	196	218	282	290
Psychology .....	96	118	133	124	131	152	141
Non-S&E <sup>2</sup> .....	2,476	2,627	2,754	3,132	3,315	3,620	4,056
Grand total .....	3,521	3,597	3,713	4,124	4,381	4,875	5,483
American Indians or Alaskan Natives							
Total science and engineering .....	95	142	96	109	108	129	161
Engineering .....	32	29	27	34	35	37	48
Sciences .....	63	113	69	75	73	92	113
Natural sciences .....	32	67	28	32	37	37	50
Physical science <sup>1</sup> .....	7	12	6	8	14	8	13
Mathematical science .....	1	5	4	7	1	4	5
Computer science .....	19	36	5	10	10	11	12
Biological science .....	4	8	8	4	7	9	12
Agricultural science .....	1	6	5	3	5	5	8
Social sciences .....	31	46	41	43	36	55	63
Social science .....	19	34	28	24	23	45	44
Psychology .....	12	12	13	19	13	10	19
Non-S&E <sup>2</sup> .....	397	336	343	355	393	427	493
Grand total .....	492	478	439	464	501	556	654
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	2,284	2,637	2,668	1,945	2,334	2,370	2,329
Engineering .....	737	1,188	1,008	839	984	1,022	924
Sciences .....	1,547	1,449	1,660	1,106	1,350	1,348	1,405
Natural sciences .....	917	999	1,117	653	821	754	843
Physical science <sup>1</sup> .....	232	164	165	167	200	164	193
Mathematical science .....	98	80	104	74	161	162	146
Computer science .....	423	675	714	288	280	256	348
Biological science .....	133	70	86	96	103	98	94
Agricultural science .....	31	10	48	28	77	74	62
Social sciences .....	630	450	543	453	529	594	562
Social science .....	463	321	406	302	350	416	440
Psychology .....	167	129	137	151	179	178	122
Non-S&E <sup>2</sup> .....	5,117	5,142	6,592	5,456	5,432	5,817	6,599
Grand total .....	7,401	7,779	9,260	7,401	7,766	8,187	8,928

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	10,518	12,043	12,702	13,081	13,705	15,365	15,761
Engineering .....	5,344	6,208	6,543	6,673	6,995	8,023	8,146
Sciences .....	5,174	5,835	6,159	6,408	6,710	7,342	7,615
Natural sciences .....	3,678	4,265	4,439	4,691	5,087	5,572	5,828
Physical science <sup>1</sup> .....	834	954	1,028	1,070	1,111	1,118	1,236
Mathematical science .....	544	632	649	683	712	751	738
Computer science .....	1,575	1,848	1,933	2,144	2,380	2,811	2,948
Biological science .....	268	357	379	370	385	406	462
Agricultural science .....	457	474	450	424	499	486	444
Social sciences .....	1,496	1,570	1,720	1,717	1,623	1,770	1,787
Social science .....	1,407	1,471	1,584	1,613	1,528	1,659	1,657
Psychology .....	89	99	136	104	95	111	130
Non-S&E <sup>2</sup> .....	9,801	10,579	10,997	12,069	12,532	13,456	14,380
Grand total .....	20,319	22,622	23,699	25,150	26,237	28,821	30,141

- <sup>1</sup> In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.
- <sup>2</sup> Non-S&E refers to non-science and non-engineering.
- <sup>3</sup> 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).
- <sup>4</sup> 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; and IPEDS Completions Surveys, 1987-94

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**Table 9. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	21,163	22,609	23,804	25,080	26,416	28,313	30,619
Engineering .....	2,767	3,081	3,268	3,357	3,665	4,093	4,421
Sciences .....	18,396	19,528	20,536	21,723	22,751	24,220	26,198
Natural sciences .....	8,555	8,839	9,035	9,139	9,295	9,637	10,056
Physical science <sup>1</sup> .....	1,413	1,523	1,430	1,457	1,457	1,562	1,658
Mathematical science .....	1,301	1,370	1,476	1,486	1,562	1,616	1,567
Computer science .....	2,496	2,626	2,675	2,761	2,646	2,756	2,694
Biological science .....	2,444	2,462	2,500	2,491	2,500	2,433	2,742
Agricultural science .....	901	858	954	944	1,130	1,270	1,395
Social sciences .....	9,841	10,689	11,501	12,584	13,456	14,583	16,142
Social science .....	4,514	4,851	5,218	5,776	6,180	6,605	7,285
Psychology .....	5,327	5,838	6,283	6,808	7,276	7,978	8,857
Non-S&E <sup>2</sup> .....	127,714	139,042	147,118	156,523	165,492	172,907	181,627
Grand total .....	148,877	161,651	170,922	181,603	191,908	201,220	212,246
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	18,636	19,509	20,168	21,112	22,114	23,528	25,501
Engineering .....	2,330	2,542	2,572	2,510	2,761	2,997	3,210
Sciences .....	16,306	16,967	17,596	18,602	19,353	20,531	22,291
Natural sciences .....	7,198	7,182	7,144	7,096	7,066	7,147	7,466
Physical science <sup>1</sup> .....	1,191	1,239	1,094	1,023	1,030	1,078	1,124
Mathematical science .....	1,009	1,026	1,090	1,110	1,162	1,229	1,210
Computer science .....	2,004	2,032	2,045	2,086	1,857	1,788	1,730
Biological science .....	2,203	2,183	2,150	2,112	2,090	1,990	2,271
Agricultural science .....	791	702	765	765	927	1,062	1,131
Social sciences .....	9,108	9,785	10,452	11,506	12,287	13,384	14,825
Social science .....	3,912	4,107	4,418	4,911	5,218	5,627	6,199
Psychology .....	5,196	5,678	6,034	6,595	7,069	7,757	8,626
Non-S&E <sup>2</sup> .....	122,296	132,641	139,851	148,030	156,379	162,404	170,380
Grand total .....	140,932	152,150	160,019	169,142	178,493	185,932	195,881
White, non-Hispanics							
Total science and engineering .....	15,240	15,830	16,200	16,879	17,536	18,482	19,865
Engineering .....	1,874	1,958	1,937	1,893	1,977	2,143	2,237
Sciences .....	13,366	13,872	14,263	14,986	15,559	16,339	17,628
Natural sciences .....	5,829	5,723	5,626	5,514	5,461	5,485	5,560
Physical science <sup>1</sup> .....	979	1,016	883	830	833	849	893
Mathematical science .....	825	859	894	899	947	1,022	959
Computer science .....	1,488	1,356	1,377	1,377	1,171	1,138	977
Biological science .....	1,813	1,849	1,790	1,724	1,685	1,551	1,810
Agricultural science .....	724	643	682	684	825	925	921
Social sciences .....	7,537	8,149	8,637	9,472	10,098	10,854	12,068
Social science .....	3,164	3,366	3,579	3,919	4,247	4,470	4,878
Psychology .....	4,373	4,783	5,058	5,553	5,851	6,384	7,190
Non-S&E <sup>2</sup> .....	101,508	110,450	114,599	122,728	128,729	133,469	137,290
Grand total .....	116,748	126,280	130,799	139,607	146,265	151,951	157,155

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	896	1,161	1,256	1,351	1,487	1,609	1,861
Engineering .....	195	293	306	323	407	441	511
Sciences .....	701	868	950	1,028	1,080	1,168	1,350
Natural sciences .....	518	627	653	704	747	769	880
Physical science <sup>1</sup> .....	63	99	94	86	89	99	102
Mathematical science .....	73	61	78	81	98	76	107
Computer science .....	257	329	332	387	400	396	443
Biological science .....	105	118	128	127	139	169	181
Agricultural science .....	20	20	21	23	21	29	47
Social sciences .....	183	241	297	324	333	399	470
Social science .....	103	154	180	201	212	258	274
Psychology .....	80	87	117	123	121	141	196
Non-S&E <sup>2</sup> .....	2,255	3,096	3,068	3,499	3,983	4,435	4,907
Grand total .....	3,151	4,257	4,324	4,850	5,470	6,044	6,768
Underrepresented minorities, total							
Total science and engineering .....	1,385	1,456	1,610	1,897	2,020	2,262	2,672
Engineering .....	162	171	181	195	221	271	316
Sciences .....	1,223	1,285	1,429	1,702	1,799	1,991	2,356
Natural sciences .....	434	386	392	531	530	594	670
Physical science <sup>1</sup> .....	70	55	64	58	65	89	90
Mathematical science .....	49	41	53	82	55	82	79
Computer science .....	116	126	119	181	197	176	215
Biological science .....	167	138	124	170	170	180	172
Agricultural science .....	32	26	32	40	43	67	114
Social sciences .....	789	899	1,037	1,171	1,269	1,397	1,686
Social science .....	331	361	439	549	562	610	751
Psychology .....	458	538	598	622	707	787	935
Non-S&E <sup>2</sup> .....	11,720	12,175	13,087	14,562	16,208	17,447	19,915
Grand total .....	13,105	13,631	14,697	16,459	18,228	19,709	22,587
Black, non-Hispanics							
Total science and engineering .....	794	774	897	1,062	1,190	1,301	1,473
Engineering .....	88	93	100	99	134	157	167
Sciences .....	706	681	797	963	1,056	1,144	1,306
Natural sciences .....	243	205	220	306	317	330	386
Physical science <sup>1</sup> .....	34	22	26	30	32	47	53
Mathematical science .....	28	27	33	47	33	50	47
Computer science .....	81	79	92	133	141	115	160
Biological science .....	87	65	59	79	88	88	94
Agricultural science .....	13	12	10	17	23	30	32
Social sciences .....	463	476	577	657	739	814	920
Social science .....	203	201	239	332	345	385	445
Psychology .....	260	275	338	325	394	429	475
Non-S&E <sup>2</sup> .....	7,494	7,717	8,407	9,176	10,436	11,124	12,456
Grand total .....	8,288	8,491	9,304	10,238	11,626	12,425	13,929

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	539	615	628	744	740	837	1,087
Engineering .....	68	74	73	90	80	101	137
Sciences .....	471	541	555	654	660	736	950
Natural sciences .....	175	162	156	200	194	233	266
Physical science <sup>1</sup> .....	34	27	35	23	29	38	34
Mathematical science .....	19	13	18	33	19	28	31
Computer science .....	32	44	25	44	51	58	49
Biological science .....	73	64	59	82	77	75	73
Agricultural science .....	17	14	19	18	18	34	79
Social sciences .....	296	379	399	454	466	503	684
Social science .....	121	137	163	187	178	192	267
Psychology .....	175	242	236	267	288	311	417
Non-S&E <sup>2</sup> .....	3,721	3,921	4,154	4,816	5,135	5,659	6,607
Grand total .....	4,260	4,536	4,782	5,560	5,875	6,496	7,694
American Indians or Alaskan Natives							
Total science and engineering .....	52	67	85	91	90	124	112
Engineering .....	6	4	8	6	7	13	12
Sciences .....	46	63	77	85	83	111	100
Natural sciences .....	16	19	16	25	19	31	18
Physical science <sup>1</sup> .....	2	6	3	5	4	4	3
Mathematical science .....	2	1	2	2	3	4	1
Computer science .....	3	3	2	4	5	3	6
Biological science .....	7	9	6	9	5	17	5
Agricultural science .....	2	0	3	5	2	3	3
Social sciences .....	30	44	61	60	64	80	82
Social science .....	7	23	37	30	39	33	39
Psychology .....	23	21	24	30	25	47	43
Non-S&E <sup>2</sup> .....	505	537	526	570	637	664	852
Grand total .....	557	604	611	661	727	788	964
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	1,115	1,062	1,102	985	1,071	1,175	1,103
Engineering .....	99	120	148	99	156	142	146
Sciences .....	1,016	942	954	886	915	1,033	957
Natural sciences .....	417	446	473	347	328	299	356
Physical science <sup>1</sup> .....	79	69	53	49	43	41	39
Mathematical science .....	62	65	65	48	62	49	65
Computer science .....	143	221	217	141	89	78	95
Biological science .....	118	78	108	91	96	90	108
Agricultural science .....	15	13	30	18	38	41	49
Social sciences .....	599	496	481	539	587	734	601
Social science .....	314	226	220	242	197	289	296
Psychology .....	285	270	261	297	390	445	305
Non-S&E <sup>2</sup> .....	6,813	6,920	9,097	7,241	7,459	7,053	8,268
Grand total .....	7,928	7,982	10,199	8,226	8,530	8,228	9,371

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
	Nonresident aliens <sup>4</sup>						
Total science and engineering .....	2,527	3,100	3,636	3,968	4,302	4,785	5,118
Engineering .....	437	539	696	847	904	1,096	1,211
Sciences .....	2,090	2,561	2,940	3,121	3,398	3,689	3,907
Natural sciences .....	1,357	1,657	1,891	2,043	2,229	2,490	2,590
Physical science <sup>1</sup> .....	222	284	336	434	427	484	534
Mathematical science .....	292	344	386	376	400	387	357
Computer science .....	492	594	630	675	789	968	964
Biological science .....	241	279	350	379	410	443	471
Agricultural science .....	110	156	189	179	203	208	264
Social sciences .....	733	904	1,049	1,078	1,169	1,199	1,317
Social science .....	602	744	800	865	962	978	1,086
Psychology .....	131	160	249	213	207	221	231
Non-S&E <sup>2</sup> .....	5,418	6,401	7,267	8,493	9,113	10,503	11,247
Grand total .....	7,945	9,501	10,903	12,461	13,415	15,288	16,365

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

<sup>2</sup> Non-S&E refers to non-science and non-engineering.

<sup>3</sup> 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).

<sup>4</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	19,894	21,731	22,867	24,019	24,673	25,441	26,202
Engineering .....	3,712	4,543	4,894	5,215	5,438	5,698	5,822
Sciences .....	16,182	17,188	17,973	18,804	19,235	19,743	20,380
Natural sciences .....	9,845	10,656	11,360	11,998	12,362	12,555	13,100
Physical science <sup>1</sup> .....	3,840	3,984	4,262	4,440	4,574	4,470	4,801
Mathematical science .....	740	859	892	1,039	1,058	1,146	1,118
Computer science .....	450	612	705	800	869	880	903
Biological science .....	3,839	4,115	4,327	4,646	4,798	5,091	5,200
Agricultural science .....	976	1,086	1,174	1,073	1,063	968	1,078
Social sciences .....	6,337	6,532	6,613	6,806	6,873	7,188	7,280
Social science .....	3,164	3,324	3,332	3,556	3,610	3,769	3,900
Psychology .....	3,173	3,208	3,281	3,250	3,263	3,419	3,380
Non-S&E <sup>2</sup> .....	12,476	12,595	13,200	13,503	14,183	14,330	14,815
Grand total .....	32,370	34,326	36,067	37,522	38,856	39,771	41,017
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	14,055	14,591	15,363	15,909	15,940	16,570	18,184
Engineering .....	1,913	2,229	2,346	2,474	2,520	2,697	3,053
Sciences .....	12,142	12,362	13,017	13,435	13,420	13,873	15,131
Natural sciences .....	7,121	7,452	7,767	8,027	8,033	8,190	9,303
Physical science <sup>1</sup> .....	2,677	2,678	2,876	2,917	2,897	2,834	3,402
Mathematical science .....	396	428	422	518	507	590	657
Computer science .....	275	396	403	451	489	509	543
Biological science .....	3,141	3,299	3,379	3,521	3,567	3,751	4,085
Agricultural science .....	632	651	687	620	573	506	616
Social sciences .....	5,021	4,910	5,250	5,408	5,387	5,683	5,828
Social science .....	2,215	2,173	2,258	2,390	2,401	2,524	2,691
Psychology .....	2,806	2,737	2,992	3,018	2,986	3,159	3,137
Non-S&E <sup>2</sup> .....	10,507	10,435	11,240	11,509	12,016	12,105	12,693
Grand total .....	24,562	25,026	26,603	27,418	27,956	28,675	30,877
White, non-Hispanics							
Total science and engineering .....	12,052	12,501	13,170	13,323	13,326	13,735	13,890
Engineering .....	1,458	1,726	1,840	1,837	1,880	2,025	2,020
Sciences .....	10,594	10,775	11,330	11,486	11,446	11,710	11,870
Natural sciences .....	6,211	6,488	6,789	6,885	6,822	6,836	7,004
Physical science <sup>1</sup> .....	2,350	2,326	2,502	2,525	2,458	2,366	2,529
Mathematical science .....	319	369	372	419	425	476	479
Computer science .....	229	319	339	355	378	410	401
Biological science .....	2,759	2,904	2,975	3,041	3,068	3,146	3,108
Agricultural science .....	554	570	601	545	493	438	487
Social sciences .....	4,383	4,287	4,541	4,601	4,624	4,874	4,866
Social science .....	1,867	1,834	1,893	1,949	1,988	2,069	2,135
Psychology .....	2,516	2,453	2,648	2,652	2,636	2,805	2,731
Non-S&E <sup>2</sup> .....	9,070	9,069	9,709	9,856	10,273	10,292	10,695
Grand total .....	21,122	21,570	22,879	23,179	23,599	24,027	24,585

See explanatory information and SOURCES at end of table.

**Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	925	986	1,009	1,180	1,344	1,610	2,989
Engineering .....	327	361	359	405	451	527	867
Sciences .....	598	625	650	775	893	1,083	2,122
Natural sciences .....	436	479	486	597	697	842	1,740
Physical science <sup>1</sup> .....	161	179	179	189	253	287	689
Mathematical science .....	41	24	27	57	52	79	142
Computer science .....	26	52	48	66	86	77	117
Biological science .....	170	201	200	261	269	370	720
Agricultural science .....	38	23	32	24	37	29	72
Social sciences .....	162	146	164	178	196	241	382
Social science .....	114	91	111	119	137	168	273
Psychology .....	48	55	53	59	59	73	109
Non-S&E <sup>2</sup> .....	243	282	297	351	417	402	556
Grand total .....	1,168	1,268	1,306	1,531	1,761	2,012	3,545
Underrepresented minorities, total							
Total science and engineering .....	729	801	884	1,007	989	1,053	1,108
Engineering .....	66	87	98	121	131	118	126
Sciences .....	663	714	786	886	858	935	982
Natural sciences .....	284	313	328	370	373	417	471
Physical science <sup>1</sup> .....	90	119	122	128	132	146	157
Mathematical science .....	22	19	15	20	18	25	26
Computer science .....	9	7	6	21	15	14	18
Biological science .....	133	134	143	165	176	195	222
Agricultural science .....	30	34	42	36	32	37	48
Social sciences .....	379	401	458	516	485	518	511
Social science .....	175	200	215	251	231	253	242
Psychology .....	204	201	243	265	254	265	269
Non-S&E <sup>2</sup> .....	1,004	949	1,099	1,152	1,182	1,317	1,337
Grand total .....	1,733	1,750	1,983	2,159	2,171	2,370	2,445
Black, non-Hispanics							
Total science and engineering .....	319	366	373	459	407	468	496
Engineering .....	25	33	40	55	49	50	54
Sciences .....	294	333	333	404	358	418	442
Natural sciences .....	108	114	103	130	115	149	170
Physical science <sup>1</sup> .....	22	35	33	34	31	45	52
Mathematical science .....	11	8	4	11	4	8	11
Computer science .....	2	1	1	8	5	6	10
Biological science .....	60	56	50	60	61	74	75
Agricultural science .....	13	14	15	17	14	16	22
Social sciences .....	186	219	230	274	243	269	272
Social science .....	93	122	115	144	137	150	148
Psychology .....	93	97	115	130	106	119	124
Non-S&E <sup>2</sup> .....	591	596	676	701	706	809	778
Grand total .....	910	962	1,049	1,160	1,113	1,277	1,274

See explanatory information and SOURCES at end of table.



**Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	357	382	468	492	513	542	548
Engineering .....	34	47	54	60	71	66	66
Sciences .....	323	335	414	432	442	476	482
Natural sciences .....	153	172	212	212	228	249	274
Physical science <sup>1</sup> .....	61	68	85	81	88	92	98
Mathematical science .....	11	11	10	9	12	16	13
Computer science .....	4	4	5	12	8	7	7
Biological science .....	62	71	89	95	102	114	131
Agricultural science .....	15	18	23	15	18	20	25
Social sciences .....	170	163	202	220	214	227	208
Social science .....	75	70	93	98	81	96	75
Psychology .....	95	93	109	122	133	131	133
Non-S&E <sup>2</sup> .....	351	312	369	375	396	431	481
Grand total .....	708	694	837	867	909	973	1,029
American Indians or Alaskan Natives							
Total science and engineering .....	53	53	43	56	69	43	64
Engineering .....	7	7	4	6	11	2	6
Sciences .....	46	46	39	50	58	41	58
Natural sciences .....	23	27	13	28	30	19	27
Physical science <sup>1</sup> .....	7	16	4	13	13	9	7
Mathematical science .....	0	0	1	0	2	1	2
Computer science .....	3	2	0	1	2	1	1
Biological science .....	11	7	4	10	13	7	16
Agricultural science .....	2	2	4	4	0	1	1
Social sciences .....	23	19	26	22	28	22	31
Social science .....	7	8	7	9	13	7	19
Psychology .....	16	11	19	13	15	15	12
Non-S&E <sup>2</sup> .....	62	41	54	76	80	77	78
Grand total .....	115	94	97	132	149	120	142
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	349	303	300	399	281	172	197
Engineering .....	62	55	49	111	58	27	40
Sciences .....	287	248	251	288	223	145	157
Natural sciences .....	190	172	164	175	141	95	88
Physical science <sup>1</sup> .....	76	54	73	75	54	35	27
Mathematical science .....	14	16	8	22	12	10	10
Computer science .....	11	18	10	9	10	8	7
Biological science .....	79	60	61	54	54	40	35
Agricultural science .....	10	24	12	15	11	2	9
Social sciences .....	97	76	87	113	82	50	69
Social science .....	59	48	39	71	45	34	41
Psychology .....	38	28	48	42	37	16	28
Non-S&E <sup>2</sup> .....	190	135	135	150	144	94	105
Grand total .....	539	438	435	549	425	266	302

See explanatory information and SOURCES at end of table.

**Table 10. Number of earned doctoral degrees, by field and by race/ethnicity of recipient: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Nonresident aliens <sup>4</sup>							
Total science and engineering .....	4,468	5,391	6,571	7,642	8,092	8,113	7,521
Engineering .....	1,532	1,940	2,277	2,634	2,743	2,784	2,653
Sciences .....	2,936	3,451	4,294	5,008	5,349	5,329	4,868
Natural sciences .....	2,149	2,499	3,232	3,782	4,089	4,056	3,606
Physical science <sup>1</sup> .....	923	1,012	1,244	1,442	1,582	1,498	1,304
Mathematical science .....	302	346	424	506	511	517	448
Computer science .....	143	178	271	340	365	348	343
Biological science .....	492	608	853	1,059	1,159	1,246	1,058
Agricultural science .....	289	355	440	435	472	447	453
Social sciences .....	787	952	1,062	1,226	1,260	1,273	1,262
Social science .....	702	846	945	1,093	1,104	1,125	1,111
Psychology .....	85	106	117	133	156	148	151
Non-S&E <sup>2</sup> .....	1,144	1,257	1,522	1,670	1,861	1,821	1,885
Grand total .....	5,612	6,648	8,093	9,312	9,953	9,934	9,406
Citizenship unknown							
Total science and engineering .....	1,371	1,749	933	468	641	758	497
Engineering .....	267	374	271	107	175	217	116
Sciences .....	1,104	1,375	662	361	466	541	381
Natural sciences .....	575	705	361	189	240	309	191
Physical science <sup>1</sup> .....	240	294	142	81	95	138	95
Mathematical science .....	42	85	46	15	40	39	13
Computer science .....	32	38	31	9	15	23	17
Biological science .....	206	208	95	66	72	94	57
Agricultural science .....	55	80	47	18	18	15	9
Social sciences .....	529	670	301	172	226	232	190
Social science .....	247	305	129	73	105	120	98
Psychology .....	282	365	172	99	121	112	92
Non-S&E <sup>2</sup> .....	825	903	438	324	306	404	237
Grand total .....	2,196	2,652	1,371	792	947	1,162	734

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

<sup>2</sup> Non-S&E refers to non-science and non-engineering.

<sup>3</sup> 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).

<sup>4</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	14,582	15,622	16,498	17,088	17,593	17,789	18,283
Engineering .....	3,470	4,168	4,479	4,748	4,932	5,176	5,187
Sciences .....	11,112	11,454	12,019	12,340	12,661	12,613	13,096
Natural sciences .....	7,484	7,857	8,430	8,843	9,015	8,935	9,361
Physical science <sup>1</sup> .....	3,200	3,217	3,460	3,582	3,616	3,530	3,790
Mathematical science .....	615	704	734	840	853	882	882
Computer science .....	385	504	595	683	749	742	766
Biological science .....	2,479	2,573	2,713	2,874	2,967	3,041	3,094
Agricultural science .....	805	859	928	864	830	740	829
Social sciences .....	3,628	3,597	3,589	3,497	3,646	3,678	3,735
Social science .....	2,153	2,189	2,221	2,243	2,311	2,347	2,457
Psychology .....	1,475	1,408	1,368	1,254	1,335	1,331	1,278
Non-S&E <sup>2</sup> .....	6,356	6,191	6,464	6,564	6,843	6,869	6,928
Grand total .....	20,938	21,813	22,962	23,652	24,436	24,658	25,211
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	9,631	9,670	10,182	10,313	10,363	10,546	11,691
Engineering .....	1,739	1,954	2,070	2,158	2,192	2,349	2,605
Sciences .....	7,892	7,716	8,112	8,155	8,171	8,197	9,086
Natural sciences .....	5,232	5,270	5,526	5,684	5,584	5,558	6,388
Physical science <sup>1</sup> .....	2,189	2,121	2,288	2,306	2,236	2,193	2,633
Mathematical science .....	319	327	329	406	390	426	506
Computer science .....	221	312	313	357	406	400	449
Biological science .....	1,997	2,023	2,068	2,132	2,129	2,167	2,344
Agricultural science .....	506	487	528	483	423	372	456
Social sciences .....	2,660	2,446	2,586	2,471	2,587	2,639	2,698
Social science .....	1,383	1,272	1,366	1,343	1,381	1,418	1,529
Psychology .....	1,277	1,174	1,220	1,128	1,206	1,221	1,169
Non-S&E <sup>2</sup> .....	5,060	4,864	5,174	5,290	5,430	5,418	5,677
Grand total .....	14,691	14,534	15,356	15,603	15,793	15,964	17,368
White, non-Hispanics							
Total science and engineering .....	8,222	8,213	8,648	8,584	8,623	8,723	8,731
Engineering .....	1,314	1,502	1,614	1,602	1,640	1,764	1,715
Sciences .....	6,908	6,711	7,034	6,982	6,983	6,959	7,016
Natural sciences .....	4,583	4,580	4,836	4,910	4,779	4,705	4,811
Physical science <sup>1</sup> .....	1,932	1,842	2,008	2,000	1,927	1,868	1,998
Mathematical science .....	258	281	293	335	332	352	361
Computer science .....	184	252	259	282	309	327	326
Biological science .....	1,764	1,784	1,821	1,871	1,847	1,835	1,759
Agricultural science .....	445	421	455	422	364	323	367
Social sciences .....	2,325	2,131	2,198	2,072	2,204	2,254	2,205
Social science .....	1,155	1,066	1,123	1,081	1,126	1,160	1,176
Psychology .....	1,170	1,065	1,075	991	1,078	1,094	1,029
Non-S&E <sup>2</sup> .....	4,388	4,215	4,513	4,564	4,642	4,608	4,825
Grand total .....	12,610	12,428	13,161	13,148	13,265	13,331	13,556

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	694	745	757	806	926	1,079	2,169
Engineering .....	305	327	326	356	390	466	748
Sciences .....	389	418	431	450	536	613	1,421
Natural sciences .....	296	331	336	373	433	501	1,214
Physical science <sup>1</sup> .....	122	139	136	135	165	182	494
Mathematical science .....	30	21	20	39	33	43	116
Computer science .....	20	42	41	51	74	58	101
Biological science .....	93	112	113	132	136	198	451
Agricultural science .....	31	17	26	16	25	20	52
Social sciences .....	93	87	95	77	103	112	207
Social science .....	76	59	73	62	83	90	175
Psychology .....	17	28	22	15	20	22	32
Non-S&E <sup>2</sup> .....	130	160	152	166	208	203	300
Grand total .....	824	905	909	972	1,134	1,282	2,469
Underrepresented minorities, total							
Total science and engineering .....	437	473	540	609	587	605	640
Engineering .....	60	74	83	101	107	95	105
Sciences .....	377	399	457	508	480	510	535
Natural sciences .....	194	217	220	257	252	274	296
Physical science <sup>1</sup> .....	66	88	82	106	97	112	119
Mathematical science .....	18	12	10	12	14	22	20
Computer science .....	7	2	5	16	13	8	15
Biological science .....	80	86	88	91	104	104	112
Agricultural science .....	23	29	35	32	24	28	30
Social sciences .....	183	182	237	251	228	236	239
Social science .....	113	113	136	150	139	141	145
Psychology .....	70	69	101	101	89	95	94
Non-S&E <sup>2</sup> .....	443	404	440	471	494	549	500
Grand total .....	880	877	980	1,080	1,081	1,154	1,140
Black, non-Hispanics							
Total science and engineering .....	189	213	225	266	237	260	282
Engineering .....	24	30	34	47	43	39	41
Sciences .....	165	183	191	219	194	221	241
Natural sciences .....	73	77	71	84	79	98	102
Physical science <sup>1</sup> .....	18	27	24	28	24	35	38
Mathematical science .....	9	5	3	7	4	7	8
Computer science .....	1	0	1	4	4	2	8
Biological science .....	35	32	29	29	37	42	32
Agricultural science .....	10	13	14	16	10	12	16
Social sciences .....	92	106	120	135	115	123	139
Social science .....	58	70	77	91	87	79	93
Psychology .....	34	36	43	44	28	44	46
Non-S&E <sup>2</sup> .....	247	239	254	282	280	317	270
Grand total .....	436	452	479	548	517	577	552

See explanatory information and SOURCES at end of table.

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**Table 11. Number of earned doctoral degrees, by field and by race/ethnicity of male recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	216	227	290	306	308	320	318
Engineering .....	29	39	45	50	56	54	60
Sciences .....	187	188	245	256	252	266	258
Natural sciences .....	105	120	138	152	151	162	174
Physical science <sup>1</sup> .....	43	47	55	68	62	70	75
Mathematical science .....	9	7	6	5	9	14	10
Computer science .....	4	1	4	11	7	6	7
Biological science .....	38	50	56	56	59	57	69
Agricultural science .....	11	15	17	12	14	15	13
Social sciences .....	82	68	107	104	101	104	84
Social science .....	50	38	55	52	46	59	41
Psychology .....	32	30	52	52	55	45	43
Non-S&E <sup>2</sup> .....	166	149	159	152	174	197	199
Grand total .....	382	376	449	458	482	517	517
American Indians or Alaskan Natives							
Total science and engineering .....	32	33	25	37	42	25	40
Engineering .....	7	5	4	4	8	2	4
Sciences .....	25	28	21	33	34	23	36
Natural sciences .....	16	20	11	21	22	14	20
Physical science <sup>1</sup> .....	5	14	3	10	11	7	6
Mathematical science .....	0	0	1	0	1	1	2
Computer science .....	2	1	0	1	2	0	0
Biological science .....	7	4	3	6	8	5	11
Agricultural science .....	2	1	4	4	0	1	1
Social sciences .....	9	8	10	12	12	9	16
Social science .....	5	5	4	7	6	3	11
Psychology .....	4	3	6	5	6	6	5
Non-S&E <sup>2</sup> .....	30	16	27	37	40	35	31
Grand total .....	62	49	52	74	82	60	71
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	278	239	237	314	227	139	151
Engineering .....	60	51	47	99	55	24	37
Sciences .....	218	188	190	215	172	115	114
Natural sciences .....	159	142	134	144	120	78	67
Physical science <sup>1</sup> .....	69	52	62	65	47	31	22
Mathematical science .....	13	13	6	20	11	9	9
Computer science .....	10	16	8	8	10	7	7
Biological science .....	60	41	46	38	42	30	22
Agricultural science .....	7	20	12	13	10	1	7
Social sciences .....	59	46	56	71	52	37	47
Social science .....	39	34	34	50	33	27	33
Psychology .....	20	12	22	21	19	10	14
Non-S&E <sup>2</sup> .....	99	85	69	89	86	58	52
Grand total .....	377	324	306	403	313	197	203

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Nonresident aliens <sup>4</sup>							
Total science and engineering .....	3,904	4,609	5,590	6,413	6,741	6,658	6,201
Engineering .....	1,478	1,850	2,157	2,485	2,574	2,623	2,475
Sciences .....	2,426	2,759	3,433	3,928	4,167	4,035	3,726
Natural sciences .....	1,794	2,011	2,608	3,003	3,230	3,127	2,802
Physical science <sup>1</sup> .....	815	852	1,048	1,206	1,296	1,217	1,066
Mathematical science .....	260	299	363	420	427	422	364
Computer science .....	138	160	256	317	329	322	302
Biological science .....	333	400	582	694	787	809	704
Agricultural science .....	248	300	359	366	391	357	366
Social sciences .....	632	748	825	925	937	908	924
Social science .....	584	688	763	848	856	844	853
Psychology .....	48	60	62	77	81	64	71
Non-S&E <sup>2</sup> .....	818	835	1,042	1,105	1,222	1,207	1,129
Grand total .....	4,722	5,444	6,632	7,518	7,963	7,865	7,330
Citizenship unknown							
Total science and engineering .....	1,047	1,343	726	362	489	585	391
Engineering .....	253	364	252	105	166	204	107
Sciences .....	794	979	474	257	323	381	284
Natural sciences .....	458	576	296	156	201	250	171
Physical science <sup>1</sup> .....	196	244	124	70	84	120	91
Mathematical science .....	36	78	42	14	36	34	12
Computer science .....	26	32	26	9	14	20	15
Biological science .....	149	150	63	48	51	65	46
Agricultural science .....	51	72	41	15	16	11	7
Social sciences .....	336	403	178	101	122	131	113
Social science .....	186	229	92	52	74	85	75
Psychology .....	150	174	86	49	48	46	38
Non-S&E <sup>2</sup> .....	478	492	248	169	191	244	122
Grand total .....	1,525	1,835	974	531	680	829	513

- <sup>1</sup> In this report, "Physical science" includes earth, atmospheric, and ocean sciences, as well as physics, astronomy, and chemistry.
- <sup>2</sup> Non-S&E refers to non-science and non-engineering.
- <sup>3</sup> 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).
- <sup>4</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all recipients							
Total science and engineering .....	5,312	6,109	6,369	6,931	7,080	7,652	7,919
Engineering .....	242	375	415	467	506	522	635
Sciences .....	5,070	5,734	5,954	6,464	6,574	7,130	7,284
Natural sciences .....	2,361	2,799	2,930	3,155	3,347	3,620	3,739
Physical science <sup>1</sup> .....	640	767	802	858	958	940	1,011
Mathematical science .....	125	155	158	199	205	264	236
Computer science .....	65	108	110	117	120	138	137
Biological science .....	1,360	1,542	1,614	1,772	1,831	2,050	2,106
Agricultural science .....	171	227	246	209	233	228	249
Social sciences .....	2,709	2,935	3,024	3,309	3,227	3,510	3,545
Social science .....	1,011	1,135	1,111	1,313	1,299	1,422	1,443
Psychology .....	1,698	1,800	1,913	1,996	1,928	2,088	2,102
Non-S&E <sup>2</sup> .....	6,120	6,404	6,736	6,939	7,340	7,461	7,887
Grand total .....	11,432	12,513	13,105	13,870	14,420	15,113	15,806
U.S. citizens and permanent residents, total <sup>3</sup>							
Total science and engineering .....	4,424	4,921	5,181	5,596	5,577	6,024	6,493
Engineering .....	174	275	276	316	328	348	448
Sciences .....	4,250	4,646	4,905	5,280	5,249	5,676	6,045
Natural sciences .....	1,889	2,182	2,241	2,343	2,449	2,632	2,915
Physical science <sup>1</sup> .....	488	557	588	611	661	641	769
Mathematical science .....	77	101	93	112	117	164	151
Computer science .....	54	84	90	94	83	109	94
Biological science .....	1,144	1,276	1,311	1,389	1,438	1,584	1,741
Agricultural science .....	126	164	159	137	150	134	160
Social sciences .....	2,361	2,464	2,664	2,937	2,800	3,044	3,130
Social science .....	832	901	892	1,047	1,020	1,106	1,162
Psychology .....	1,529	1,563	1,772	1,890	1,780	1,938	1,968
Non-S&E <sup>2</sup> .....	5,447	5,571	6,066	6,219	6,586	6,687	7,016
Grand total .....	9,871	10,492	11,247	11,815	12,163	12,711	13,509
White, non-Hispanics							
Total science and engineering .....	3,830	4,288	4,522	4,739	4,703	5,012	5,159
Engineering .....	144	224	226	235	240	261	305
Sciences .....	3,686	4,064	4,296	4,504	4,463	4,751	4,854
Natural sciences .....	1,628	1,908	1,953	1,975	2,043	2,131	2,193
Physical science <sup>1</sup> .....	418	484	494	525	531	498	531
Mathematical science .....	61	88	79	84	93	124	118
Computer science .....	45	67	80	73	69	83	75
Biological science .....	995	1,120	1,154	1,170	1,221	1,311	1,349
Agricultural science .....	109	149	146	123	129	115	120
Social sciences .....	2,058	2,156	2,343	2,529	2,420	2,620	2,661
Social science .....	712	768	770	868	862	909	959
Psychology .....	1,346	1,388	1,573	1,661	1,558	1,711	1,702
Non-S&E <sup>2</sup> .....	4,682	4,854	5,196	5,292	5,631	5,684	5,870
Grand total .....	8,512	9,142	9,718	10,031	10,334	10,696	11,029

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Asians							
Total science and engineering .....	231	241	252	374	418	531	820
Engineering .....	22	34	33	49	61	61	119
Sciences .....	209	207	219	325	357	470	701
Natural sciences .....	140	148	150	224	264	341	526
Physical science <sup>1</sup> .....	39	40	43	54	88	105	195
Mathematical science .....	11	3	7	18	19	36	26
Computer science .....	6	10	7	15	12	19	16
Biological science .....	77	89	87	129	133	172	269
Agricultural science .....	7	6	6	8	12	9	20
Social sciences .....	69	59	69	101	93	129	175
Social science .....	38	32	38	57	54	78	98
Psychology .....	31	27	31	44	39	51	77
Non-S&E <sup>2</sup> .....	113	122	145	185	209	199	256
Grand total .....	344	363	397	559	627	730	1,076
Underrepresented minorities, total							
Total science and engineering .....	292	328	344	398	402	448	468
Engineering .....	6	13	15	20	24	23	21
Sciences .....	286	315	329	378	378	425	447
Natural sciences .....	90	96	108	113	121	143	175
Physical science <sup>1</sup> .....	24	31	40	22	35	34	38
Mathematical science .....	4	7	5	8	4	3	6
Computer science .....	2	5	1	5	2	6	3
Biological science .....	53	48	55	74	72	91	110
Agricultural science .....	7	5	7	4	8	9	18
Social sciences .....	196	219	221	265	257	282	272
Social science .....	62	87	79	101	92	112	97
Psychology .....	134	132	142	164	165	170	175
Non-S&E <sup>2</sup> .....	561	545	659	681	688	768	837
Grand total .....	853	873	1,003	1,079	1,090	1,216	1,305
Black, non-Hispanics							
Total science and engineering .....	130	153	148	193	170	208	214
Engineering .....	1	3	6	8	6	11	13
Sciences .....	129	150	142	185	164	197	201
Natural sciences .....	35	37	32	46	36	51	68
Physical science <sup>1</sup> .....	4	8	9	6	7	10	14
Mathematical science .....	2	3	1	4	0	1	3
Computer science .....	1	1	0	4	1	4	2
Biological science .....	25	24	21	31	24	32	43
Agricultural science .....	3	1	1	1	4	4	6
Social sciences .....	94	113	110	139	128	146	133
Social science .....	35	52	38	53	50	71	55
Psychology .....	59	61	72	86	78	75	78
Non-S&E <sup>2</sup> .....	344	357	422	419	426	492	508
Grand total .....	474	510	570	612	596	700	722

See explanatory information and SOURCES at end of table.

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**Table 12. Number of earned doctoral degrees, by field and by race/ethnicity of female recipients: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Hispanics							
Total science and engineering .....	141	155	178	186	205	222	230
Engineering .....	5	8	9	10	15	12	6
Sciences .....	136	147	169	176	190	210	224
Natural sciences .....	48	52	74	60	77	87	100
Physical science <sup>1</sup> .....	18	21	30	13	26	22	23
Mathematical science .....	2	4	4	4	3	2	3
Computer science .....	0	3	1	1	1	1	0
Biological science .....	24	21	33	39	43	57	62
Agricultural science .....	4	3	6	3	4	5	12
Social sciences .....	88	95	95	116	113	123	124
Social science .....	25	32	38	46	35	37	34
Psychology .....	63	63	57	70	78	86	90
Non-S&E <sup>2</sup> .....	185	163	210	223	222	234	282
Grand total .....	326	318	388	409	427	456	512
American Indians or Alaskan Natives							
Total science and engineering .....	21	20	18	19	27	18	24
Engineering .....	0	2	0	2	3	0	2
Sciences .....	21	18	18	17	24	18	22
Natural sciences .....	7	7	2	7	8	5	7
Physical science <sup>1</sup> .....	2	2	1	3	2	2	1
Mathematical science .....	0	0	0	0	1	0	0
Computer science .....	1	1	0	0	0	1	1
Biological science .....	4	3	1	4	5	2	5
Agricultural science .....	0	1	0	0	0	0	0
Social sciences .....	14	11	16	10	16	13	15
Social science .....	2	3	3	2	7	4	8
Psychology .....	12	8	13	8	9	9	7
Non-S&E <sup>2</sup> .....	32	25	27	39	40	42	47
Grand total .....	53	45	45	58	67	60	71
U.S. citizens and permanent residents, unknown race/ethnicity							
Total science and engineering .....	71	64	63	85	54	33	46
Engineering .....	2	4	2	12	3	3	3
Sciences .....	69	60	61	73	51	30	43
Natural sciences .....	31	30	30	31	21	17	21
Physical science <sup>1</sup> .....	7	2	11	10	7	4	5
Mathematical science .....	1	3	2	2	1	1	1
Computer science .....	1	2	2	1	0	1	0
Biological science .....	19	19	15	16	12	10	13
Agricultural science .....	3	4	0	2	1	1	2
Social sciences .....	38	30	31	42	30	13	22
Social science .....	20	14	5	21	12	7	8
Psychology .....	18	16	26	21	18	6	14
Non-S&E <sup>2</sup> .....	91	50	66	61	58	36	53
Grand total .....	162	114	129	146	112	69	99

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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Nonresident aliens <sup>4</sup>							
Total science and engineering .....	564	782	981	1,229	1,351	1,455	1,320
Engineering .....	54	90	120	149	169	161	178
Sciences .....	510	692	861	1,080	1,182	1,294	1,142
Natural sciences .....	355	488	624	779	859	929	804
Physical science <sup>1</sup> .....	108	160	196	236	286	281	238
Mathematical science .....	42	47	61	86	84	95	84
Computer science .....	5	18	15	23	36	26	41
Biological science .....	159	208	271	365	372	437	354
Agricultural science .....	41	55	81	69	81	90	87
Social sciences .....	155	204	237	301	323	365	338
Social science .....	118	158	182	245	248	281	258
Psychology .....	37	46	55	56	75	84	80
Non-S&E <sup>2</sup> .....	326	422	480	565	639	614	756
Grand total .....	890	1,204	1,461	1,794	1,990	2,069	2,076
Citizenship unknown							
Total science and engineering .....	324	406	207	106	152	173	106
Engineering .....	14	10	19	2	9	13	9
Sciences .....	310	396	188	104	143	160	97
Natural sciences .....	117	129	65	33	39	59	20
Physical science <sup>1</sup> .....	44	50	18	11	11	18	4
Mathematical science .....	6	7	4	1	4	5	1
Computer science .....	6	6	5	0	1	3	2
Biological science .....	57	58	32	18	21	29	11
Agricultural science .....	4	8	6	3	2	4	2
Social sciences .....	193	267	123	71	104	101	77
Social science .....	61	76	37	21	31	35	23
Psychology .....	132	191	86	50	73	66	54
Non-S&E <sup>2</sup> .....	347	411	190	155	115	160	115
Grand total .....	671	817	397	261	267	333	221

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

<sup>2</sup> Non-S&E refers to non-science and non-engineering.

<sup>3</sup> 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).

<sup>4</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	17,230	17,385	18,230	19,987	22,431	24,421	26,289
Engineering .....	2,315	2,067	2,072	2,229	2,362	2,577	2,659
Sciences .....	14,915	15,318	16,158	17,758	20,069	21,844	23,630
Natural sciences .....	6,524	6,005	5,782	5,834	6,401	6,972	7,559
Physical science <sup>1</sup> .....	823	697	650	753	816	836	921
Mathematical science .....	834	792	720	811	904	965	992
Computer science .....	2,820	2,457	2,247	1,997	2,090	2,213	2,398
Biological science .....	1,890	1,916	1,994	2,111	2,385	2,739	2,980
Agricultural science .....	157	143	171	162	206	219	268
Social sciences .....	8,391	9,313	10,376	11,924	13,668	14,872	16,071
Social science .....	5,940	6,570	7,226	8,236	9,489	10,254	10,835
Psychology .....	2,451	2,743	3,150	3,688	4,179	4,618	5,236
Non-S&E <sup>2</sup> .....	37,873	39,452	41,071	45,022	48,880	52,246	56,027
Grand total .....	55,103	56,837	59,301	65,009	71,311	76,667	82,316
Black recipients from HBCUs							
Total science and engineering .....	5,229	5,054	5,190	5,679	6,363	7,368	7,804
Engineering .....	557	474	524	589	594	700	690
Sciences .....	4,672	4,580	4,666	5,090	5,769	6,668	7,114
Natural sciences .....	2,750	2,513	2,353	2,363	2,599	3,021	3,105
Physical science <sup>1</sup> .....	346	320	296	358	376	390	421
Mathematical science .....	425	381	307	369	420	463	449
Computer science .....	1,187	1,048	899	748	780	904	904
Biological science .....	714	693	764	792	906	1,155	1,197
Agricultural science .....	78	71	87	96	117	109	134
Social sciences .....	1,922	2,067	2,313	2,727	3,170	3,647	4,009
Social science .....	1,457	1,517	1,651	1,886	2,201	2,507	2,701
Psychology .....	465	550	662	841	969	1,140	1,308
Non-S&E <sup>2</sup> .....	11,360	10,871	11,155	12,284	13,346	14,481	15,622
Grand total .....	16,589	15,925	16,345	17,963	19,709	21,849	23,426
Percent from HBCUs							
Total science and engineering .....	30.3	29.1	28.5	28.4	28.4	30.2	29.7
Engineering .....	24.1	22.9	25.3	26.4	25.1	27.2	25.9
Sciences .....	31.3	29.9	28.9	28.7	28.7	30.5	30.1
Natural sciences .....	42.2	41.8	40.7	40.5	40.6	43.3	41.1
Physical science <sup>1</sup> .....	42.0	45.9	45.5	47.5	46.1	46.7	45.7
Mathematical science .....	51.0	48.1	42.6	45.5	46.5	48.0	45.3
Computer science .....	42.1	42.7	40.0	37.5	37.3	40.8	37.7
Biological science .....	37.8	36.2	38.3	37.5	38.0	42.2	40.2
Agricultural science .....	49.7	49.7	50.9	59.3	56.8	49.8	50.0
Social sciences .....	22.9	22.2	22.3	22.9	23.2	24.5	24.9
Social science .....	24.5	23.1	22.8	22.9	23.2	24.4	24.9
Psychology .....	19.0	20.1	21.0	22.8	23.2	24.7	25.0
Non-S&E <sup>2</sup> .....	30.0	27.6	27.2	27.3	27.3	27.7	27.9
Grand total .....	30.1	28.0	27.6	27.6	27.6	28.5	28.5

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94



**Table 14. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black men, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	7,886	7,685	7,830	8,448	9,375	10,099	10,806
Engineering .....	1,606	1,397	1,416	1,484	1,614	1,764	1,784
Sciences .....	6,280	6,288	6,414	6,964	7,761	8,335	9,022
Natural sciences .....	2,939	2,732	2,476	2,538	2,709	2,872	3,146
Physical science <sup>1</sup> .....	433	365	292	391	381	370	464
Mathematical science .....	399	374	342	380	374	444	457
Computer science .....	1,284	1,205	1,074	971	1,092	1,049	1,161
Biological science .....	723	700	658	696	749	883	927
Agricultural science .....	100	88	110	100	113	126	137
Social sciences .....	3,341	3,556	3,938	4,426	5,052	5,463	5,876
Social science .....	2,680	2,911	3,144	3,547	4,070	4,364	4,644
Psychology .....	661	645	794	879	982	1,099	1,232
Non-S&E <sup>2</sup> .....	14,056	14,228	14,760	15,790	17,143	18,275	19,300
Grand total .....	21,942	21,913	22,590	24,238	26,518	28,374	30,106
Black recipients from HBCUs							
Total science and engineering .....	2,337	2,112	2,086	2,211	2,450	2,761	2,940
Engineering .....	371	308	331	359	380	430	425
Sciences .....	1,966	1,804	1,755	1,852	2,070	2,331	2,515
Natural sciences .....	1,193	1,056	935	951	972	1,089	1,162
Physical science <sup>1</sup> .....	156	160	127	163	145	150	197
Mathematical science .....	213	179	134	164	150	196	181
Computer science .....	502	460	377	333	364	361	381
Biological science .....	264	206	231	231	238	317	334
Agricultural science .....	58	51	66	60	75	65	69
Social sciences .....	773	748	820	901	1,098	1,242	1,353
Social science .....	661	621	657	720	868	989	1,060
Psychology .....	112	127	163	181	230	253	293
Non-S&E <sup>2</sup> .....	4,239	3,870	3,980	4,219	4,637	5,106	5,517
Grand total .....	6,576	5,982	6,066	6,430	7,087	7,867	8,457
Percent from HBCUs							
Total science and engineering .....	29.6	27.5	26.6	26.2	26.1	27.3	27.2
Engineering .....	23.1	22.0	23.4	24.2	23.5	24.4	23.8
Sciences .....	31.3	28.7	27.4	26.6	26.7	28.0	27.9
Natural sciences .....	40.6	38.7	37.8	37.5	35.9	37.9	36.9
Physical science <sup>1</sup> .....	36.0	43.8	43.5	41.7	38.1	40.5	42.5
Mathematical science .....	53.4	47.9	39.2	43.2	40.1	44.1	39.6
Computer science .....	39.1	38.2	35.1	34.3	33.3	34.4	32.8
Biological science .....	36.5	29.4	35.1	33.2	31.8	35.9	36.0
Agricultural science .....	58.0	58.0	60.0	60.0	66.4	51.6	50.4
Social sciences .....	23.1	21.0	20.8	20.4	21.7	22.7	23.0
Social science .....	24.7	21.3	20.9	20.3	21.3	22.7	22.8
Psychology .....	16.9	19.7	20.5	20.6	23.4	23.0	23.8
Non-S&E <sup>2</sup> .....	30.2	27.2	27.0	26.7	27.0	27.9	28.6
Grand total .....	30.0	27.3	26.9	26.5	26.7	27.7	28.1

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 15. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black women, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	9,344	9,700	10,400	11,539	13,056	14,322	15,483
Engineering .....	709	670	656	745	748	813	875
Sciences .....	8,635	9,030	9,744	10,794	12,308	13,509	14,608
Natural sciences .....	3,585	3,273	3,306	3,296	3,692	4,100	4,413
Physical science <sup>1</sup> .....	390	332	358	362	435	466	457
Mathematical science .....	435	418	378	431	530	521	535
Computer science .....	1,536	1,252	1,173	1,026	998	1,164	1,237
Biological science .....	1,167	1,216	1,336	1,415	1,636	1,856	2,053
Agricultural science .....	57	55	61	62	93	93	131
Social sciences .....	5,050	5,757	6,438	7,498	8,616	9,409	10,195
Social science .....	3,260	3,659	4,082	4,689	5,419	5,890	6,191
Psychology .....	1,790	2,098	2,356	2,809	3,197	3,519	4,004
Non-S&E <sup>2</sup> .....	23,817	25,224	26,311	29,232	31,737	33,971	36,727
Grand total .....	33,161	34,924	36,711	40,771	44,793	48,293	52,210
Black recipients from HBCUs							
Total science and engineering .....	2,892	2,942	3,104	3,468	3,913	4,607	4,864
Engineering .....	186	166	193	230	214	270	265
Sciences .....	2,706	2,776	2,911	3,238	3,699	4,337	4,599
Natural sciences .....	1,557	1,457	1,418	1,412	1,627	1,932	1,943
Physical science <sup>1</sup> .....	190	160	169	195	231	240	224
Mathematical science .....	212	202	173	205	270	267	268
Computer science .....	685	588	522	415	416	543	523
Biological science .....	450	487	533	561	668	838	863
Agricultural science .....	20	20	21	36	42	44	65
Social sciences .....	1,149	1,319	1,493	1,826	2,072	2,405	2,656
Social science .....	796	896	994	1,166	1,333	1,518	1,641
Psychology .....	353	423	499	660	739	887	1,015
Non-S&E <sup>2</sup> .....	7,121	7,001	7,175	8,065	8,709	9,375	10,105
Grand total .....	10,013	9,943	10,279	11,533	12,622	13,982	14,969
Percent from HBCUs							
Total science and engineering .....	31.0	30.3	29.8	30.1	30.0	32.2	31.4
Engineering .....	26.2	24.8	29.4	30.9	28.6	33.2	30.3
Sciences .....	31.3	30.7	29.9	30.0	30.1	32.1	31.5
Natural sciences .....	43.4	44.5	42.9	42.8	44.1	47.1	44.0
Physical science <sup>1</sup> .....	48.7	48.2	47.2	53.9	53.1	51.5	49.0
Mathematical science .....	48.7	48.3	45.8	47.6	50.9	51.2	50.1
Computer science .....	44.6	47.0	44.5	40.4	41.7	46.6	42.3
Biological science .....	38.6	40.0	39.9	39.6	40.8	45.2	42.0
Agricultural science .....	35.1	36.4	34.4	58.1	45.2	47.3	49.6
Social sciences .....	22.8	22.9	23.2	24.4	24.0	25.6	26.1
Social science .....	24.4	24.5	24.4	24.9	24.6	25.8	26.5
Psychology .....	19.7	20.2	21.2	23.5	23.1	25.2	25.3
Non-S&E <sup>2</sup> .....	29.9	27.8	27.3	27.6	27.4	27.6	27.5
Grand total .....	30.2	28.5	28.0	28.3	28.2	29.0	28.7

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 16. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	1,784	1,652	1,847	2,090	2,356	2,554	2,849
Engineering .....	403	355	387	398	466	564	589
Sciences .....	1,381	1,297	1,460	1,692	1,890	1,990	2,260
Natural sciences .....	581	495	527	644	699	716	821
Physical science <sup>1</sup> .....	79	78	87	73	98	105	127
Mathematical science .....	73	59	70	100	77	98	109
Computer science .....	207	198	232	283	316	308	365
Biological science .....	167	124	110	137	149	135	142
Agricultural science .....	55	36	28	51	59	70	78
Social sciences .....	800	802	933	1,048	1,191	1,274	1,439
Social science .....	424	407	462	594	660	730	803
Psychology .....	376	395	471	454	531	544	636
Non-S&E <sup>2</sup> .....	11,389	11,803	12,626	13,767	15,064	16,343	18,087
Grand total .....	13,173	13,455	14,473	15,857	17,420	18,897	20,936
Black recipients from HBCUs							
Total science and engineering .....	318	314	339	391	426	453	484
Engineering .....	27	38	42	37	41	41	43
Sciences .....	291	276	297	354	385	412	441
Natural sciences .....	177	143	153	180	188	204	204
Physical science <sup>1</sup> .....	23	23	24	24	21	36	21
Mathematical science .....	17	13	17	21	17	23	21
Computer science .....	39	42	63	59	76	75	87
Biological science .....	67	47	37	46	47	38	34
Agricultural science .....	31	18	12	30	27	32	41
Social sciences .....	114	133	144	174	197	208	237
Social science .....	67	78	69	114	125	107	126
Psychology .....	47	55	75	60	72	101	111
Non-S&E <sup>2</sup> .....	2,125	2,054	2,019	2,127	2,205	2,326	2,721
Grand total .....	2,443	2,368	2,358	2,518	2,631	2,779	3,205
Percent from HBCUs							
Total science and engineering .....	17.8	19.0	18.4	18.7	18.1	17.7	17.0
Engineering .....	6.7	10.7	10.9	9.3	8.8	7.3	7.3
Sciences .....	21.1	21.3	20.3	20.9	20.4	20.7	19.5
Natural sciences .....	30.5	28.9	29.0	28.0	26.9	28.5	24.8
Physical science <sup>1</sup> .....	29.1	29.5	27.6	32.9	21.4	34.3	16.5
Mathematical science .....	23.3	22.0	24.3	21.0	22.1	23.5	19.3
Computer science .....	18.8	21.2	27.2	20.8	24.1	24.4	23.8
Biological science .....	40.1	37.9	33.6	33.6	31.5	28.1	23.9
Agricultural science .....	56.4	50.0	42.9	58.8	45.8	45.7	52.6
Social sciences .....	14.2	16.6	15.4	16.6	16.5	16.3	16.5
Social science .....	15.8	19.2	14.9	19.2	18.9	14.7	15.7
Psychology .....	12.5	13.9	15.9	13.2	13.6	18.6	17.5
Non-S&E <sup>2</sup> .....	18.7	17.4	16.0	15.4	14.6	14.2	15.0
Grand total .....	18.5	17.6	16.3	15.9	15.1	14.7	15.3

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 17. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black men, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	990	878	950	1,028	1,166	1,253	1,376
Engineering .....	315	262	287	299	332	407	422
Sciences .....	675	616	663	729	834	846	954
Natural sciences .....	338	290	307	338	382	386	435
Physical science <sup>1</sup> .....	45	56	61	43	66	58	74
Mathematical science .....	45	32	37	53	44	48	62
Computer science .....	126	119	140	150	175	193	205
Biological science .....	80	59	51	58	61	47	48
Agricultural science .....	42	24	18	34	36	40	46
Social sciences .....	337	326	356	391	452	460	519
Social science .....	221	206	223	262	315	345	358
Psychology .....	116	120	133	129	137	115	161
Non-S&E <sup>2</sup> .....	3,895	4,086	4,219	4,591	4,628	5,219	5,631
Grand total .....	4,885	4,964	5,169	5,619	5,794	6,472	7,007
Black recipients from HBCUs							
Total science and engineering .....	155	154	164	172	195	191	208
Engineering .....	15	26	32	29	27	23	28
Sciences .....	140	128	132	143	168	168	180
Natural sciences .....	93	76	84	90	100	106	98
Physical science <sup>1</sup> .....	14	14	14	14	16	19	10
Mathematical science .....	10	8	9	7	7	9	12
Computer science .....	19	24	35	33	46	44	40
Biological science .....	28	19	17	15	15	11	7
Agricultural science .....	22	11	9	21	16	23	29
Social sciences .....	47	52	48	53	68	62	82
Social science .....	36	39	28	39	47	40	49
Psychology .....	11	13	20	14	21	22	33
Non-S&E <sup>2</sup> .....	627	576	582	594	587	631	734
Grand total .....	782	730	746	766	782	822	942
Percent from HBCUs							
Total science and engineering .....	15.7	17.5	17.3	16.7	16.7	15.2	15.1
Engineering .....	4.8	9.9	11.1	9.7	8.1	5.7	6.6
Sciences .....	20.7	20.8	19.9	19.6	20.1	19.9	18.9
Natural sciences .....	27.5	26.2	27.4	26.6	26.2	27.5	22.5
Physical science <sup>1</sup> .....	31.1	25.0	23.0	32.6	24.2	32.8	13.5
Mathematical science .....	22.2	25.0	24.3	13.2	15.9	18.8	19.4
Computer science .....	15.1	20.2	25.0	22.0	26.3	22.8	19.5
Biological science .....	35.0	32.2	33.3	25.9	24.6	23.4	14.6
Agricultural science .....	52.4	45.8	50.0	61.8	44.4	57.5	63.0
Social sciences .....	13.9	16.0	13.5	13.6	15.0	13.5	15.8
Social science .....	16.3	18.9	12.6	14.9	14.9	11.6	13.7
Psychology .....	9.5	10.8	15.0	10.9	15.3	19.1	20.5
Non-S&E <sup>2</sup> .....	16.1	14.1	13.8	12.9	12.7	12.1	13.0
Grand total .....	16.0	14.7	14.4	13.6	13.5	12.7	13.4

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 18. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black women, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	794	774	897	1,062	1,190	1,301	1,473
Engineering .....	88	93	100	99	134	157	167
Sciences .....	706	681	797	963	1,056	1,144	1,306
Natural sciences .....	243	205	220	306	317	330	386
Physical science <sup>1</sup> .....	34	22	26	30	32	47	53
Mathematical science .....	28	27	33	47	33	50	47
Computer science .....	81	79	92	133	141	115	160
Biological science .....	87	65	59	79	88	88	94
Agricultural science .....	13	12	10	17	23	30	32
Social sciences .....	463	476	577	657	739	814	920
Social science .....	203	201	239	332	345	385	445
Psychology .....	260	275	338	325	394	429	475
Non-S&E <sup>2</sup> .....	7,494	7,717	8,407	9,176	10,436	11,124	12,456
Grand total .....	8,288	8,491	9,304	10,238	11,626	12,425	13,929
Black recipients from HBCUs							
Total science and engineering .....	163	160	175	219	231	262	276
Engineering .....	12	12	10	8	14	18	15
Sciences .....	151	148	165	211	217	244	261
Natural sciences .....	84	67	69	90	88	98	106
Physical science <sup>1</sup> .....	9	9	10	10	5	17	11
Mathematical science .....	7	5	8	14	10	14	9
Computer science .....	20	18	28	26	30	31	47
Biological science .....	39	28	20	31	32	27	27
Agricultural science .....	9	7	3	9	11	9	12
Social sciences .....	67	81	96	121	129	146	155
Social science .....	31	39	41	75	78	67	77
Psychology .....	36	42	55	46	51	79	78
Non-S&E <sup>2</sup> .....	1,498	1,478	1,437	1,533	1,618	1,695	1,987
Grand total .....	1,661	1,638	1,612	1,752	1,849	1,957	2,263
Percent from HBCUs							
Total science and engineering .....	20.5	20.7	19.5	20.6	19.4	20.1	18.7
Engineering .....	13.6	12.9	10.0	8.1	10.4	11.5	9.0
Sciences .....	21.4	21.7	20.7	21.9	20.5	21.3	20.0
Natural sciences .....	34.6	32.7	31.4	29.4	27.8	29.7	27.5
Physical science <sup>1</sup> .....	26.5	40.9	38.5	33.3	15.6	36.2	20.8
Mathematical science .....	25.0	18.5	24.2	29.8	30.3	28.0	19.1
Computer science .....	24.7	22.8	30.4	19.5	21.3	27.0	29.4
Biological science .....	44.8	43.1	33.9	39.2	36.4	30.7	28.7
Agricultural science .....	69.2	58.3	30.0	52.9	47.8	30.0	37.5
Social sciences .....	14.5	17.0	16.6	18.4	17.5	17.9	16.8
Social science .....	15.3	19.4	17.2	22.6	22.6	17.4	17.3
Psychology .....	13.8	15.3	16.3	14.2	12.9	18.4	16.4
Non-S&E <sup>2</sup> .....	20.0	19.2	17.1	16.7	15.5	15.2	16.0
Grand total .....	20.0	19.3	17.3	17.1	15.9	15.8	16.2

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94



**Table 19. Number of earned doctoral degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	319	366	373	459	407	468	496
Engineering .....	25	33	40	55	49	50	54
Sciences .....	294	333	333	404	358	418	442
Natural sciences .....	108	114	103	130	115	149	170
Physical science <sup>1</sup> .....	22	35	33	34	31	45	52
Mathematical science .....	11	8	4	11	4	8	11
Computer science .....	2	1	1	8	5	6	10
Biological science .....	60	56	50	60	61	74	75
Agricultural science .....	13	14	15	17	14	16	22
Social sciences .....	186	219	230	274	243	269	272
Social science .....	93	122	115	144	137	150	148
Psychology .....	93	97	115	130	106	119	124
Non-S&E <sup>2</sup> .....	591	596	676	701	706	809	778
Grand total .....	910	962	1,049	1,160	1,113	1,277	1,274
Black recipients from HBCUs							
Total science and engineering .....	35	34	35	48	42	59	49
Engineering .....	0	1	0	3	2	0	4
Sciences .....	35	33	35	45	40	59	45
Natural sciences .....	15	15	14	16	11	25	14
Physical science <sup>1</sup> .....	1	3	4	5	0	6	3
Mathematical science .....	0	3	0	0	0	0	2
Computer science .....	0	0	0	0	0	0	0
Biological science .....	14	9	10	11	11	18	9
Agricultural science .....	0	0	0	0	0	1	0
Social sciences .....	20	18	21	29	29	34	31
Social science .....	11	12	13	10	19	22	11
Psychology .....	9	6	8	19	10	12	20
Non-S&E <sup>2</sup> .....	42	52	105	59	61	75	82
Grand total .....	77	86	140	107	103	134	131
Percent from HBCUs							
Total science and engineering .....	11.0	9.3	9.4	10.5	10.3	12.6	9.9
Engineering .....	.0	3.0	.0	5.5	4.1	.0	7.4
Sciences .....	11.9	9.9	10.5	11.1	11.2	14.1	10.2
Natural sciences .....	13.9	13.2	13.6	12.3	9.6	16.8	8.2
Physical science <sup>1</sup> .....	4.5	8.6	12.1	14.7	.0	13.3	5.8
Mathematical science .....	.0	37.5	.0	.0	.0	.0	18.2
Computer science .....	.0	.0	.0	.0	.0	.0	.0
Biological science .....	23.3	16.1	20.0	18.3	18.0	24.3	12.0
Agricultural science .....	.0	.0	.0	.0	.0	6.3	.0
Social sciences .....	10.8	8.2	9.1	10.6	11.9	12.6	11.4
Social science .....	11.8	9.8	11.3	6.9	13.9	14.7	7.4
Psychology .....	9.7	6.2	7.0	14.6	9.4	10.1	16.1
Non-S&E <sup>2</sup> .....	7.1	8.7	15.5	8.4	8.6	9.3	10.5
Grand total .....	8.5	8.9	13.3	9.2	9.3	10.5	10.3

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

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	189	213	225	266	237	260	282
Engineering .....	24	30	34	47	43	39	41
Sciences .....	165	183	191	219	194	221	241
Natural sciences .....	73	77	71	84	79	98	102
Physical science <sup>1</sup> .....	18	27	24	28	24	35	38
Mathematical science .....	9	5	3	7	4	7	8
Computer science .....	1	0	1	4	4	2	8
Biological science .....	35	32	29	29	37	42	32
Agricultural science .....	10	13	14	16	10	12	16
Social sciences .....	92	106	120	135	115	123	139
Social science .....	58	70	77	91	87	79	93
Psychology .....	34	36	43	44	28	44	46
Non-S&E <sup>2</sup> .....	247	239	254	282	280	317	270
Grand total .....	436	452	479	548	517	577	552
Black recipients from HBCUs							
Total science and engineering .....	20	20	22	28	22	29	27
Engineering .....	0	1	0	3	2	0	3
Sciences .....	20	19	22	25	20	29	24
Natural sciences .....	8	9	7	11	4	14	6
Physical science <sup>1</sup> .....	1	2	2	4	0	5	2
Mathematical science .....	0	2	0	0	0	0	1
Computer science .....	0	0	0	0	0	0	0
Biological science .....	7	5	5	7	4	8	3
Agricultural science .....	0	0	0	0	0	1	0
Social sciences .....	12	10	15	14	16	15	18
Social science .....	9	9	11	8	14	12	10
Psychology .....	3	1	4	6	2	3	8
Non-S&E <sup>2</sup> .....	17	20	39	26	25	26	27
Grand total .....	37	40	61	54	47	55	54
Percent from HBCUs							
Total science and engineering .....	10.6	9.4	9.8	10.5	9.3	11.2	9.6
Engineering .....	.0	3.3	.0	6.4	4.7	.0	7.3
Sciences .....	12.1	10.4	11.5	11.4	10.3	13.1	10.0
Natural sciences .....	11.0	11.7	9.9	13.1	5.1	14.3	5.9
Physical science <sup>1</sup> .....	5.6	7.4	8.3	14.3	.0	14.3	5.3
Mathematical science .....	.0	40.0	.0	.0	.0	.0	12.5
Computer science .....	.0	.0	.0	.0	.0	.0	.0
Biological science .....	20.0	15.6	17.2	24.1	10.8	19.0	9.4
Agricultural science .....	.0	.0	.0	.0	.0	8.3	.0
Social sciences .....	13.0	9.4	12.5	10.4	13.9	12.2	12.9
Social science .....	15.5	12.9	14.3	8.8	16.1	15.2	10.8
Psychology .....	8.8	2.8	9.3	13.6	7.1	6.8	17.4
Non-S&E <sup>2</sup> .....	6.9	8.4	15.4	9.2	8.9	8.2	10.0
Grand total .....	8.5	8.8	12.7	9.9	9.1	9.5	9.8

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

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all black recipients							
Total science and engineering .....	130	153	148	193	170	208	214
Engineering .....	1	3	6	8	6	11	13
Sciences .....	129	150	142	185	164	197	201
Natural sciences .....	35	37	32	46	36	51	68
Physical science <sup>1</sup> .....	4	8	9	6	7	10	14
Mathematical science .....	2	3	1	4	0	1	3
Computer science .....	1	1	0	4	1	4	2
Biological science .....	25	24	21	31	24	32	43
Agricultural science .....	3	1	1	1	4	4	6
Social sciences .....	94	113	110	139	128	146	133
Social science .....	35	52	38	53	50	71	55
Psychology .....	59	61	72	86	78	75	78
Non-S&E <sup>2</sup> .....	344	357	422	419	426	492	508
Grand total .....	474	510	570	612	596	700	722
Black recipients from HBCUs							
Total science and engineering .....	15	14	13	20	20	30	22
Engineering .....	0	0	0	0	0	0	1
Sciences .....	15	14	13	20	20	30	21
Natural sciences .....	7	6	7	5	7	11	8
Physical science <sup>1</sup> .....	0	1	2	1	0	1	1
Mathematical science .....	0	1	0	0	0	0	1
Computer science .....	0	0	0	0	0	0	0
Biological science .....	7	4	5	4	7	10	6
Agricultural science .....	0	0	0	0	0	0	0
Social sciences .....	8	8	6	15	13	19	13
Social science .....	2	3	2	2	5	10	1
Psychology .....	6	5	4	13	8	9	12
Non-S&E <sup>2</sup> .....	25	32	66	33	36	49	55
Grand total .....	40	46	79	53	56	79	77
Percent from HBCUs							
Total science and engineering .....	11.5	9.2	8.8	10.4	11.8	14.4	10.3
Engineering .....	.0	.0	.0	.0	.0	.0	7.7
Sciences .....	11.6	9.3	9.2	10.8	12.2	15.2	10.4
Natural sciences .....	20.0	16.2	21.9	10.9	19.4	21.6	11.8
Physical science <sup>1</sup> .....	.0	12.5	22.2	16.7	.0	10.0	7.1
Mathematical science .....	.0	33.3	.0	.0	.0	.0	33.3
Computer science .....	.0	.0	0	.0	.0	.0	.0
Biological science .....	28.0	16.7	23.8	12.9	29.2	31.3	14.0
Agricultural science .....	.0	.0	.0	.0	.0	.0	.0
Social sciences .....	8.5	7.1	5.5	10.8	10.2	13.0	9.8
Social science .....	5.7	5.8	5.3	3.8	10.0	14.1	1.8
Psychology .....	10.2	8.2	5.6	15.1	10.3	12.0	15.4
Non-S&E <sup>2</sup> .....	7.3	9.0	15.6	7.9	8.5	10.0	10.8
Grand total .....	8.4	9.0	13.9	8.7	9.4	11.3	10.7

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

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	12,419	13,327	13,918	15,351	17,391	18,442	20,529
Engineering .....	2,554	2,561	2,511	2,566	2,733	2,961	3,143
Sciences .....	9,865	10,766	11,407	12,785	14,658	15,481	17,386
Natural sciences .....	4,660	4,417	4,357	4,705	4,892	5,034	5,648
Physical science <sup>1</sup> .....	585	563	522	533	546	599	733
Mathematical science .....	321	373	413	480	482	470	543
Computer science .....	1,375	1,195	1,085	1,215	1,173	1,096	1,135
Biological science .....	2,146	2,090	2,119	2,264	2,477	2,652	2,901
Agricultural science .....	233	196	218	213	214	217	336
Social sciences .....	5,205	6,349	7,050	8,080	9,766	10,447	11,738
Social science .....	3,503	4,197	4,645	5,334	6,519	6,860	7,748
Psychology .....	1,702	2,152	2,405	2,746	3,247	3,587	3,990
Non-S&E <sup>2</sup> .....	25,777	28,034	29,946	33,676	35,616	39,403	42,154
Grand total .....	38,196	41,361	43,864	49,027	53,007	57,845	62,683
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	3,065	3,056	2,983	2,952	3,007	3,001	3,205
Engineering .....	584	651	626	554	686	697	742
Sciences .....	2,481	2,405	2,357	2,398	2,321	2,304	2,463
Natural sciences .....	1,556	1,479	1,447	1,446	1,339	1,300	1,374
Physical science <sup>1</sup> .....	173	184	184	154	172	172	227
Mathematical science .....	58	69	69	108	34	41	27
Computer science .....	337	326	261	327	296	254	258
Biological science .....	916	858	862	797	837	833	808
Agricultural science .....	72	42	71	60	0	0	54
Social sciences .....	925	926	910	952	982	1,004	1,089
Social science .....	576	501	495	523	496	508	590
Psychology .....	349	425	415	429	486	496	499
Non-S&E <sup>2</sup> .....	8,871	9,146	9,192	9,558	9,748	10,358	10,249
Grand total .....	11,936	12,202	12,175	12,510	12,755	13,359	13,454
Percent from institutions in Puerto Rico							
Total science and engineering .....	24.7	22.9	21.4	19.2	17.3	16.3	15.6
Engineering .....	22.9	25.4	24.9	21.6	25.1	23.5	23.6
Sciences .....	25.1	22.3	20.7	18.8	15.8	14.9	14.2
Natural sciences .....	33.4	33.5	33.2	30.7	27.4	25.8	24.3
Physical science <sup>1</sup> .....	29.6	32.7	35.2	28.9	31.5	28.7	31.0
Mathematical science .....	18.1	18.5	16.7	22.5	7.1	8.7	5.0
Computer science .....	24.5	27.3	24.1	26.9	25.2	23.2	22.7
Biological science .....	42.7	41.1	40.7	35.2	33.8	31.4	27.9
Agricultural science .....	30.9	21.4	32.6	28.2	.0	.0	16.1
Social sciences .....	17.8	14.6	12.9	11.8	10.1	9.6	9.3
Social science .....	16.4	11.9	10.7	9.8	7.6	7.4	7.6
Psychology .....	20.5	19.7	17.3	15.6	15.0	13.8	12.5
Non-S&E <sup>2</sup> .....	34.4	32.6	30.7	28.4	27.4	26.3	24.3
Grand total .....	31.2	29.5	27.8	25.5	24.1	23.1	21.5

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 23. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	6,974	7,318	7,434	7,888	8,730	9,160	10,190
Engineering .....	2,100	2,100	2,035	2,039	2,187	2,355	2,495
Sciences .....	4,874	5,218	5,399	5,849	6,543	6,805	7,695
Natural sciences .....	2,516	2,432	2,328	2,458	2,497	2,608	2,925
Physical science <sup>1</sup> .....	377	362	311	318	326	361	415
Mathematical science .....	196	224	249	259	279	273	300
Computer science .....	766	750	669	738	724	700	719
Biological science .....	1,018	965	955	1,019	1,043	1,144	1,298
Agricultural science .....	159	131	144	124	125	130	193
Social sciences .....	2,358	2,786	3,071	3,391	4,046	4,197	4,770
Social science .....	1,845	2,153	2,384	2,634	3,220	3,269	3,774
Psychology .....	513	633	687	757	826	928	996
Non-S&E <sup>2</sup> .....	9,664	10,684	11,249	12,893	13,296	14,665	15,670
Grand total .....	16,638	18,002	18,683	20,781	22,026	23,825	25,860
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	1,524	1,559	1,462	1,365	1,362	1,339	1,426
Engineering .....	453	525	481	398	498	511	534
Sciences .....	1,071	1,034	981	967	864	828	892
Natural sciences .....	730	671	626	612	520	496	540
Physical science <sup>1</sup> .....	98	91	90	70	78	70	86
Mathematical science .....	30	39	47	50	20	24	15
Computer science .....	172	197	143	170	159	147	149
Biological science .....	377	322	302	293	263	255	258
Agricultural science .....	53	22	44	29	0	0	32
Social sciences .....	341	363	355	355	344	332	352
Social science .....	272	257	252	245	243	211	248
Psychology .....	69	106	103	110	101	121	104
Non-S&E <sup>2</sup> .....	2,578	2,814	2,804	3,204	2,890	3,030	3,087
Grand total .....	4,102	4,373	4,266	4,569	4,252	4,369	4,513
Percent from institutions in Puerto Rico							
Total science and engineering .....	21.9	21.3	19.7	17.3	15.6	14.6	14.0
Engineering .....	21.6	25.0	23.6	19.5	22.8	21.7	21.4
Sciences .....	22.0	19.8	18.2	16.5	13.2	12.2	11.6
Natural sciences .....	29.0	27.6	26.9	24.9	20.8	19.0	18.5
Physical science <sup>1</sup> .....	26.0	25.1	28.9	22.0	23.9	19.4	20.7
Mathematical science .....	15.3	17.4	18.9	19.3	7.2	8.8	5.0
Computer science .....	22.5	26.3	21.4	23.0	22.0	21.0	20.7
Biological science .....	37.0	33.4	31.6	28.8	25.2	22.3	19.9
Agricultural science .....	33.3	16.8	30.6	23.4	.0	.0	16.6
Social sciences .....	14.5	13.0	11.6	10.5	8.5	7.9	7.4
Social science .....	14.7	11.9	10.6	9.3	7.5	6.5	6.6
Psychology .....	13.5	16.7	15.0	14.5	12.2	13.0	10.4
Non-S&E <sup>2</sup> .....	26.7	26.3	24.9	24.9	21.7	20.7	19.7
Grand total .....	24.7	24.3	22.8	22.0	19.3	18.3	17.5

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 24. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	5,445	6,009	6,484	7,463	8,661	9,282	10,339
Engineering .....	454	461	476	527	546	606	648
Sciences .....	4,991	5,548	6,008	6,936	8,115	8,676	9,691
Natural sciences .....	2,144	1,985	2,029	2,247	2,395	2,426	2,723
Physical science <sup>1</sup> .....	208	201	211	215	220	238	318
Mathematical science .....	125	149	164	221	203	197	243
Computer science .....	609	445	416	477	449	396	416
Biological science .....	1,128	1,125	1,164	1,245	1,434	1,508	1,603
Agricultural science .....	74	65	74	89	89	87	143
Social sciences .....	2,847	3,563	3,979	4,689	5,720	6,250	6,968
Social science .....	1,658	2,044	2,261	2,700	3,299	3,591	3,974
Psychology .....	1,189	1,519	1,718	1,989	2,421	2,659	2,994
Non-S&E <sup>2</sup> .....	16,113	17,350	18,697	20,783	22,320	24,738	26,484
Grand total .....	21,558	23,359	25,181	28,246	30,981	34,020	36,823
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	1,541	1,497	1,521	1,587	1,645	1,662	1,779
Engineering .....	131	126	145	156	188	186	208
Sciences .....	1,410	1,371	1,376	1,431	1,457	1,476	1,571
Natural sciences .....	826	808	821	834	819	804	834
Physical science <sup>1</sup> .....	75	93	94	84	94	102	141
Mathematical science .....	28	30	22	58	14	17	12
Computer science .....	165	129	118	157	137	107	109
Biological science .....	539	536	560	504	574	578	550
Agricultural science .....	19	20	27	31	0	0	22
Social sciences .....	584	563	555	597	638	672	737
Social science .....	304	244	243	278	253	297	342
Psychology .....	280	319	312	319	385	375	395
Non-S&E <sup>2</sup> .....	6,293	6,332	6,388	6,354	6,858	7,328	7,162
Grand total .....	7,834	7,829	7,909	7,941	8,503	8,990	8,941
Percent from institutions in Puerto Rico							
Total science and engineering .....	28.3	24.9	23.5	21.3	19.0	17.9	17.2
Engineering .....	28.9	27.3	30.5	29.6	34.4	30.7	32.1
Sciences .....	28.3	24.7	22.9	20.6	18.0	17.0	16.2
Natural sciences .....	38.5	40.7	40.5	37.1	34.2	33.1	30.6
Physical science <sup>1</sup> .....	36.1	46.3	44.5	39.1	42.7	42.9	44.3
Mathematical science .....	22.4	20.1	13.4	26.2	6.9	8.6	4.9
Computer science .....	27.1	29.0	28.4	32.9	30.5	27.0	26.2
Biological science .....	47.8	47.6	48.1	40.5	40.0	38.3	34.3
Agricultural science .....	25.7	30.8	36.5	34.8	0	0	15.4
Social sciences .....	20.5	15.8	13.9	12.7	11.2	10.8	10.6
Social science .....	18.3	11.9	10.7	10.3	7.7	8.3	8.6
Psychology .....	23.5	21.0	18.2	16.0	15.9	14.1	13.2
Non-S&E <sup>2</sup> .....	39.1	36.5	34.2	30.6	30.7	29.6	27.0
Grand total .....	36.3	33.5	31.4	28.1	27.4	26.4	24.3

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 25. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	1,584	1,585	1,587	1,736	1,806	2,092	2,514
Engineering .....	512	468	446	468	488	581	719
Sciences .....	1,072	1,117	1,141	1,268	1,318	1,511	1,795
Natural sciences .....	493	444	431	494	503	574	680
Physical science <sup>1</sup> .....	122	92	98	96	93	114	114
Mathematical science .....	60	34	51	85	66	78	75
Computer science .....	123	144	118	128	149	162	169
Biological science .....	126	126	120	136	146	151	138
Agricultural science .....	62	48	44	49	49	69	184
Social sciences .....	579	673	710	774	815	937	1,115
Social science .....	308	313	341	383	396	474	557
Psychology .....	271	360	369	391	419	463	558
Non-S&E <sup>2</sup> .....	6,197	6,548	6,908	7,948	8,450	9,279	10,663
Grand total .....	7,781	8,133	8,495	9,684	10,256	11,371	13,177
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	184	214	207	214	140	160	311
Engineering .....	11	22	32	23	0	1	86
Sciences .....	173	192	175	191	140	159	225
Natural sciences .....	99	62	65	83	27	47	68
Physical science <sup>1</sup> .....	13	19	21	16	9	12	18
Mathematical science .....	8	6	7	17	7	14	8
Computer science .....	0	7	0	0	0	4	5
Biological science .....	44	17	30	39	11	17	18
Agricultural science .....	34	13	7	11	0	0	19
Social sciences .....	74	130	110	108	113	112	157
Social science .....	33	25	25	31	32	30	36
Psychology .....	41	105	85	77	81	82	121
Non-S&E <sup>2</sup> .....	936	1,033	855	1,009	1,084	1,081	1,371
Grand total .....	1,120	1,247	1,062	1,223	1,224	1,241	1,682
Percent from institutions in Puerto Rico							
Total science and engineering .....	11.6	13.5	13.0	12.3	7.8	7.6	12.4
Engineering .....	2.1	4.7	7.2	4.9	.0	.2	12.0
Sciences .....	16.1	17.2	15.3	15.1	10.6	10.5	12.5
Natural sciences .....	20.1	14.0	15.1	16.8	5.4	8.2	10.0
Physical science <sup>1</sup> .....	10.7	20.7	21.4	16.7	9.7	10.5	15.8
Mathematical science .....	13.3	17.6	13.7	20.0	10.6	17.9	10.7
Computer science .....	.0	4.9	.0	.0	.0	2.5	3.0
Biological science .....	34.9	13.5	25.0	28.7	7.5	11.3	13.0
Agricultural science .....	54.8	27.1	15.9	22.4	.0	.0	10.3
Social sciences .....	12.8	19.3	15.5	14.0	13.9	12.0	14.1
Social science .....	10.7	8.0	7.3	8.1	8.1	6.3	6.5
Psychology .....	15.1	29.2	23.0	19.7	19.3	17.7	21.7
Non-S&E <sup>2</sup> .....	15.1	15.8	12.4	12.7	12.8	11.6	12.9
Grand total .....	14.4	15.3	12.5	12.6	11.9	10.9	12.8

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 26. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic men, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	1,045	970	959	992	1,066	1,255	1,427
Engineering .....	444	394	373	378	408	480	582
Sciences .....	601	576	586	614	658	775	845
Natural sciences .....	318	282	275	294	309	341	414
Physical science <sup>1</sup> .....	88	65	63	73	64	76	80
Mathematical science .....	41	21	33	52	47	50	44
Computer science .....	91	100	93	84	98	104	120
Biological science .....	53	62	61	54	69	76	65
Agricultural science .....	45	34	25	31	31	35	105
Social sciences .....	283	294	311	320	349	434	431
Social science .....	187	176	178	196	218	282	290
Psychology .....	96	118	133	124	131	152	141
Non-S&E <sup>2</sup> .....	2,476	2,627	2,754	3,132	3,315	3,620	4,056
Grand total .....	3,521	3,597	3,713	4,124	4,381	4,875	5,483
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	93	103	103	80	48	56	154
Engineering .....	11	21	26	15	0	1	68
Sciences .....	82	82	77	65	48	55	86
Natural sciences .....	54	35	33	39	12	23	43
Physical science <sup>1</sup> .....	8	14	11	9	4	6	15
Mathematical science .....	4	2	3	9	4	11	5
Computer science .....	0	4	0	0	0	1	3
Biological science .....	15	5	14	13	4	5	8
Agricultural science .....	27	10	5	8	0	0	12
Social sciences .....	28	47	44	26	36	32	43
Social science .....	18	16	10	8	14	16	25
Psychology .....	10	31	34	18	22	16	18
Non-S&E <sup>2</sup> .....	276	313	262	306	350	346	432
Grand total .....	369	416	365	386	398	402	586
Percent from institutions in Puerto Rico							
Total science and engineering .....	8.9	10.6	10.7	8.1	4.5	4.5	10.8
Engineering .....	2.5	5.3	7.0	4.0	.0	.2	11.7
Sciences .....	13.6	14.2	13.1	10.6	7.3	7.1	10.2
Natural sciences .....	17.0	12.4	12.0	13.3	3.9	6.7	10.4
Physical science <sup>1</sup> .....	9.1	21.5	17.5	12.3	6.3	7.9	18.8
Mathematical science .....	9.8	9.5	9.1	17.3	8.5	22.0	11.4
Computer science .....	.0	4.0	.0	.0	.0	1.0	2.5
Biological science .....	28.3	8.1	23.0	24.1	5.8	6.6	12.3
Agricultural science .....	60.0	29.4	20.0	25.8	.0	.0	11.4
Social sciences .....	9.9	16.0	14.1	8.1	10.3	7.4	10.0
Social science .....	9.6	9.1	5.6	4.1	6.4	5.7	8.6
Psychology .....	10.4	26.3	25.6	14.5	16.8	10.5	12.8
Non-S&E <sup>2</sup> .....	11.1	11.9	9.5	9.8	10.6	9.6	10.7
Grand total .....	10.5	11.6	9.8	9.4	9.1	8.2	10.7

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94



**Table 27. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic women, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	539	615	628	744	740	837	1,087
Engineering .....	68	74	73	90	80	101	137
Sciences .....	471	541	555	654	660	736	950
Natural sciences .....	175	162	156	200	194	233	266
Physical science <sup>1</sup> .....	34	27	35	23	29	38	34
Mathematical science .....	19	13	18	33	19	28	31
Computer science .....	32	44	25	44	51	58	49
Biological science .....	73	64	59	82	77	75	73
Agricultural science .....	17	14	19	18	18	34	79
Social sciences .....	296	379	399	454	466	503	684
Social science .....	121	137	163	187	178	192	267
Psychology .....	175	242	236	267	288	311	417
Non-S&E <sup>2</sup> .....	3,721	3,921	4,154	4,816	5,135	5,659	6,607
Grand total .....	4,260	4,536	4,782	5,560	5,875	6,496	7,694
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	91	111	104	134	92	104	157
Engineering .....	0	1	6	8	0	0	18
Sciences .....	91	110	98	126	92	104	139
Natural sciences .....	45	27	32	44	15	24	25
Physical science <sup>1</sup> .....	5	5	10	7	5	6	3
Mathematical science .....	4	4	4	8	3	3	3
Computer science .....	0	3	0	0	0	3	2
Biological science .....	29	12	16	26	7	12	10
Agricultural science .....	7	3	2	3	0	0	7
Social sciences .....	46	83	66	82	77	80	114
Social science .....	15	9	15	23	18	14	11
Psychology .....	31	74	51	59	59	66	103
Non-S&E <sup>2</sup> .....	660	720	593	703	734	735	939
Grand total .....	751	831	697	837	826	839	1,096
Percent from institutions in Puerto Rico							
Total science and engineering .....	16.9	18.0	16.6	18.0	12.4	12.4	14.4
Engineering .....	.0	1.4	8.2	8.9	.0	.0	13.1
Sciences .....	19.3	20.3	17.7	19.3	13.9	14.1	14.6
Natural sciences .....	25.7	16.7	20.5	22.0	7.7	10.3	9.4
Physical science <sup>1</sup> .....	14.7	18.5	28.6	30.4	17.2	15.8	8.8
Mathematical science .....	21.1	30.8	22.2	24.2	15.8	10.7	9.7
Computer science .....	.0	6.8	.0	.0	.0	5.2	4.1
Biological science .....	39.7	18.8	27.1	31.7	9.1	16.0	13.7
Agricultural science .....	41.2	21.4	10.5	16.7	.0	.0	8.9
Social sciences .....	15.5	21.9	16.5	18.1	16.5	15.9	16.7
Social science .....	12.4	6.6	9.2	12.3	10.1	7.3	4.1
Psychology .....	17.7	30.6	21.6	22.1	20.5	21.2	24.7
Non-S&E <sup>2</sup> .....	17.7	18.4	14.3	14.6	14.3	13.0	14.2
Grand total .....	17.6	18.3	14.6	15.1	14.1	12.9	14.2

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

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 28. Number of earned doctoral degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	357	382	468	492	513	542	548
Engineering .....	34	47	54	60	71	66	66
Sciences .....	323	335	414	432	442	476	482
Natural sciences .....	153	172	212	212	228	249	274
Physical science <sup>1</sup> .....	61	68	85	81	88	92	98
Mathematical science .....	11	11	10	9	12	16	13
Computer science .....	4	4	5	12	8	7	7
Biological science .....	62	71	89	95	102	114	131
Agricultural science .....	15	18	23	15	18	20	25
Social sciences .....	170	163	202	220	214	227	208
Social science .....	75	70	93	98	81	96	75
Psychology .....	95	93	109	122	133	131	133
Non-S&E <sup>2</sup> .....	351	312	369	375	396	431	481
Grand total .....	708	694	837	867	909	973	1,029
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	6	12	18	12	26	14	30
Engineering .....	0	0	0	0	0	0	0
Sciences .....	6	12	18	12	26	14	30
Natural sciences .....	5	5	8	5	5	6	12
Physical science <sup>1</sup> .....	4	4	6	3	4	4	7
Mathematical science .....	0	0	0	0	0	0	0
Computer science .....	0	0	0	0	0	0	0
Biological science .....	1	1	2	2	1	2	5
Agricultural science .....	0	0	0	0	0	0	0
Social sciences .....	1	7	10	7	21	8	18
Social science .....	1	1	0	1	5	0	1
Psychology .....	0	6	10	6	16	8	17
Non-S&E <sup>2</sup> .....	7	5	15	13	24	17	27
Grand total .....	13	17	33	25	50	31	57
Percent from institutions in Puerto Rico							
Total science and engineering .....	1.7	3.1	3.8	2.4	5.1	2.6	5.5
Engineering .....	.0	.0	.0	.0	.0	.0	.0
Sciences .....	1.9	3.6	4.3	2.8	5.9	2.9	6.2
Natural sciences .....	3.3	2.9	3.8	2.4	2.2	2.4	4.4
Physical science <sup>1</sup> .....	6.6	5.9	7.1	3.7	4.5	4.3	7.1
Mathematical science .....	.0	.0	.0	.0	.0	.0	.0
Computer science .....	.0	.0	.0	.0	.0	.0	.0
Biological science .....	1.6	1.4	2.2	2.1	1.0	1.8	3.8
Agricultural science .....	.0	.0	.0	.0	.0	.0	.0
Social sciences .....	.6	4.3	5.0	3.2	9.8	3.5	8.7
Social science .....	1.3	1.4	.0	1.0	6.2	.0	1.3
Psychology .....	.0	6.5	9.2	4.9	12.0	6.1	12.8
Non-S&E <sup>2</sup> .....	2.0	1.6	4.1	3.5	6.1	3.9	5.6
Grand total .....	1.8	2.4	3.9	2.9	5.5	3.2	5.5

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

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	216	227	290	306	308	320	318
Engineering .....	29	39	45	50	56	54	60
Sciences .....	187	188	245	256	252	266	258
Natural sciences .....	105	120	138	152	151	162	174
Physical science <sup>1</sup> .....	43	47	55	68	62	70	75
Mathematical science .....	9	7	6	5	9	14	10
Computer science .....	4	1	4	11	7	6	7
Biological science .....	38	50	56	56	59	57	69
Agricultural science .....	11	15	17	12	14	15	13
Social sciences .....	82	68	107	104	101	104	84
Social science .....	50	38	55	52	46	59	41
Psychology .....	32	30	52	52	55	45	43
Non-S&E <sup>2</sup> .....	166	149	159	152	174	197	199
Grand total .....	382	376	449	458	482	517	517
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	4	3	6	3	11	7	11
Engineering .....	0	0	0	0	0	0	0
Sciences .....	4	3	6	3	11	7	11
Natural sciences .....	4	2	2	2	4	4	6
Physical science <sup>1</sup> .....	3	2	1	2	3	2	5
Mathematical science .....	0	0	0	0	0	0	0
Computer science .....	0	0	0	0	0	0	0
Biological science .....	1	0	1	0	1	2	1
Agricultural science .....	0	0	0	0	0	0	0
Social sciences .....	0	1	4	1	7	3	5
Social science .....	0	0	0	0	0	0	0
Psychology .....	0	1	4	1	7	3	5
Non-S&E <sup>2</sup> .....	2	2	3	4	3	3	7
Grand total .....	6	5	9	7	14	10	18
Percent from institutions in Puerto Rico							
Total science and engineering .....	1.9	1.3	2.1	1.0	3.6	2.2	3.5
Engineering .....	.0	.0	.0	.0	.0	.0	.0
Sciences .....	2.1	1.6	2.4	1.2	4.4	2.6	4.3
Natural sciences .....	3.8	1.7	1.4	1.3	2.6	2.5	3.4
Physical science <sup>1</sup> .....	7.0	4.3	1.8	2.9	4.8	2.9	6.7
Mathematical science .....	.0	.0	.0	.0	.0	.0	.0
Computer science .....	.0	.0	.0	.0	.0	.0	.0
Biological science .....	2.6	.0	1.8	.0	1.7	3.5	1.4
Agricultural science .....	.0	.0	.0	.0	.0	.0	.0
Social sciences .....	.0	1.5	3.7	1.0	6.9	2.9	6.0
Social science .....	.0	.0	.0	.0	.0	.0	.0
Psychology .....	.0	3.3	7.7	1.9	12.7	6.7	11.6
Non-S&E <sup>2</sup> .....	1.2	1.3	1.9	2.6	1.7	1.5	3.5
Grand total .....	1.6	1.3	2.0	1.5	2.9	1.9	3.5

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

<sup>2</sup> 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: 1987-94, selected years**

Field	1987	1989	1990	1991	1992	1993	1994
Total, all Hispanic recipients							
Total science and engineering .....	141	155	178	186	205	222	230
Engineering .....	5	8	9	10	15	12	6
Sciences .....	136	147	169	176	190	210	224
Natural sciences .....	48	52	74	60	77	87	100
Physical science <sup>1</sup> .....	18	21	30	13	26	22	23
Mathematical science .....	2	4	4	4	3	2	3
Computer science .....	0	3	1	1	1	1	0
Biological science .....	24	21	33	39	43	57	62
Agricultural science .....	4	3	6	3	4	5	12
Social sciences .....	88	95	95	116	113	123	124
Social science .....	25	32	38	46	35	37	34
Psychology .....	63	63	57	70	78	86	90
Non-S&E <sup>2</sup> .....	185	163	210	223	222	234	282
Grand total .....	326	318	388	409	427	456	512
Hispanic recipients from institutions in Puerto Rico							
Total science and engineering .....	2	9	12	9	15	7	19
Engineering .....	0	0	0	0	0	0	0
Sciences .....	2	9	12	9	15	7	19
Natural sciences .....	1	3	6	3	1	2	6
Physical science <sup>1</sup> .....	1	2	5	1	1	2	2
Mathematical science .....	0	0	0	0	0	0	0
Computer science .....	0	0	0	0	0	0	0
Biological science .....	0	1	1	2	0	0	4
Agricultural science .....	0	0	0	0	0	0	0
Social sciences .....	1	6	6	6	14	5	13
Social science .....	1	1	0	1	5	0	1
Psychology .....	0	5	6	5	9	5	12
Non-S&E <sup>2</sup> .....	5	3	12	9	21	14	20
Grand total .....	7	12	24	18	36	21	39
Percent from institutions in Puerto Rico							
Total science and engineering .....	1.4	5.8	6.7	4.8	7.3	3.2	8.3
Engineering .....	.0	.0	.0	.0	.0	.0	.0
Sciences .....	1.5	6.1	7.1	5.1	7.9	3.3	8.5
Natural sciences .....	2.1	5.8	8.1	5.0	1.3	2.3	6.0
Physical science <sup>1</sup> .....	5.6	9.5	16.7	7.7	3.8	9.1	8.7
Mathematical science .....	.0	.0	.0	.0	.0	.0	.0
Computer science .....	0	.0	.0	.0	.0	.0	0
Biological science .....	.0	4.8	3.0	5.1	.0	.0	6.5
Agricultural science .....	.0	.0	.0	.0	.0	.0	.0
Social sciences .....	1.1	6.3	6.3	5.2	12.4	4.1	10.5
Social science .....	4.0	3.1	.0	2.2	14.3	.0	2.9
Psychology .....	.0	7.9	10.5	7.1	11.5	5.8	13.3
Non-S&E <sup>2</sup> .....	2.7	1.8	5.7	4.0	9.5	6.0	7.1
Grand total .....	2.1	3.8	6.2	4.4	8.4	4.6	7.6

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

<sup>2</sup> 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: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	20,577	20,098	19,150	18,294	17,113	16,987	16,654
U.S. citizens and permanent residents, total <sup>1</sup> .....	19,591	19,439	18,423	17,582	16,597	16,546	16,161
White, non-Hispanics .....	16,541	16,156	15,251	14,279	13,286	13,245	12,909
Asians .....	807	839	755	768	778	768	720
Underrepresented minorities, total .....	2,011	1,947	2,053	2,033	2,074	2,096	2,160
Black, non-Hispanics .....	1,269	1,208	1,200	1,227	1,239	1,132	1,249
Hispanics .....	664	634	784	731	747	853	813
American Indians or Alaskan Natives .....	78	105	69	75	88	111	98
U.S. citizens and permanent residents, unknown race/ethnicity .....	232	497	364	502	459	437	372
Nonresident aliens <sup>2</sup> .....	986	659	727	712	516	441	493
Men							
Total, all recipients .....	18,429	17,999	17,113	16,329	15,309	15,089	14,835
U.S. citizens and permanent residents, total <sup>1</sup> .....	17,509	17,383	16,431	15,660	14,841	14,687	14,401
White, non-Hispanics .....	14,933	14,578	13,679	12,819	12,069	11,908	11,694
Asians .....	727	743	679	700	690	678	641
Underrepresented minorities, total .....	1,641	1,601	1,733	1,692	1,659	1,694	1,729
Black, non-Hispanics .....	983	941	953	968	949	892	959
Hispanics .....	594	567	722	655	629	710	687
American Indians or Alaskan Natives .....	64	93	58	69	81	92	83
U.S. citizens and permanent residents, unknown race/ethnicity .....	208	461	340	449	423	407	337
Nonresident aliens <sup>2</sup> .....	920	616	682	669	468	402	434
Women							
Total, all recipients .....	2,148	2,099	2,037	1,965	1,804	1,898	1,819
U.S. citizens and permanent residents, total <sup>1</sup> .....	2,082	2,056	1,992	1,922	1,756	1,859	1,760
White, non-Hispanics .....	1,608	1,578	1,572	1,460	1,217	1,337	1,215
Asians .....	80	96	76	68	88	90	79
Underrepresented minorities, total .....	370	346	320	341	415	402	431
Black, non-Hispanics .....	286	267	247	259	290	240	290
Hispanics .....	70	67	62	76	118	143	126
American Indians or Alaskan Natives .....	14	12	11	6	7	19	15
U.S. citizens and permanent residents, unknown race/ethnicity .....	24	36	24	53	36	30	35
Nonresident aliens <sup>2</sup> .....	66	43	45	43	48	39	59

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

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**Table 32. Number of earned master's degrees awarded in engineering technologies, by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	883	1,135	1,194	1,188	1,278	1,555	1,547
U.S. citizens and permanent residents, total <sup>1</sup> .....	756	1,004	1,032	1,016	1,063	1,276	1,256
White, non-Hispanics .....	581	802	823	830	817	1,041	994
Asians .....	46	40	79	60	58	40	46
Underrepresented minorities, total .....	85	67	58	69	92	94	112
Black, non-Hispanics .....	42	55	44	47	64	61	72
Hispanics .....	17	10	9	19	23	25	37
American Indians or Alaskan Natives .....	26	2	5	3	5	8	3
U.S. citizens and permanent residents, unknown race/ethnicity .....	44	95	72	57	96	101	104
Nonresident aliens <sup>2</sup> .....	127	131	162	172	215	279	291
Men							
Total, all recipients .....	678	892	888	888	971	1,172	1,164
U.S. citizens and permanent residents, total <sup>1</sup> .....	573	789	757	757	815	961	949
White, non-Hispanics .....	436	631	607	619	619	783	753
Asians .....	41	36	40	39	45	28	33
Underrepresented minorities, total .....	72	48	43	47	66	57	75
Black, non-Hispanics .....	35	40	32	29	46	32	48
Hispanics .....	11	7	7	17	16	18	27
American Indians or Alaskan Natives .....	26	1	4	1	4	7	0
U.S. citizens and permanent residents, unknown race/ethnicity .....	24	74	67	52	85	93	88
Nonresident aliens <sup>2</sup> .....	105	103	131	131	156	211	215
Women							
Total, all recipients .....	205	243	306	300	307	383	383
U.S. citizens and permanent residents, total <sup>1</sup> .....	183	215	275	259	248	315	307
White, non-Hispanics .....	145	171	216	211	198	258	241
Asians .....	5	4	39	21	13	12	13
Underrepresented minorities, total .....	13	19	15	22	26	37	37
Black, non-Hispanics .....	7	15	12	18	18	29	24
Hispanics .....	6	3	2	2	7	7	10
American Indians or Alaskan Natives .....	0	1	1	2	1	1	3
U.S. citizens and permanent residents, unknown race/ethnicity .....	20	21	5	5	11	8	16
Nonresident aliens <sup>2</sup> .....	22	28	31	41	59	68	76

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 33. Number of earned bachelor's degrees awarded in health fields, by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	64,399	60,114	59,852	60,228	62,655	67,942	75,229
U.S. citizens and permanent residents, total <sup>1</sup> .....	63,622	59,367	59,056	59,250	61,792	66,929	74,200
White, non-Hispanics .....	53,903	49,854	48,405	48,798	51,328	55,482	61,624
Asians .....	1,535	1,698	1,823	1,981	2,229	2,469	3,024
Underrepresented minorities, total .....	6,456	6,474	6,890	6,881	7,048	7,758	8,225
Black, non-Hispanics .....	3,725	3,886	4,056	4,122	4,151	4,670	4,817
Hispanics .....	2,464	2,348	2,580	2,481	2,571	2,747	3,018
American Indians or Alaskan Natives .....	267	240	254	278	326	341	390
U.S. citizens and permanent residents, unknown race/ethnicity .....	1,728	1,341	1,938	1,590	1,187	1,220	1,327
Nonresident aliens <sup>2</sup> .....	777	747	796	978	863	1,013	1,029
Men							
Total, all recipients .....	9,346	9,068	9,418	9,855	10,305	11,467	13,180
U.S. citizens and permanent residents, total <sup>1</sup> .....	9,085	8,842	9,176	9,572	10,057	11,189	12,912
White, non-Hispanics .....	7,597	7,339	7,521	7,717	8,230	9,081	10,627
Asians .....	329	398	392	468	541	561	694
Underrepresented minorities, total .....	931	899	1,030	1,094	1,032	1,285	1,315
Black, non-Hispanics .....	469	451	502	525	530	673	659
Hispanics .....	417	401	491	519	441	545	576
American Indians or Alaskan Natives .....	45	47	37	50	61	67	80
U.S. citizens and permanent residents, unknown race/ethnicity .....	228	206	233	293	254	262	276
Nonresident aliens <sup>2</sup> .....	261	226	242	283	248	278	268
Women							
Total, all recipients .....	55,053	51,046	50,434	50,373	52,350	56,475	62,049
U.S. citizens and permanent residents, total <sup>1</sup> .....	54,537	50,525	49,880	49,678	51,735	55,740	61,288
White, non-Hispanics .....	46,306	42,515	40,884	41,081	43,098	46,401	50,997
Asians .....	1,206	1,300	1,431	1,513	1,688	1,908	2,330
Underrepresented minorities, total .....	5,525	5,575	5,860	5,787	6,016	6,473	6,910
Black, non-Hispanics .....	3,256	3,435	3,554	3,597	3,621	3,997	4,158
Hispanics .....	2,047	1,947	2,089	1,962	2,130	2,202	2,442
American Indians or Alaskan Natives .....	222	193	217	228	265	274	310
U.S. citizens and permanent residents, unknown race/ethnicity .....	1,500	1,135	1,705	1,297	933	958	1,051
Nonresident aliens <sup>2</sup> .....	516	521	554	695	615	735	761

<sup>1</sup> 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).

<sup>2</sup> Nonresident aliens include foreign citizens on temporary visas only.

**NOTE:** 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; and IPEDS Completions Surveys, 1987-94

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**Table 34. Number of earned master's degrees awarded in health fields, by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	18,580	19,410	20,482	21,398	23,213	25,823	28,314
U.S. citizens and permanent residents, total <sup>1</sup> .....	17,711	18,337	19,400	20,160	21,903	24,357	26,814
White, non-Hispanics .....	14,902	15,474	16,284	17,002	18,464	20,509	22,154
Asians .....	464	537	600	600	709	830	962
Underrepresented minorities, total .....	1,388	1,430	1,523	1,667	1,867	2,084	2,528
Black, non-Hispanics .....	811	814	886	1,004	1,092	1,251	1,431
Hispanics .....	518	535	558	572	685	718	967
American Indians or Alaskan Natives .....	59	81	79	91	90	115	130
U.S. citizens and permanent residents, unknown race/ethnicity .....	957	896	993	891	863	934	1,170
Nonresident aliens <sup>2</sup> .....	869	1,073	1,082	1,238	1,310	1,466	1,500
Men							
Total, all recipients .....	3,915	4,239	4,554	4,499	4,714	5,248	5,874
U.S. citizens and permanent residents, total <sup>1</sup> .....	3,471	3,720	4,080	3,956	4,175	4,638	5,274
White, non-Hispanics .....	2,931	3,094	3,309	3,215	3,399	3,807	4,216
Asians .....	146	162	181	170	215	222	295
Underrepresented minorities, total .....	245	321	313	362	352	399	495
Black, non-Hispanics .....	134	173	158	194	171	207	220
Hispanics .....	99	128	135	146	158	172	250
American Indians or Alaskan Natives .....	12	20	20	22	23	20	25
U.S. citizens and permanent residents, unknown race/ethnicity .....	149	143	277	209	209	210	268
Nonresident aliens <sup>2</sup> .....	444	519	474	543	539	610	600
Women							
Total, all recipients .....	14,665	15,171	15,928	16,899	18,499	20,575	22,440
U.S. citizens and permanent residents, total <sup>1</sup> .....	14,240	14,617	15,320	16,204	17,728	19,719	21,540
White, non-Hispanics .....	11,971	12,380	12,975	13,787	15,065	16,702	17,938
Asians .....	318	375	419	430	494	608	667
Underrepresented minorities, total .....	1,143	1,109	1,210	1,305	1,515	1,685	2,033
Black, non-Hispanics .....	677	641	728	810	921	1,044	1,211
Hispanics .....	419	407	423	426	527	546	717
American Indians or Alaskan Natives .....	47	61	59	69	67	95	105
U.S. citizens and permanent residents, unknown race/ethnicity .....	808	753	716	682	654	724	902
Nonresident aliens <sup>2</sup> .....	425	554	608	695	771	856	900

<sup>1</sup> 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).

<sup>2</sup> Nonresident aliens include foreign citizens on temporary visas only.

**NOTE:** 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; and IPEDS Completions Surveys, 1987-94



**Table 35. Number of earned doctoral degrees awarded in health fields, by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	800	974	956	1,041	1,112	1,197	1,296
U.S. citizens and permanent residents, total <sup>1</sup> .....	646	756	756	839	855	939	1,050
White, non-Hispanics .....	553	684	662	720	735	800	867
Asians .....	35	22	39	44	52	45	94
Underrepresented minorities, total .....	45	43	50	61	56	89	77
Black, non-Hispanics .....	31	29	32	40	38	59	46
Hispanics .....	11	11	17	16	13	24	25
American Indians or Alaskan Natives .....	3	3	1	5	5	6	6
U.S. citizens and permanent residents, unknown race/ethnicity .....	13	7	5	14	12	5	12
Nonresident aliens <sup>2</sup> .....	96	134	166	171	226	214	230
Citizenship unknown .....	58	84	34	31	31	44	16
Men							
Total, all recipients .....	325	345	364	373	402	420	453
U.S. citizens and permanent residents, total <sup>1</sup> .....	231	225	239	252	226	260	328
White, non-Hispanics .....	191	195	203	199	177	208	258
Asians .....	18	13	17	21	22	22	48
Underrepresented minorities, total .....	16	13	17	27	21	26	19
Black, non-Hispanics .....	12	9	14	17	14	18	11
Hispanics .....	3	4	2	7	4	8	7
American Indians or Alaskan Natives .....	1	0	1	3	3	0	1
U.S. citizens and permanent residents, unknown race/ethnicity .....	6	4	2	5	6	4	3
Nonresident aliens <sup>2</sup> .....	61	87	101	101	159	138	115
Citizenship unknown .....	33	33	24	20	17	22	10
Women							
Total, all recipients .....	475	629	592	668	710	777	843
U.S. citizens and permanent residents, total <sup>1</sup> .....	415	531	517	587	629	679	722
White, non-Hispanics .....	362	489	459	521	558	592	609
Asians .....	17	9	22	23	30	23	46
Underrepresented minorities, total .....	29	30	33	34	35	63	58
Black, non-Hispanics .....	19	20	18	23	24	41	35
Hispanics .....	8	7	15	9	9	16	18
American Indians or Alaskan Natives .....	2	3	0	2	2	6	5
U.S. citizens and permanent residents, unknown race/ethnicity .....	7	3	3	9	6	1	9
Nonresident aliens <sup>2</sup> .....	35	47	65	70	67	76	115
Citizenship unknown .....	25	51	10	11	14	22	6

<sup>1</sup> 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).

<sup>2</sup> 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: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	72,120	71,318	71,551	72,636	74,801	76,068	76,000
U.S. citizens and permanent residents, total <sup>1</sup> .....	71,248	70,358	70,515	71,550	73,459	74,520	74,563
White, non-Hispanics .....	61,291	59,597	59,376	59,692	59,869	60,338	58,476
Asians .....	2,222	2,903	3,299	3,772	4,757	5,107	5,759
Underrepresented minorities, total .....	6,130	6,025	6,549	6,984	7,334	8,075	8,314
Black, non-Hispanics .....	3,341	3,017	3,337	3,535	3,568	4,078	4,329
Hispanics .....	2,491	2,746	2,959	3,191	3,472	3,632	3,623
American Indians or Alaskan Natives .....	298	262	253	258	294	365	362
U.S. citizens and permanent residents, unknown race/ethnicity .....	1,605	1,833	1,291	1,102	1,499	1,000	2,014
Nonresident aliens <sup>2</sup> .....	872	960	1,036	1,086	1,342	1,548	1,437
Men							
Total, all recipients .....	46,841	45,399	44,309	44,226	45,459	45,565	45,068
U.S. citizens and permanent residents, total <sup>1</sup> .....	46,217	44,728	43,607	43,464	44,511	44,462	44,053
White, non-Hispanics .....	40,314	38,499	37,367	36,926	37,089	36,896	35,526
Asians .....	1,391	1,772	1,946	2,171	2,728	2,831	3,139
Underrepresented minorities, total .....	3,561	3,375	3,501	3,663	3,831	4,122	4,155
Black, non-Hispanics .....	1,798	1,568	1,627	1,653	1,620	1,777	1,851
Hispanics .....	1,583	1,661	1,738	1,868	2,054	2,156	2,088
American Indians or Alaskan Natives .....	180	146	136	142	157	189	216
U.S. citizens and permanent residents, unknown race/ethnicity .....	951	1,082	793	704	863	613	1,233
Nonresident aliens <sup>2</sup> .....	624	671	702	762	948	1,103	1,015
Women							
Total, all recipients .....	25,279	25,919	27,242	28,410	29,342	30,503	30,932
U.S. citizens and permanent residents, total <sup>1</sup> .....	25,031	25,630	26,908	28,086	28,948	30,058	30,510
White, non-Hispanics .....	20,977	21,098	22,009	22,766	22,780	23,442	22,950
Asians .....	831	1,131	1,353	1,601	2,029	2,276	2,620
Underrepresented minorities, total .....	2,569	2,650	3,048	3,321	3,503	3,953	4,159
Black, non-Hispanics .....	1,543	1,449	1,710	1,882	1,948	2,301	2,478
Hispanics .....	908	1,085	1,221	1,323	1,418	1,476	1,535
American Indians or Alaskan Natives .....	118	116	117	116	137	176	146
U.S. citizens and permanent residents, unknown race/ethnicity .....	654	751	498	398	636	387	781
Nonresident aliens <sup>2</sup> .....	248	289	334	324	394	445	422

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

**Table 37. First-professional degrees awarded in health fields,  
by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
<b>Total</b>							
Total, all recipients .....	29,400	29,518	28,787	28,183	28,303	29,475	29,680
U.S. citizens and permanent residents, total <sup>1</sup> .....	28,938	29,036	28,252	27,677	27,600	28,693	28,861
White, non-Hispanics .....	24,467	24,094	23,027	21,958	21,333	22,076	21,730
Asians .....	1,394	1,978	2,290	2,472	2,909	3,317	3,637
Underrepresented minorities, total .....	2,623	2,591	2,724	2,777	2,840	2,915	3,000
Black, non-Hispanics .....	1,269	1,159	1,251	1,285	1,288	1,350	1,437
Hispanics .....	1,217	1,323	1,373	1,381	1,417	1,426	1,432
American Indians or Alaskan Natives .....	137	109	100	111	135	139	131
U.S. citizens and permanent residents, unknown race/ethnicity .....	454	373	211	470	518	385	494
Nonresident aliens <sup>2</sup> .....	462	482	535	506	703	782	819
<b>Men</b>							
Total, all recipients .....	20,011	19,596	18,562	17,777	17,694	17,704	17,565
U.S. citizens and permanent residents, total <sup>1</sup> .....	19,708	19,283	18,235	17,449	17,220	17,194	17,034
White, non-Hispanics .....	16,925	16,298	15,232	14,207	13,607	13,608	13,243
Asians .....	870	1,217	1,363	1,440	1,718	1,859	1,972
Underrepresented minorities, total .....	1,599	1,506	1,510	1,479	1,587	1,490	1,504
Black, non-Hispanics .....	691	581	606	573	604	556	582
Hispanics .....	822	861	847	841	907	858	840
American Indians or Alaskan Natives .....	86	64	57	65	76	76	82
U.S. citizens and permanent residents, unknown race/ethnicity .....	314	262	130	323	308	237	315
Nonresident aliens <sup>2</sup> .....	303	313	327	328	474	510	531
<b>Women</b>							
Total, all recipients .....	9,389	9,922	10,225	10,406	10,609	11,771	12,115
U.S. citizens and permanent residents, total <sup>1</sup> .....	9,230	9,753	10,017	10,228	10,380	11,499	11,827
White, non-Hispanics .....	7,542	7,796	7,795	7,751	7,726	8,468	8,487
Asians .....	524	761	927	1,032	1,191	1,458	1,665
Underrepresented minorities, total .....	1,024	1,085	1,214	1,298	1,253	1,425	1,496
Black, non-Hispanics .....	578	578	645	712	684	794	855
Hispanics .....	395	462	526	540	510	568	592
American Indians or Alaskan Natives .....	51	45	43	46	59	63	49
U.S. citizens and permanent residents, unknown race/ethnicity .....	140	111	81	147	210	148	179
Nonresident aliens <sup>2</sup> .....	159	169	208	178	229	272	288

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

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**Table 38. First-professional degrees awarded in non-health fields, by race/ethnicity and sex of recipient: 1987-94**

Citizenship and race/ethnicity	1987	1989	1990	1991	1992	1993	1994
Total							
Total, all recipients .....	42,720	41,800	42,764	44,453	46,498	46,593	46,320
U.S. citizens and permanent residents, total <sup>1</sup> .....	42,310	41,322	42,263	43,873	45,859	45,827	45,702
White, non-Hispanics .....	36,824	35,503	36,349	37,734	38,536	38,262	36,746
Asians .....	828	925	1,009	1,300	1,848	1,790	2,122
Underrepresented minorities, total .....	3,507	3,434	3,825	4,207	4,494	5,160	5,314
Black, non-Hispanics .....	2,072	1,858	2,086	2,250	2,280	2,728	2,892
Hispanics .....	1,274	1,423	1,586	1,810	2,055	2,206	2,191
American Indians or Alaskan Natives .....	161	153	153	147	159	226	231
U.S. citizens and permanent residents, unknown race/ethnicity .....	1,151	1,460	1,080	632	981	615	1,520
Nonresident aliens <sup>2</sup> .....	410	478	501	580	639	766	618
Men							
Total, all recipients .....	26,830	25,803	25,747	26,449	27,765	27,861	27,503
U.S. citizens and permanent residents, total <sup>1</sup> .....	26,509	25,445	25,372	26,015	27,291	27,268	27,019
White, non-Hispanics .....	23,389	22,201	22,135	22,719	23,482	23,288	22,283
Asians .....	521	555	583	731	1,010	972	1,167
Underrepresented minorities, total .....	1,962	1,869	1,991	2,184	2,244	2,632	2,651
Black, non-Hispanics .....	1,107	987	1,021	1,080	1,016	1,221	1,269
Hispanics .....	761	800	891	1,027	1,147	1,298	1,248
American Indians or Alaskan Natives .....	94	82	79	77	81	113	134
U.S. citizens and permanent residents, unknown race/ethnicity .....	637	820	663	381	555	376	918
Nonresident aliens <sup>2</sup> .....	321	358	375	434	474	593	484
Women							
Total, all recipients .....	15,890	15,997	17,017	18,004	18,733	18,732	18,817
U.S. citizens and permanent residents, total <sup>1</sup> .....	15,801	15,877	16,891	17,858	18,568	18,559	18,683
White, non-Hispanics .....	13,435	13,302	14,214	15,015	15,054	14,974	14,463
Asians .....	307	370	426	569	838	818	955
Underrepresented minorities, total .....	1,545	1,565	1,834	2,023	2,250	2,528	2,663
Black, non-Hispanics .....	965	871	1,065	1,170	1,264	1,507	1,623
Hispanics .....	513	623	695	783	908	908	943
American Indians or Alaskan Natives .....	67	71	74	70	78	113	97
U.S. citizens and permanent residents, unknown race/ethnicity .....	514	640	417	251	426	239	602
Nonresident aliens <sup>2</sup> .....	89	120	126	146	165	173	134

<sup>1</sup> 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).

<sup>2</sup> 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; and IPEDS Completions Surveys, 1987-94

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