

Graduate Degree Fields

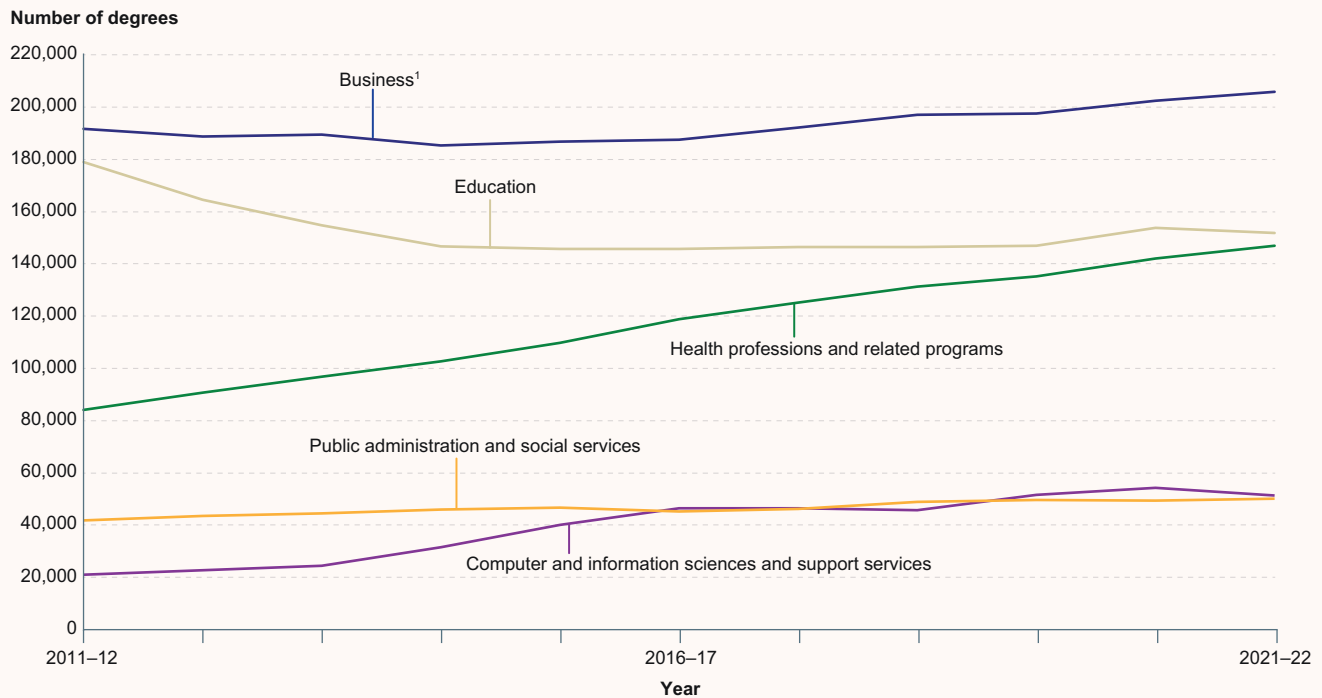
Between 2011–12 and 2021–22, the total number of master’s degrees conferred increased by 16 percent, from 756,000 to 880,200 degrees. During this time, the number of doctor’s degrees conferred increased 20 percent, from 170,200 to 203,900 degrees.

In 2021–22, postsecondary institutions in the United States¹ conferred 1.1 million graduate degrees, an increase of 17 percent since 2011–12.² These included 880,200 master’s degrees and 203,900 doctor’s degrees in 2021–22. For the purposes of this analysis, doctor’s degrees include Ph.D., Ed.D., and comparable degrees at the doctoral level, as well as such degrees as M.D., D.D.S., and J.D. that were previously classified as first-professional degrees. Health professions and related programs were among the top three most popular fields of study at both award levels, as was education.

Master’s Degrees by Field of Study

FIGURE 1.

Number of master’s degrees conferred by degree-granting postsecondary institutions in selected fields of study: Academic years 2011–12 through 2021–22



¹ In order to be consistent with the definition of “business” for bachelor’s degree data, “business” is defined as business, management, marketing, and related support services, as well as culinary, entertainment, and personal services.
NOTE: Data are for the 50 states and the District of Columbia. The fields shown are the five programs in which the largest numbers of master’s degrees were conferred in 2021–22. Data are for postsecondary institutions participating in Title IV federal financial aid programs and U.S. service academies. Data in this figure are based on the 2020 Classification of Instructional Programs. Some data have been revised from previously published figures. Figures are plotted based on unrounded data.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component, Fall 2012 through Fall 2021 (final data) and Fall 2022 (provisional data). See *Digest of Education Statistics 2023*, table 323.10 and *Digest of Education Statistics 2022*, table 323.10.

In 2021-22, postsecondary institutions conferred 880,200 master's degrees. Of the master's degrees conferred, 69 percent were concentrated in five fields of study:

- business³ (205,800 degrees, 23 percent)
- education (151,700 degrees, 17 percent)
- health professions and related programs (147,000 degrees, 17 percent)
- computer and information sciences and support services (51,300 degrees, 6 percent)
- public administration and social services (50,100 degrees, 6 percent)

Between 2011-12 and 2021-22, trends in the number of master's degrees conferred varied by field of study. During this time, the total number of master's degrees conferred increased by 16 percent, from 756,000 to 880,200 degrees. Four of the top five fields of study in which degrees were conferred in 2021-22 saw increases in the number of master's degrees conferred from 2011-12 to 2021-22, with the largest percentage increase in computer and information sciences and support services:

- computer and information sciences and support services (from 20,900 to 51,300 degrees, or 145 percent)
- health professions and related programs (from 84,100 to 147,000, or 75 percent)
- public administration and social services (from 41,700 to 50,100, or 20 percent)
- business (from 191,600 to 205,800, or 7 percent)

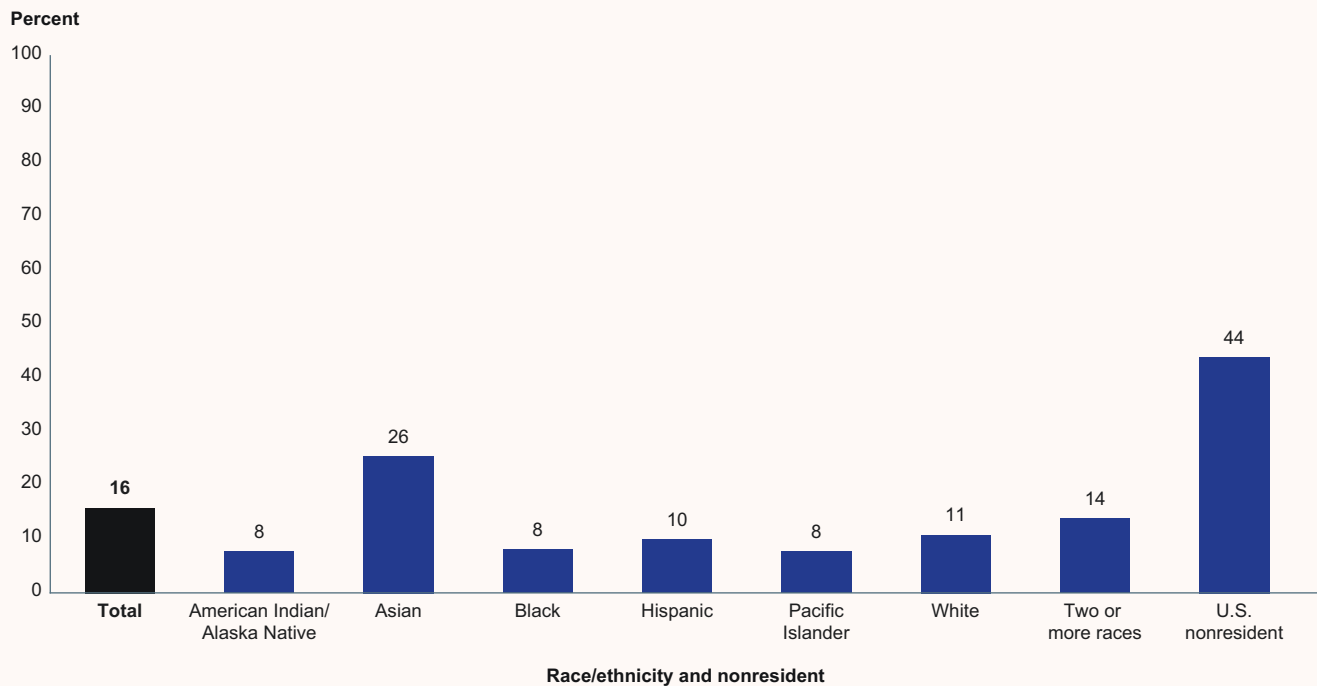
In contrast, the number of master's degrees conferred in education was 15 percent lower in 2021-22 than in 2011-12, reflecting a decrease from 2011-12 to 2016-17 (from 179,000 to 145,600 degrees), followed by an increase to 151,700 degrees in 2021-22.

Among other fields in which at least 10,000 master's degrees were conferred in 2021-22, the largest change was in multi/interdisciplinary studies, which increased 94 percent since 2011-12 (from 7,700 to 15,000 degrees). Mathematics and statistics had an 88 percent increase in the number of degrees conferred during this same period of time (from 6,200 to 11,800 degrees).

In 2021-22, the three fields in which the most master's degrees were conferred overall (business, education, and health professions and related programs) were also the top three conferred to most racial/ethnic groups. The exception was Asian students, whose top three master's degree fields were business; health professions and related programs; and computer and information sciences and support services. For U.S. nonresident⁴ students, the most master's degrees were conferred in the following three fields: business, computer and information sciences and support services, and engineering.

Master's Degrees and STEM**FIGURE 2.**

Percentage of master's degrees conferred by degree-granting postsecondary institutions in science, technology, engineering, and mathematics (STEM) fields, by race/ethnicity and U.S. nonresident status: Academic year 2021–22



NOTE: Data are for the 50 states and the District of Columbia. STEM fields include biological and biomedical sciences, computer and information sciences, engineering and engineering technologies, mathematics and statistics, and physical sciences and science technologies. Data are for postsecondary institutions participating in Title IV federal financial aid programs and U.S. service academies. Race categories exclude persons of Hispanic ethnicity. Race/ethnicity categories exclude U.S. nonresidents. Figures are plotted based on unrounded data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component, Fall 2022 (provisional data). See *Digest of Education Statistics 2023*, tables 318.45 and 323.30.

In 2021-22, of the 880,200 master's degrees conferred by postsecondary institutions, 16 percent (139,900 degrees) were in a science, technology, engineering, and mathematics (STEM)⁵ field.

Of all the master's degrees conferred to each racial/ethnic group in 2021-22, the percentage conferred in a STEM field varied by group and was highest for Asian students. Specifically, of the master's degrees conferred to each group, the percentage conferred in a STEM field was

- 26 percent for Asian students;
- 14 percent for students of Two or more races;
- 11 percent for White students;
- 10 percent for Hispanic students; and
- 8 percent each for Black, Pacific Islander, and American Indian/Alaska Native students.

Among U.S. nonresident students, 44 percent of master's degrees conferred were in a STEM field.

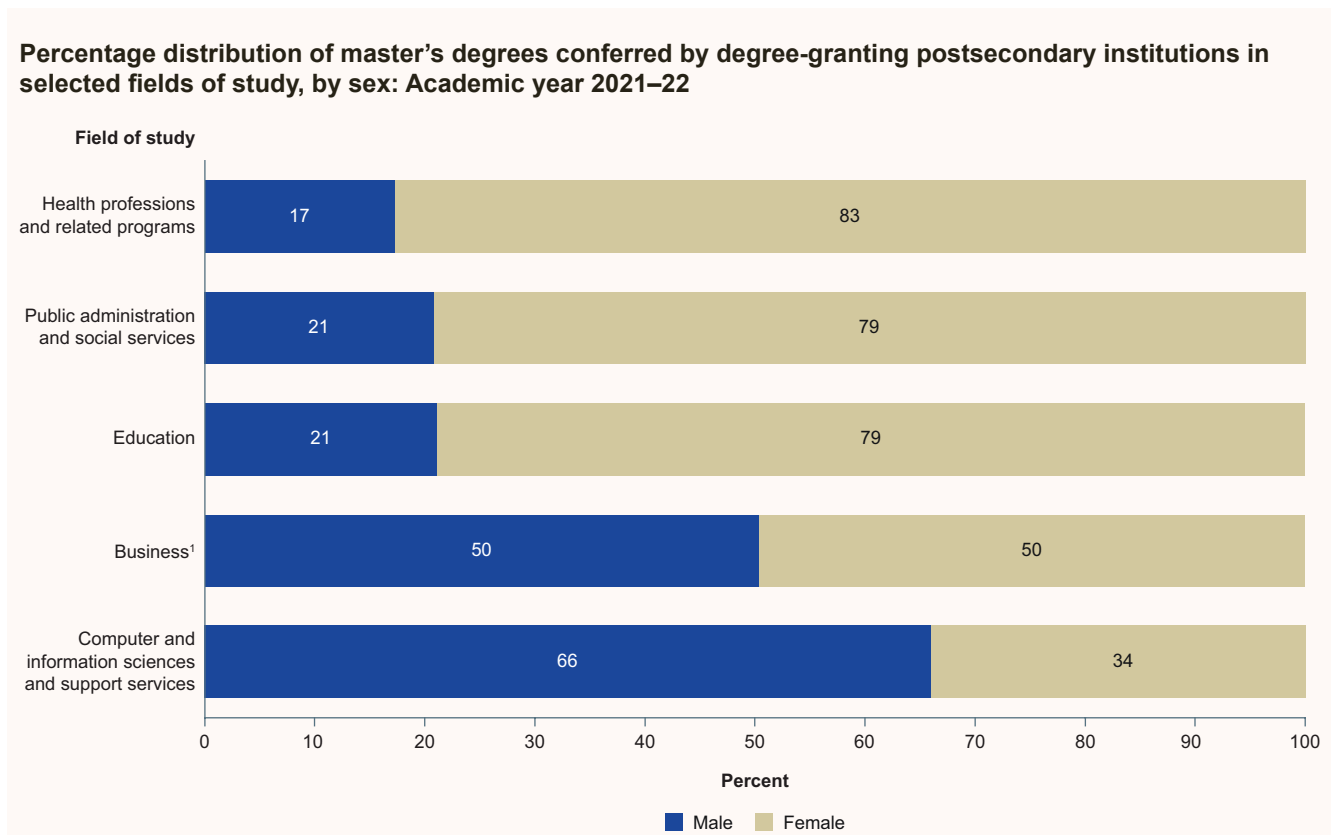
Because each racial/ethnic group earned different shares of overall master’s degrees conferred, the groups with the highest rates of STEM degrees conferred may not make up the largest shares of all STEM degrees. Of the 139,900 master’s degrees conferred in a STEM field in 2021-22, some 50,800 were earned by White students. Specifically, of all master’s degrees conferred in a STEM field,⁶

- 36 percent were conferred to White students;
- 11 percent were conferred to Asian students;
- 7 percent were conferred to Hispanic students;
- 6 percent were conferred to Black students;
- 2 percent were conferred to students of Two or more races; and
- less than one-half of 1 percent each were conferred to American Indian/Alaska Native and Pacific Islander students.

Thirty-six percent of master’s degrees in a STEM field were conferred to U.S. nonresident students, despite the fact that this group earned only 13 percent of total master’s degrees.

Master’s Degrees by Sex

FIGURE 3.



¹ In order to be consistent with the definition of “business” for bachelor’s degree data, “business” is defined as business, management, marketing, and related support services, as well as culinary, entertainment, and personal services.
NOTE: Data are for the 50 states and the District of Columbia. The fields shown are the five programs in which the largest numbers of master’s degrees were conferred in 2021–22. Data are for postsecondary institutions participating in Title IV federal financial aid programs and U.S. service academies. Data in this figure are based on the 2020 Classification of Instructional Programs. Figures are plotted based on unrounded data. Detail may not sum to totals because of rounding in the data labels.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component, Fall 2022 (provisional data). See *Digest of Education Statistics 2023*, tables 323.40 and 323.50.

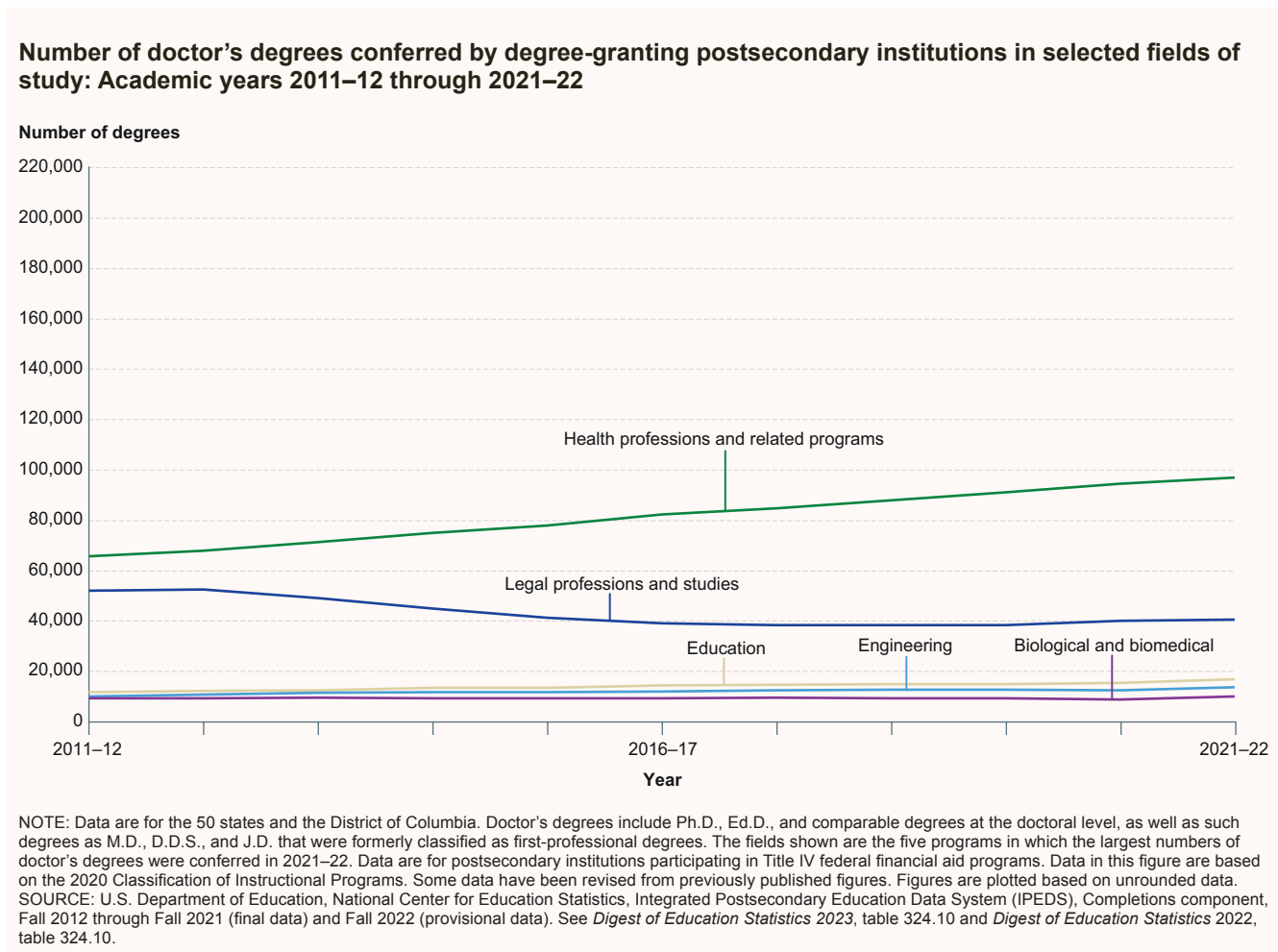
In 2021-22, females earned 63 percent (551,400 degrees) and males earned 37 percent (328,900 degrees) of all master's degrees conferred. Of the five fields in which the most master's degrees were conferred in 2021-22, females were conferred the majority of degrees in three of the top five fields:

- health professions and related programs (83 percent)
- public administration and social services (79 percent)
- education (79 percent)

In business, 50 percent of degrees were conferred each to males and females. In computer and information sciences, the majority of degrees were conferred to males (66 percent).

Doctor's Degrees by Field of Study

FIGURE 4.



Postsecondary institutions conferred 203,900 doctor's degrees in 2021-22. Of these degrees, 79 percent were concentrated in five fields of study:

- health professions and related programs (87,800 degrees, 44 percent)
- legal professions and studies (36,400 degrees, 19 percent)
- education (14,800 degrees, 7 percent)
- engineering (12,100 degrees, 6 percent)
- biological and biomedical sciences (8,600 degrees, 4 percent)

Between 2011-12 and 2021-22, the total number of doctor’s degrees conferred increased by 20 percent, from 170,200 to 203,900 degrees. Over the same time, the total number of doctor’s degrees conferred increased in three of the five top fields of study in 2021-22:

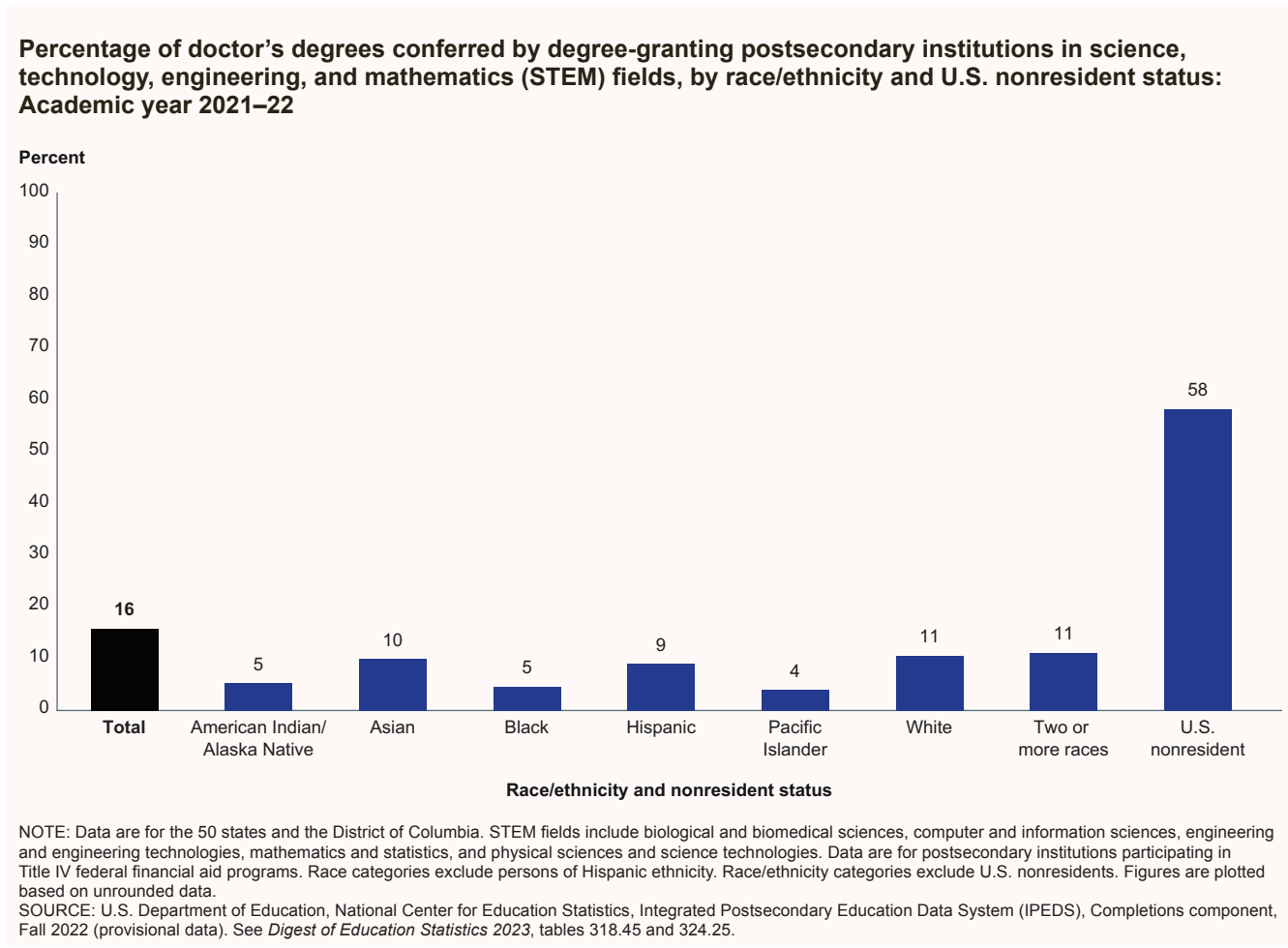
- health professions and related programs (from 59,200 to 87,800 degrees, or 48 percent)
- education (from 10,100 to 14,800 degrees, or 47 percent)
- engineering (from 8,700 to 12,100 degrees, or 38 percent)

Over the same period, the number of doctor’s degrees conferred in legal professions and studies decreased by 22 percent, from 46,800 to 36,400 degrees. In biological and biomedical sciences, the number of doctor’s degrees conferred was 8 percent higher in 2021-22 than in 2011-12 (8,600 vs. 7,900 degrees), but fluctuated in the intervening years, with a low of 7,500 in 2020-21.

In 2021-22, the three fields in which the most doctor’s degrees were conferred overall (health professions and related programs; legal professions and studies; and education) were also the top three conferred to most racial/ethnic groups. The exception was Asian students, whose top three doctor’s degree fields were health professions and related programs, legal professions and studies, and biological and biomedical sciences. For U.S. nonresident students, the three fields in which the most doctor’s degrees were conferred were engineering, physical sciences and science technologies, and health professions and related programs.

Doctor’s Degrees and STEM

FIGURE 5.



Among the 203,900 doctor's degrees conferred by postsecondary institutions in 2021-22, some 16 percent (32,300 degrees) were in a STEM field.

Of all the doctor's degrees conferred to each racial/ethnic group in 2021-22, the percentage conferred in a STEM field varied by group and was highest for students of Two or more races and White students. Specifically, of the doctor's degrees conferred to each group, the percentage conferred in a STEM field was

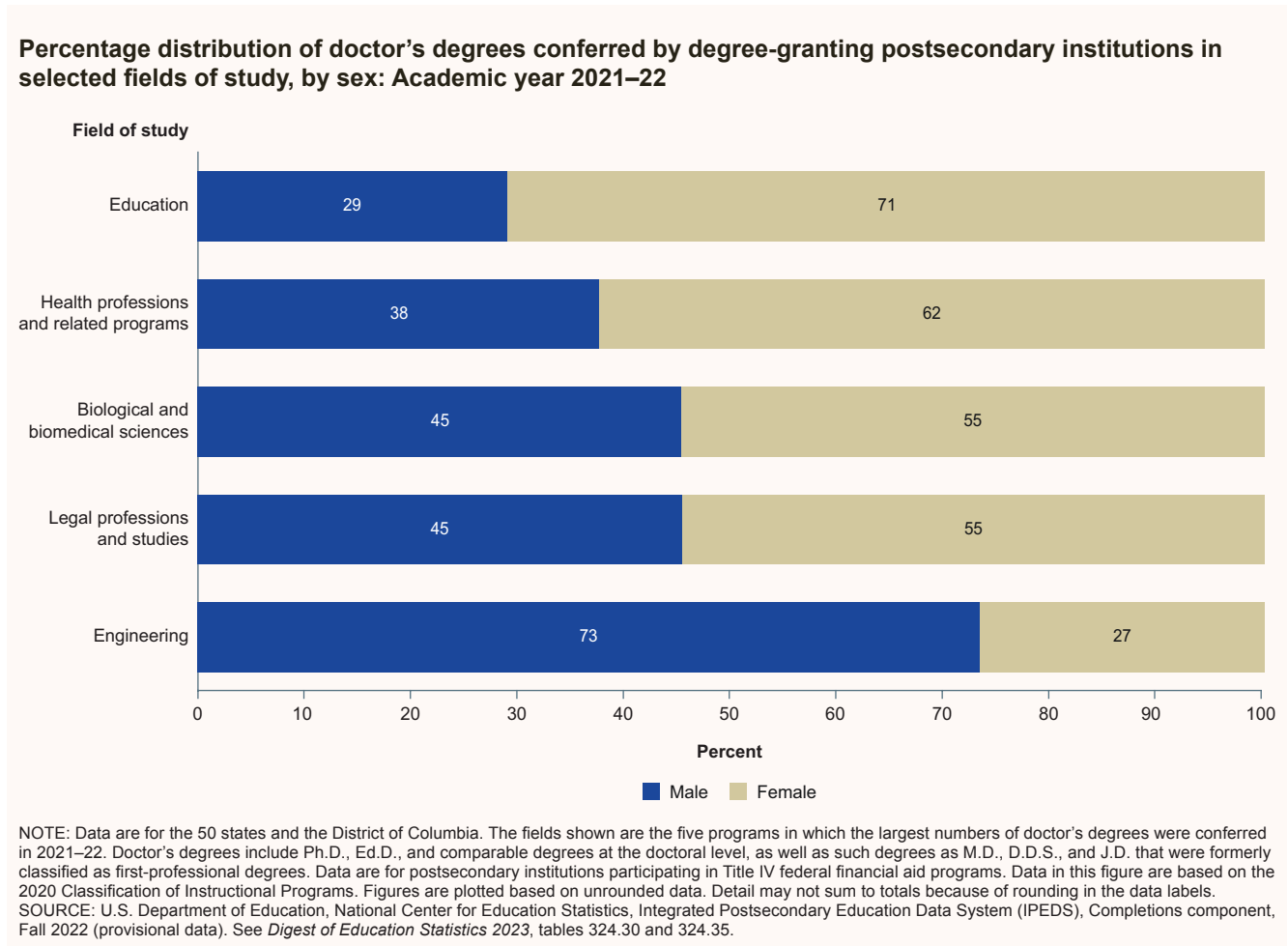
- 11 percent each for students of Two or more races and White students;
- 10 percent for Asian students;
- 9 percent for Hispanic students;
- 5 percent each for American Indian/Alaska Native and Black students; and
- 4 percent for Pacific Islander students.

Among U.S. nonresident students, 58 percent of doctor's degrees conferred were in a STEM field.

Similar to the pattern observed for master's degrees, White students earned a higher percentage of STEM degrees than did students of any other race/ethnicity. Of all doctor's degrees conferred in a STEM field,⁶

- 37 percent were conferred to White students;
- 7 percent were conferred to Asian students;
- 5 percent were conferred to Hispanic students;
- 3 percent were conferred to Black students;
- 2 percent were conferred to students of Two or more races; and
- less than one-half of 1 percent each were conferred to American Indian/Alaska Native and Pacific Islander students.

Forty-six percent of doctor's degrees in a STEM field were conferred to U.S. nonresident students, despite the fact that this group earned only 12 percent of total doctor's degrees.

Doctor's Degrees by Sex**FIGURE 6.**

Just as females earned the majority of master's degrees conferred in 2021-22, they also earned the majority of doctor's degrees conferred that year. In 2021-22, females earned 57 percent (116,100 degrees) and males earned 43 percent (87,800 degrees) of all doctor's degrees conferred. Females earned the majority of degrees in four of the five fields of study in which the most doctor's degrees were conferred:

- education (71 percent)
- health professions and related programs (62 percent)
- biological and biomedical sciences (55 percent)
- legal profession and studies (55 percent)

Males earned the majority of doctor's degrees in engineering (73 percent).

Endnotes:

¹ Data in this indicator represent the 50 states and the District of Columbia.

² For general technical notes related to data analysis, data interpretation, rounding, and other considerations, please refer to the [Reader's Guide](#).

³ Includes business, management, marketing, and related support services, as well as culinary, entertainment, and personal services.

⁴ In the Integrated Postsecondary Education Data System (IPEDS), racial/ethnic data were not collected for U.S. nonresident students, and their data were compiled as a separate group.

⁵ STEM fields include biological and biomedical sciences, computer and information sciences, engineering and engineering technologies, mathematics and statistics, and physical sciences and science technologies. Construction trades and mechanic and repair technologies/technicians are categorized as engineering technologies in some tables in the *Digest of Education Statistics* to facilitate trend comparisons but are not included as STEM fields in this indicator.

⁶ The percentage distribution of STEM degrees conferred by race/ethnicity presented here differs from the distribution in table 318.45 of the *Digest of Education Statistics*, which excludes U.S. nonresidents from the distribution.

Reference tables: *Digest of Education Statistics 2023*, tables [318.45](#), [323.10](#), [323.30](#), [323.40](#), [323.50](#), [324.10](#), [324.25](#), [324.30](#), and [324.35](#); and *Digest of Education Statistics 2022*, tables [318.45](#), [323.10](#), and [324.10](#)

Related indicators and resources: [Postsecondary Certificates and Degrees Conferred](#); [Trends in Student Loan Debt for Graduate School Completers](#) [*The Condition of Education 2018 Spotlight*]; [Undergraduate and Graduate Degree Fields](#) [*Status and Trends in the Education of Racial and Ethnic Groups*]; [Undergraduate Degree Fields](#)

Glossary: [Classification of Instructional Programs \(CIP\)](#); [Doctor's degree](#); [Master's degree](#); [Racial/ethnic group](#); [STEM fields](#)