

Graduate Degree Fields

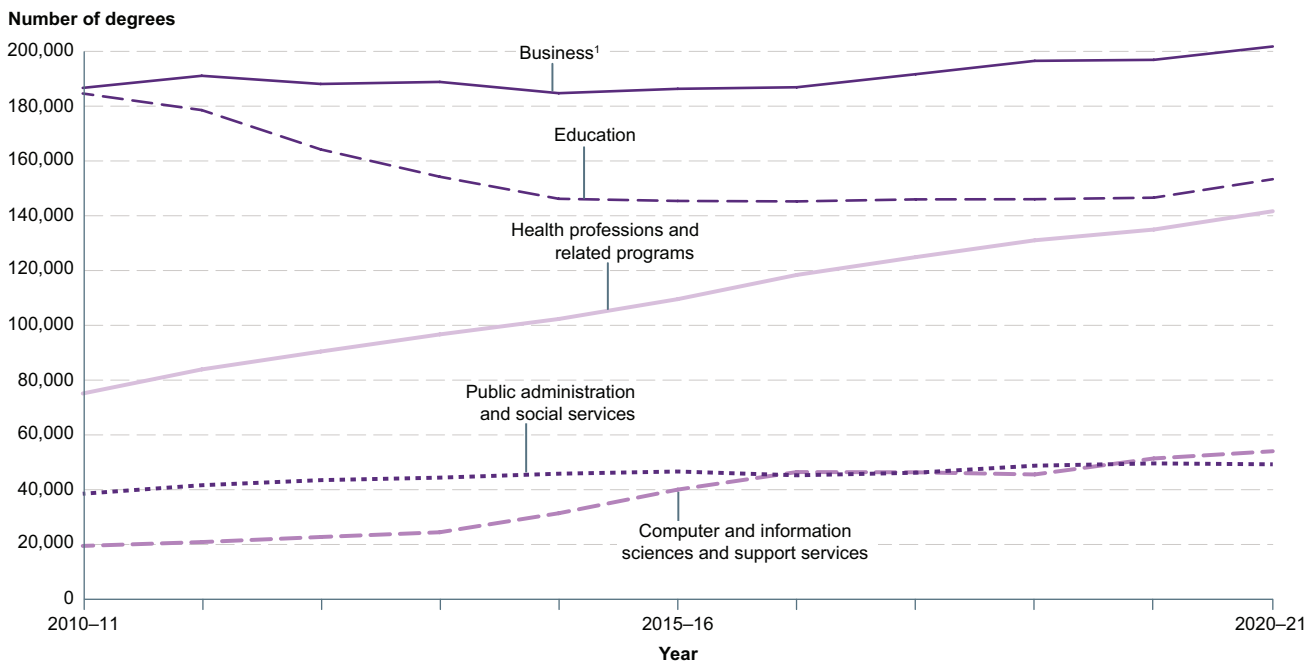
Between 2010–11 and 2020–21, the total number of master’s degrees conferred increased by 19 percent, from 730,900 to 866,900 degrees. During this time, the number of doctor’s degrees increased 18 percent, from 163,800 to 194,100 degrees.

In 2020–21, postsecondary institutions in the United States¹ conferred 1.1 million graduate degrees, an increase of 19 percent since 2010–11. These included 866,900 master’s degrees and 194,100 doctor’s degrees in 2020–21. 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.² 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 2010–11 through 2020–21



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 2020–21. Data are for postsecondary institutions participating in Title IV federal financial aid programs. Data in this figure are based on the 2020 Classification of Instructional Programs. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2011 through Fall 2021, Completions component. See *Digest of Education Statistics 2022*, table 323.10 and *Digest of Education Statistics 2021*, table 323.10.

In 2020-21, postsecondary institutions conferred 866,900 master's degrees. More than two-thirds of these degrees (69 percent) were concentrated in five fields of study:

- business³ (202,300 degrees, 23 percent);
- education (153,800 degrees, 18 percent);
- health professions and related programs (142,000 degrees, 16 percent);
- computer and information sciences and support services (54,200 degrees, 6 percent); and
- public administration and social services (49,400 degrees, 6 percent).

Between 2010-11 and 2020-21, 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 19 percent, from 730,900 to 866,900 degrees. Four of the top five fields of study in which degrees were conferred in 2020-21 saw increases in the number of master's degrees conferred from 2010-11 to 2020-21, with the largest percentage increase in computer and information sciences and support services. Specifically, increases occurred in

- computer and information sciences and support services (from 19,500 to 54,200 degrees, or 178 percent);
- health professions and related programs (from 75,300 to 142,000, or 89 percent);
- public administration and social services (from 38,600 to 49,400, or 28 percent); and
- business (from 187,200 to 202,300, or 8 percent).

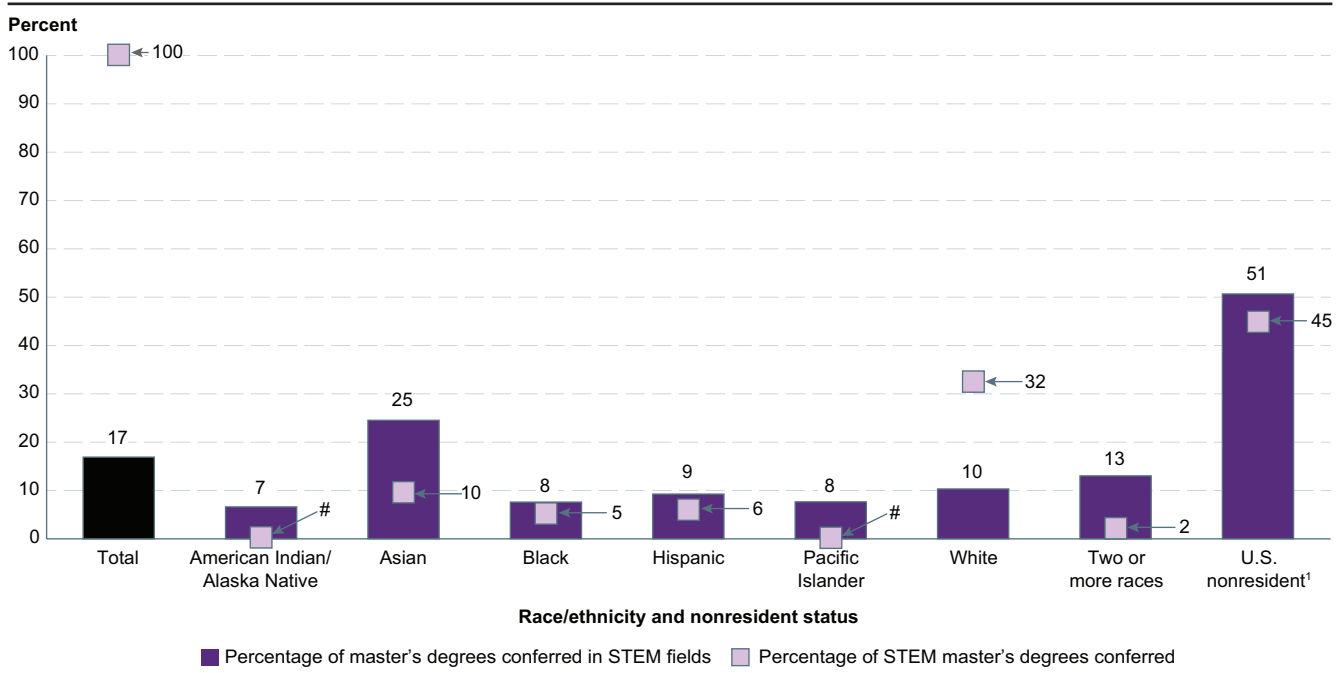
Conversely, between 2010-11 and 2020-21, the number of master's degrees conferred in education decreased by 17 percent, from 185,100 to 153,800 degrees. However, despite this longer-term trend, the number of master's degrees conferred in education was 5 percent higher in 2020-21 than in 2018-19 (the last full academic year prior to the coronavirus pandemic).

Among other fields in which at least 10,000 master's degrees were conferred in 2020-21, the number of degrees conferred more than doubled between 2010-11 and 2020-21 in one field: mathematics and statistics (from 5,900 to 12,600 degrees, an increase of 115 percent).

In 2020-21, 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 and percentage distribution 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 2020–21



Rounds to zero.

¹ 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 2022*, which excludes U.S. nonresidents from the distribution.

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. Race categories exclude persons of Hispanic ethnicity. Race/ethnicity categories exclude U.S. nonresidents. Although rounded numbers are displayed, the figures are based on unrounded data. Detail may not sum to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2021, Completions component. See *Digest of Education Statistics 2022*, tables 318.45 and 323.30.

In 2020-21, of the 866,900 master’s degrees conferred by postsecondary institutions, 17 percent (146,600 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 2020-21, 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

- 25 percent for Asian students;
- 13 percent for students of Two or more races;
- 10 percent for White students;
- 9 percent for Hispanic students;
- 8 percent each for Pacific Islander and Black students; and
- 7 percent for American Indian/Alaska Native students.

Among U.S. nonresident students, 51 percent of master’s degrees conferred were in a STEM field.

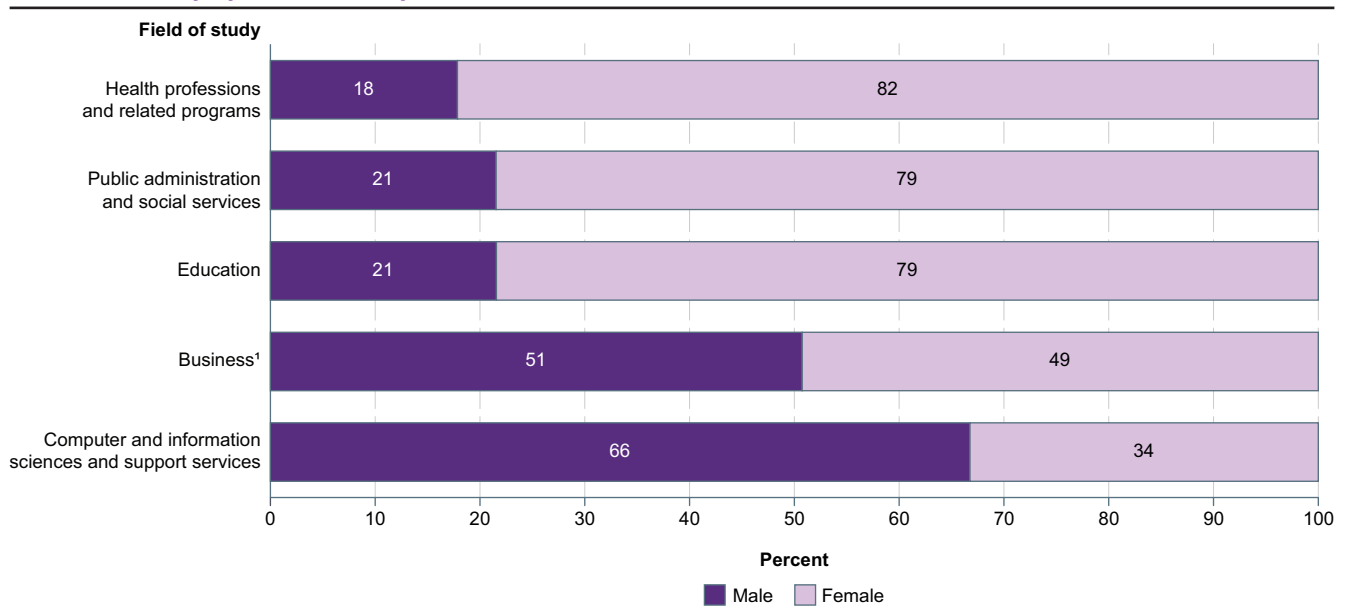
Because racial/ethnic groups earned different shares of overall master’s degree conferred, the groups with the highest rates of STEM degrees conferred may not make up the largest shares of all STEM degrees. Of the 146,600 master’s degrees conferred in a STEM field in 2020-21, nearly a third were earned by White students. Specifically, of all master’s degrees conferred in a STEM⁶ field,

- 32 percent were conferred to White students;
- 10 percent were conferred to Asian students;
- 6 percent were conferred to Hispanic students;
- 5 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-five percent of master’s degrees in a STEM field were conferred to U.S. nonresident students, despite the fact that this group earned only 15 percent of total master’s degrees.

Master’s Degrees by Sex

Figure 3. Percentage distribution of master’s degrees conferred by degree-granting postsecondary institutions in selected fields of study, by sex: Academic year 2020–21



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 2020–21. Data are for postsecondary institutions participating in Title IV federal financial aid programs. Data in this figure are based on the 2020 Classification of Instructional Programs. Although rounded numbers are displayed, the figures are based on unrounded data. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2021, Completions component. See *Digest of Education Statistics 2022*, tables 323.40 and 323.50.

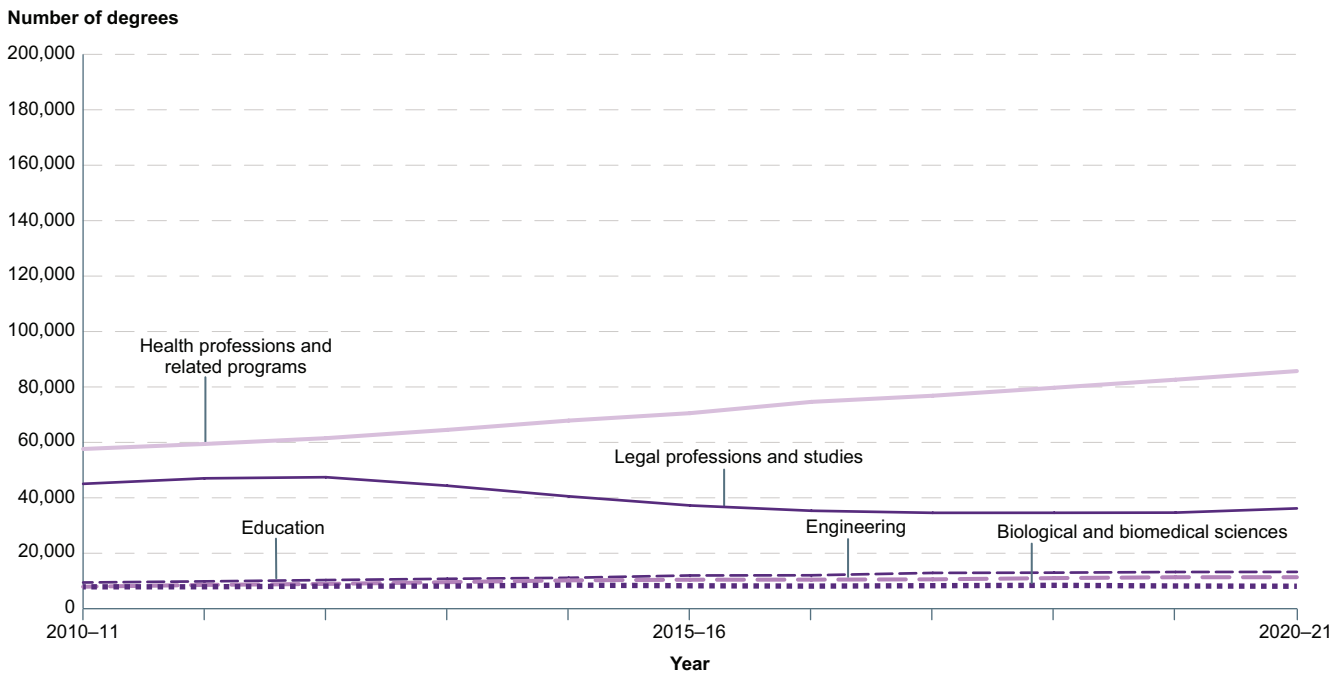
In 2020-21, females earned 62 percent (536,200 degrees) and males earned 38 percent (330,700 degrees) of all master’s degrees conferred. Of the five fields in which the most master’s degrees were conferred in 2020-21, females were conferred the majority of degrees in three of the top five fields:

- health professions and related programs (82 percent);
- public administration and social services (79 percent);
- and
- education (79 percent).

In the two remaining top fields of study, the majority of degrees were conferred to males in computer and information sciences and support services (66 percent) and business (51 percent).

Doctor’s Degrees by Field of Study

Figure 4. Number of doctor’s degrees conferred by degree-granting postsecondary institutions in selected fields of study: Academic years 2010–11 through 2020–21



NOTE: Data are for the 50 states and the District of Columbia. 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 formerly classified as first-professional degrees. The year 2010–11 was the last year the classification of first-professional degrees was used. The fields shown are the five programs in which the largest numbers of doctor’s degrees were conferred in 2020–21. Data are for postsecondary institutions participating in Title IV federal financial aid programs. Data in this figure are based on the 2020 Classification of Instructional Programs. Some data have been revised from previously published figures.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2011 through Fall 2021, Completions component. See *Digest of Education Statistics 2022*, table 324.10.

Postsecondary institutions conferred 194,100 doctor’s degrees in 2020-21. Of these degrees, 79 percent were concentrated in five fields of study:

- health professions and related programs (85,600 degrees, 44 percent);
- legal professions and studies (36,000 degrees, 19 percent);
- education (13,700 degrees, 7 percent);
- engineering (10,900 degrees, 6 percent); and
- biological and biomedical sciences (7,500 degrees, 4 percent).

Between 2010-11 and 2020-21, the total number of doctor’s degrees conferred increased by 18 percent, from 163,800 to 194,100 degrees. Over the same time, the total number of doctor’s degrees increased in three of the five top fields of study in 2020-21:

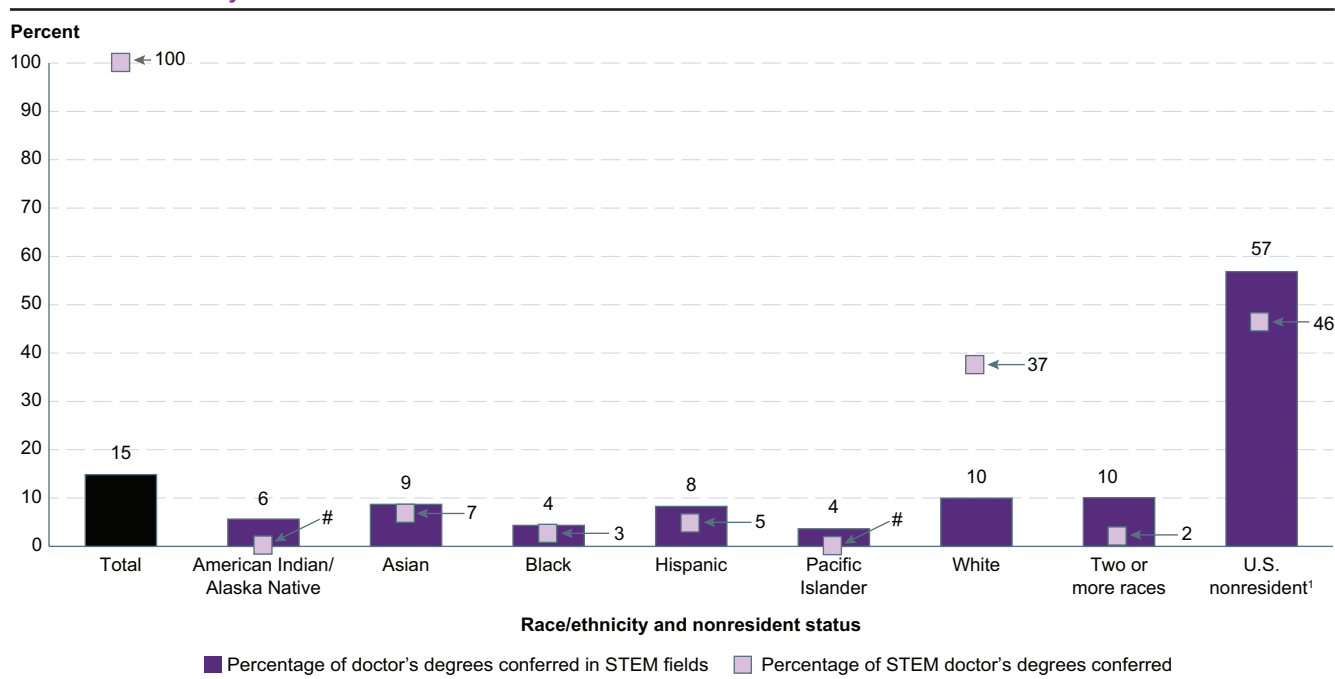
- health professions and related programs (from 57,400 to 85,600 degrees, or 49 percent);
- education (from 9,600 to 13,700 degrees, or 42 percent); and
- engineering (from 8,400 to 10,900 degrees, or 30 percent).

Over the same period, the number of doctor’s degrees conferred in legal professions and studies decreased by 20 percent, from 44,900 to 36,000 degrees. In biological and biomedical sciences, the number of degrees conferred was lower in 2020-21 (7,500 degrees) than in 2010-11 (7,700 degrees), but there was no consistent trend throughout the period.

In 2020-21, 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 engineering. For U.S. nonresident students, the three fields in which the most doctor’s degrees were conferred were engineering, health professions and related programs, and physical sciences and science technologies.

Doctor’s Degrees and STEM

Figure 5. Percentage and percentage distribution of doctor’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 2020–21



Rounds to zero.

¹ 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 2022*, which excludes U.S. nonresidents from the distribution.

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. Race categories exclude persons of Hispanic ethnicity. Race/ethnicity categories exclude U.S. nonresidents. Although rounded numbers are displayed, the figures are based on unrounded data. Detail may not sum to total due to rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2021, Completions component. See *Digest of Education Statistics 2022*, tables 318.45 and 324.25.

Among the 194,100 doctor’s degrees conferred by postsecondary institutions in 2020–21, some 15 percent (28,800 degrees) were in a STEM field.

Of all the doctor’s degrees conferred to each racial/ethnic group in 2020–21, 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 STEM⁶ field was

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

Among U.S. nonresident students, 57 percent of doctor’s degrees conferred were in a STEM field.

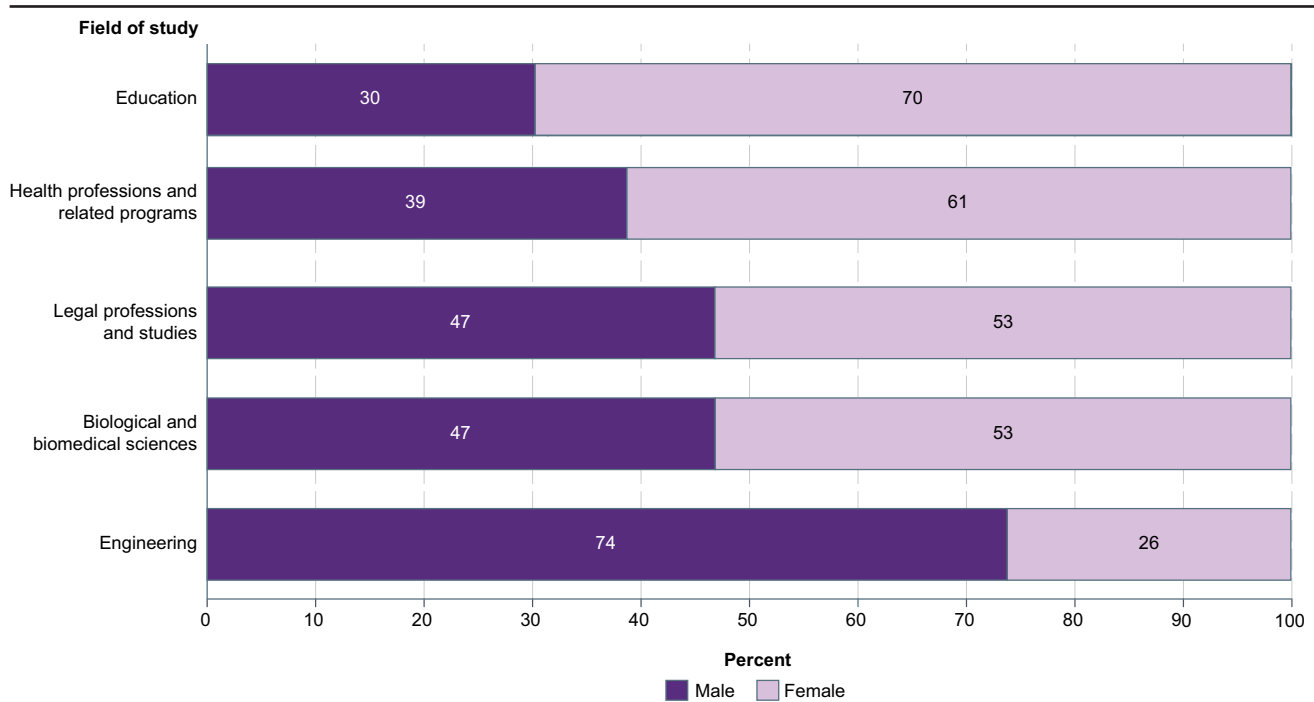
Similar to the pattern observed for master’s degrees, White students earned a higher percentage of STEM degrees than any other race/ethnicity. Of all doctor’s degrees conferred in a STEM field,

- 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. Percentage distribution of doctor’s degrees conferred by degree-granting postsecondary institutions in selected fields of study, by sex: Academic year 2020–21



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 doctor’s degrees were conferred in 2020–21. 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 formerly classified as first-professional degrees. Data are for postsecondary institutions participating in Title IV federal financial aid programs. Data in this figure are based on the 2020 Classification of Instructional Programs. Although rounded numbers are displayed, the figures are based on unrounded data. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2021, Completions component. See *Digest of Education Statistics 2022*, tables 324.30 and 324.35.

Just as females earned the majority of master’s degrees conferred in 2020–21, they also earned the majority of doctor’s degrees conferred that year. In 2020–21, females earned 56 percent (108,700 degrees) and males earned 44 percent (85,400 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 (70 percent);
- health professions and related programs (61 percent);
- legal profession and studies (53 percent); and
- biological and biomedical sciences (53 percent).

Of the five fields of study in which the most doctor’s degrees were conferred, males earned the majority of doctor’s degrees in engineering (74 percent).

Endnotes:

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

² The year 2010-11 was the last year the classification of first-professional degrees was used.

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 (previously known as nonresident alien 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 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 2022*, which excludes U.S. nonresidents from the distribution.

Reference tables: *Digest of Education Statistics 2022*, 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 2021*, 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