

# Race and Ethnicity in Higher Education: 2020 Supplement

## CHAPTER 3



### Graduate and Professional Education



## Race and Ethnicity in Higher Education: 2020 Supplement

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This chapter is part of a larger report by the American Council on Education (ACE) titled *Race and Ethnicity in Higher Education: 2020 Supplement*, which follows ACE's 2019 release of *Race and Ethnicity in Higher Education: A Status Report*. These reports, along with their accompanying microsite, provide a data-informed foundation for those working to close persistent equity gaps by providing a comprehensive review of the educational pathways of today's college students and the educators who serve them.

*Race and Ethnicity in Higher Education: 2020 Supplement* and the microsite were made possible through the generous support of The Andrew W. Mellon Foundation.

Visit [www.equityinhighered.org](http://www.equityinhighered.org) to learn more about the project and to download the full report, figures, detailed data tables, and other resources on race and ethnicity in higher education.

The screenshot shows the homepage of the ACE website. At the top left is the ACE logo with the text "American Council on Education" and "RACE AND ETHNICITY IN HIGHER EDUCATION". To the right of the logo is a navigation menu with links for HOME, ABOUT, INDICATORS, DATA SOURCES, DATA TABLES, and RESOURCES. Further right are social media icons for Twitter, Facebook, LinkedIn, YouTube, and a search icon. The main content area features a large image of a smiling Black woman with a backpack. Overlaid on the image is a "Featured Findings" box with two statistics: "40.1% of Associate Degrees were Earned by Students of Color" and "31.5% of Bachelor's Degrees were Earned by Students of Color". Below the image are two buttons: "EXPLORE THE FINDINGS" and "DOWNLOAD THE REPORT". At the bottom left, there is a section titled "Explore the Findings" with a paragraph of text and a link to "Download Reports". At the bottom right, there is a blue box titled "NEW: IDEAS AND INSIGHTS" with the text "View essays, videos, podcasts, and more >" and an icon of a speech bubble.

## About the American Council on Education

ACE is a membership organization that mobilizes the higher education community to shape effective public policy and foster innovative, high-quality practice. As the major coordinating body for the nation's colleges and universities, our strength lies in our diverse membership of more than 1,700 colleges and universities, related associations, and other organizations in America and abroad. ACE is the only major higher education association to represent all types of U.S. accredited, degree-granting institutions: two-year and four-year, public and private. For more information, please visit [www.acenet.edu](http://www.acenet.edu).

# INTRODUCTION

Graduate education has diversified greatly over the past several decades; however, there are still large differences in where students attend graduate education and in what they study (Espinosa et al. 2019). Black or African American and Native Hawaiian or other Pacific Islander students were much more likely than all other groups to have completed their master's, doctoral, and professional degrees at for-profit institutions. Such trends have a direct impact on other graduate education outcomes, such as the level of loan debt that students graduate with. For example, research shows that students who complete degrees from for-profit institutions are more likely to borrow and carry larger debt burdens than students at public and private nonprofit institutions (Espinosa et al. 2019).

Similarly, field of study has bearing on other outcomes, such as employment and earnings. As the data show, American Indian or Alaska Native, Black or African American, Hispanic or Latino, and Native Hawaiian or other Pacific Islander students were much less likely to have completed graduate degrees in the potentially more lucrative science, technology, engineering and math (STEM) fields.<sup>1</sup>

*Race and Ethnicity in Higher Education: A Status Report* (2019) included an overview of graduate school enrollment and completion. This chapter builds upon data presented in the 2019 report and provides a comprehensive overview of master's, doctoral, and professional degree recipients between 2015 and 2017,<sup>2</sup> as well as the educational pathways of doctoral degree recipients, and a profile of students attending dental, medical, and law schools.

## KEY FINDINGS

- Over 2.3 million master's degrees were awarded between 2015 and 2017. Of all master's degree recipients, 50.9 percent were White, 25.5 percent were students of color,<sup>3</sup> 17.0 percent were international students,<sup>4</sup> and 6.7 percent were students of unknown racial and ethnic backgrounds.<sup>5</sup>
- Over 530,000 doctoral and professional degrees<sup>6</sup> were awarded between 2015 and 2017. Of all doctoral and professional degree recipients, 56.0 percent were White, 25.9 percent were students of color, 12.1 percent were international students, and 6.1 percent were students of unknown racial and ethnic backgrounds.
- Most graduate students earned their degrees at public and private nonprofit four-year institutions.<sup>7</sup> However, Black or African American and Native Hawaiian or other Pacific Islander students were much more likely than all other groups to have completed their master's, doctoral, and professional degrees at for-profit institutions.
- Among master's degree recipients, the primary fields of study across most groups were business and management, education, and STEM fields. Among doctoral and professional degree recipients, the primary fields of study across most groups were health fields, law, and STEM fields.

1 STEM fields include life and physical sciences, math, engineering, and computer science.

2 This chapter examines pooled graduate completions data for three years. Doing so allows for a detailed analysis of fine field of study by race and ethnicity. For more information, please visit this report's methods section.

3 The term students of color includes American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or other Pacific Islander students, as well as students of more than one race.

4 The National Center for Education Statistics (NCES) defines a nonresident alien as "a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely." In this chapter, nonresident aliens are labeled as international students.

5 Race and ethnicity unknown is included among the racial and ethnic categories within data from the Integrated Postsecondary Education Data System (IPEDS), which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

6 Includes all doctoral degrees classified as research/scholarship, professional practice, and other doctorates in IPEDS.

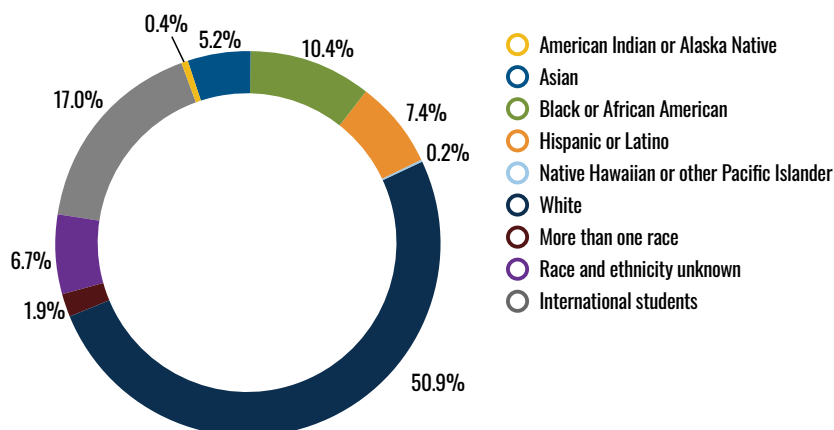
7 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Nearly half of international students completed their master's degrees in STEM fields, the only group for which STEM was their top field of study. Similarly, 60.2 percent of international students completed doctoral and professional degrees in STEM fields—more than six times as likely as nearly all other groups. Among those pursuing doctoral and professional degrees, Black or African American and Native Hawaiian or other Pacific Islander students were the least likely to pursue STEM degrees.
- About one-third of Hispanic or Latino and American Indian or Alaska Native students who pursued doctoral and professional degrees did so in law, the highest shares across all groups.
- Overall, 14.7 percent of all 2017 doctoral degree recipients had ever attended a community college. Nearly 30 percent of all American Indian or Alaska Native doctoral recipients had attended a community college; one-quarter of Hispanic or Latino students and 23.0 percent of Black or African American students had done so.
- Across all groups, the majority of 2017 doctoral degree recipients<sup>8</sup> had parents who had some level of postsecondary education. However, greater shares of American Indian or Alaska Native, Black or African American, and Hispanic or Latino students than other groups had parents who had completed only a high school credential or less.
- Large gender gaps exist for Black or African American students pursuing dental, medical, and law school, where women constitute more than 60 percent of all Black or African American students enrolled—the largest gender gaps of any group.
- Dental, medical, and law school graduates remain predominantly White. In 2018–19, 39.3 percent of dental school graduates were students of color, as were 41.4 percent of medical school graduates. Slightly less than one-third (30.6 percent) of law school graduates were students of color.

## MASTER'S DEGREE RECIPIENTS

Over 2.3 million master's degrees were awarded between 2015 and 2017. Of these, 50.9 percent were earned by White students, followed by international students (17.0 percent), Black or African American students (10.4 percent), Hispanic or Latino students (7.4 percent), students of unknown racial or ethnic background (6.7 percent), Asian students (5.2 percent), students of more than one race (1.9 percent), American Indian or Alaska Native students (0.4 percent), and Native Hawaiian or other Pacific Islander students (0.2 percent).

**Figure 3.1: Master's Degree Recipients, by Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

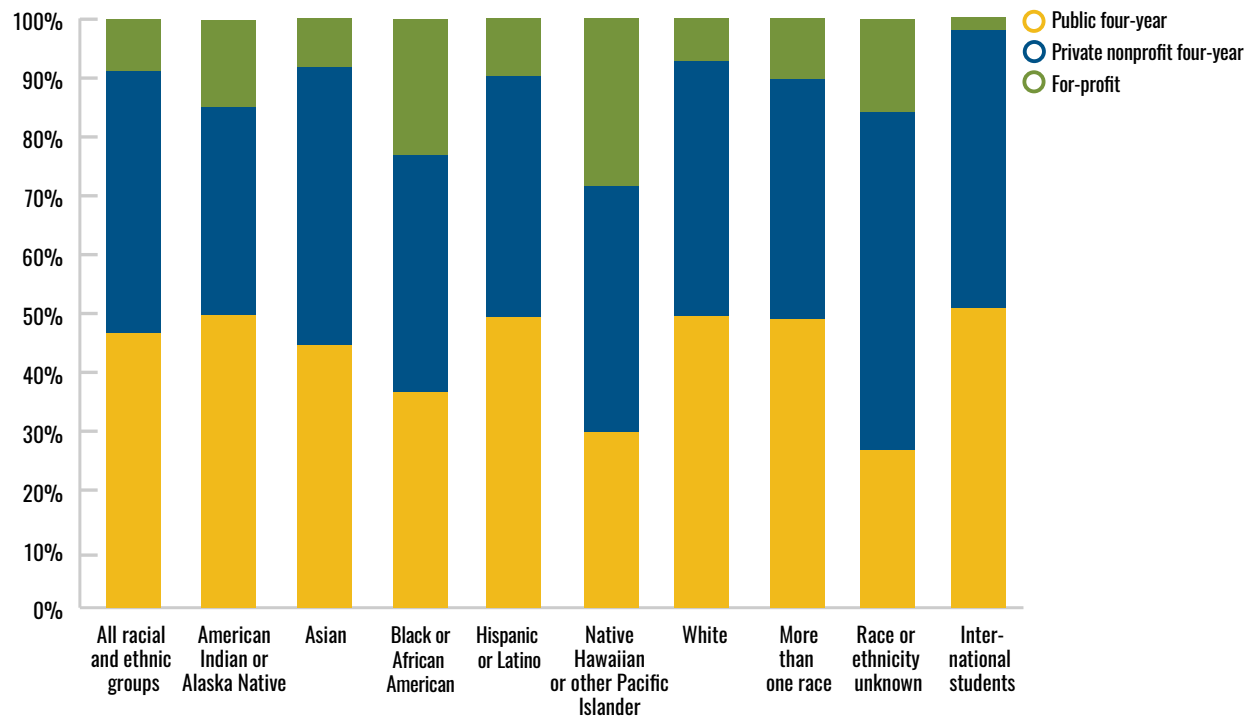
Notes: Data reflect master's degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Total may not add up to 100 percent due to rounding.

<sup>8</sup> Data on level of parental education come from the Survey of Earned Doctorates, which includes only research doctoral degree recipients.

## Master's Degrees Awarded, by Sector

Of all master's degrees awarded between 2015 and 2017, 46.5 percent were completed at public four-year institutions, 44.5 percent at private nonprofit four-year institutions, and 8.9 percent at for-profit institutions. Black or African American and Native Hawaiian or other Pacific Islander students were much more likely than all other groups to have completed their master's degrees at for-profit institutions.

**Figure 3.2: Master's Degrees, by Sector and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

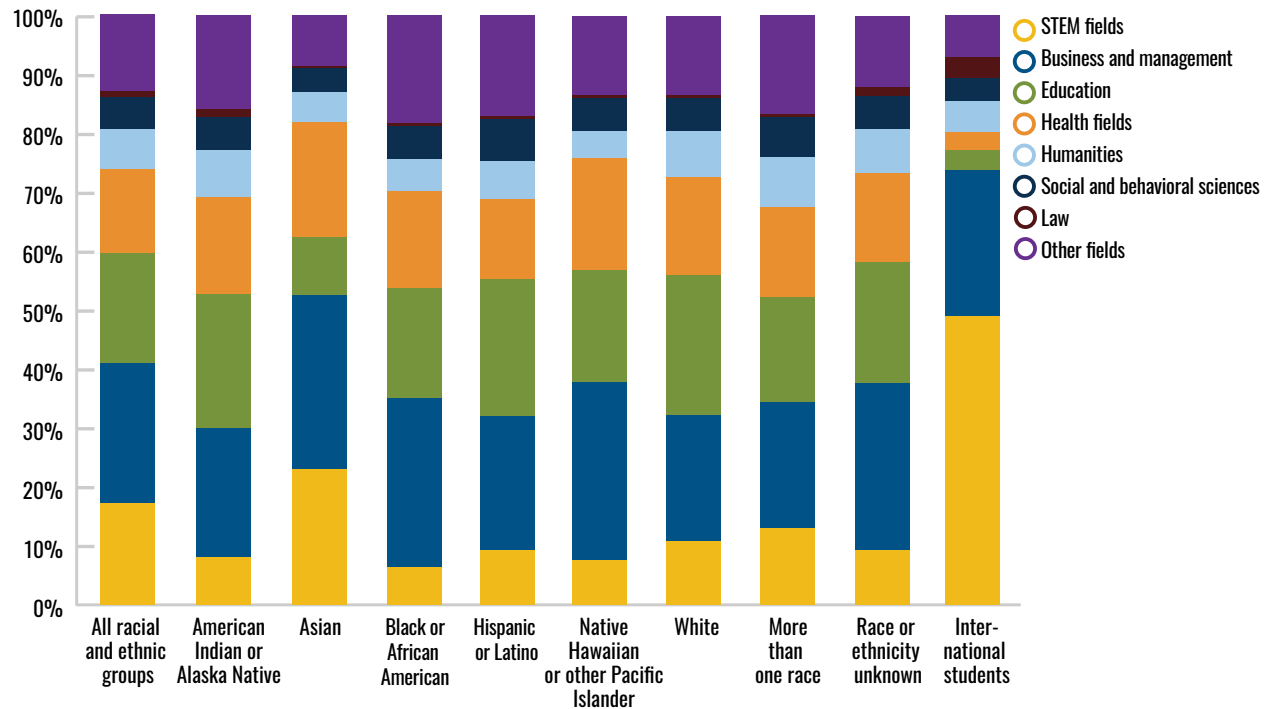
Notes: Data reflect the total number of master's degrees awarded, pooled for 2015, 2016, and 2017. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Between 2015 and 2017, 0.3 percent of American Indian or Alaska Native students and 0.1 percent of Black or African American students completed their master's degrees at a public two-year institution.

- About half of all international students (50.8 percent), American Indian or Alaska Native students (49.6 percent), White students (49.4 percent), Hispanic or Latino students (49.3 percent), and students of more than one race (49.0 percent) earned their master's degrees at a public four-year institution, compared with 36.6 percent of Black or African American students and 29.7 percent of Native Hawaiian or other Pacific Islander students.
- American Indian or Alaska Native students were the least likely of all groups to complete their master's degrees at a private nonprofit four-year institution (35.4 percent).
- A much greater proportion of Native Hawaiian or other Pacific Islander (28.4 percent) and Black or African American (23.2 percent) students completed their master's degrees at for-profit institutions than all other groups.
- Nearly 15 percent of American Indians or Alaska Natives also completed their master's degrees at for-profit institutions, twice that of White students (7.2 percent).

## Master's Degrees Awarded, by Broad Field of Study

The primary fields in which students completed master's degrees between 2015 and 2017 were business and management (23.8 percent), education (18.7 percent), and STEM fields (17.2 percent).

**Figure 3.3: Field of Study for Master's Degree Recipients, by Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Notes: Data reflect master's degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | STEM fields include life and physical sciences, math, engineering, and computer science.

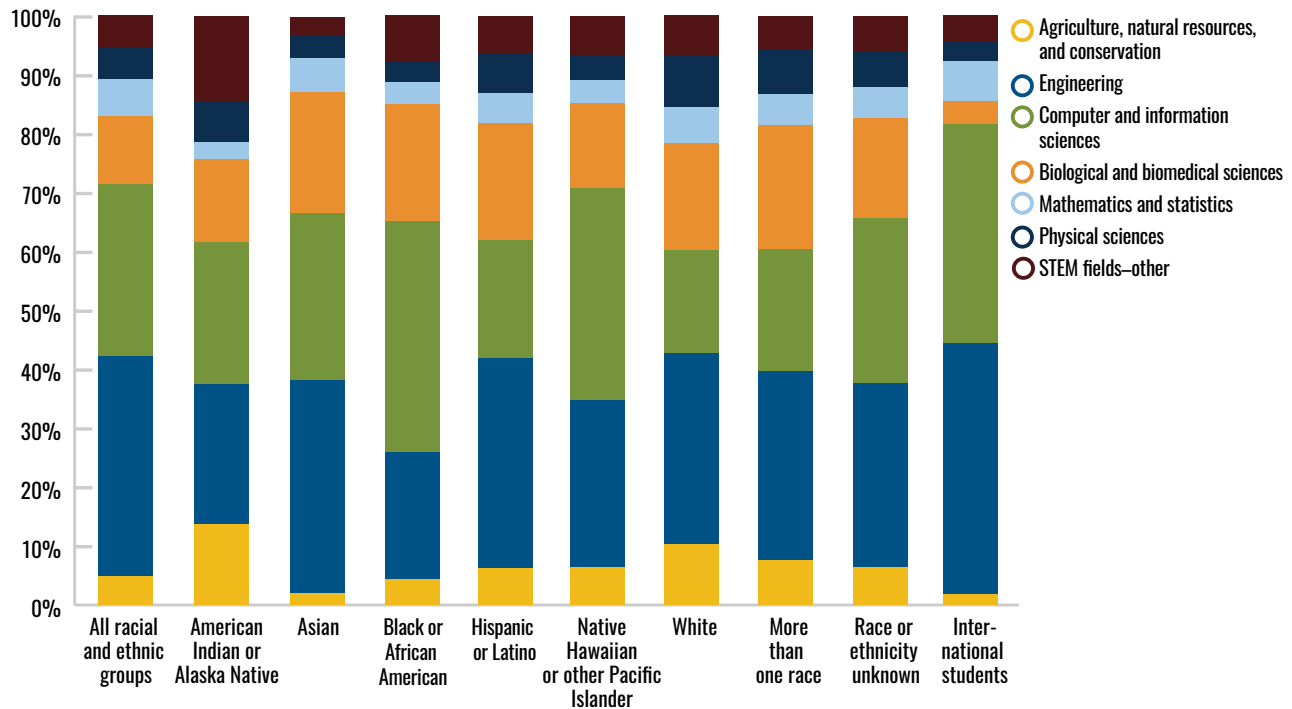
- Nearly half of international students completed their master's degrees in STEM fields (48.9 percent), the only group for which STEM was their top field of study.
- More than one in five White (23.8 percent), Hispanic or Latino (23.2 percent), and American Indian or Alaska Native (22.9 percent) students completed their master's degrees in education, compared with 9.8 percent of Asians and 3.4 percent of international students.
- Domestic students were much more likely than international students to have completed a master's degree in health fields.



## Detailed Field of Study of Master's Degree Recipients in STEM

Among all master's degrees earned in STEM fields between 2015 and 2017, the primary fields of study were engineering (37.3 percent); computer and information sciences (29.2 percent); and biological and biomedical sciences (11.6 percent).

**Figure 3.4: Master's Degree Recipients in STEM Fields, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Notes: Data reflect master's degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Agriculture, natural resources, and conservation includes the following fields of study: agriculture and related sciences; natural resources and conservation. | STEM fields—other includes the following fields of study: engineering technologies/technicians; science technologies/technicians; anthropology.

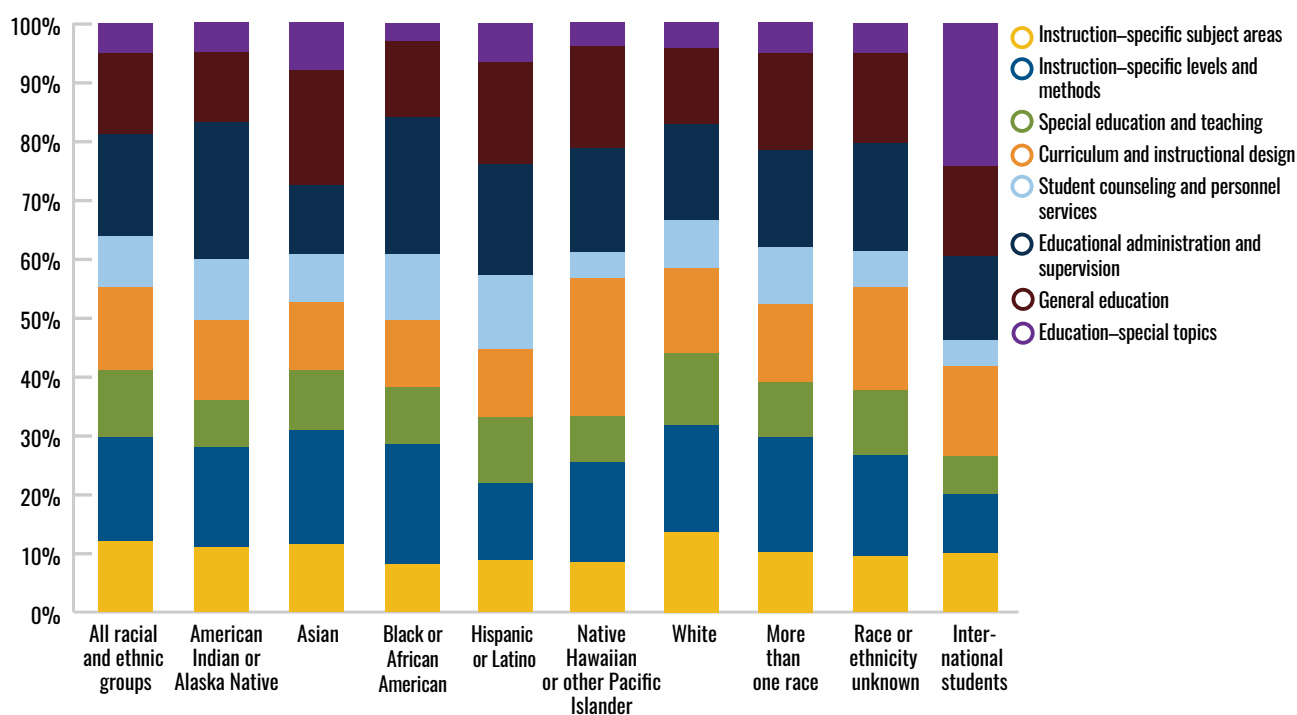
- American Indian or Alaska Native (13.7 percent) and White (10.2 percent) students were much more likely to complete their degrees in agriculture, natural resources, and conservation<sup>9</sup> than all other groups.
- Nearly 43 percent of international students completed their STEM master's degrees in engineering—the highest share of any group. American Indian or Alaska Native (23.8 percent) and Black or African American (21.6 percent) students were the least likely to have completed their degrees in this field.
- A larger proportion of Black or African American (39.2 percent), international (37.3 percent), and Native Hawaiian or other Pacific Islander (36.0 percent) STEM master's degree recipients completed their degrees in computer and information sciences, compared with 28.4 percent of Asians, 24.0 percent of American Indians or Alaska Natives, 20.0 percent of Hispanics or Latinos, and 17.5 percent of Whites.
- International students were much less likely to have completed their degrees in biological and biomedical sciences (3.9 percent) than domestic students.

<sup>9</sup> Agriculture, natural resources, and conservation includes the following fields of study: agriculture and related sciences; natural resources and conservation.

## Detailed Field of Study of Master's Degree Recipients in Education

The primary fields of study among master's degree recipients in education between 2015 and 2017 were instruction—specific levels and methods<sup>10</sup> (17.6 percent); educational administration and supervision (17.2 percent); curriculum and instructional design<sup>11</sup> (14.0 percent); and general education (13.8 percent).

**Figure 3.5: Master's Degree Recipients in Education, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Notes: Data reflect master's degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Instruction—specific levels and methods includes the following field of study: teacher education and professional development, specific levels and methods. | Curriculum and instructional design includes the following fields of study: curriculum and instruction, and educational/instructional media design. | Education—special topics includes the following fields of study: bilingual, multilingual, and multicultural education; teaching English or French as a second or foreign language; international and comparative education; social and philosophical foundations of education; education, other; teaching assistants/aides; educational assessment, evaluation, and research. | Instruction—specific subject areas includes the following field of study: teacher education and professional development, specific subject areas.

- A larger proportion of American Indian or Alaska Native (23.4 percent) and Black or African American (23.1 percent) students completed their degrees in educational administration and supervision than any other group.
- Native Hawaiian or other Pacific Islander students (23.3 percent) were twice as likely as Asian (11.6 percent), Hispanic or Latino (11.4 percent), and Black or African American (11.3 percent) students to complete their education master's degrees in curriculum and instructional design.
- A larger share of White students (12.3 percent) completed their degrees in special education and teaching than any other group.
- International students were much more likely than domestic students to complete their degrees in education—special topics<sup>12</sup> fields (24.4 percent).

10 Instruction—specific levels and methods includes the following field of study: teacher education and professional development, specific levels and methods.

11 Curriculum and instructional design includes the following fields of study: curriculum and instruction; educational/instructional media design.

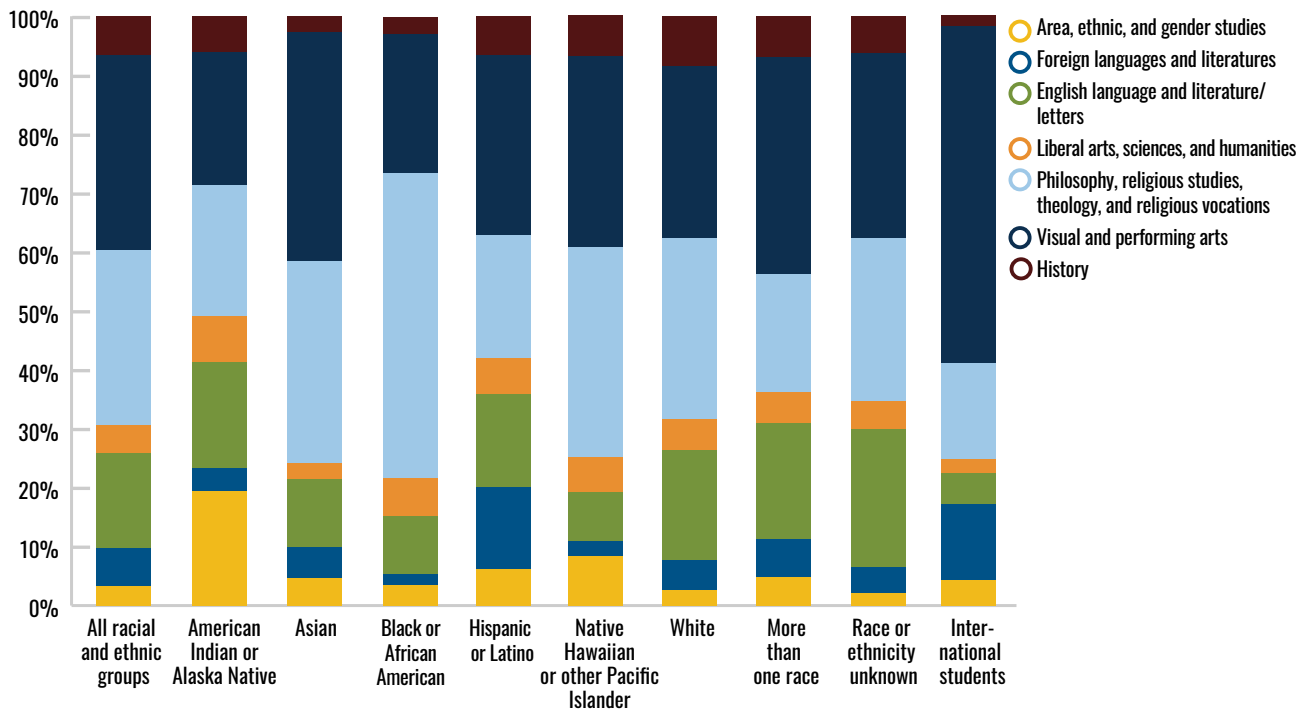
12 Education—special topics includes the following fields of study: bilingual, multilingual, and multicultural education; teaching English or French as a second or foreign language; international and comparative education; social and philosophical foundations of education; education, other; teaching assistants/aides; educational assessment, evaluation, and research.



## Detailed Field of Study of Master's Degree Recipients in Humanities

Between 2015 and 2017, the primary fields of study among master's recipients in the humanities were visual and performing arts (33.1 percent); philosophy, religious studies, theology, and religious vocations (29.6 percent); and English language and literature/letters (16.1 percent).

**Figure 3.6: Master's Degree Recipients in Humanities, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



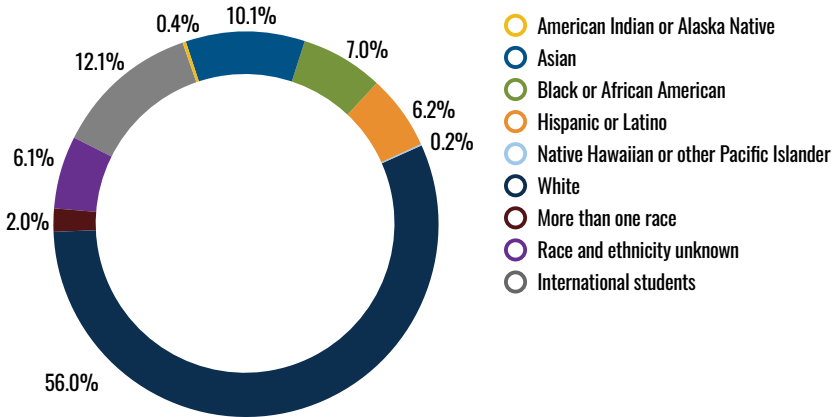
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017  
 Note: Data reflect master's degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017.

- Nearly one in five American Indians or Alaska Natives completed their humanities master's degrees in area, ethnic, and gender studies (19.4 percent), a much higher percentage than all other groups.
- Hispanic or Latino (13.8 percent) and international (12.8 percent) students were twice as likely as all other groups to have completed their degrees in foreign languages and literatures.
- The range in the share of students who completed their degrees in philosophy, religious studies, theology, and religious vocations was 16.4 percent of international students to 51.7 percent of Black or African American students.
- Over half of all international students completed their humanities master's degrees in visual and performing arts (57.1 percent)—the highest share of any group.

## DOCTORAL AND PROFESSIONAL DEGREE RECIPIENTS

Over 530,000 doctoral and professional degrees were awarded between 2015 and 2017. Of these, 56.0 percent were earned by White students, followed by international students (12.1 percent), Asian students (10.1 percent), Black or African American students (7.0 percent), Hispanic or Latino students (6.2 percent), students of unknown racial or ethnic background (6.1 percent), students of more than one race (2.0 percent), American Indian or Alaska Native students (0.4 percent), and Native Hawaiian or other Pacific Islander students (0.2 percent).

**Figure 3.7: Doctoral and Professional Degree Recipients, by Race and Ethnicity: Pooled 2015 to 2017**



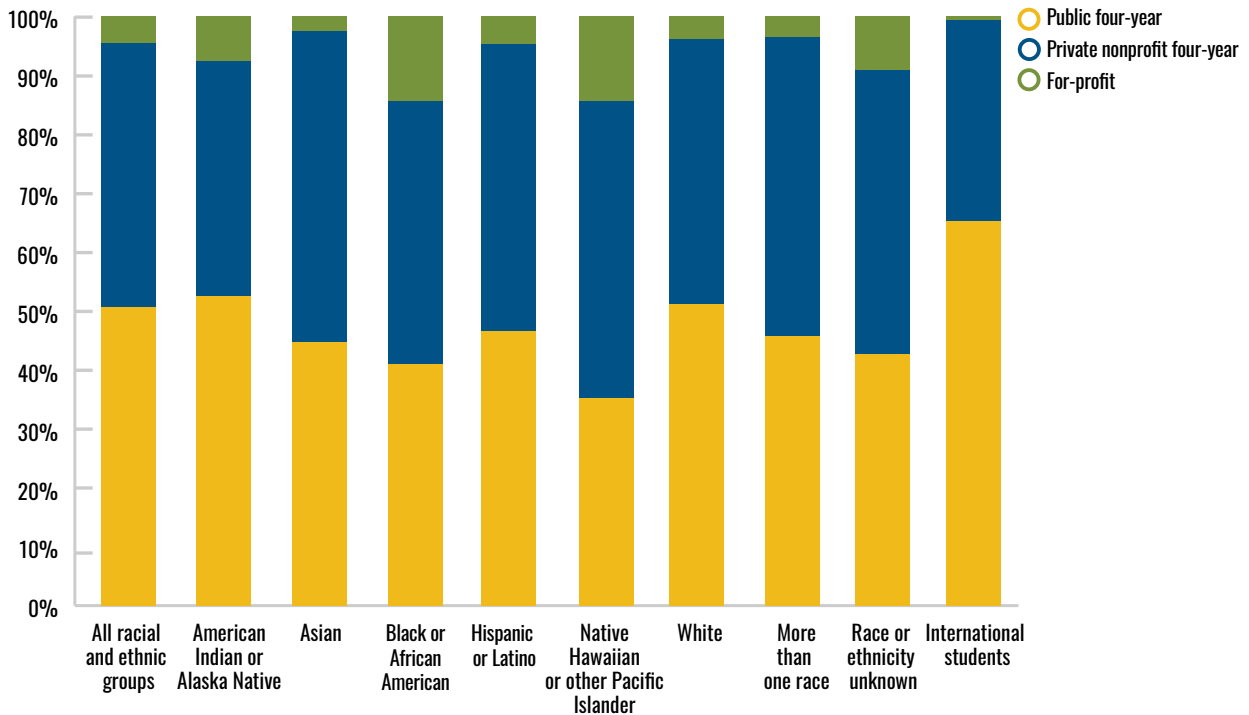
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Note: Data reflect all doctoral degrees classified as research/scholarship, professional practice, and other doctorates earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017.

## Doctoral and Professional Degrees Awarded, by Sector

Of all doctoral and professional degrees awarded between 2015 and 2017, 50.6 percent were completed at public four-year institutions, 44.9 percent at private nonprofit four-year institutions, and 4.5 percent at for-profit institutions. Black or African American and Native Hawaiian or other Pacific Islander students were much more likely than all other groups to have completed their doctoral and professional degrees at for-profit institutions.

**Figure 3.8: Doctoral and Professional Degrees, by Sector and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

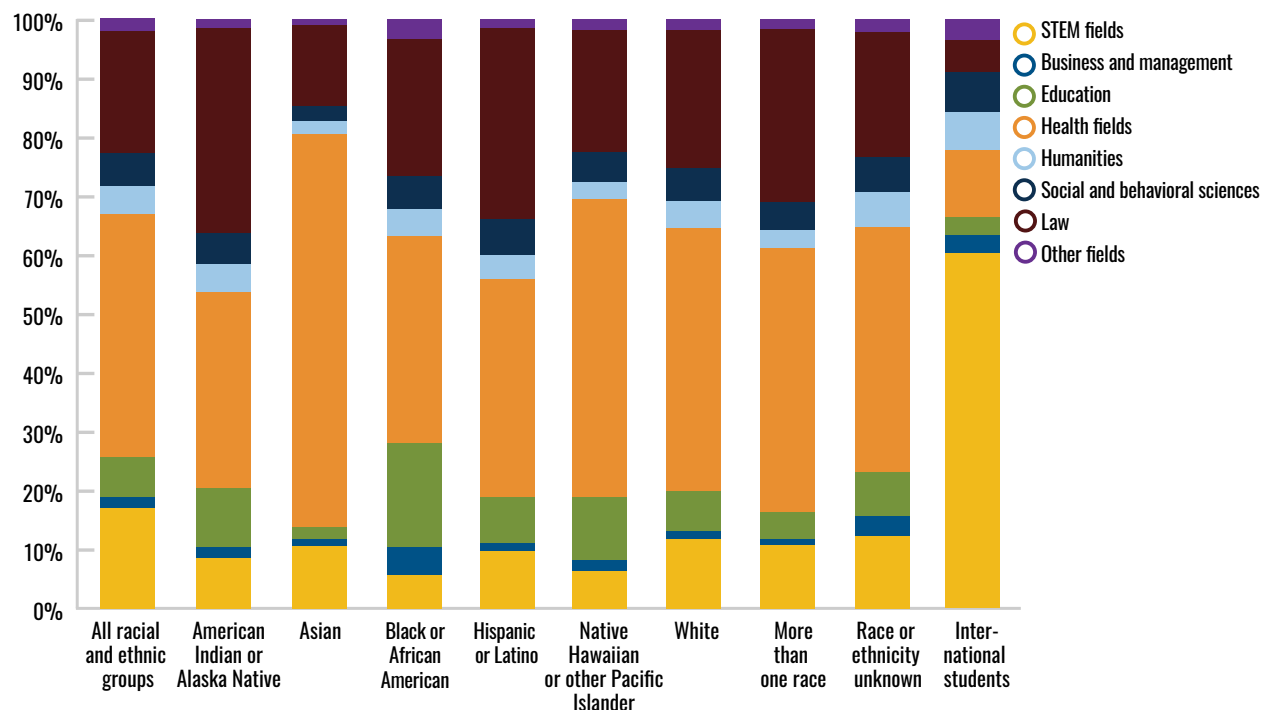
Notes: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned, pooled for 2015, 2016, and 2017. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of all international (65.2 percent), American Indian or Alaska Native (52.5 percent), and White (51.2 percent) students completed their doctoral and professional degrees at public four-year institutions.
- Over half of all Asian students (52.7 percent), students of more than one race (50.7 percent), and Native Hawaiian or other Pacific Islander students (50.4 percent) completed their doctoral and professional degrees at private nonprofit four-year institutions. In comparison, 39.8 percent of American Indian or Alaska Native and 34.2 percent of international students completed their degrees at these institutions.
- Hispanic or Latino students were slightly more likely to have completed their doctoral and professional degrees at private nonprofit four-year institutions (48.6 percent) than public four-year institutions (46.6 percent).
- A much greater proportion of Black or African American (14.4 percent) and Native Hawaiian or other Pacific Islander (14.4 percent) students completed their doctoral and professional degrees at for-profit institutions than all other groups.

## Doctoral and Professional Degrees Awarded, by Broad Field of Study

The primary fields in which students completed doctoral and professional degrees between 2015 and 2017 were health fields (41.4 percent), law (20.8 percent), and STEM fields (17.0 percent).

**Figure 3.9: Field of Study for Doctoral and Professional Degree Recipients, by Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

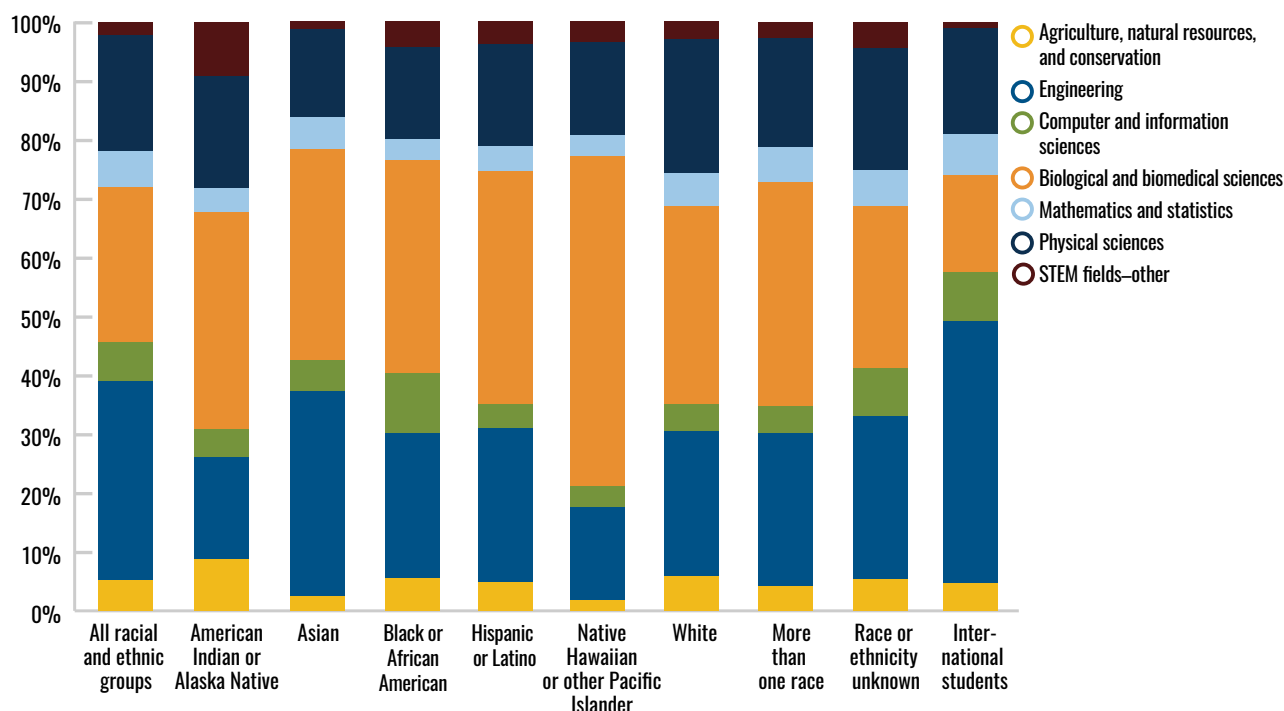
Notes: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | STEM fields include life and physical sciences, math, engineering, and computer science.

- The majority of international students completed their doctoral and professional degrees in STEM fields (60.2 percent) between 2015 and 2017—more than six times as likely as nearly all other groups.
- Black or African American (17.7 percent), Native Hawaiian or other Pacific Islander (10.7 percent), and American Indian or Alaska Native (10.0 percent) students were much more likely than other groups to complete their doctoral and professional degrees in education.
- Over half of all Asian (66.7 percent) and Native Hawaiian or other Pacific Islander (50.5 percent) students completed their doctoral and professional degrees in health fields, compared with 36.9 percent of Hispanic or Latino, 35.1 percent of Black or African American, 33.2 percent of American Indian or Alaska Native, and 11.3 percent of international students.
- A larger proportion of American Indian or Alaska Natives (34.9 percent), Hispanics or Latinos (32.4 percent), and students of more than one race (29.4 percent) completed their doctoral and professional degrees in law than any other group. International students were the least likely to complete their doctoral and professional degrees in law, at 5.3 percent.

## Detailed Field of Study of Doctoral and Professional Degree Recipients in STEM

Among all doctoral and professional degrees earned in STEM fields between 2015 and 2017, the primary fields of study were engineering (33.9 percent), biological and biomedical sciences (26.4 percent), and physical sciences (19.6 percent).

**Figure 3.10: Doctoral and Professional Degree Recipients in STEM Fields, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Notes: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Agriculture, natural resources, and conservation includes the following fields of study: agriculture and related sciences; natural resources and conservation. | STEM fields—other includes the following fields of study: engineering technologies/technicians; science technologies/technicians; anthropology.

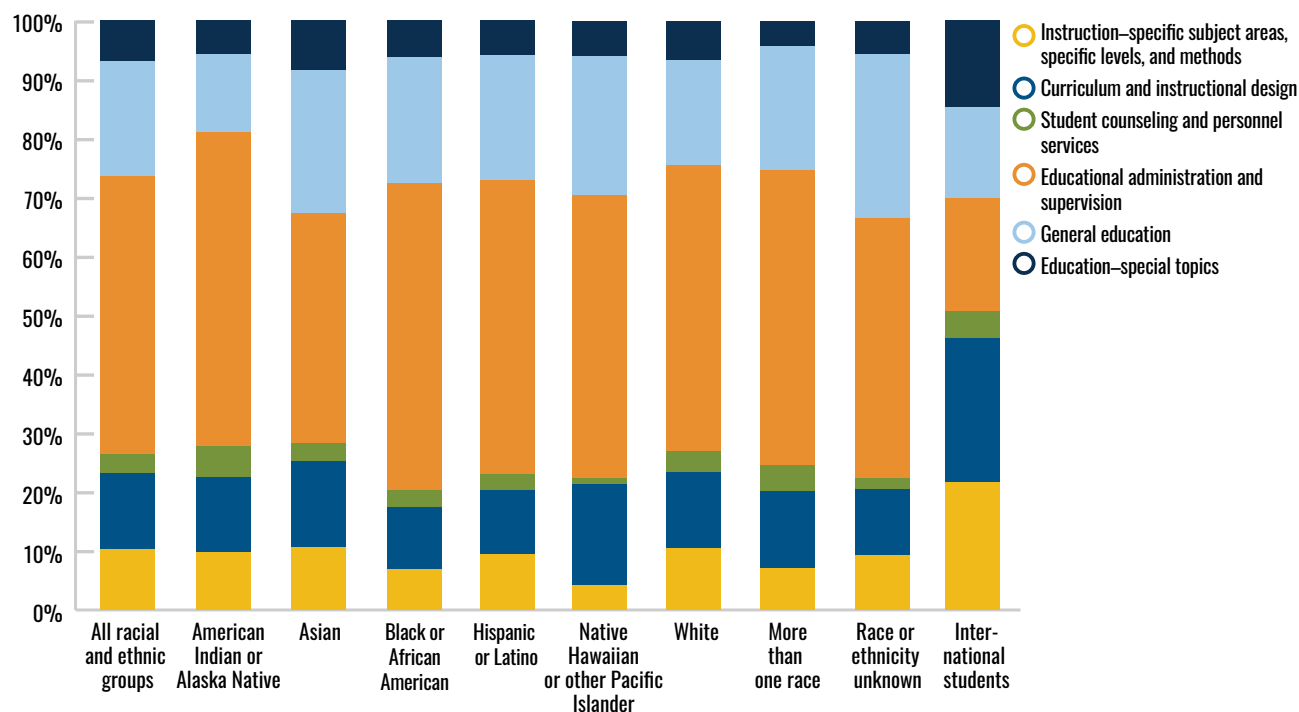
- More than one-third of international (44.4 percent) and Asian (34.7 percent) students completed their STEM doctoral and professional degrees in engineering, compared with 17.4 percent of American Indian or Alaska Native and 15.8 percent of Native Hawaiian or other Pacific Islander students.
- One in 10 Black or African American students completed their doctoral and professional degrees in computer and information sciences (10.3 percent), as did 8.4 percent of international students. The shares of other groups completing their degrees in this field were much smaller.
- Over half of all Native Hawaiian or other Pacific Islander students (56.1 percent) completed their doctoral and professional degrees in biological and biomedical sciences, as did over one-third of all other domestic students. International students were the least likely of all groups to complete their degrees in these fields (16.3 percent).
- American Indian or Alaska Native students were more than twice as likely as all other groups to complete their STEM doctoral and professional degrees in other STEM fields<sup>13</sup> (9.2 percent).

13 STEM fields—other includes the following fields of study: engineering technologies/technicians; science technologies/technicians; anthropology.

## Detailed Field of Study of Doctoral and Professional Degree Recipients in Education

The primary fields of study among education doctoral and professional degree recipients between 2015 and 2017 were educational administration and supervision (47.1 percent); general education (19.5 percent); and curriculum and instructional design (13.0 percent).

**Figure 3.11: Doctoral and Professional Degree Recipients in Education, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Notes: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Curriculum and instructional design includes the following fields of study: curriculum and instruction; educational/instructional media design. | Education—special topics includes the following fields of study: bilingual, multilingual, and multicultural education; teaching English or French as a second or foreign language; international and comparative education; social and philosophical foundations of education; education, other; teaching assistants/aides; educational assessment, evaluation, and research. | Instruction—specific subject areas, levels, and methods includes the following fields of study: teacher education and professional development, specific subject areas; teacher education and professional development, specific levels and methods; special education and teaching.

- A higher share of American Indian or Alaska Native students (53.3 percent), Black or African American students (52.1 percent), Hispanic or Latino students (50.0 percent), students of more than one race (49.9 percent), White students (48.6 percent), and Native Hawaiian or other Pacific Islander students (48.0 percent) completed their doctoral and professional degrees in educational administration and supervision than Asian (38.9 percent) and international (19.2 percent) students.
- White (17.8 percent), international (15.3 percent), and American Indian or Alaska Native (13.2 percent) students were less likely than all other groups to have completed their doctoral and professional degrees in general education.
- International students were more than twice as likely as domestic students to have completed their education doctoral and professional degrees in instruction—specific subject areas, specific levels, and methods.<sup>14</sup>
- Nearly one-quarter of all international students (24.5 percent) completed their doctoral and professional degrees in curriculum and instructional design. The shares of domestic students completing their degrees in these fields were much smaller.

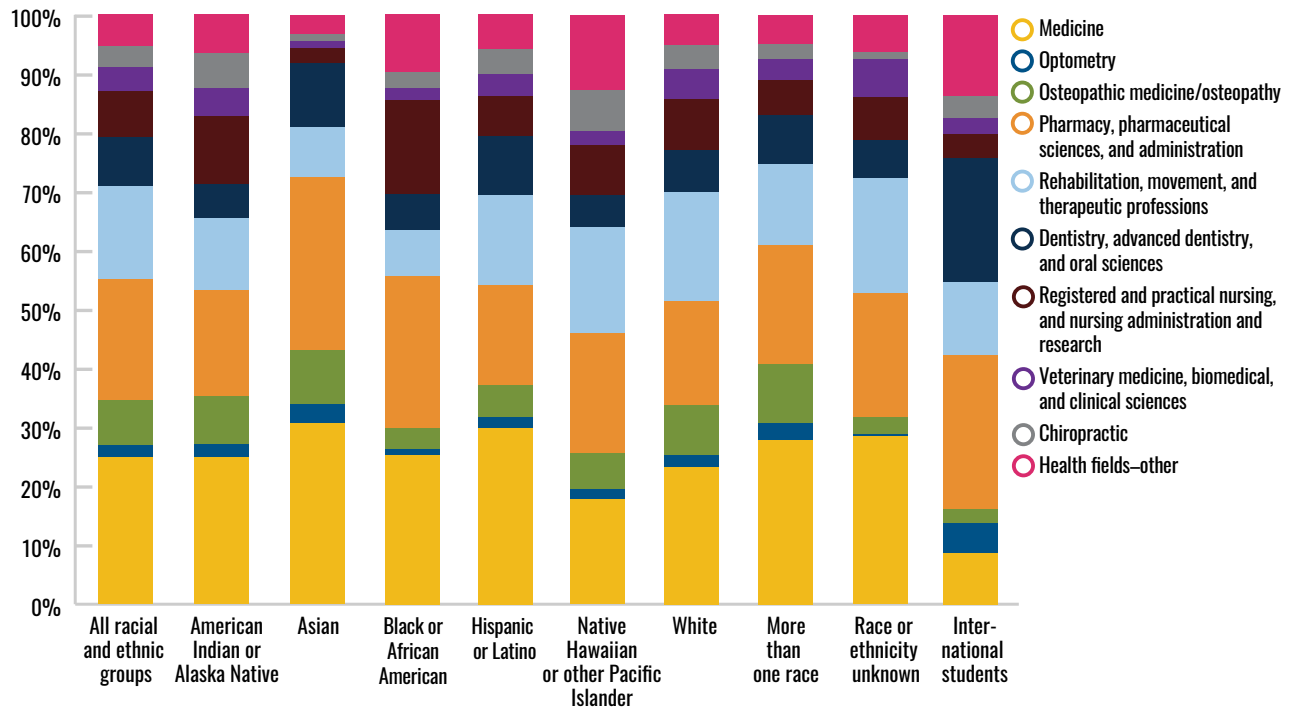
<sup>14</sup> Instruction—specific subject areas, levels, and methods includes the following fields of study: teacher education and professional development, specific subject areas; teacher education and professional development, specific levels and methods; special education and teaching.



## Detailed Field of Study of Doctoral and Professional Degree Recipients in Health Fields

Between 2015 and 2017, the primary fields of study among students who completed doctoral and professional degrees in health fields were medicine (24.9 percent); pharmacy, pharmaceutical sciences, and administration (20.5 percent); and rehabilitation, movement, and therapeutic professions (15.9 percent).

**Figure 3.12: Doctoral and Professional Degree Recipients in Health Fields, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

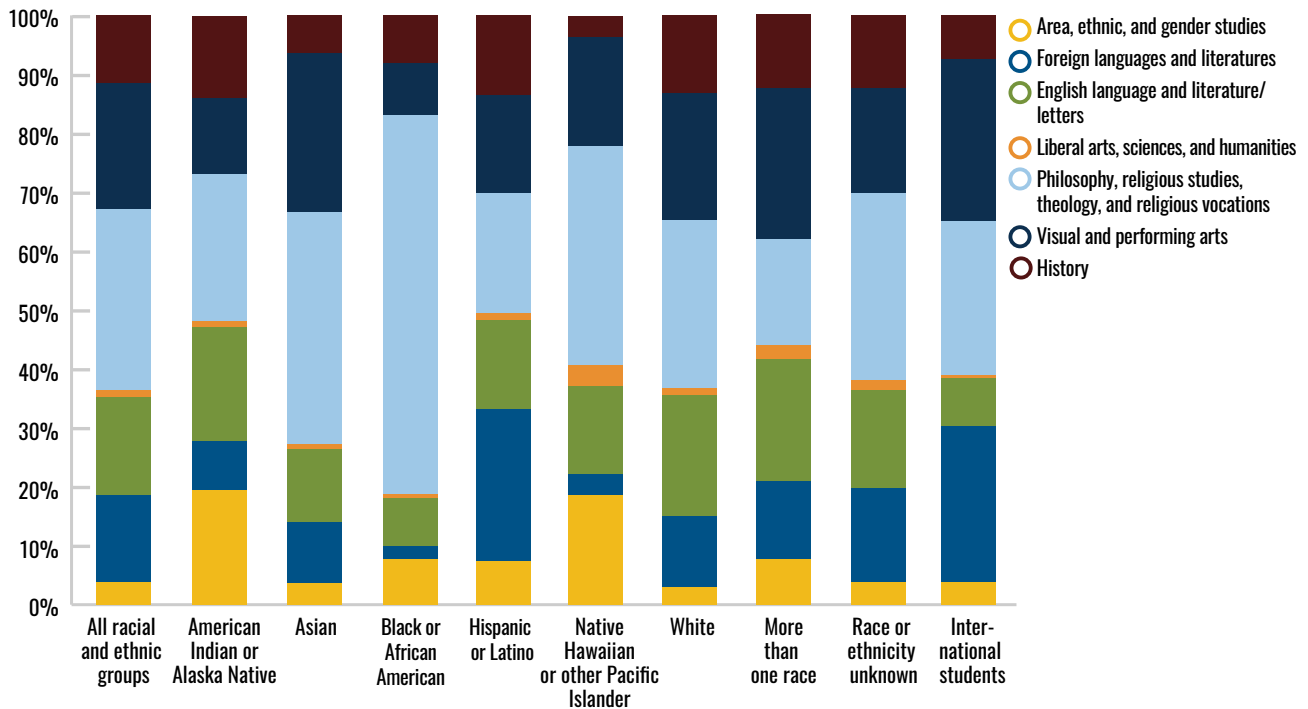
Notes: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017. | Health fields—other includes the following fields of study: allied health: communication disorders sciences and services; dietetics and clinical nutrition services; alternative and complementary medicine: health professions and related clinical sciences, other; public health: health and medical administrative services; podiatric medicine/podiatry.

- About three in 10 Asian (30.7 percent) and Hispanic or Latino (29.9 percent) students completed their health fields doctoral and professional degrees in medicine, compared with only 8.7 percent international students.
- Asian (8.4 percent) and Black or African American (7.9 percent) students were much less likely than all other groups to have completed their doctoral and professional degrees in rehabilitation, movement, and therapeutic professions.
- A higher share of Black or African American (16.1 percent) and American Indian or Alaska Native (11.4 percent) students completed their doctoral and professional degrees in registered and practical nursing, and nursing administration and research than any other group.
- Roughly one in five international students (21.0 percent) completed their doctoral and professional degrees in dentistry, advanced dentistry, and oral sciences, as did 11.0 percent of Asian students and 10.0 percent of Hispanic or Latino students. The shares of other groups to complete a doctoral and professional degree in these fields were much smaller.

## Detailed Field of Study of Doctoral and Professional Degree Recipients in Humanities

Among doctoral and professional degree recipients who completed their degrees in the humanities between 2015 and 2017, the primary fields of study were philosophy, religious studies, theology, and religious vocations (30.7 percent); visual and performing arts (21.4 percent); and English language and literature/letters (16.6 percent).

**Figure 3.13: Doctoral and Professional Degree Recipients in Humanities, by Detailed Field of Study and Race and Ethnicity: Pooled 2015 to 2017**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2015, 2016, 2017

Note: Data reflect all research/scholarship, professional practice, and other doctoral degrees earned at all Title IV eligible, degree-granting institutions, pooled for 2015, 2016, and 2017.

- American Indian or Alaska Native (19.4 percent) and Native Hawaiian or other Pacific Islander (18.5 percent) students were more than twice as likely as all other groups to complete their humanities doctoral and professional degrees in area, ethnic, and gender studies.
- International (26.5 percent) and Hispanic or Latino (25.9 percent) students were more than twice as likely as all other groups to complete their doctoral and professional degrees in foreign languages and literatures.
- The majority of Black or African American students completed their doctoral and professional degrees in philosophy, religious studies, theology, and religious vocations (64.2 percent)—the highest share of any group.
- A higher share of international students (27.5 percent), Asian students (27.1 percent), and students of more than one race (25.7 percent) completed their doctoral and professional degrees in visual and performing arts than Black or African American students (8.9 percent).

## EDUCATIONAL PATHWAYS OF DOCTORAL DEGREE RECIPIENTS

This section utilizes data from the Survey of Earned Doctorates (SED) to examine the educational pathways of doctoral degree recipients. Started in 1957, the SED is an annual survey of individuals receiving a research doctorate from accredited institutions in the United States in a given academic year. The SED collects information related to the educational pathways of research doctoral degree recipients, demographic characteristics, and plans following graduation. The SED is sponsored by the National Center for Science and Engineering Statistics with the National Science Foundation, the National Institutes of Health, the Department of Education, and the National Endowment for the Humanities (National Science Foundation, n.d.). The data presented in this report reflect research doctoral degree recipients in 2017.

### Parental Educational Attainment Level

The majority of 2017 doctoral degree recipients had parents who had completed some level of postsecondary education. Overall, doctoral degree recipients' fathers had higher levels of educational attainment than their mothers. Roughly 62 percent of doctoral degree recipients had fathers who had completed a bachelor's degree or higher. A little more than half of all doctoral degree recipients had mothers who had completed a bachelor's degree or higher (54.2 percent).

**Table 3.1: Educational Attainment of 2017 Doctoral Degree Recipients' Parents, by Race and Ethnicity**

	High School or Less	Some College	Bachelor's Degree	Advanced Degree
<b>FATHER'S LEVEL OF EDUCATIONAL ATTAINMENT</b>				
All doctoral degree recipients	24.0%	13.9%	27.0%	35.1%
American Indian or Alaska Native	34.8%	22.8%	25.0%	17.4%
Asian	21.8%	9.2%	23.0%	46.1%
Black or African American	40.1%	20.1%	16.5%	23.3%
Hispanic or Latino	35.8%	16.7%	21.1%	26.5%
White	18.7%	14.6%	26.0%	40.8%
More than one race	18.0%	14.9%	20.6%	46.6%
Other race or race not reported	15.9%	11.9%	27.8%	44.4%
Ethnicity not reported	17.4%	12.8%	31.4%	38.4%
International students	29.2%	12.5%	32.1%	26.3%
<b>MOTHER'S LEVEL OF EDUCATIONAL ATTAINMENT</b>				
All doctoral degree recipients	28.4%	17.3%	28.6%	25.6%
American Indian or Alaska Native	26.9%	26.9%	24.7%	21.5%
Asian	29.1%	13.0%	31.3%	26.6%
Black or African American	34.0%	24.6%	19.4%	22.1%
Hispanic or Latino	38.1%	19.6%	21.6%	20.7%
White	19.2%	19.2%	29.3%	32.4%
More than one race	20.8%	19.3%	25.7%	34.2%

	High School or Less	Some College	Bachelor's Degree	Advanced Degree
Other race or race not reported	17.3%	14.2%	32.7%	35.8%
Ethnicity not reported	24.1%	16.1%	27.6%	32.2%
International students	41.0%	13.9%	29.6%	15.5%

Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students. | Totals include only doctoral degree recipients who reported parental education. | Some college includes those who attended college, but did not earn a bachelor's degree. | Totals may not add to 100 percent due to rounding.

- Over one-third of all Black or African American (40.1 percent), Hispanic or Latino (35.8 percent), and American Indian or Alaska Native (34.8 percent) doctoral degree recipients' fathers had attained only a high school credential or less. Comparatively, 18.7 percent of White doctoral degree recipients had fathers who had attained only a high school credential or less.
- Over one-third of all international (41.0 percent), Hispanic or Latino (38.1 percent), and Black or African American (34.0 percent) doctoral degree recipients' mothers had attained only a high school credential or less, compared with 19.2 percent of White doctoral degree recipients.
- Nearly half of all Asian doctoral degree recipients' fathers had attained an advanced degree (46.1 percent). Roughly one-quarter of all Asian doctoral degree recipients' mothers had attained an advanced degree (26.6 percent). This was the largest percentage point difference between father and mother educational attainment across all groups (19.5 percentage points).

## Pre-doctoral Postsecondary Education

### COMMUNITY COLLEGE ENROLLMENT

Overall, 14.7 percent of all 2017 doctoral degree recipients had ever attended a community college. By broad field of study, doctoral degree recipients in education were the most likely to have ever attended a community college (21.7 percent), followed by life sciences (16.5 percent), and psychology and social sciences (16.3 percent). Engineering doctoral degree recipients were the least likely to have ever attended a community college (10.1 percent).

**Table 3.2: Percentage of 2017 Doctoral Degree Recipients Who Had Ever Attended a Community College, by Broad Field of Study and Race and Ethnicity**

	All Doctoral Degrees	Education	Engineering	Humanities and Arts	Life Sciences	Mathematics and Computer Sciences	Physical Sciences and Earth Sciences	Psychology and Social Sciences	Other Fields
All doctoral degree recipients	14.7%	21.7%	10.1%	15.4%	16.5%	10.5%	13.3%	16.3%	14.0%
American Indian or Alaska Native	29.4%	50.0%	‡	‡	44.0%	0.0%	‡	19.2%	0.0%
Asian	12.9%	18.8%	11.7%	14.9%	14.4%	11.2%	12.3%	11.3%	8.6%
Black or African American	23.0%	26.1%	21.9%	16.2%	22.5%	14.3%	26.6%	22.0%	24.4%
Hispanic or Latino	25.5%	32.6%	22.4%	25.2%	27.4%	24.1%	19.9%	24.7%	20.0%
White	20.6%	24.4%	17.9%	17.9%	21.7%	19.8%	19.5%	21.0%	22.0%
More than one race	23.2%	24.1%	20.2%	24.3%	21.3%	22.0%	20.5%	25.4%	35.3%
Other race or race not reported	15.3%	21.6%	‡	‡	11.2%	17.5%	‡	19.1%	8.0%
Ethnicity not reported	3.8%	4.1%	2.1%	6.7%	4.9%	2.9%	1.8%	4.1%	2.0%
International students	5.1%	6.9%	5.3%	4.2%	6.3%	4.6%	4.9%	3.8%	3.8%
Citizenship unknown	2.7%	4.6%	0.5%	3.3%	3.4%	3.0%	1.4%	2.9%	3.4%

Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students. | Life sciences includes agricultural sciences and natural sciences, biological and biomedical sciences, and health sciences. | Other fields includes other non-science and engineering fields not shown separately. | Percentages based on total number of doctoral degree recipients. | ‡ Estimate suppressed. Reporting standards not met.

- American Indians or Alaska Natives were the most likely to have attended a community college (29.4 percent), followed by Hispanic or Latino (25.5 percent) and Black or African American (23.0 percent) students.<sup>15</sup>
- Across all fields of study, a very small share of international<sup>16</sup> doctoral degree recipients had attended a community college.
- Among math and computer science doctoral degree recipients, Hispanic or Latino students (24.1 percent) and individuals of more than one race (22.0 percent) were more than twice as likely as all graduates to have attended a community college (10.5 percent).
- Among engineering doctoral degree recipients, Hispanic or Latino students (22.4 percent), Black or African American students (21.9 percent), and students of more than one race (20.2 percent) were twice as likely to have attended a community college as all doctoral degree recipients (10.1 percent).

<sup>15</sup> The groups other race or race not reported and ethnicity not reported are included among the racial and ethnic categories within the Survey of Earned Doctorates (SED) data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

<sup>16</sup> The SED includes several categories in which students can identify their citizenship status. In the SED data presented in this chapter, individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students.

## BACHELOR'S DEGREE COMPLETION

More than half of all doctoral degree recipients in 2017 had previously completed a bachelor's degree in a field of study related to their doctorate (54.7 percent). By broad field of study, engineering doctoral degree recipients were the most likely to have completed a bachelor's degree in a related field of study (76.9 percent). Education doctoral degree recipients were the least likely to have completed a bachelor's degree in a related field (23.7 percent).

**Table 3.3: 2017 Doctoral Degree Recipients Who Earned a Bachelor's Degree Related to Their Doctorate, by Broad Field of Study and Race and Ethnicity**

	All Doctoral Degrees	Education	Engineering	Humanities and Arts	Life Sciences	Mathematics and Computer Sciences	Physical Sciences and Earth Sciences	Psychology and Social Sciences	Other Fields
All doctoral degree recipients	54.7%	23.7%	76.9%	51.5%	48.5%	61.5%	68.8%	51.9%	34.9%
American Indian or Alaska Native	47.7%	36.4%	60.0%	43.8%	68.0%	‡	‡	34.6%	‡
Asian	52.9%	18.3%	77.6%	47.0%	46.7%	52.9%	62.2%	49.1%	29.0%
Black or African American	39.4%	17.8%	69.8%	42.6%	41.2%	65.3%	66.0%	47.1%	32.5%
Hispanic or Latino	51.0%	12.7%	82.2%	52.1%	50.0%	62.0%	67.6%	54.2%	34.8%
White	57.4%	25.3%	79.2%	57.3%	52.4%	68.7%	75.0%	60.5%	38.6%
More than one race	59.4%	20.5%	75.4%	59.1%	54.9%	‡	75.9%	66.8%	‡
Other race or race not reported	32.9%	13.5%	34.8%	39.0%	29.0%	‡	‡	30.9%	‡
Ethnicity not reported	6.7%	4.1%	10.4%	7.8%	3.8%	10.0%	10.5%	6.4%	2.0%
International students	63.0%	42.0%	81.8%	51.7%	50.2%	64.0%	69.1%	46.4%	41.5%
Citizenship unknown	13.7%	8.3%	30.6%	8.1%	9.9%	19.3%	13.9%	8.8%	9.5%

Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students. | Life sciences includes agricultural sciences and natural sciences, biological and biomedical sciences, and health sciences. | Other fields includes other non-science and engineering fields not shown separately. | A bachelor's degree is counted as "in same field as doctorate" if the fields of study of the doctorate recipient's first or most recent bachelor's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See Survey of Earned Doctorates technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy. | ‡ Estimate suppressed. Reporting standards not met.

- Over half of all international students (63.0 percent), students of more than one race (59.4 percent), Whites (57.4 percent), Asians (52.9 percent), and Hispanics or Latinos (51.0 percent) completed a bachelor's degree in a field related to their doctoral degrees. In contrast, 47.7 percent of American Indian or Alaska Native students and 39.4 percent of Black or African American students completed a bachelor's degree in a related field.
- Among engineering doctoral degree recipients, 82.2 percent of Hispanic or Latino students and 81.8 percent of international students completed a bachelor's degree in a related field—the highest shares of any group.
- Less than one in five Asian (18.3 percent), Black or African American (17.8 percent), and Hispanic or Latino (12.7 percent) education doctoral degree recipients completed a bachelor's degree in a related field, compared with 42.0 percent of international and 36.4 percent of American Indian or Alaska Native students.



- Roughly three-quarters of individuals of more than one race (75.9 percent) and White (75.0 percent) doctoral degree recipients in physical sciences and earth sciences completed a bachelor's degree in a related field, compared with 68.8 percent of all doctoral degree recipients in this field.

## MASTER'S DEGREE COMPLETION

More than half of all doctoral degree recipients in 2017 had previously completed a master's degree in a field of study related to their doctorate (51.1 percent). The remaining 48.9 percent of doctoral degree recipients either earned no master's degree or a master's degree in an unrelated field. By broad field of study, doctoral degree recipients in engineering (62.8 percent) and the humanities and arts (62.5 percent) were most likely to have completed a master's degree in a related field of study. Life sciences doctoral degree recipients were the least likely to have completed a master's degree in a related field (32.2 percent).

**Table 3.4: 2017 Doctoral Degree Recipients Who Earned a Master's Degree Related to Their Doctorate, by Broad Field of Study and Race and Ethnicity**

	All Doctoral Degrees	Education	Engineering	Humanities and Arts	Life Sciences	Mathematics and Computer Sciences	Physical Sciences and Earth Sciences	Psychology and Social Sciences	Other Fields
All doctoral degree recipients	51.1%	53.7%	62.8%	62.5%	32.2%	57.1%	42.4%	59.1%	53.4%
American Indian or Alaska Native	43.1%	‡	50.0%	56.3%	36.0%	‡	‡	46.2%	‡
Asian	46.6%	56.7%	60.4%	64.1%	28.9%	48.6%	37.3%	55.3%	50.0%
Black or African American	49.3%	52.9%	66.3%	58.1%	36.0%	61.2%	27.7%	50.8%	56.9%
Hispanic or Latino	51.8%	54.4%	65.7%	62.8%	28.4%	67.1%	38.4%	63.1%	59.3%
White	53.4%	58.4%	60.2%	69.1%	30.9%	61.8%	42.4%	67.1%	59.6%
More than one race	52.9%	61.4%	57.9%	75.7%	25.5%	70.0%	42.0%	71.7%	60.8%
Other race or race not reported	35.0%	‡	37.9%	46.8%	20.6%	‡	‡	50.0%	‡
Ethnicity not reported	6.9%	13.3%	6.9%	8.9%	3.3%	8.6%	5.3%	6.4%	5.9%
International students	58.5%	57.8%	71.2%	63.6%	41.3%	61.0%	49.6%	60.5%	60.2%
Citizenship unknown	5.5%	7.1%	7.6%	3.6%	4.7%	8.4%	1.9%	4.6%	6.4%

Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017

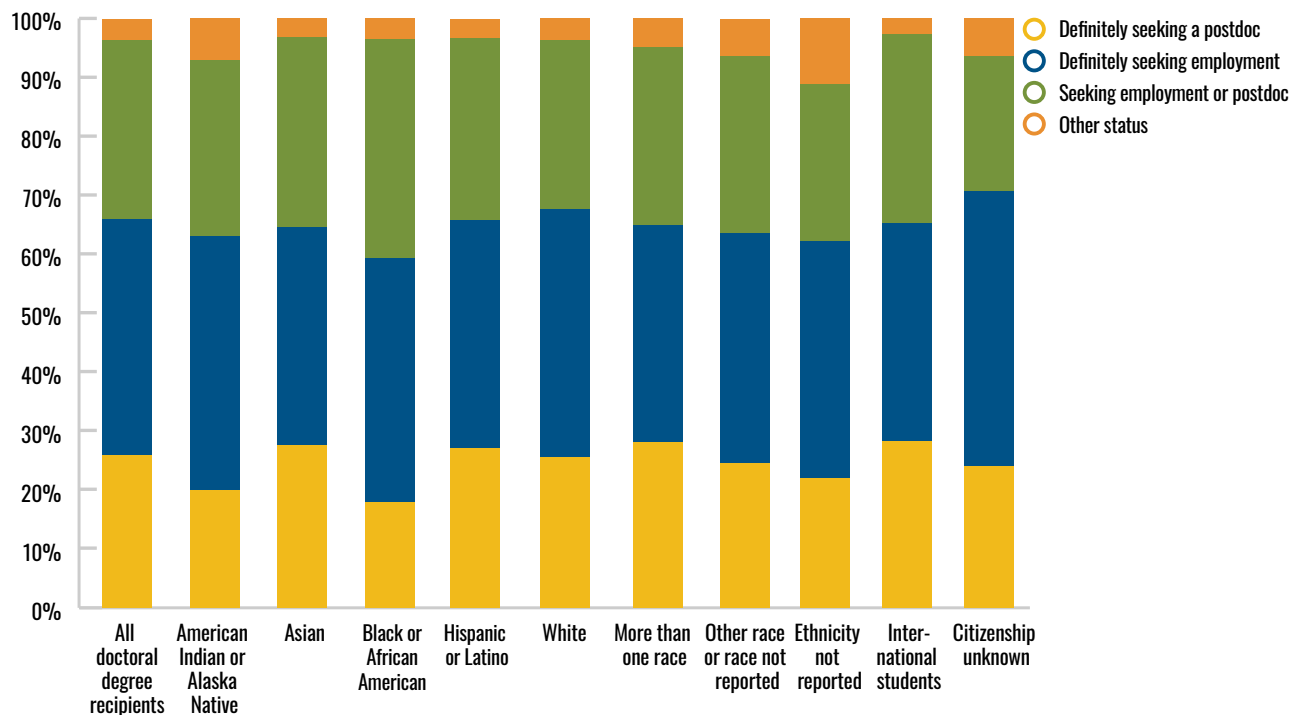
Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students. | Life sciences includes agricultural sciences and natural sciences, biological and biomedical sciences, and health sciences. | Other fields includes other non-science and engineering fields not shown separately. | A master's degree is counted as "related master's" if the fields of study of doctorate recipient's first or most recent master's degree and doctoral degree are both in the same major field category, except for engineering and education fields where broad field categories need to be the same. See the Survey of Earned Doctorates technical notes for a listing of major fields and their constituent subfields based on the National Center for Science and Engineering Statistics' field of study taxonomy. | Percentages based on total number of doctorate recipients. | ‡ Estimate suppressed. Reporting standards not met.

- Over half of all international students (58.5 percent), White students (53.4 percent), students of more than one race (52.9 percent), and Hispanic or Latino students (51.8 percent) had previously earned a master's degree in a field related to their doctoral degrees, compared with 49.3 percent of Black or African American, 46.6 percent of Asian, and 43.1 percent of American Indian or Alaska Native students.
- Over 75 percent of students of more than one race who completed a doctoral degree in the humanities and arts earned a master's degree in a related field, compared with 62.5 percent of all doctoral degree recipients in these fields, a difference of 13.2 percentage points.
- Among mathematics and computer sciences doctoral degree recipients, individuals of more than one race (70.0 percent) and Hispanics or Latinos (67.1 percent) were the most likely to have earned a master's degree in a related field.
- Among life sciences doctoral degree recipients, international (41.3 percent), American Indian or Alaska Native (36.0 percent), and Black or African American (36.0 percent) students were more likely than all other groups to have completed a master's degree in a related field.

## Postgraduate Plans

Among all 2017 doctoral degree recipients, 40.2 percent reported they planned to seek employment after graduation and 25.8 percent reported they would seek a postdoc.<sup>17</sup> An additional 30.3 percent reported they would seek either employment or study, and 3.6 percent reported some other plan following graduation.

**Figure 3.14: Postgraduate Plans of 2017 Doctoral Degree Recipients, by Race and Ethnicity**



Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2017

Notes: A "postdoc" is a temporary position primarily for gaining additional education and training in research, awarded in academe, industry, government, or a nonprofit organization. | Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders are categorized as international students.

<sup>17</sup> A "postdoc" is a temporary position awarded in academe, industry, government, or a nonprofit organization, primarily for gaining additional education and training in research.

- American Indian or Alaska Native (43.0 percent), White (42.0 percent) and Black or African American (41.5 percent) doctoral degree recipients were more likely than other groups to report they would definitely seek employment after graduation.
- Over one-quarter of international students (28.2 percent), students of more than one race (28.1 percent), Asian students (27.5 percent), Hispanic or Latino students (27.1 percent), and White students (25.6 percent) reported they would definitely seek a postdoc.
- American Indian or Alaska Native (20.0 percent) and Black or African American (17.9 percent) doctoral degree recipients were the least likely of all groups to report they definitely planned to seek a postdoc.

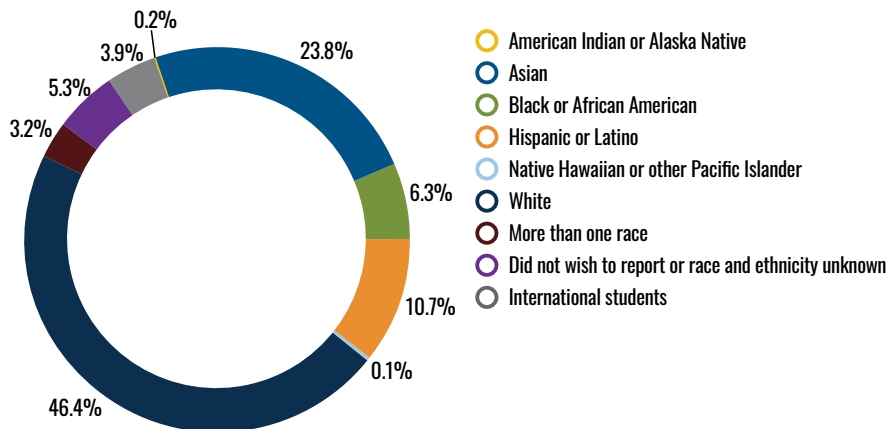
## PROFESSIONAL DEGREE PROGRAMS

This section examines the profile of students applying to, enrolling in, and completing doctorates in three professional degree programs: dentistry, law, and medicine. Data on dental school applicants, enrollment, and completions came from the American Dental Education Association and the American Dental Association. The Association of American Medical Colleges provided data on medical school applicants, enrollment, and graduates. Data on law school applicants, enrollment, and completions come from AccessLex.

### Dental School

Of the over 11,200 dental school applicants in 2018, 46.4 percent were White, 23.8 percent were Asian, 10.7 percent were Hispanic or Latino, 6.3 percent were Black or African American, 3.9 percent were international, 3.2 percent were of more than one race, 0.2 percent were American Indian or Alaska Native, and 0.1 percent were Native Hawaiian or other Pacific Islander. An additional 5.3 percent were of unknown racial or ethnic backgrounds.

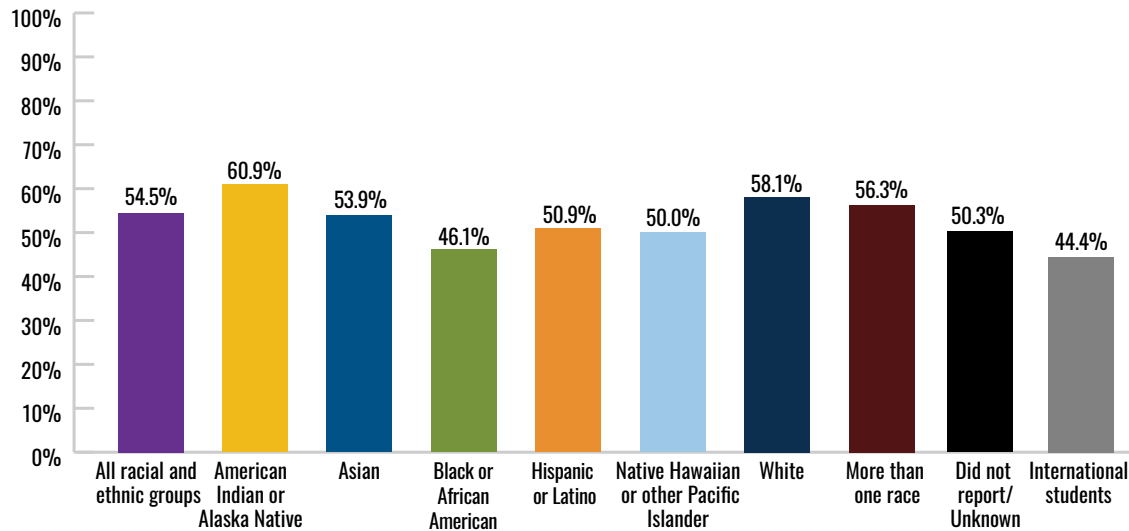
**Figure 3.15: Dental School Applicants, by Race and Ethnicity: 2018 Entering Class**



Source: American Dental Education Association, U.S. Dental School Applicants and Enrollees, 2018 Entering Class  
 Note: Total may not add up to 100 percent due to rounding.

In 2018, there were over 6,100 applicants admitted into dental schools. The enrollment rate<sup>18</sup> of all 2018 dental school applicants was 54.5 percent. Overall, Whites had higher enrollment rates than most other groups.

**Figure 3.16: Enrollment Rate of Dental School Applicants, by Race and Ethnicity: 2018 Entering Class**



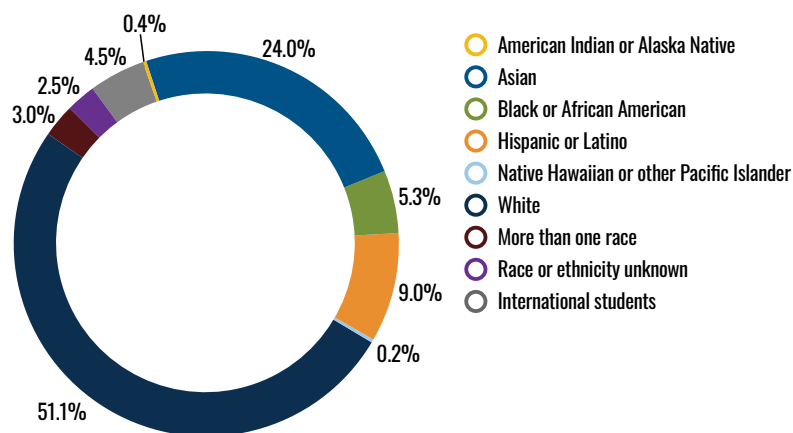
Source: American Dental Education Association, U.S. Dental School Applicants and Enrollees, 2018 Entering Class

- Roughly 58 percent of Whites who applied to dental school enrolled, as did 56.3 percent of individuals of more than one race, 53.9 percent of Asians, 50.9 percent of Hispanics or Latinos, and 50.0 percent of Native Hawaiians or other Pacific Islanders.
- Black or African American (46.1 percent) and international (44.4 percent) students were the only groups among whom less than half of all applicants enrolled in dental school.
- The enrollment rate of American Indians or Alaska Natives who applied to dental school in 2018 was 60.9 percent—the highest of any group. While the enrollment rate of this group is high, only 23 applicants identified as American Indian or Alaska Native.

<sup>18</sup> Enrollment rate measures the proportion of dental school applicants who enrolled in a program as first-time students in the entering class of 2018.

In 2018–19, over 25,000 students were enrolled in dental education. Of these, the majority were White (51.5 percent), 24.0 percent were Asian, 9.0 percent were Hispanic or Latino, 5.3 percent were Black or African American, 4.5 percent were international, 3.0 percent were of more than one race, 0.4 percent were American Indian or Alaska Native, and 0.2 percent were Native Hawaiian or other Pacific Islander. An additional 2.5 percent were of unknown racial or ethnic backgrounds.

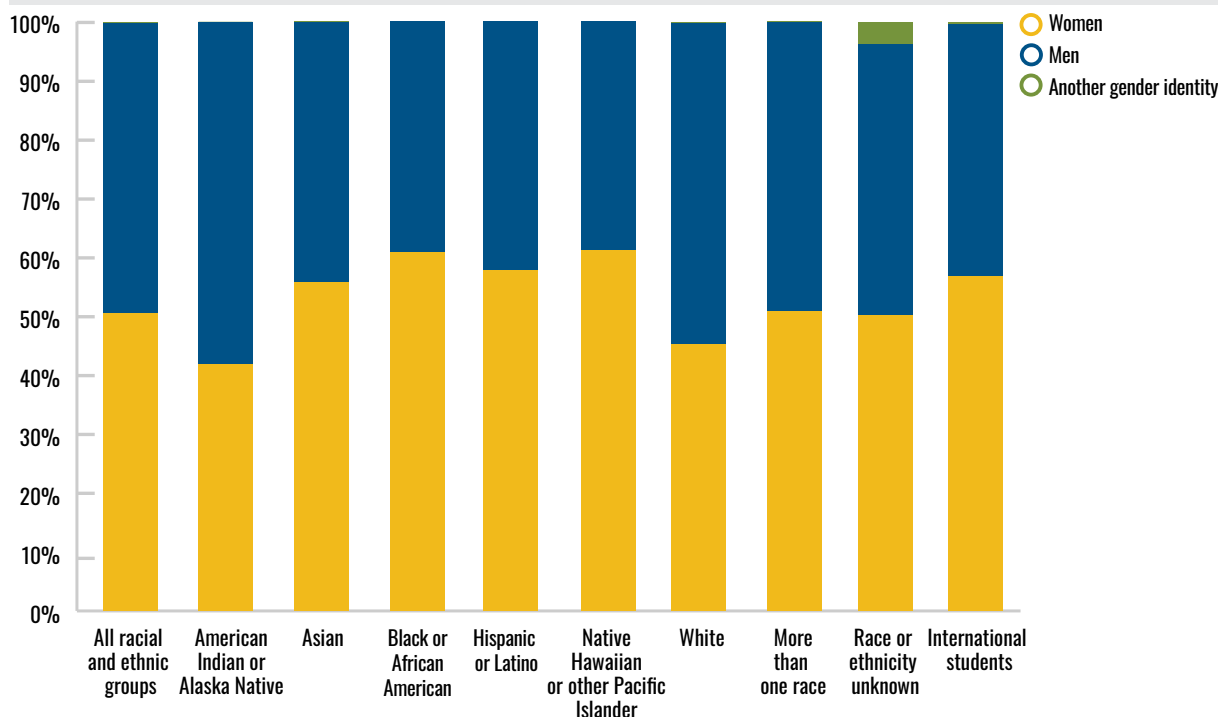
**Figure 3.17: Dental School Enrollment, by Race and Ethnicity: 2018–19**



Source: American Dental Association, Health Policy Institute, 2018–19 Survey of Dental Education

In 2018–19, 50.5 percent of students enrolled in dental education identified as women, 49.2 percent identified as men, and 0.2 percent had another gender identity. This pattern was similar across most groups, with the exception of American Indians or Alaska Natives and Whites, among whom the majority of students identified as men.

**Figure 3.18: Dental School Enrollment, by Gender and Race and Ethnicity: 2018–19**

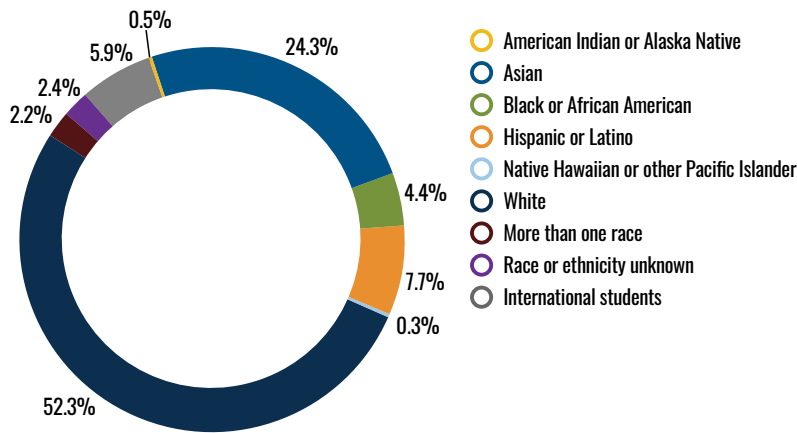


Source: American Dental Association, Health Policy Institute, 2018–19 Survey of Dental Education

- More than six in 10 Native Hawaiian or other Pacific Islander (61.1 percent) and Black or African American (60.8 percent) students in dental education identified as women—the highest shares of any group.
- The majority of American Indian or Alaska Native (58.2 percent) and White (54.6 percent) students enrolled in dental education identified as men, the only groups for which this was the case.

In 2018–19, more than 6,300 students graduated from dental school. Of these, 52.3 percent were White, 24.3 percent were Asian, 7.7 percent were Hispanic or Latino, 5.9 percent were international, 4.4 percent were Black or African American, 2.2 percent were of more than one race, 0.5 percent were American Indian or Alaska Native, and 0.3 percent were Native Hawaiian or other Pacific Islander. An additional 2.4 percent were of unknown racial or ethnic backgrounds.

**Figure 3.19: Dental School Graduates, by Race and Ethnicity: 2018–19**

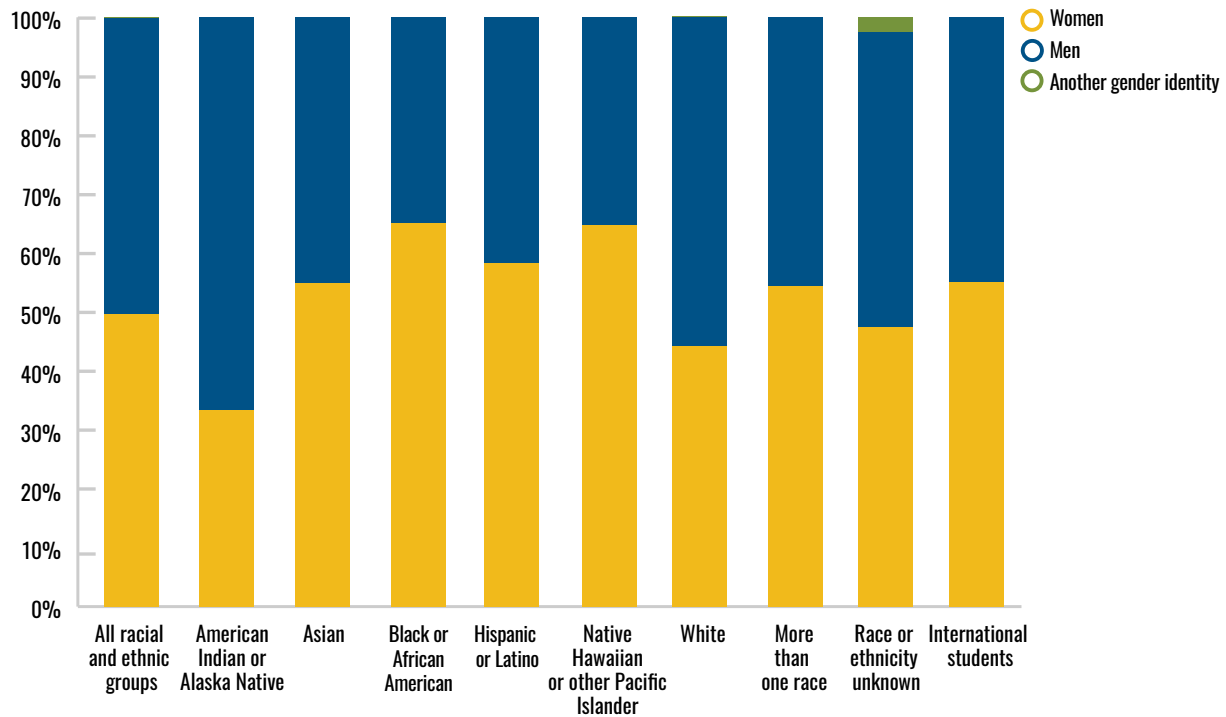


Source: American Dental Association, Health Policy Institute, 2018–19 Survey of Dental Education



Among all dental school graduates, 50.2 percent identified as men, 49.7 percent identified as women, and 0.1 percent had another gender identity. The majority of all dental school graduates among American Indians or Alaska Natives and Whites identified as men. Among all other groups, women represented the majority of dental school graduates.

**Figure 3.20: Dental School Graduates, by Gender and Race and Ethnicity: 2018–19**



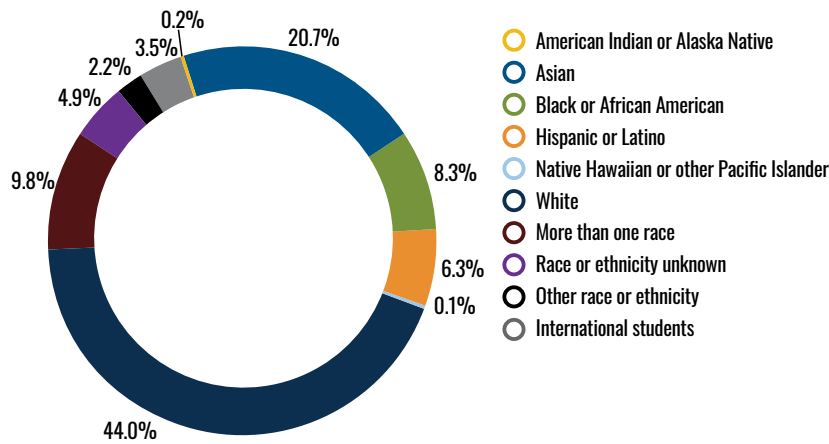
Source: American Dental Association, Health Policy Institute, 2018–19 Survey of Dental Education

- Nearly two-thirds of Black or African American dental school graduates identified as women (65.0 percent), as did 64.7 percent of Native Hawaiians or other Pacific Islanders—the highest shares across all groups.
- Over half of all Hispanics or Latinos (58.3 percent), international graduates (55.0 percent), Asians (54.9 percent), and individuals of more than one race (54.3 percent) identified as women.
- The majority of American Indian or Alaska Native (66.7 percent) and White (55.8 percent) dental school graduates identified as men.

## Medical School

Over 53,000 individuals applied to medical school in the 2019–20 academic year. Of all applicants, 44.0 percent were White, 20.7 percent were Asian, 9.8 percent were of more than one race, 8.3 percent were Black or African American, 6.3 percent were Hispanic or Latino, 3.5 percent were international, 0.2 percent were American Indian or Alaska Native, and 0.1 percent were Native Hawaiian or other Pacific Islander. An additional 2.2 percent identified as another race or ethnicity, and 4.9 percent were of unknown racial or ethnic backgrounds.

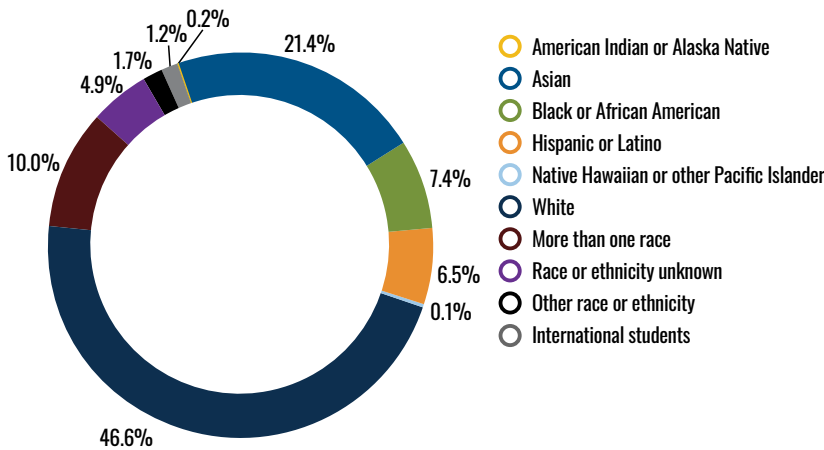
**Figure 3.21: Medical School Applicants, by Race and Ethnicity: 2019–20**



Source: Association of American Medical Colleges, 2019 FACTS: Applicants and Matriculants Data

In the 2019–20 academic year, over 21,800 applicants were admitted into medical school. Of all first-year medical students, 46.6 percent were White, 21.4 percent were Asian, 10.0 percent were of more than one race, 7.4 percent were Black or African American, 6.5 percent were Hispanic or Latino, 1.2 percent were international, 0.2 percent were American Indian or Alaska Native, and 0.1 percent were Native Hawaiian or other Pacific Islander. An additional 1.7 percent identified as another race or ethnicity, and 4.9 percent were of unknown racial or ethnic backgrounds.

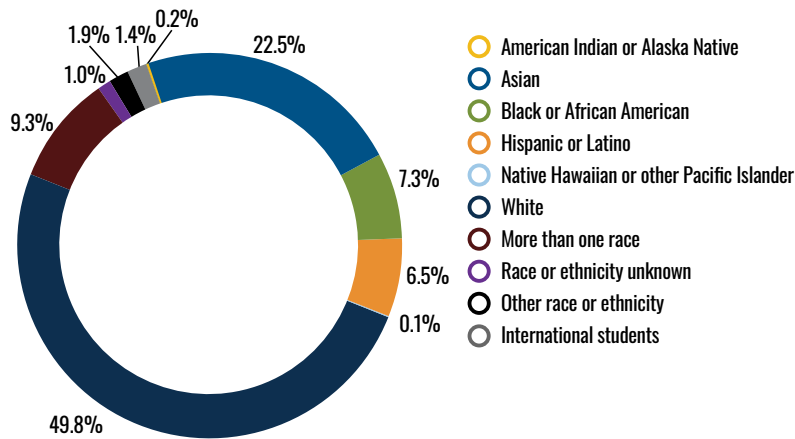
**Figure 3.22: Admitted Medical School Students, by Race and Ethnicity: 2019–20**



Source: Association of American Medical Colleges, 2019 FACTS: Applicants and Matriculants Data

In 2019–20, there were nearly 93,000 students enrolled in medical school. Of these, nearly half were White (49.8 percent), 22.5 percent were Asian, 9.3 percent were of more than one race, 7.3 percent were Black or African American, 6.5 percent were Hispanic or Latino, 1.4 percent were international, 0.2 percent were American Indian or Alaska Native, and 0.1 percent were Native Hawaiian or other Pacific Islander. An additional 1.9 percent identified as another race or ethnicity, and 1.0 percent were of unknown racial or ethnic backgrounds.

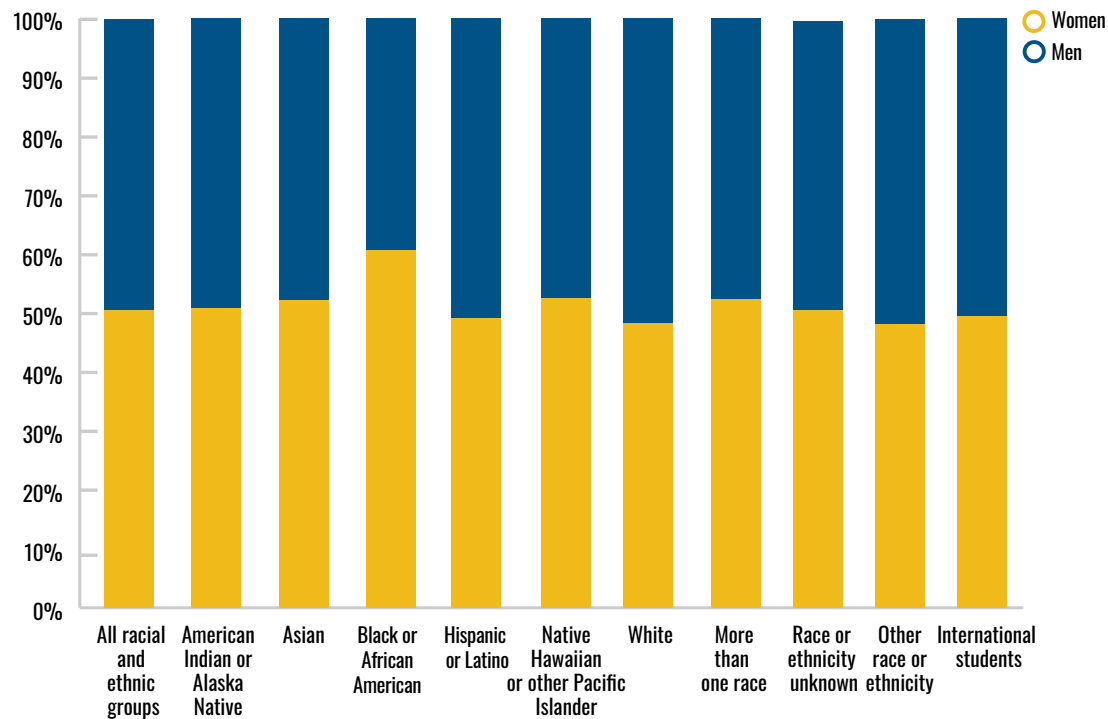
**Figure 3.23: Enrollment in Medical School, by Race and Ethnicity: 2019–20**



Source: Association of American Medical Colleges, 2019 FACTS: Enrollment, Graduates, and MD-PhD Data

Roughly half of all students enrolled in medical school identified as women (50.5 percent), and 49.4 percent identified as men. This pattern was similar across most groups, with exception of Hispanic or Latino, White, and international students, among whom the majority identified as men.

**Figure 3.24: Medical School Enrollment, by Gender and Race and Ethnicity: 2019–20**

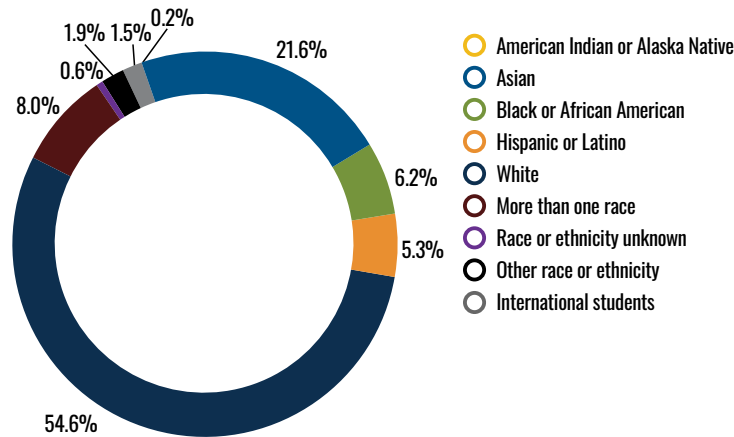


Source: Association of American Medical Colleges, 2019 FACTS: Enrollment, Graduates, and MD–PhD Data  
 Note: Table only includes medical school students who reported their gender. Therefore, totals may not sum to 100%.

- Roughly 61 percent of all Black or African American medical school students identified as women. This was the largest gender gap among all groups, 21.5 percentage points.
- The gender gap between men and women was smallest among American Indians or Alaska Natives, Hispanics or Latinos, and international students.
- White medical students were slightly more likely to identify as men (51.7 percent) than as women (48.3 percent).

Nearly 20,000 individuals graduated from medical school in 2018–19. Of these, 54.6 percent were White, 21.6 percent were Asian, 8.0 percent were of more than one race, 6.2 percent were Black or African American, 5.3 percent were Hispanic or Latino, 1.5 percent were international, and 0.2 percent were American Indian or Alaska Native. An additional 1.9 percent identified as another race or ethnicity, and 0.6 percent were of unknown racial or ethnic backgrounds.

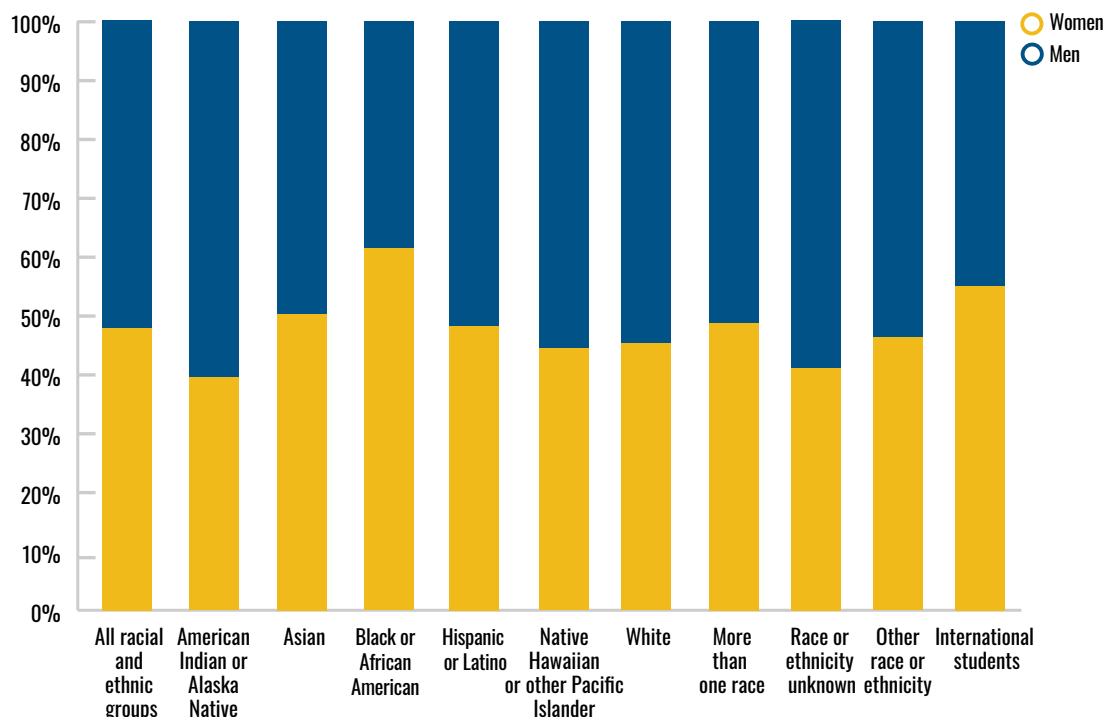
**Figure 3.25: Medical School Graduates, by Race and Ethnicity: 2018–19**



Source: Association of American Medical Colleges, 2019 FACTS: Enrollment, Graduates, and MD-PhD Data  
 Note: Total may not add up to 100 percent due to rounding.

Among all medical school graduates, 52.1 percent identified as men and 47.9 percent identified as women. Men represented the majority of medical school graduates across most groups, with exception of Asian, Black or African American, and international students, the majority of whom identified as women.

**Figure 3.26: Medical School Graduates, by Gender and Race and Ethnicity: 2018–19**



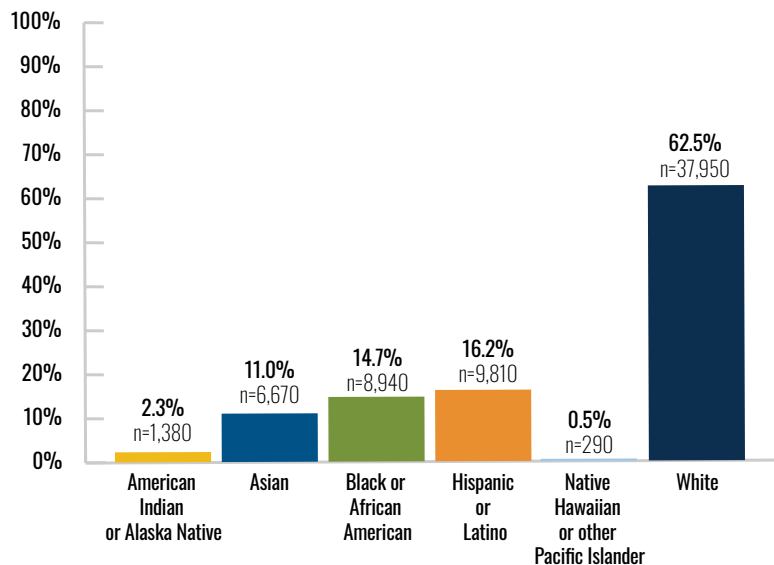
Source: Association of American Medical Colleges, 2019 FACTS: Enrollment, Graduates, and MD-PhD Data

- Among Black or African American medical school graduates, 61.4 percent identified as women and 38.6 percent identified as men. This was the largest difference by gender among all groups (22.8 percentage points).
- The second largest difference by gender was among American Indians or Alaska Natives, of whom 60.5 percent identified as men and 39.5 percent as women, a difference of 21.0 percentage points.
- Asians had the smallest difference by gender, with 50.3 percent identifying as women and 49.7 percent identifying as men.

## Law School

In 2018, there were 60,700 individuals who applied to law school.<sup>19</sup> Of these, 62.5 percent identified as White, 16.2 percent identified as Hispanic or Latino, 14.7 percent identified as Black or African American, 11.0 percent identified as Asian, 2.3 percent identified as American Indian or Alaska Native, and 0.5 percent identified as Native Hawaiian or other Pacific Islander.

**Figure 3.27: Law School Applicants, by Race and Ethnicity: 2018**



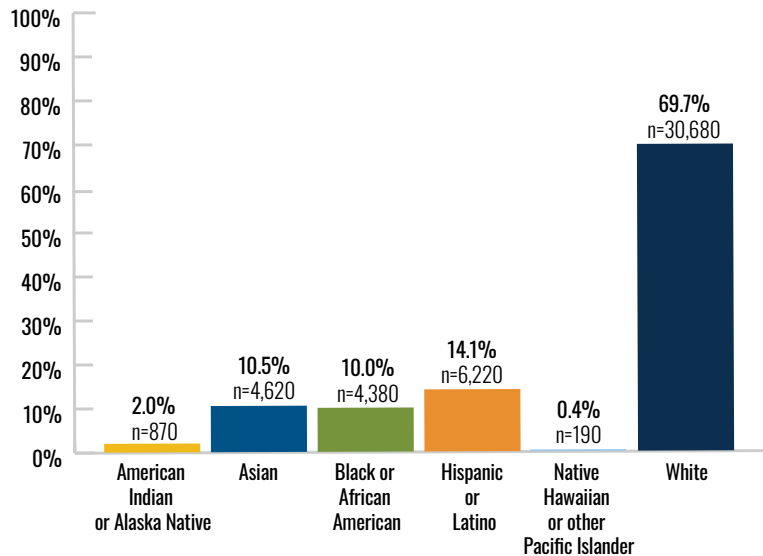
Source: Law School Admission Council, 2018

Note: Data incorporate maximum reporting, meaning that applicants could select multiple racial and ethnic identities. All selections are counted in each racial and ethnic group. As a result of this overlap, summing the racial and ethnic category totals will yield a larger number than the total number of individuals who applied to law school.

<sup>19</sup> Data from the Law School Admission Council incorporates maximum reporting, meaning that applicants could select multiple racial and ethnic identities and students are counted in each racial and ethnic group with which they identify. As a result of this overlap, summing the racial and ethnic category totals will exceed 100 percent.

In 2018, 44,000 applicants were admitted into law school. Of these, 69.7 percent identified as White, 14.1 percent identified as Hispanic or Latino, 10.5 percent identified as Asian, 10.0 percent identified as Black or African American, 2.0 percent identified as American Indian or Alaska Native, and 0.4 percent identified as Native Hawaiian or other Pacific Islander.

**Figure 3.28: Admitted Law School Students, by Race and Ethnicity: 2018**

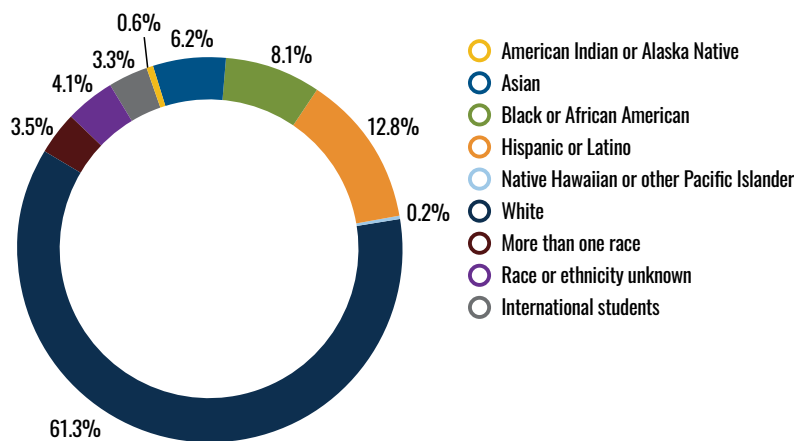


Source: Law School Admission Council, 2018

Note: Data incorporate maximum reporting, meaning that applicants could select multiple racial and ethnic identities. All selections are counted in each racial and ethnic group. As a result of this overlap, summing the racial and ethnic category totals will yield a larger number than the total number of individuals who applied to law school.

Over 111,000 students were enrolled in law school in 2018. Of these, 61.3 percent were White, 12.8 percent were Hispanic or Latino, 8.1 percent were Black or African American, 6.2 percent were Asian, 3.5 percent were more than one race, 3.3 percent were international, 0.6 percent were American Indian or Alaska Native, and 0.2 percent were Native Hawaiian or other Pacific Islander. An additional 4.1 percent were of unknown racial or ethnic backgrounds.

**Figure 3.29: Enrollment in Law School, by Race and Ethnicity: 2018**

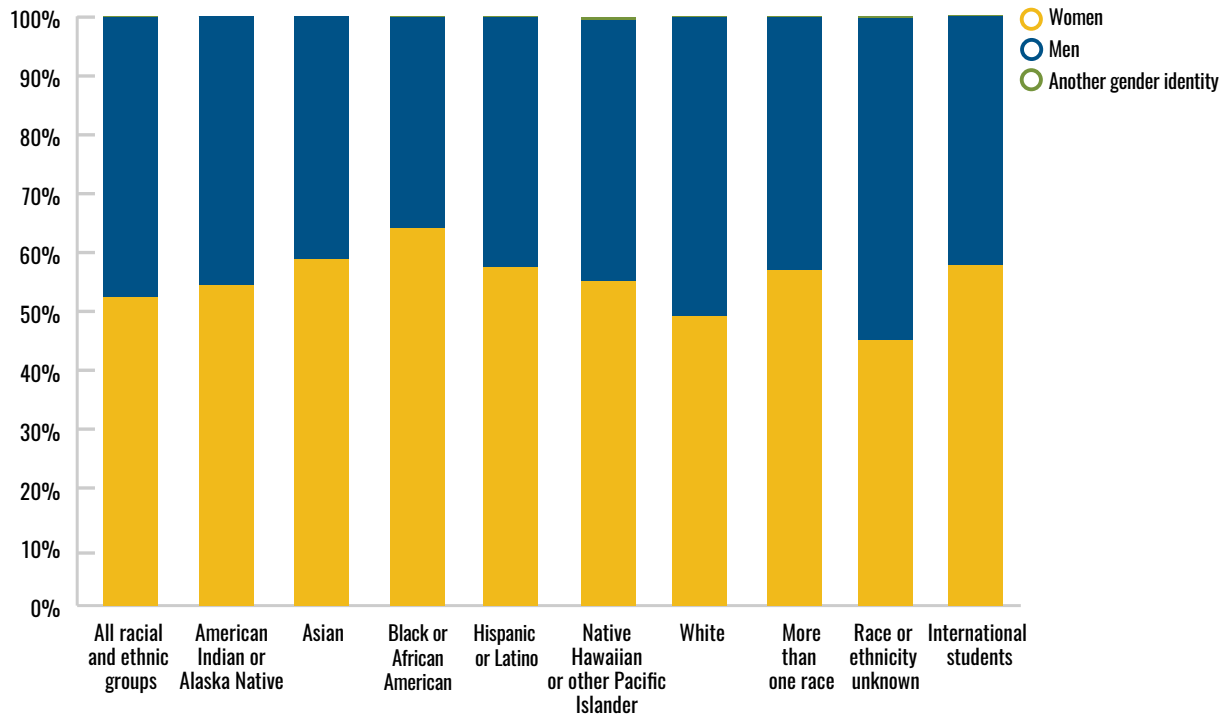


Source: Analytix by AccessLex, 2018 Enrollment Dataset

Note: Total may not add to 100 percent due to rounding.

In 2018, 52.4 percent of students enrolled in law school identified as women, 47.5 percent identified as men, and 0.1 percent had another gender identity. This pattern remained across most groups, with exception of White students, among whom the gender distribution was nearly even between men and women.

**Figure 3.30: Enrollment in Law School, by Gender and Race and Ethnicity: 2018**



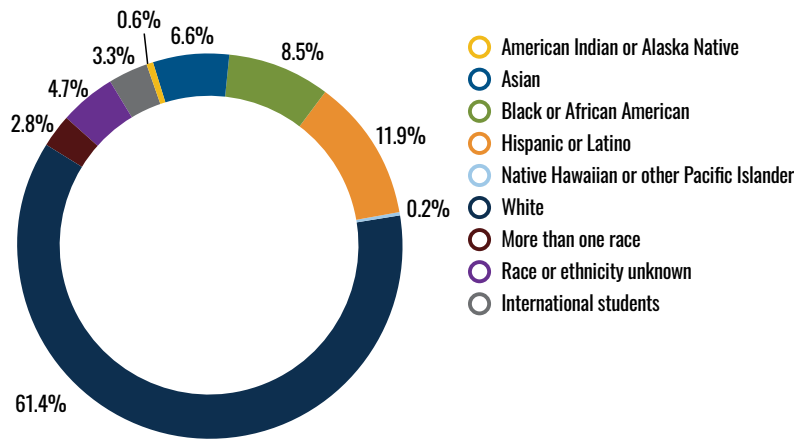
Source: Analytix by AccessLex, 2018 Enrollment Dataset

- Roughly 64 percent of all Black or African American law school students identified as women, and 35.8 percent identified as men. This was the largest gender gap among all groups, 28.4 percentage points.
- The gender gap between men and women was smallest among American Indian or Alaska Native and White students.
- White law students were slightly more likely to identify as men (50.8 percent) than as women (49.1 percent).



Over 34,000 individuals graduated from law school in 2018. Of these, 61.4 percent were White, 11.9 percent were Hispanic or Latino, 8.5 percent were Black or African American, 6.6 percent were Asian, 3.3 percent were international, 2.8 percent were of more than one race, 0.6 percent were American Indian or Alaska Native, and 0.2 percent were Native Hawaiian or other Pacific Islander. An additional 4.7 percent were of unknown racial or ethnic backgrounds.

**Figure 3.31: Law School Graduates, by Race and Ethnicity: 2018**



Source: Analytix by AccessLex, 2018 Degrees Dataset

## REFERENCES

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