

# Race and Ethnicity in Higher Education: A Status Report

## CHAPTER 6



### Graduate School Completion



## Race and Ethnicity in Higher Education: A Status Report

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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: A Status Report*. The report and its 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: A Status Report* 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 containing more than 200 indicators on race and ethnicity. Also available on the site are downloadable figures, detailed data, and other resources on race and ethnicity in higher education.

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# RACE AND ETHNICITY IN HIGHER EDUCATION

Welcome! Race and Ethnicity in Higher Education provides a data-informed foundation for those working to close persistent equity gaps by providing a glimpse into the educational pathways of today's college students and the educators who serve them.

[EXPLORE THE REPORT](#)

**Featured Findings:**

- 45.2% of Undergraduates were Students of Color
- 32.0% of Graduate Students were Students of Color

### Explore the Report's Findings

This report examines data across 11 chapters that provide a foundation from which the higher education community and its many stakeholders can draw insights, raise new questions, and make the case for why race and ethnicity still matter in American higher education. [Download the Report >](#)

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Explores patterns in undergraduate enrollment, including where students enroll, program award level, and field of

## ABOUT THE AMERICAN COUNCIL ON EDUCATION

ACE is the major coordinating body for the nation's colleges and universities. Our strength lies in our diverse base of member institutions. We represent nearly 1,800 college and university presidents and the executives at related associations, and are 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, visit [acenet.edu](http://acenet.edu).

# INTRODUCTION

Research has consistently shown the value of achieving higher levels of educational attainment for individuals and families. As shown in Chapter 11 of this report, “Employment and Earnings,” median annual earnings increase with each additional level of educational attainment. For example, the median annual earnings of adults who attained a master’s degree was about \$65,000<sup>1</sup>—nearly \$13,000 higher than that of a bachelor’s degree holder—while the median annual earnings of doctoral degree holders<sup>2</sup> was about \$84,000 and that of professional degree holders<sup>3</sup> was \$95,000. These earnings differentials, as well as job-specific requirements, have raised demand for graduate education across a multitude of fields and professions, and student enrollment in graduate education is likely to increase as the workforce demands more master’s degrees (Council of Graduate Schools 2017).

The U.S. higher education system is arguably the best in the world. Beyond the individual benefits that our system confers to credential holders, the production of knowledge in our country’s graduate schools is critical to the advancement of our society and economy. Over 1 million teachers, doctors, researchers, nurses, and other professionals completed graduate degrees in 2016, and while not all American institutions of higher education produce graduate credentials, roughly half<sup>4</sup> do. Many of these institutions are not only knowledge engines for their community and the country but also top employers in their region and state.

While graduate credential completion by students of color has increased over the last 20 years, some groups saw zero growth and others were marginal. Moreover, we continue to see disproportionate attendance by certain groups at for-profit institutions and relatively small numbers of domestic students and underrepresented students of color completing STEM graduate degrees. Indeed, where students complete their credentials and what they study have great implications not only for them as individuals, but also for their families and communities, and for the production and relevance of knowledge for an increasingly diverse citizenry.

## KEY FINDINGS

- The total number of graduate completions rose sharply between 1996 and 2016, growing from about 527,000 to over 1 million. While there were increases across all award levels, the largest were in post-baccalaureate certificates<sup>5</sup> and master’s degrees.
- African American,<sup>6</sup> Hispanic, and international<sup>7</sup> students each saw an increase of about 4 percentage points in their representation among all graduate credentials earned between 1996 and 2016. This equates to an increase of over 69,000 Black graduates, an increase of over 54,000 Hispanic graduates, and an increase of over 102,000 international graduates over this 20-year period.

1 Data reflect the U.S. Census Bureau’s 2016 five-year estimates of median annual earnings of individuals ages 25 and older. For more information on postgraduate outcomes, please see Chapter 11 of this report, “Employment and Earnings.”

2 Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

3 Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

4 In 2017, 48 percent of degree-granting, Title IV institutions of higher education produced graduate credentials (authors’ calculation of data from the Integrated Postsecondary Education Data System (IPEDS)).

5 Includes post-baccalaureate and post-master’s certificates.

6 The terms Black and African American are used interchangeably.

7 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 report, nonresident aliens are labeled as international students.

- Most graduate students earned their degrees from public and private nonprofit four-year institutions.<sup>8</sup> However, differences emerge when looking at completions by race and ethnicity, in particular for Black, Native Hawaiian or other Pacific Islander, and American Indian or Alaska Native students, who were more likely to complete their graduate education at a for-profit institution.
- White, American Indian or Alaska Native, Black, and Hispanic students were much more likely to have completed a post-baccalaureate certificate in education than Asian and international students. Asians were nearly twice as likely as other groups to complete a post-baccalaureate certificate in health.
- Almost half of all international students who earned master's degrees in 2016 studied STEM fields. Asian master's degree recipients were also more likely than students in other groups to have completed in STEM fields;<sup>9</sup> however, international students were more than twice as likely as Asian students to do so.
- Across all groups, health and law were the top fields of study for all professional degree completers. American Indian or Alaska Native students were the only group to have earned more degrees in law than in health, and Hispanic students were as likely to earn a degree in law as in health.
- A larger proportion of Black and Native Hawaiian or other Pacific Islander doctoral students completed their degrees in education than any other group. Asian and international students were more likely to complete doctoral degrees in STEM fields.

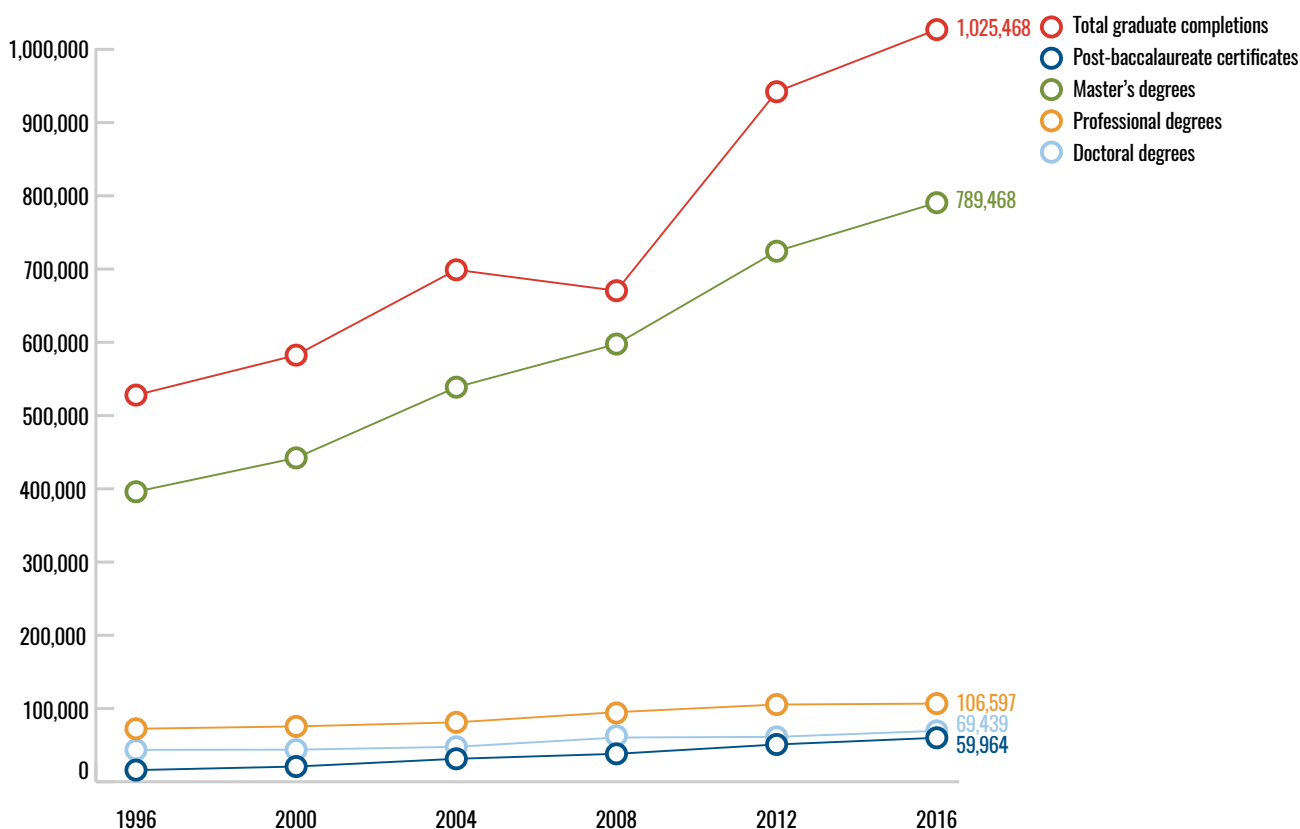
<sup>8</sup> Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section

<sup>9</sup> For graduate-level field of study, STEM includes life and physical sciences, math, engineering, and computer science.

## GRADUATE STUDENT COMPLETIONS: 1996 TO 2016

The total number of graduate credentials earned rose sharply between 1996 and 2016, growing from about 527,000 to over 1 million. While there were increases across all award levels, the largest were in post-baccalaureate certificates (44,028 new degrees—a 276.3 percent increase) and master’s degrees (394,049 new degrees—a 99.7 percent increase). Master’s degrees rose from 75.0 percent to 77.0 percent of all graduate credentials, and post-baccalaureate certificates increased from 3.0 percent to 5.8 percent. Professional degrees fell from 13.7 percent of the total in 1996 to 10.4 percent in 2016, and doctoral degrees fell from 8.3 percent of the total to 6.8 percent.

**Figure 6.1: Graduate Student Completions, by Award Level: Select Years, 1996 to 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996, 2000, 2004, 2008, 2012, and 2016

While White students continued to earn the majority of graduate-level credentials in 2016, their total share of all completions declined from 69.5 percent in 1996 to 51.8 percent—a 17.7 percentage point decrease. Black, Hispanic, and international students each saw an increase of about 4 percentage points in their representation among all graduate credentials earned between 1996 and 2016. This growth has resulted in an increase of over 69,000 Black graduates, an increase of over 54,000 Hispanic graduates, and an increase of over 102,000 international graduates during this 20-year period.



**Table 6.1: Graduate Student Completions, by Award Level and Race and Ethnicity: 1996 and 2016**

	Total Graduate Completions		Post-baccalaureate Certificates		Master's Degrees		Professional Degrees		Doctoral Degrees	
	1996	2016	1996	2016	1996	2016	1996	2016	1996	2016
American Indian or Alaska Native	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.6%	0.5%	0.3%	0.4%
Asian	4.9%	6.0%	4.8%	4.6%	4.2%	5.2%	8.4%	13.4%	5.6%	5.1%
Black	5.9%	9.8%	6.0%	11.4%	6.0%	10.3%	6.5%	6.5%	3.5%	7.6%
Hispanic	3.4%	7.1%	3.5%	6.4%	3.3%	7.4%	4.5%	6.9%	2.1%	4.9%
Native Hawaiian or other Pacific Islander	N/A	0.2%	N/A	0.2%	N/A	0.2%	N/A	0.2%	N/A	0.1%
White	69.5%	51.8%	70.7%	57.1%	69.5%	50.4%	75.7%	61.3%	59.0%	47.9%
More than one race	N/A	1.9%	N/A	1.9%	N/A	1.9%	N/A	2.3%	N/A	1.4%
Race or ethnicity unknown	4.3%	6.9%	8.2%	9.2%	4.6%	6.9%	2.3%	6.2%	3.8%	5.9%
International students	11.5%	15.9%	6.6%	8.6%	11.9%	17.3%	2.1%	2.7%	25.6%	26.7%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996 and 2016

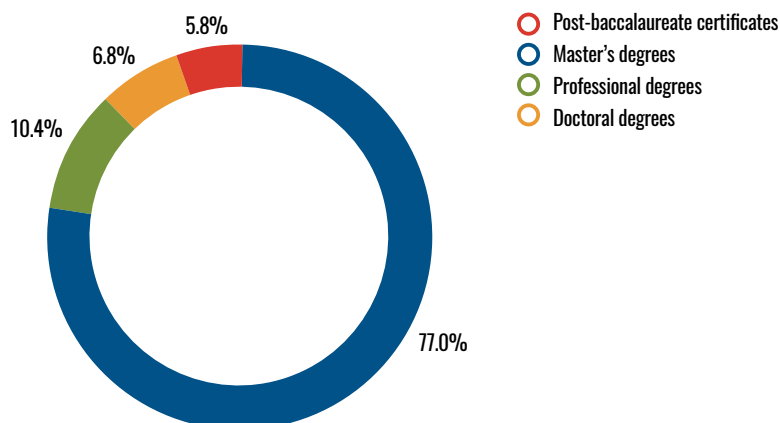
Notes: In 1996, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | In 1996, data on students of more than one race were not collected separately.

- The total share of Black students among all post-baccalaureate certificate completions increased from 6.0 percent of all certificates in 1996 to 11.4 percent in 2016, the largest increase of any group. The total share of Hispanics increased from 3.5 percent in 1996 to 6.4 percent in 2016.
- The total share of Black and Hispanic students among master's degrees completions increased (a 4.3 percentage point and 4.1 percentage point increase, respectively). The total share of international students rose by 5.4 percentage points.
- The total share of Asians among all professional degree completions increased 5.0 percentage points, from 8.4 to 13.4 percent—the largest increase of any group. The share of Black students remained unchanged at 6.5 percent of all professional degrees completed.
- Black and Hispanic students showed the largest increase in their total share of all doctoral degrees earned. Blacks increased from 3.5 percent of all doctoral degree completions in 1996 to 7.6 percent in 2016; Hispanics increased from 2.1 percent in 1996 to 4.9 percent in 2016.
- While the total share of White students decreased across all levels of graduate completions, the largest decline was among master's degrees, where their share fell from 69.5 percent to 50.4 percent, a decline of roughly 19 percentage points. The smallest decrease for this group occurred in doctoral degree programs, a decline of roughly 11 percentage points in 20 years.

## GRADUATE STUDENT COMPLETIONS: 2016

Over 1 million graduate credentials were completed in 2016. Of these, 77.0 percent were master's degrees, 10.4 percent were professional degrees, 6.8 percent were doctoral degrees, and 5.8 percent were post-baccalaureate certificates.

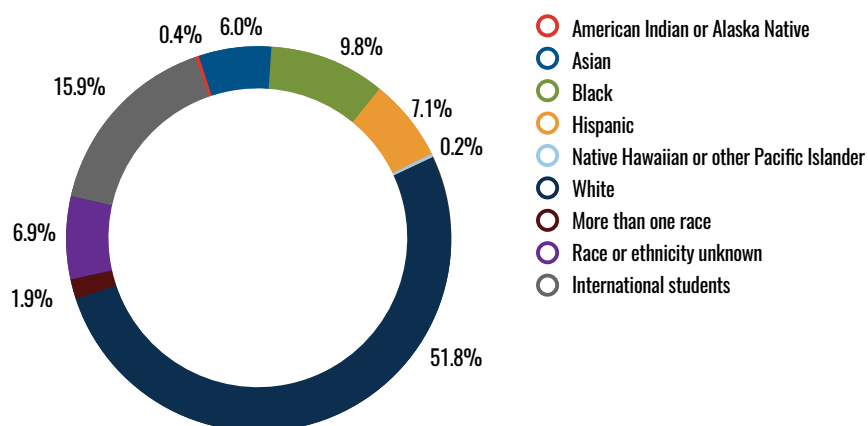
**Figure 6.2: Graduate Student Completions, by Award Level: 2016**



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

In 2016, Whites represented the largest share of graduate completions (51.8 percent), followed by international students (15.9 percent), Black students (9.8 percent), Hispanic students (7.1 percent), and Asian students (6.0 percent). American Indian or Alaska Native (0.4 percent) and Native Hawaiian or other Pacific Islander (0.2 percent) students represented less than 1 percent of all graduate completions in 2016.

**Figure 6.3: Graduate Student Completions, by Race and Ethnicity: 2016**

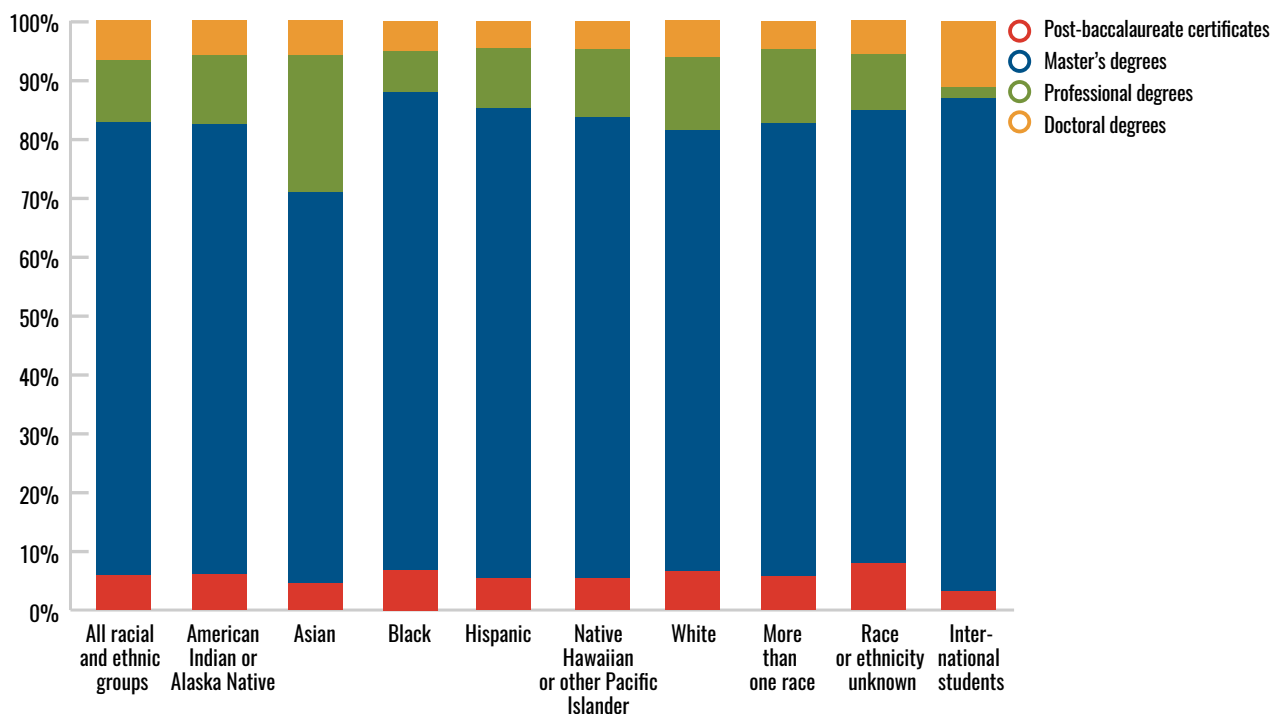


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## Completions Within Student Groups

While the vast majority of graduate students earned master's degrees rather than other forms of credentials, variation emerged across student groups.

**Figure 6.4: Graduate Student Completions, by Award Level and Race and Ethnicity: 2016**



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

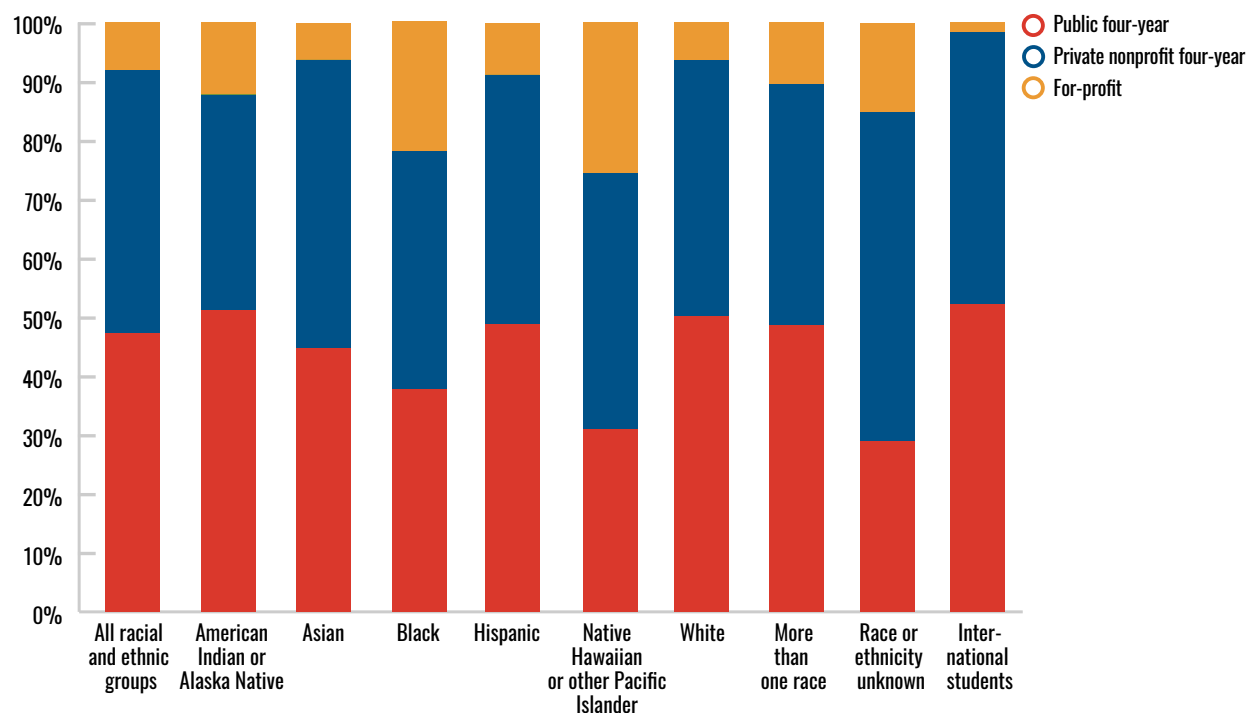
- A larger proportion of Asian students completed a professional degree (23.2 percent) than did other student groups.
- Black students (6.9 percent) and international students (1.7 percent) were much less likely to complete professional degrees than their peers, but were more likely to have completed a master's degree (81.1 percent for Black students and 83.7 percent for international students).
- A larger proportion of international students completed doctoral degrees (11.3 percent) than did other groups. Whites were the next largest group to earn these types of degrees (6.3 percent).



## Completions by Higher Education Sector and Field

Across all student groups in 2016, public four-year institutions awarded 47.3 percent of all graduate credentials, private non-profit four-year institutions awarded 44.6 percent, and for-profit institutions awarded 8.1 percent.

**Figure 6.5: Graduate Student Completions Across Sectors, by Race and Ethnicity: 2016**



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

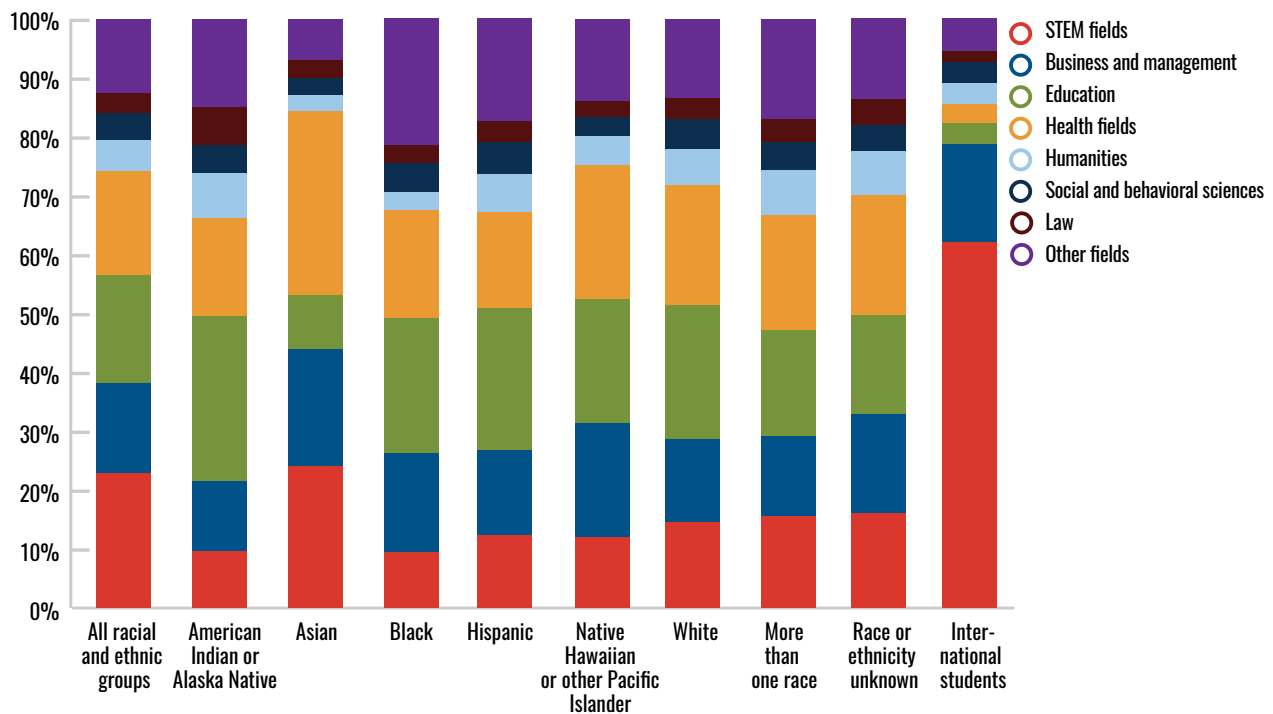
Notes: In 2016, 0.2% of American Indian or Alaska Native students completed their graduate studies at a public two-year institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of all international (52.2 percent), American Indian or Alaska Native (51.2 percent), and White (50.1 percent) students earned their graduate credentials at a public four-year institution.
- A greater proportion of Native Hawaiian or other Pacific Islander (25.7 percent) and Black (21.9 percent) students earned their graduate credentials at for-profit institutions than any other group.

## Public Four-Year Institutions

The primary fields in which students completed graduate credentials at public four-year institutions were STEM fields (22.9 percent), education (18.4 percent), and health (17.5 percent).

**Figure 6.6: Total Graduate Credentials Completed at Public Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016**



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

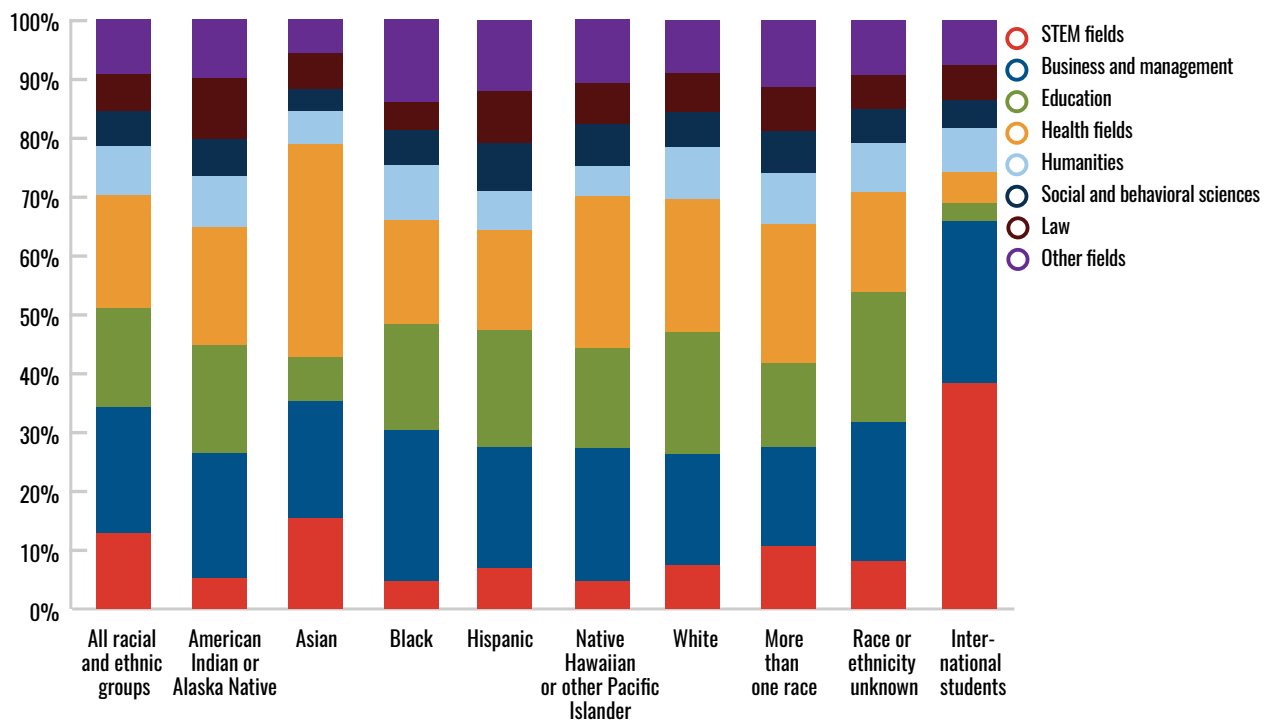
Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- International students overwhelmingly graduated in STEM fields (62.1 percent), the only student group to choose STEM as their top field of study.
- More than one in five American Indians or Alaska Natives (28.0 percent), Blacks (23.0 percent), Hispanics (24.1 percent), and Whites (22.8 percent) completed a graduate credential in education, compared with 9.0 percent of Asians and 3.6 percent of international students.
- Larger shares of Asians (31.3 percent), Native Hawaiians or other Pacific Islanders (22.7 percent), and students of more than one race (19.6 percent) than of other groups completed a graduate credential in health.

## Private Nonprofit Four-Year Institutions

The primary fields in which students completed graduate credentials at private nonprofit four-year institutions were business and management (21.5 percent), health (19.3 percent), and education (16.7 percent).

**Figure 6.7: Total Graduate Credentials Completed at Private Nonprofit Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016**



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

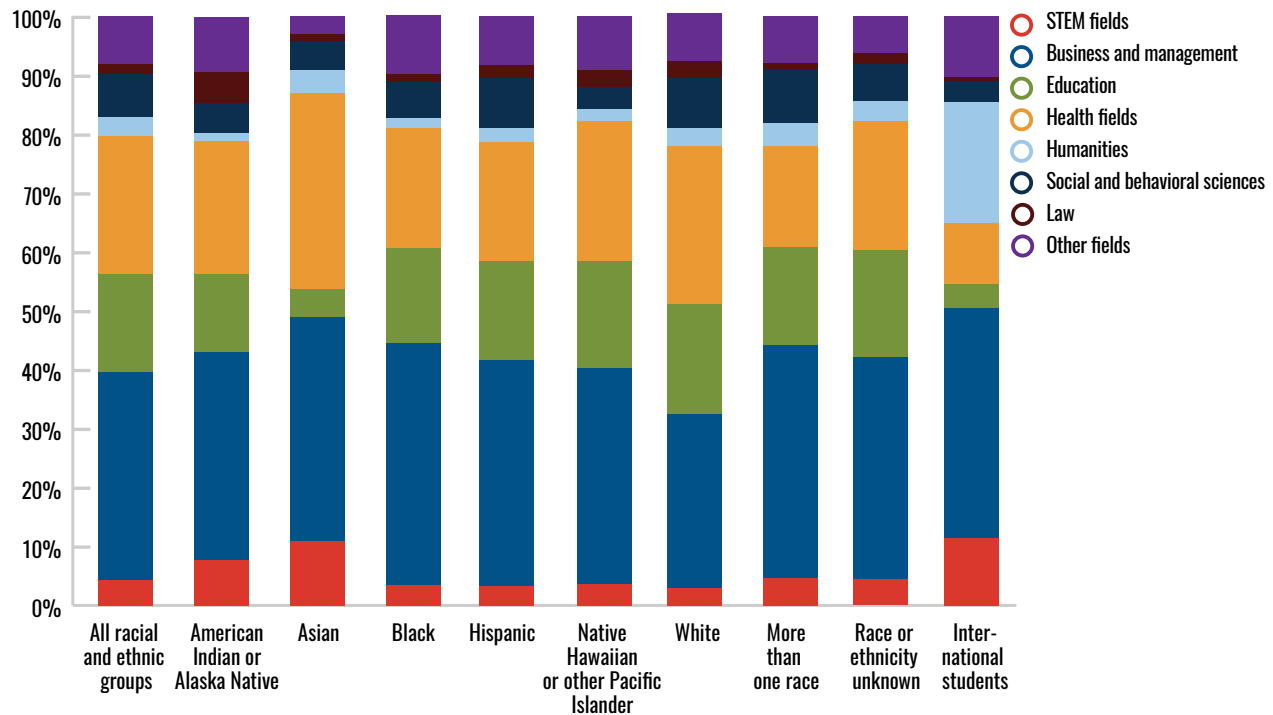
Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- Approximately one in five Hispanic (20.0 percent) and White (20.7 percent) students at private nonprofit four-year institutions completed a graduate credential in education, compared with 7.5 percent of Asian students.
- More than one-third of Asian students completed a graduate credential in health (36.1 percent)—the highest percentage of any group.
- More than one-third of international students earned a graduate credential in STEM fields (38.2 percent), compared with less than 10 percent of all American Indians or Alaska Natives, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and Whites.

## For-Profit Institutions

The primary fields in which graduate credentials were completed at for-profit institutions were business and management (35.3 percent), health (23.4 percent), and education (16.6 percent).

**Figure 6.8: Total Graduate Credentials Completed at For-Profit Institutions, by Field and Race and Ethnicity: 2016**



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

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- Around 41 percent of graduate credentials earned by Black students were in business and management fields, the most of any group. This was true for only 29.4 percent of White students.
- Asian and international students were more than twice as likely as their peers in other groups to graduate with a credential in STEM fields (11.0 percent and 11.5 percent, respectively).
- One in five international students (20.7 percent) completed a credential in the humanities, compared with less than 5 percent of all other student groups.

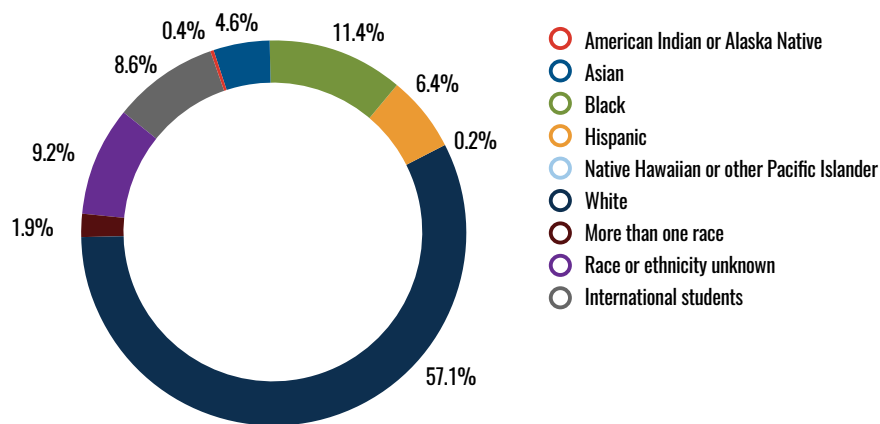
## Completions by Credential Type

Similar to differences seen in undergraduate credential completion (as shown in Chapter 5 of this report, “Undergraduate Persistence and Completion”), we see great variation across student groups when it comes to where students attend graduate school and what types of credentials they complete.

### Post-baccalaureate Certificates

In 2016, graduate students completed nearly 60,000 post-baccalaureate certificates. Among post-baccalaureate certificate completers, 57.1 percent were White and 25.0 percent were students of color.<sup>10</sup> International students made up 8.6 percent of post-baccalaureate certificate completers, and 9.2 percent were of unknown race and ethnicity.<sup>11, 12</sup>

**Figure 6.9: Post-baccalaureate Certificates, by Race and Ethnicity: 2016**



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

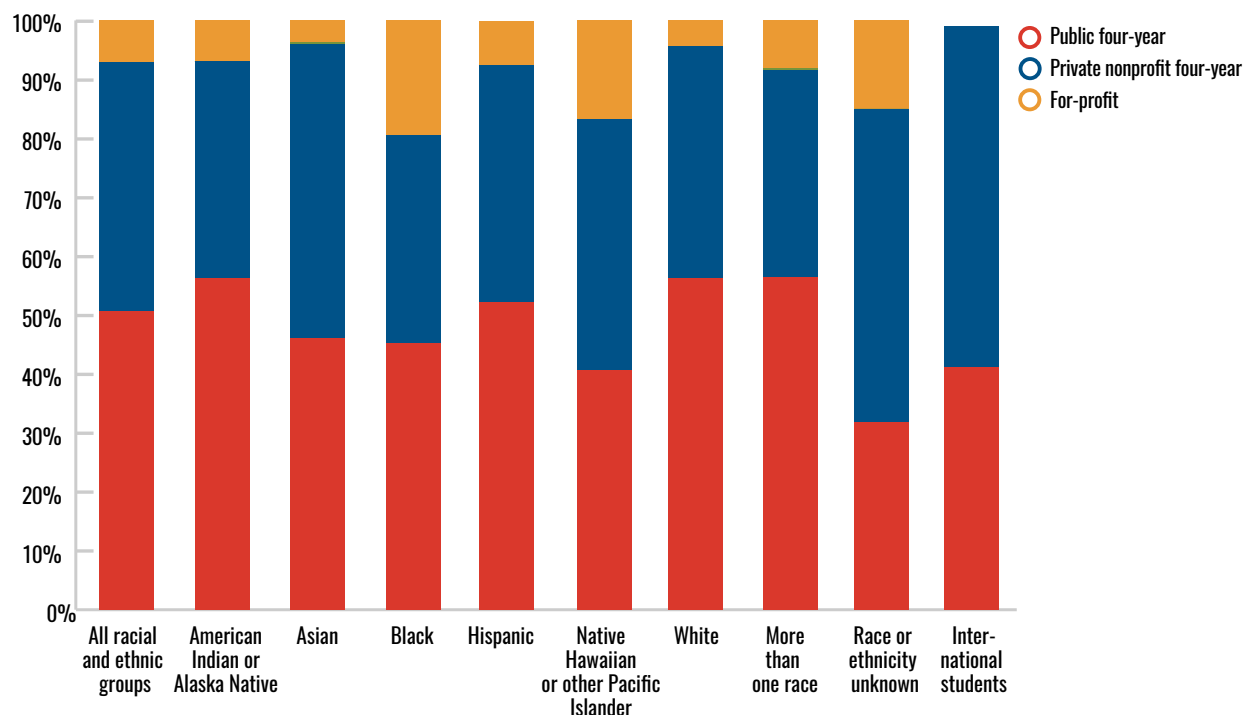
<sup>10</sup> The group students of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and students of more than one race.

<sup>11</sup> Numbers may not add to 100 due to rounding.

<sup>12</sup> Race and ethnicity unknown is included among the racial and ethnic categories within IPEDS 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.

## HIGHER EDUCATION SECTOR

**Figure 6.10: Post-baccalaureate Certificates, by Sector and Race and Ethnicity: 2016**



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

Notes: In 2016, 0.2% or fewer students overall, Asian students, White students, students of more than one race, and international students completed a post-baccalaureate certificate at a public two-year institution.

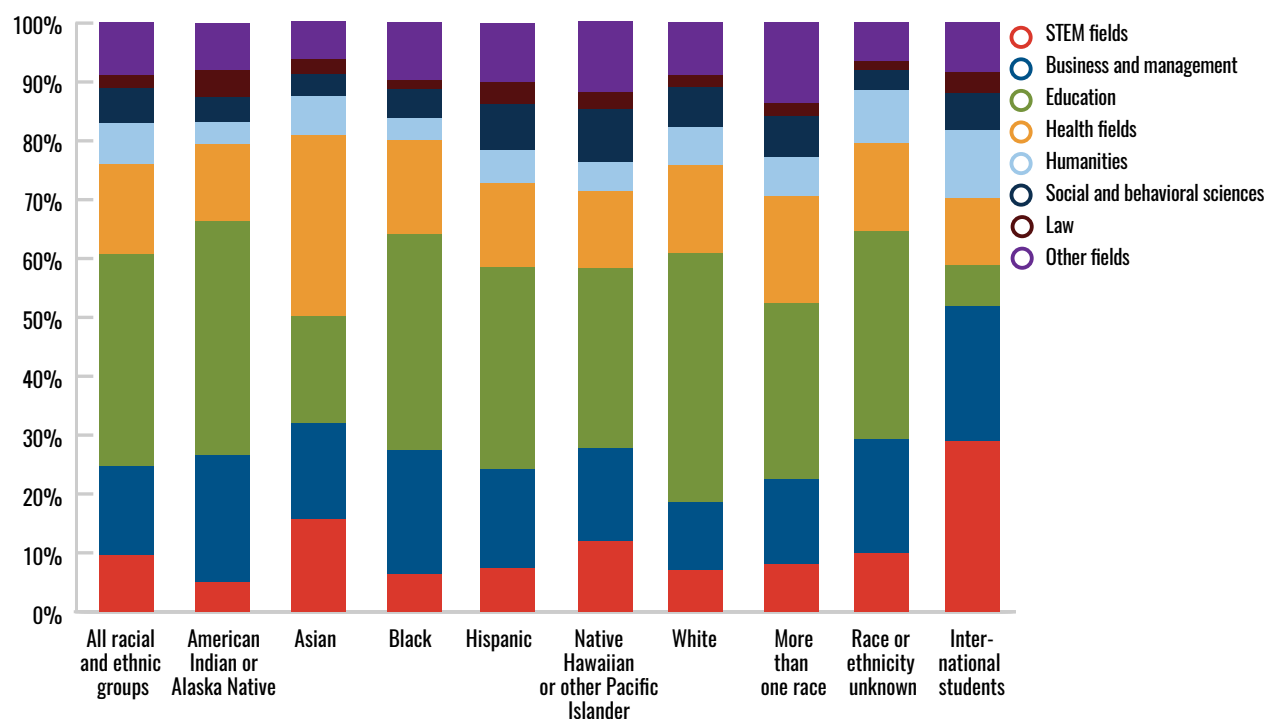
| Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Half of all post-baccalaureate certificates were completed at public four-year institutions (50.7 percent), 42.1 percent at private nonprofit four-year institutions, 7.1 percent at for-profit institutions, and 0.1 percent at public two-year institutions.
- Nearly one in five Black students (19.5 percent) earned their post-baccalaureate certificate at a for-profit institution—the highest percentage of any group.
- International students were more likely than other groups to have earned their post-baccalaureate certificate at a private nonprofit four-year institution (58.0 percent).



## FIELD OF STUDY

**Figure 6.11: Field of Study for Post-baccalaureate Certificate Recipients, by Race and Ethnicity: 2016**



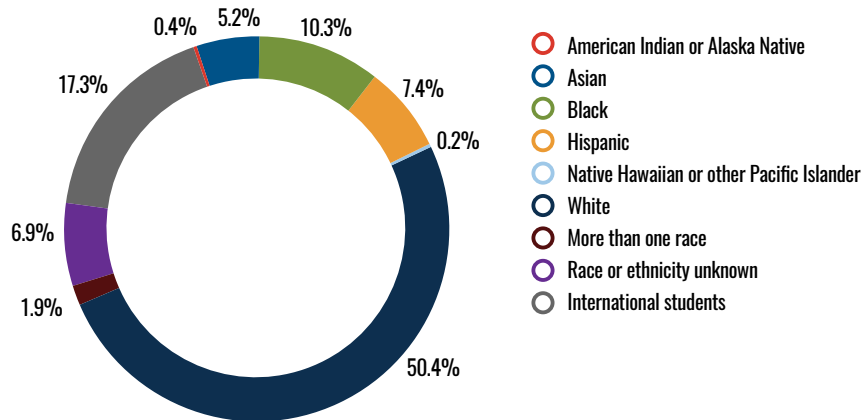
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Over one-third of all White (42.3 percent), American Indian or Alaska Native (39.8 percent), Black (36.6 percent), and Hispanic (34.3 percent) students completed their post-baccalaureate certificates in education, compared with 18.2 percent of all Asian certificate completers and 7.0 percent of all international students earning these credentials.
- Asians were nearly twice as likely as other groups to complete a post-baccalaureate certificate in health (30.7 percent).
- International students were more likely to complete their credential in the humanities (11.4 percent) than other groups.
- International students were nearly twice as likely as other groups to complete a certificate in a STEM field (29.0 percent).

## Master's Degrees

In 2016, graduate students completed over 789,000 master's degrees. Among master's degree completers, 50.4 percent were White and 25.4 percent were students of color. International students made up 17.3 percent of master's degree completers, and 6.9 percent were of unknown race and ethnicity.

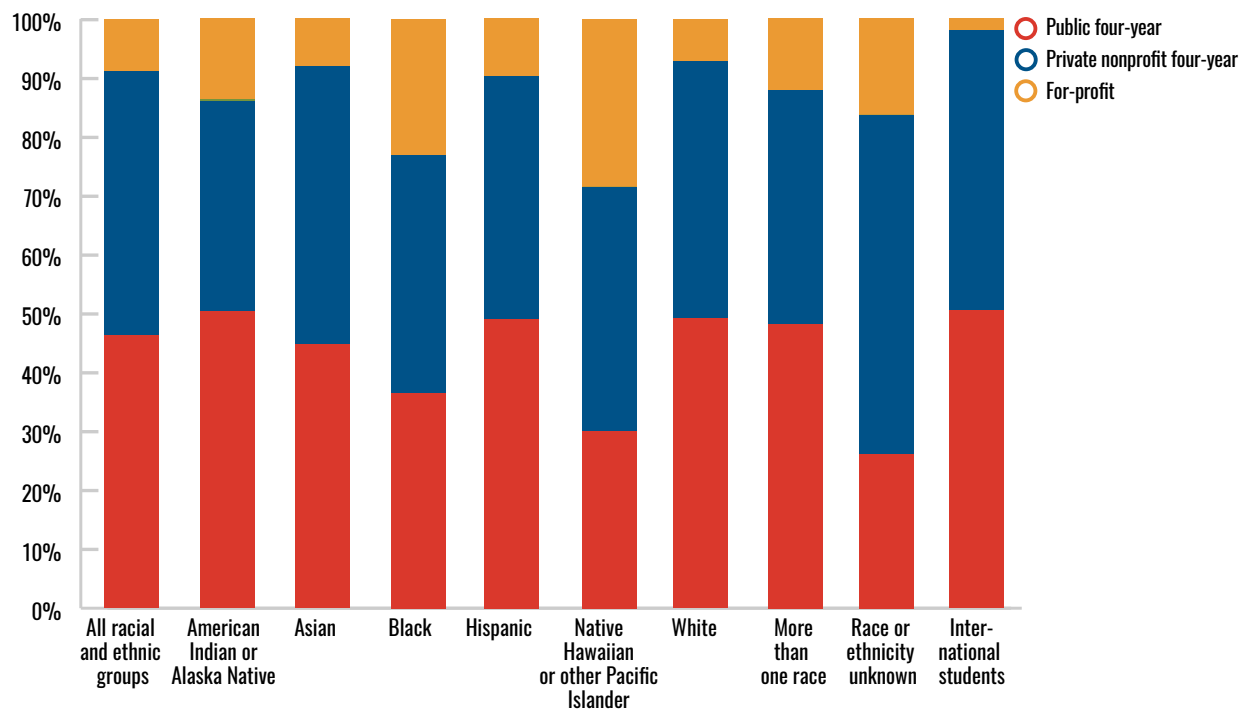
**Figure 6.12: Master's Degrees, by Race and Ethnicity: 2016**



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

## HIGHER EDUCATION SECTOR

**Figure 6.13: Master's Degrees, by Sector and Race and Ethnicity: 2016**



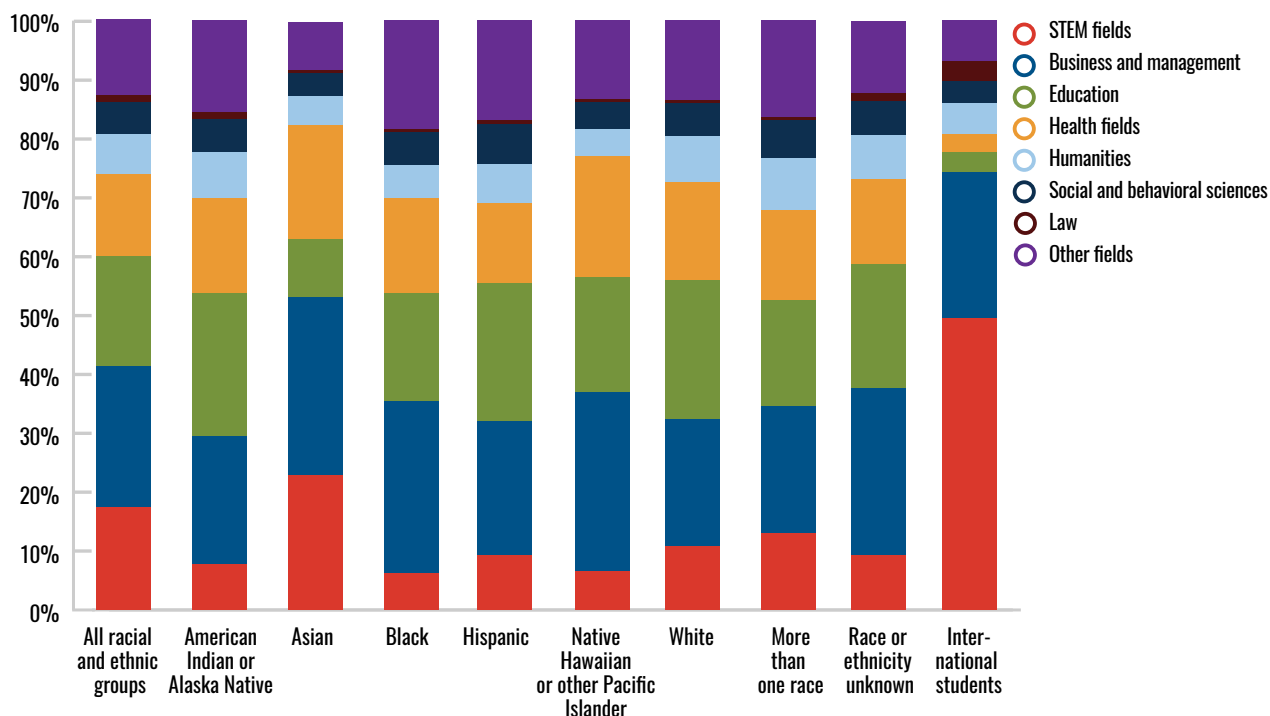
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: In 2016, 0.3% of American Indian or Alaska Native students completed a master's degree at a public two-year institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Almost half of students who completed master's degrees in 2016 earned their degrees at public four-year institutions (46.3 percent), and 44.8 percent completed their degrees at private nonprofit four-year institutions. The remaining 8.9 percent of students graduated from for-profit institutions.
- Nearly one-third of Native Hawaiian or other Pacific Islander students earned their master's degrees at a for-profit institution (28.5 percent)—the highest percentage of any group. Black students were the second most likely to complete their master's degree at for-profit institutions (23.2 percent).

## FIELD OF STUDY

**Figure 6.14: Field of Study for Master's Degree Recipients, by Race and Ethnicity: 2016**



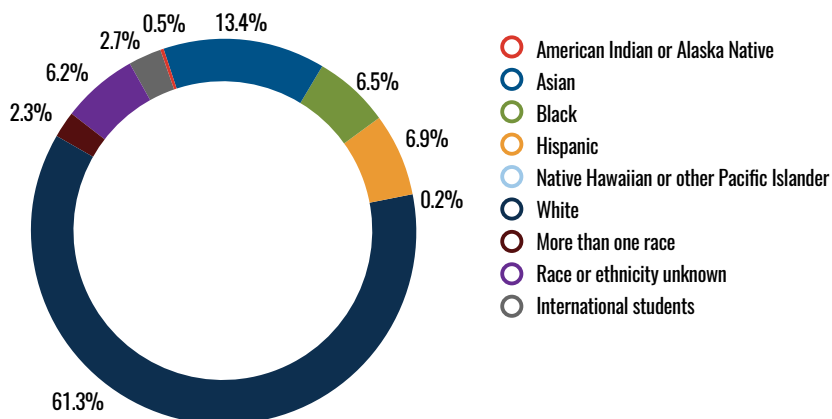
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Nearly one-quarter of all American Indian or Alaska Native (24.4 percent), White (23.6 percent), and Hispanic (23.5 percent) master's degree recipients completed degrees in education, compared with only 9.9 percent of Asian students and 3.3 percent of international students.
- About half of all international master's degree recipients earned degrees in STEM fields (49.4 percent), as did 22.9 percent of Asian students. The shares of all other groups of master's degree recipients earning their degrees in STEM fields were much lower.

## Professional Degrees

Graduate students completed over 106,000 professional degrees in 2016. Among professional degree completers, 61.3 percent were White and 29.8 percent were students of color. International students made up 2.7 percent of professional degree completers, and 6.2 percent were of unknown race and ethnicity.

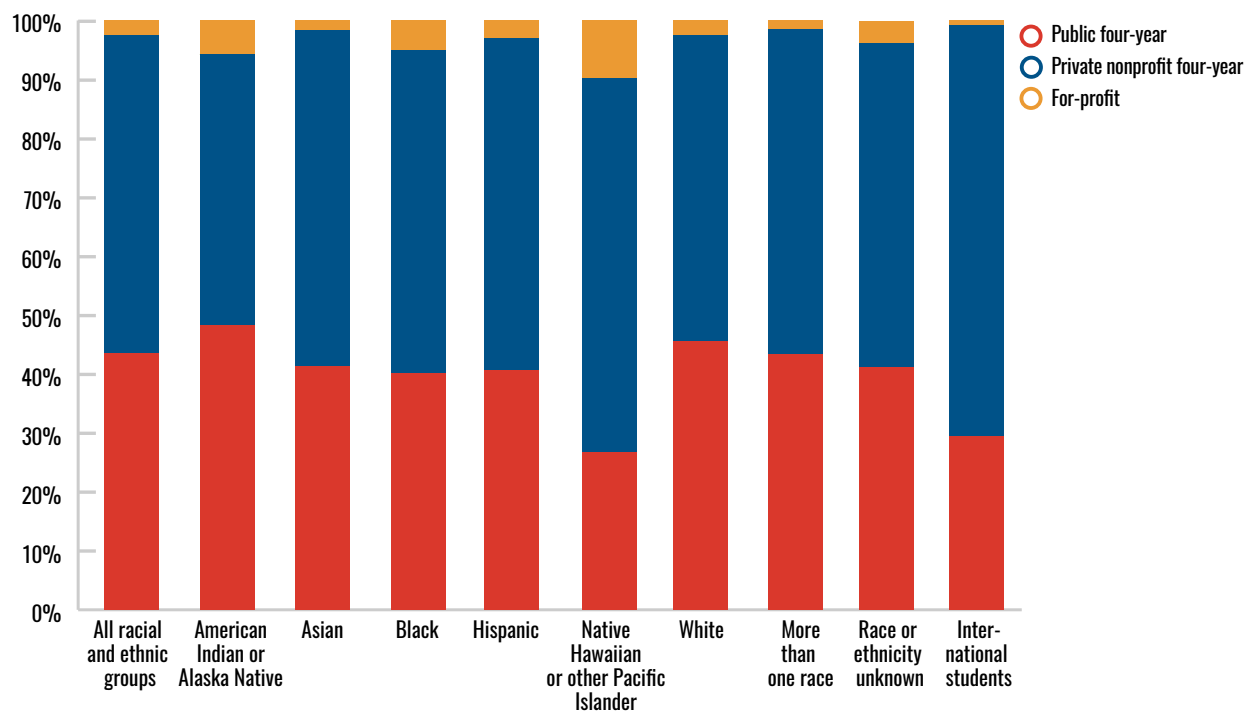
**Figure 6.15: Professional Degrees, by Race and Ethnicity: 2016**



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

## HIGHER EDUCATION SECTOR

**Figure 6.16: Professional Degrees, by Sector and Race and Ethnicity: 2016**



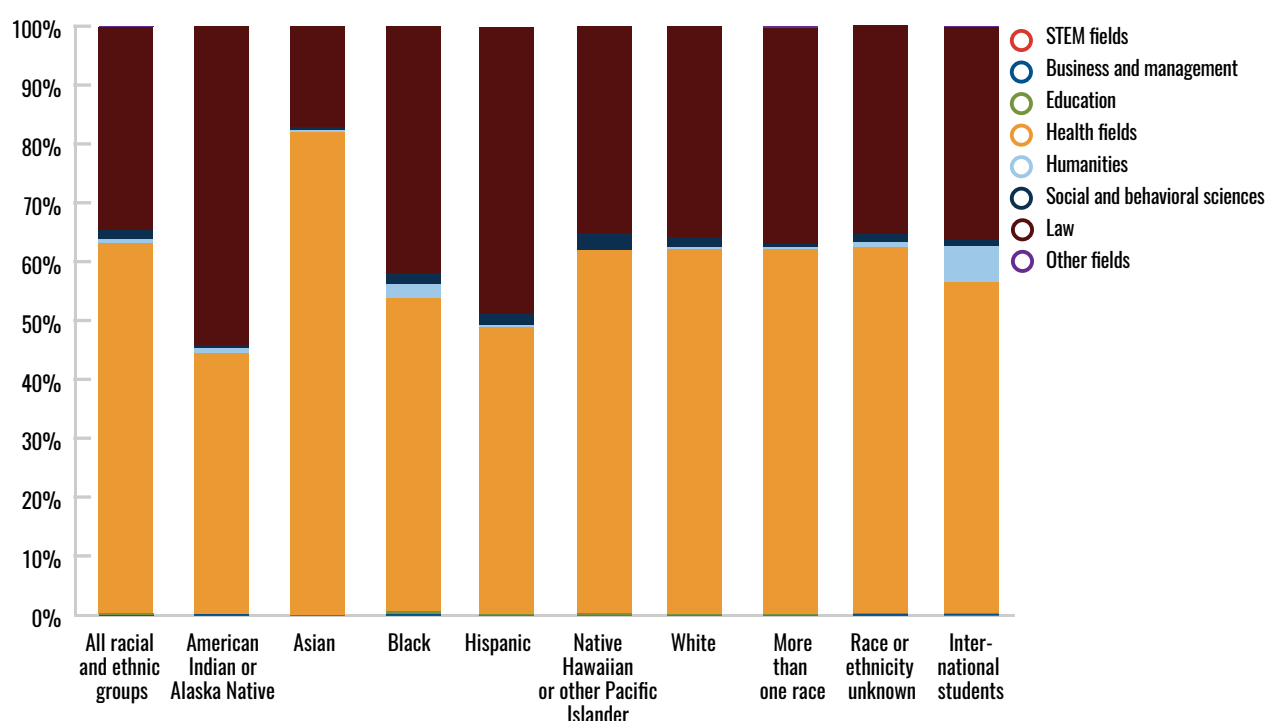
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

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

- Over half of the students who completed professional degrees in 2016 earned their degrees at private nonprofit four-year institutions (53.8 percent); 43.6 percent earned their degrees at public four-year institutions and 2.7 percent at for-profit institutions.
- American Indian or Alaska Native students were more likely than their peers to complete their professional degrees at public four-year institutions (48.3 percent).
- Nearly 10 percent of Native Hawaiian or other Pacific Islander students earned their professional degrees at for-profit institutions—the highest of any group; 5.8 percent of American Indian or Alaska Native and 5.1 percent of Black professional degree recipients attended institutions in this sector.

## FIELD OF STUDY

**Figure 6.17: Field of Study for Professional Degree Recipients, by Race and Ethnicity: 2016**



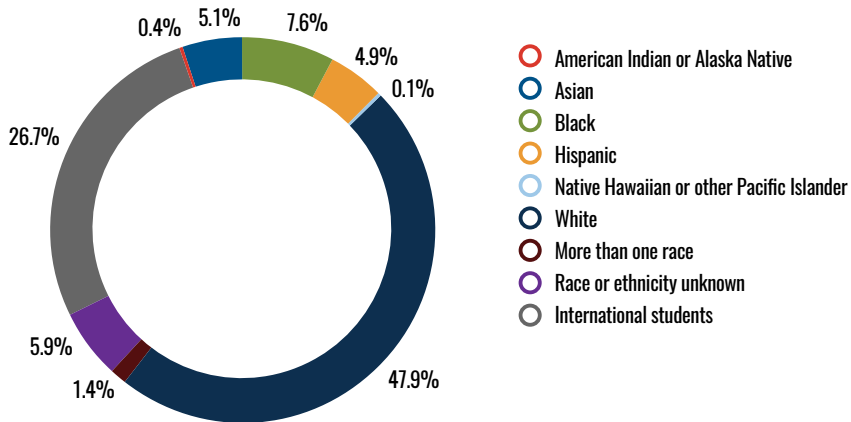
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Health was the top field of study for recipients of professional degrees, with 62.8 percent of all degrees awarded in this field, followed by law at 34.6 percent. These were the top two fields of study across all student groups.
- Nearly half of all Hispanic students completed their professional degrees in law (48.8 percent), compared with 17.0 percent of Asian students, the lowest percentage among all student groups.
- American Indian or Alaska Native students were the only group to have earned more professional degrees in law (54.1 percent) rather than health (44.3 percent).

## Doctoral Degrees

In 2016, graduate students completed about 69,400 doctoral degrees. Among doctoral degree completers, 47.9 percent were White and 19.6 percent were students of color. International students made up 26.7 percent of doctoral degree completers, and 5.9 percent were of unknown race or ethnicity.<sup>13</sup>

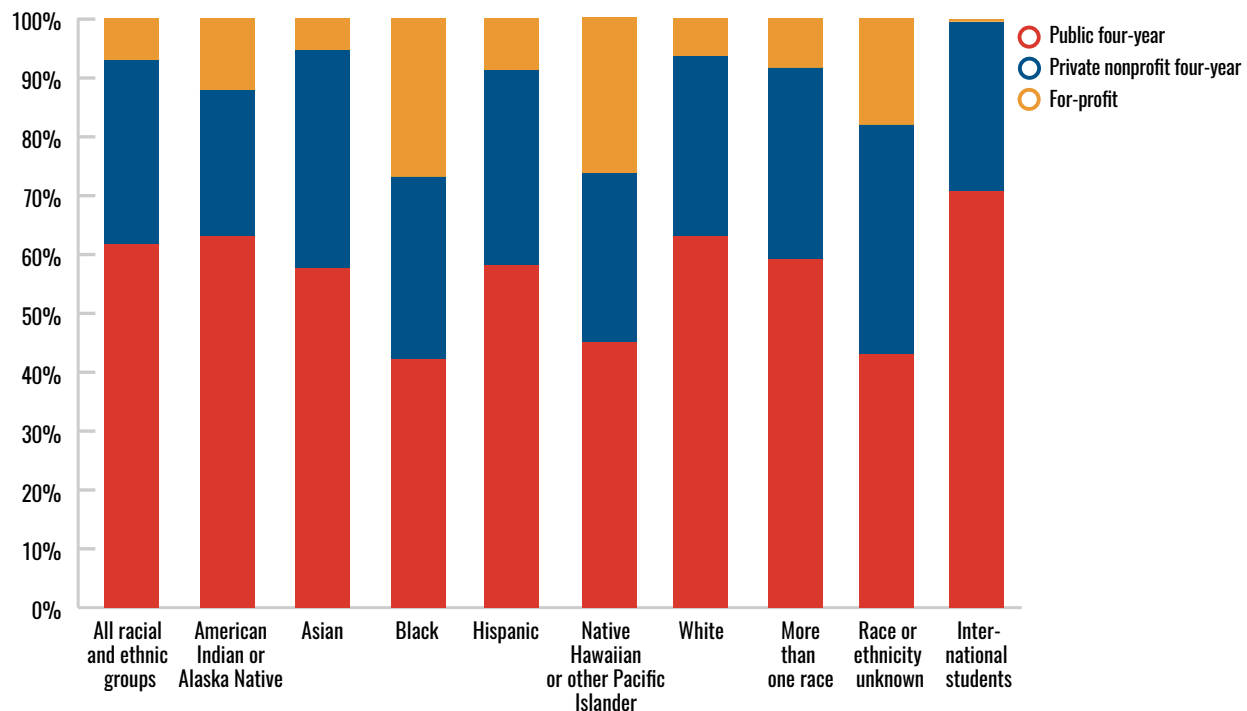
**Figure 6.18: Doctoral Degrees, by Race and Ethnicity: 2016**



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

## HIGHER EDUCATION SECTOR

**Figure 6.19: Doctoral Degrees, by Sector and Race and Ethnicity: 2016**



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

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

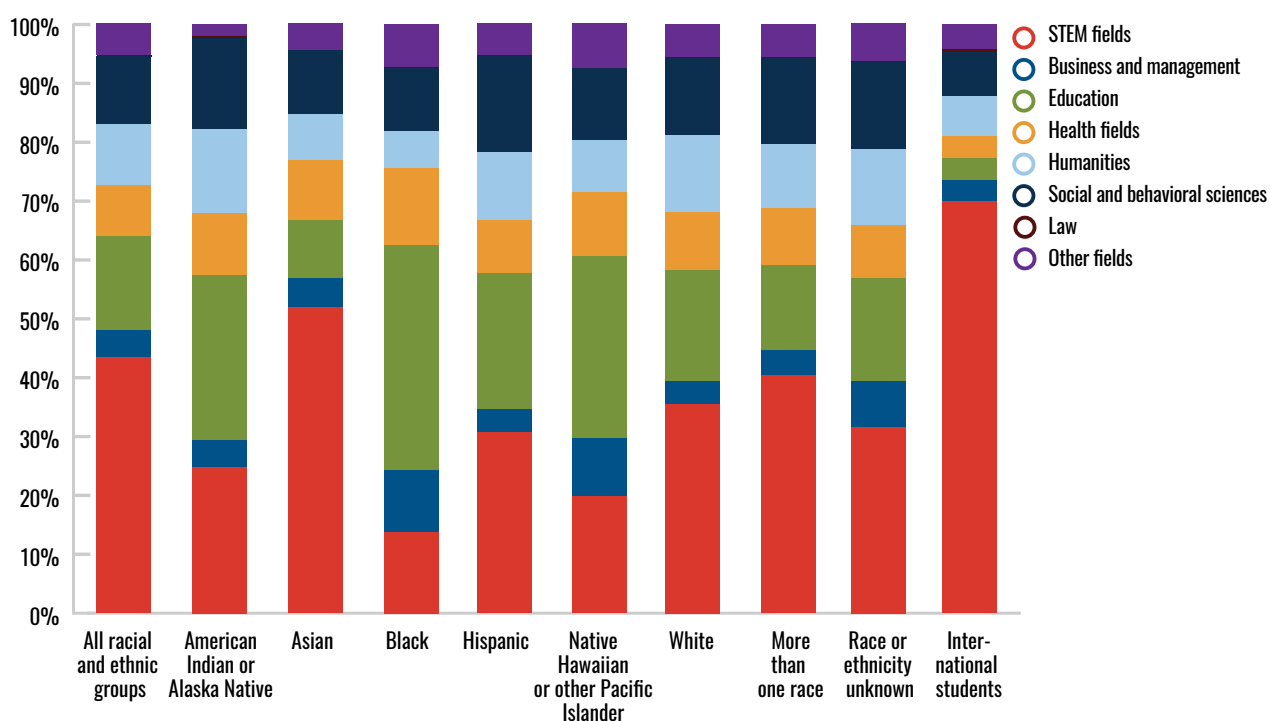
<sup>13</sup> Numbers may not add to 100 due to rounding.



- The majority of students earned their doctoral degrees at public four-year institutions (61.7 percent), followed by private nonprofit four-year (31.1 percent) and for-profit (7.2 percent) institutions. There was considerable variation across racial and ethnic groups.
- Over one-quarter of Black (26.9 percent) and Native Hawaiian or other Pacific Islander (26.4 percent) students, and over one in 10 American Indian or Alaska Native students (12.2 percent) earned their doctoral degrees at for-profit institutions.
- The largest share of any group of students who completed their doctoral degree at public four-year institutions was 70.6 percent among international students.

## FIELD OF STUDY

**Figure 6.20: Field of Study for Doctoral Degree Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- More than half of all international (69.9 percent) and Asian (51.9 percent) students completed their doctoral degrees in STEM fields, compared with only 24.8 percent of American Indian or Alaska Native doctoral degree recipients, 19.8 percent of Native Hawaiian or other Pacific Islander students, and 13.8 percent of Black students.
- Larger proportions of Black doctoral degree recipients (38.3 percent) and Native Hawaiian or other Pacific Islander students (30.8 percent) than of other groups completed their degrees in education. Asian (9.9 percent) and international (3.6 percent) students were the least likely to complete their doctoral degrees in education.

## REFERENCES

Council of Graduate Schools. 2017. *Master's Degree Requirements and the U.S. Workforce*. Washington, DC: Council of Graduate Schools. [https://cgsnet.org/ckfinder/userfiles/files/Masters\\_Degree\\_Requirements\\_and\\_the\\_US\\_Workforce\(1\).pdf](https://cgsnet.org/ckfinder/userfiles/files/Masters_Degree_Requirements_and_the_US_Workforce(1).pdf).