

CHAPTER 5

**GRADUATE SCHOOL
COMPLETION**



Race and Ethnicity in Higher Education: 2024 Status Report

By Ji Hye “Jane” Kim, Maria Claudia Soler, Zhe Zhao, and Erica Swirsky

ABOUT THE PROJECT

Race and Ethnicity in Higher Education: 2024 Status Report follows *Race and Ethnicity in Higher Education: A Status Report* (2019) and *Race and Ethnicity in Higher Education: 2020 Supplement*. These reports and the accompanying website provide a data-informed foundation for those who are working to close persistent equity gaps and also offer a glimpse into the educational pathways of today’s college students and the educators who serve them. For more information, including downloadable figures and detailed data tables behind the figures presented in this report, please visit equityinhighered.org.

Race and Ethnicity in Higher Education: 2024 Status Report was made possible through the generous support of the Mellon Foundation. The accompanying website was generously supported by the Mellon Foundation and the Alfred P. Sloan Foundation.

ABOUT THE AMERICAN COUNCIL ON EDUCATION

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 nearly 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 colleges and universities. Our members educate two out of every three students in all accredited, degree-granting U.S. institutions. For more information, please visit acenet.edu.



ACE and the American Council on Education are registered marks of the American Council on Education and may not be used or reproduced without the express written permission of ACE.

American Council on Education
One Dupont Circle NW
Washington, DC 20036

© 2024. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

INTRODUCTION

Advanced degrees open many doors for college graduates. Earnings are higher for those with master's degrees than for those whose highest degree is a bachelor's, and the earnings premium for doctoral and professional degrees is significantly larger still. In 2022, the median earnings were \$71,530 for adults ages 35 to 44 whose highest degree was a bachelor's degree, yet the median was \$86,820 for master's degree recipients and \$113,372 for those with research doctoral or professional degrees (U.S. Census Bureau 2023). Advanced degrees are also associated with the enhancement of certain skills, depending on the field of study, as well as lower unemployment rates. However—while 14 percent of White and 27 percent of Asian adults ages 25 and over held master's, doctoral, or professional degrees—only 11 percent of Black or African American and 6 percent of Hispanic or Latino adults held these degrees (U.S. Census Bureau 2022).

There is considerable variation in the returns for graduate degrees and certificates. In particular, master's degrees—which account for three-quarters of postbaccalaureate degrees and certificates awarded each year—lead to a wide range of outcomes. In 2022, one-third of master's degree holders ages 35 to 44 earned less than \$67,500 per year. A significant number of master's degree programs produce graduates who then earn less than the median earnings of bachelor's degree holders in their state (Delisle and Cohn 2023). The range of postgraduation earnings of adults with master's degrees raises concerns about the levels of borrowing among these students, which often occurs in addition to debt incurred for undergraduate study.¹ Differences by field of study and work sector explain some of these discrepancies.

These variations show how important it is to understand the distribution of graduate students from different racial and ethnic groups across types of institutions, programs, and fields of study. This chapter explores differences in the types of graduate certificates and degrees—postbaccalaureate certificates, master's degrees, professional or other doctoral degrees, and research doctoral degrees—earned by students from different racial and ethnic groups.

¹ The subsidized and unsubsidized aggregate loan limit is \$138,500 for graduate or professional students, and no more than \$65,500 of this amount may be in subsidized loans. The graduate aggregate limit includes all federal loans received for undergraduate study (Federal Student Aid 2023).

KEY FINDINGS

- The total number of graduate completions rose sharply between 2001 and 2021, growing from about 618,000 to over 1.15 million degrees and certificates earned. Over these two decades, postbaccalaureate certificates grew from about 4 percent to approximately 8 percent of all graduate degrees and certificates completed. Professional or other doctoral degrees declined from 12.9 percent to 10.6 percent, and research doctoral degrees fell from 7.3 percent to 6.3 percent (see figures 5.1 and 5.3).
- Between 2001 and 2021, while the share of White students among all graduate completions declined from about 64 percent to roughly 51 percent, the share of students of color among all graduate completions increased from about 18 percent to approximately 30 percent (see table 5.1).²
- The shares of graduate completions earned by Black or African American, Hispanic or Latino, Asian, and international students increased between 2001 and 2021. In particular, the share of graduate certificates earned by Black and African American students rose from about 7 percent in 2001 to approximately 10 percent in 2021. The share of graduate certificates and degrees earned by Hispanic or Latino students rose from about 4 percent in 2001 to roughly 10 percent in 2021 (see table 5.1).
- Of all graduate degrees and certificates earned in 2021, about 76 percent were master's degrees, 11 percent were professional or other doctoral degrees, roughly 8 percent were postbaccalaureate certificates, and about 6 percent were research doctoral degrees (see table 5.2).
- In 2021, about 58 percent of postbaccalaureate certificates, 48 percent of master's degrees, 60 percent of research doctoral degrees, and 48 percent of professional or other doctoral degrees were from public four-year institutions (see figures 5.6 and 5.12 and table 5.8).
- Enrollment patterns varied among different racial and ethnic groups. Native Hawaiian or other Pacific Islander and Black or African American students were more likely than others to earn a graduate degree or certificate at for-profit institutions (see figure 5.3). For example, of the total share earned by Black or African American students, about 18 percent of certificates, 19 percent of master's degrees, 25 percent of research doctoral degrees, and 6 percent of professional or other doctoral degrees were awarded at for-profit institutions. For White students, these percentages were about 4 percent, 7 percent, 6 percent, and 3 percent (see figures 5.6 and 5.12 and table 5.8).³
- Science, technology, engineering, and mathematics (STEM) fields accounted for about 22 percent of graduate degrees and certificates earned at public four-year institutions, ranging from about 10 percent of American Indian or Alaska Native and Black or African American students to 25.7 percent of Asian and 61.5 percent of international students (see table 5.2). STEM fields accounted for about 15 percent of graduate degrees and certificates earned at private nonprofit four-year institutions, ranging from about 7 percent of American Indian or Alaska Native, Black or African American, and Native Hawaiian or Pacific Islander students to 19.3 percent of Asian and 45.6 percent of international students (see table 5.3). STEM fields accounted for about 5 percent of graduate degrees and certificates earned at for-profit institutions, ranging from 2.9 percent of Hispanic or Latino students to 16.9 percent of international students (see table 5.4).⁴

2 *Students of color* included American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and multiracial students.

3 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 methodology.

4 For the graduate-level field of study, *STEM fields* included life and physical sciences, math, engineering, and computer science.

- About 90 percent of graduate degrees and certificates completed in 2021 were earned at R1 doctoral, other doctoral, and master's institutions denoted by Carnegie Classification. Asian and international students were more likely than others to earn a graduate degree or certificate at R1 institutions (about 45 percent and 64 percent respectively, compared with approximately 37 percent overall). American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students were more likely than others to earn a graduate degree or certificate at master's institutions (about 35 percent and 34 percent, respectively, compared with approximately 24 percent overall) (see figure 5.4).⁵
- In 2021, three-quarters of master's degrees were in STEM, business and management, education, or health fields. The STEM share ranged from about 8 percent of American Indian or Alaska Native, Black or African American, and Native Hawaiian or Pacific Islander students to 25.2 percent of Asian and 51.7 percent of international students. The business and management share was between 22 percent and 27 percent for all racial and ethnic groups. The education share ranged from about 3 percent of international and 9 percent of Asian students to 23 percent of American Indian or Alaska Native and Hispanic or Latino students. The health fields share ranged from about 3 percent of international students to 21 percent of Asian students and 23 percent of Native Hawaiian or Pacific Islander students (see figure 5.14).
- STEM was the most popular field of study for research doctoral degree recipients. About 70 percent of international students and 48 percent of Asian students earned their research doctoral degrees in STEM, while only 10 percent of Black or African American students did so (see table 5.10).
- For professional or other doctoral degrees, health was the primary field of study. About 84 percent of Asian students earned a degree in health, versus about 54 percent of American Indian or Alaska Native and 56 percent of Hispanic or Latino students (see table 5.10).
- In 2021, 17 percent of adults ages 35 to 54 held advanced degrees (U.S. Census Bureau 2022) and about 46 percent of the parents or guardians of research doctoral degree recipients held advanced degrees. This share ranged from about 35 percent of Black or African American graduates and 37 percent of international and Hispanic or Latino graduates to approximately 55 percent of multiracial graduates and 56 percent of Asian graduates (see figure 5.33).⁶
- Overall, about one in five 2021 research doctoral degree recipients had ever attended a community college. The shares of students who had attended a community college among all research doctoral recipients ranged from 4.0 percent of international students and 21.3 percent of Asian students to 37.4 percent of Hispanic or Latino students and 55.4 percent of American Indian or Alaska Native students (see table 5.15).

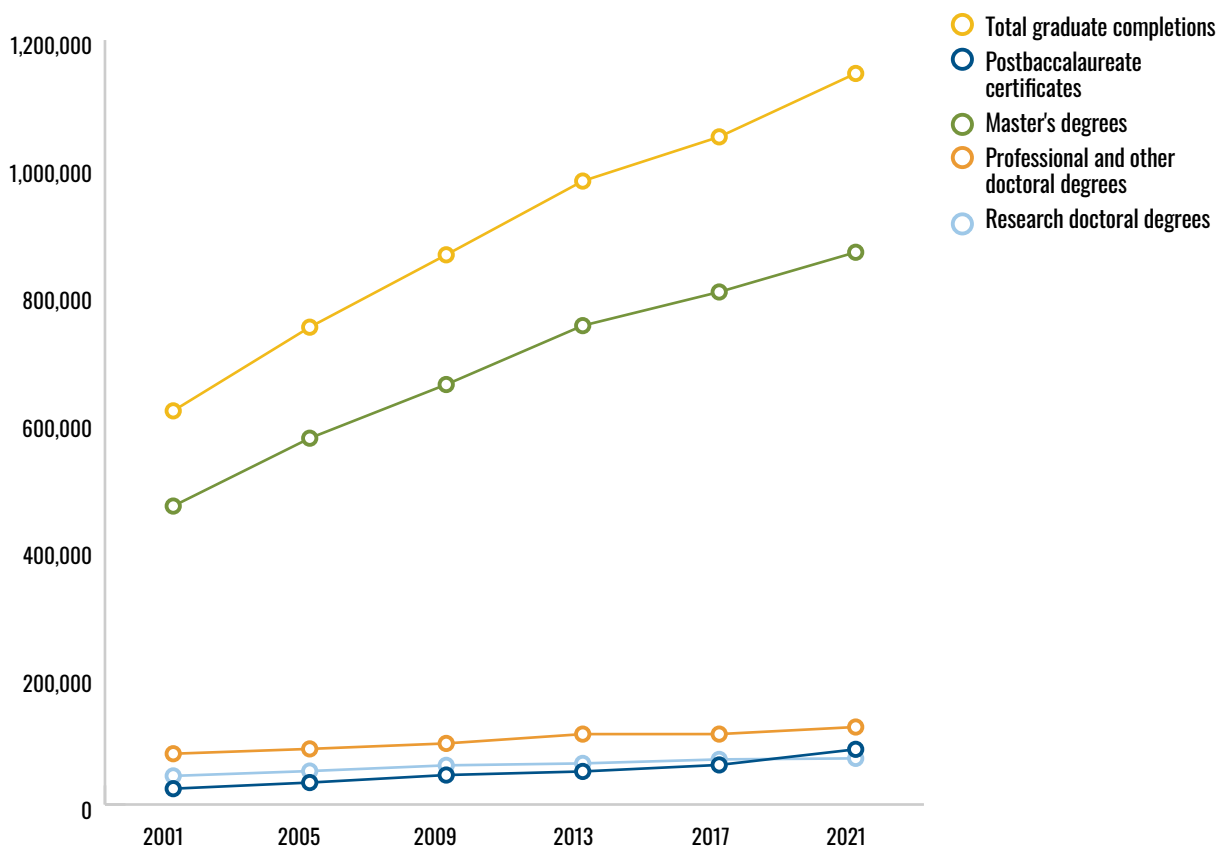
5 Institutions were categorized into Carnegie Classification based upon the 2018 Basic Carnegie Classification, an update of the traditional framework that was developed by the Carnegie Commission on Higher Education in the early 1970s. It is important to note that classifications are time-specific descriptions of institutional attributes and behavior; thus, an individual institution's classification may change over time. For more information, please refer to the report's methodology.

6 NCES defines those who reported identifying with more than one racial or ethnic group as students of two or more races. In this report, students of two or more races are labeled as *multiracial students*.

GRADUATE COMPLETIONS: 2001 TO 2021

The total number of graduate degrees and certificates earned rose sharply between 2001 and 2021, growing from about 618,000 to 1.15 million. Postbaccalaureate certificate completions rose from 24,854 in 2001 to 86,616 in 2021—a 249 percent increase. The shares of postbaccalaureate certificates among all graduate completions increased from about 4 percent in 2001 to 7.5 percent in 2021. Master’s degrees still accounted for three-quarters of graduate completions in 2021, with a slight decrease from 75.8 percent in 2001 to 75.5 percent in 2021. While the total number of doctoral degrees earned increased between 2001 and 2021, the shares of doctoral degrees among all graduate completions slightly decreased. Professional or other doctoral degrees fell from 12.9 percent of the total in 2001 to 10.6 percent in 2021, and research doctoral degrees fell from 7.3 percent of the total to 6.3 percent.⁷

Figure 5.1: Graduate Completions, by Award Level, Select Years: 2001, 2005, 2009, 2013, 2017, and 2021



Sources: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2001, 2005, 2009, 2013, 2017, and 2021.
 Note: Data reflect graduate degrees and certificates earned at all Title IV–eligible, degree-granting institutions.

The total number of graduate completions increased between 2001 and 2021 across all award levels and racial and ethnic groups except for small declines in professional and other doctoral degree completions among American Indian or Alaska Native graduates. The postbaccalaureate certificate completions of Black or African American students rose from 1,602 in 2001 to 10,644 in 2021—a 564 percent increase.

⁷ The data in this chapter included only students’ first majors to avoid counting multiple completions.

- In 2021, White students represented the largest share of graduate completions (50.6 percent), followed by international students (13.9 percent), Black or African American students (10.3 percent), Hispanic or Latino students (9.6 percent), Asian students (6.9 percent), and multiracial students (2.6 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 2021.
- While White students continued to earn most of all graduate degrees and certificates completed in 2021, the share of graduate completions by students of color increased from 17.5 percent to 29.9 percent between 2001 and 2021. The largest percentage increase was in postbaccalaureate certificate completions (15.8 percent to 30.4 percent).
- In 2021, 27.6 percent of all research doctoral degrees were earned by international students, a slight increase from 24.4 percent in 2001.
- The total share of graduate completions by Hispanic or Latino students nearly doubled at all award levels between 2001 and 2021. The largest increase was among master's degree completions, which more than doubled from 4.2 percent to 10.1 percent.
- Black or African American students also saw about a twofold increase in their representation among postbaccalaureate certificate (6.4 percent to 12.3 percent) and research doctoral degree (4.7 percent to 9.8 percent) completions during this 20-year period.

Table 5.1: Graduate Completions Across Race and Ethnicity, by Award Level: 2001 and 2021

	Total Graduate Completions		Postbaccalaureate Certificates		Master's Degrees		Professional and Other Doctoral Degrees		Research Doctoral Degrees	
	2001	2021	2001	2021	2001	2021	2001	2021	2001	2021
American Indian or Alaska Native	0.5%	0.4%	0.4%	0.4%	0.5%	0.4%	0.7%	0.4%	0.4%	0.3%
Asian	5.6%	6.9%	4.2%	5.7%	4.8%	6.1%	11.3%	14.0%	5.4%	5.3%
Black or African American	7.2%	10.3%	6.4%	12.3%	7.5%	10.6%	6.5%	7.2%	4.7%	9.8%
Hispanic or Latino	4.2%	9.6%	4.7%	9.1%	4.2%	10.1%	4.6%	9.1%	3.2%	6.1%
Native Hawaiian or other Pacific Islander	-	0.2%	-	0.2%	-	0.2%	-	0.1%	-	0.1%
White	63.9%	50.6%	67.4%	55.8%	63.2%	49.6%	70.7%	57.8%	57.6%	43.1%
More than one race	-	2.6%	-	2.6%	-	2.5%	-	3.2%	-	2.2%
Race or ethnicity unknown	6.1%	5.6%	7.7%	6.3%	6.6%	5.6%	3.6%	5.3%	4.3%	5.5%
International students	12.4%	13.9%	9.1%	7.5%	13.1%	14.9%	2.6%	2.9%	24.4%	27.6%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

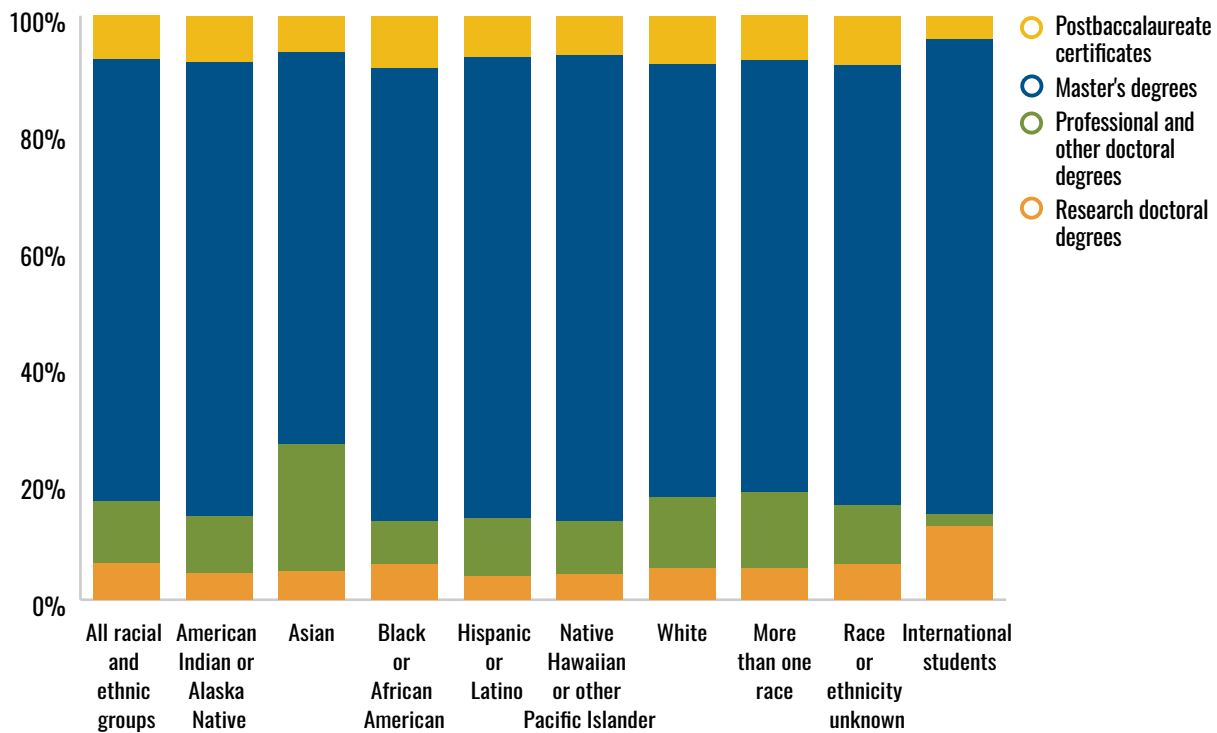
Sources: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2001 and 2021.

Notes: Data reflect graduate degrees and certificates earned at all Title IV-eligible, degree-granting institutions. | In 2001, data for Asian students also included data for Native Hawaiian or other Pacific Islander students.

GRADUATE COMPLETIONS: 2021

About 1.15 million graduate degrees and certificates were earned in 2021. Of these, 75.5 percent were master’s degrees, 10.6 percent were professional or other doctoral degrees, 7.5 percent were postbaccalaureate certificates, and 6.3 percent were research doctoral degrees. The distribution of types of credentials varied across racial and ethnic groups.

Figure 5.2: Graduate Completions Across Award Levels, by Race and Ethnicity: 2021



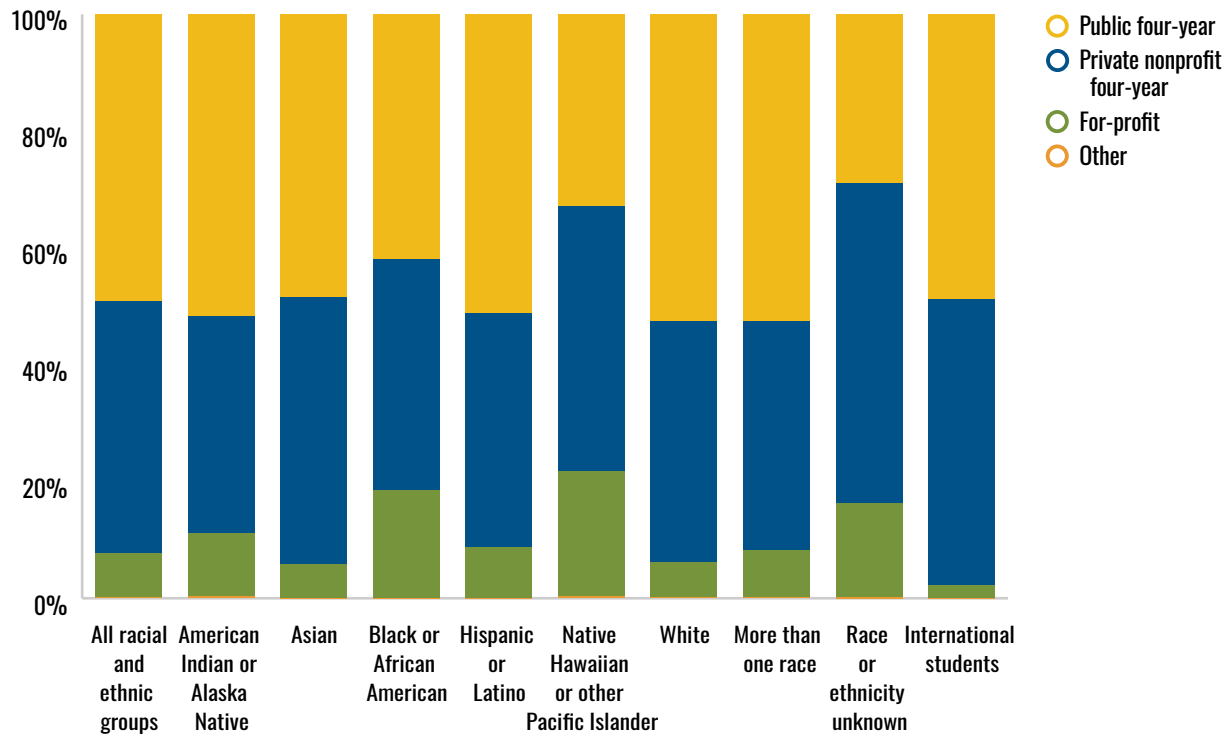
Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.
 Note: Data reflect graduate degrees and certificates earned at all Title IV–eligible, degree-granting institutions.

- Research doctoral degrees accounted for 12.5 percent of graduate completions by international students, much higher than the corresponding percentages for domestic student groups. Among all graduate completions by domestic students, the shares of research doctoral degrees ranged from 4.0 percent for Hispanic or Latino students to 6.0 percent for Black or African American students.
- In contrast, professional or other doctoral degrees were uncommon among international students (2.2 percent). Among graduate completions by domestic students, the shares of professional or other doctoral degrees ranged from 7.4 percent for Black or African American students to 21.6 percent for Asian students.
- Among Black or African American students, 9.0 percent earned a postbaccalaureate certificate. In contrast, 4.1 percent of international students did so.

GRADUATE COMPLETIONS, BY SECTOR AND FIELD

Among all graduate completions in 2021, public four-year institutions awarded 49.1 percent of all degrees and certificates earned, private nonprofit four-year institutions awarded 43.1 percent, and for-profit institutions awarded 7.7 percent.

Figure 5.3: Graduate Completions Across Sectors, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV-eligible, degree-granting public four-year, private nonprofit four-year, public two-year, and for-profit institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Other includes other types of institutions, as well as some cases of public two-year institutions that offer or confer graduate degrees.

- Over half of all White (52.5 percent), multiracial (52.5 percent), American Indian or Alaska Native (51.7 percent), and Hispanic or Latino (51.2 percent) students graduated from public four-year institutions. In contrast, fewer than one-third of Native Hawaiian or other Pacific Islander students (32.9 percent) graduated from these institutions.
- About one in five Native Hawaiian or other Pacific Islander (21.5 percent) and Black or African American (18.5 percent) students graduated from for-profit institutions, while 6.1 percent of White students, 5.8 percent of Asian students, and 2.1 percent of international students did so.

Public Four-Year Institutions

The primary fields for graduate completions at public four-year institutions were STEM (21.9 percent), education (18.2 percent), health (17.8 percent), and business and management (17.2 percent) fields, followed by social and behavioral sciences (4.4 percent), humanities (4.3 percent) and law (3.0 percent). When comparing sectors, 21.9 percent of graduate completions at public four-year institutions were in STEM, versus 15.3 at private nonprofit and 4.5 percent at for-profit institutions.

Table 5.2: Graduate Completions at Public Four-Year Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	21.9%	17.2%	18.2%	17.8%	4.3%	4.4%	3.0%	13.2%	100%
	American Indian or Alaska Native	9.8%	14.7%	25.5%	16.2%	5.8%	3.9%	7.5%	16.6%	100%
	Asian	25.7%	21.4%	9.1%	28.9%	2.4%	2.8%	2.5%	7.2%	100%
	Black or African American	10.2%	18.5%	22.4%	19.1%	2.8%	4.0%	2.7%	20.2%	100%
	Hispanic or Latino	13.0%	17.2%	22.2%	17.0%	4.8%	4.9%	3.1%	17.8%	100%
	Native Hawaiian or other Pacific Islander	12.3%	20.6%	22.3%	18.3%	4.1%	3.6%	2.5%	16.4%	100%
	White	15.4%	16.7%	22.0%	19.8%	4.7%	4.5%	3.4%	13.5%	100%
	More than one race	17.1%	16.1%	16.6%	19.3%	5.6%	5.3%	3.9%	16.0%	100%
	Race or ethnicity unknown	17.8%	20.8%	15.3%	21.1%	4.3%	4.3%	4.0%	12.4%	100%
	International students	61.5%	15.8%	3.0%	4.0%	4.0%	4.2%	1.2%	6.3%	100%
Research Doctoral Degrees	All racial and ethnic groups	51.5%	2.1%	13.5%	9.1%	8.2%	9.7%	0.1%	5.8%	100%
	American Indian or Alaska Native	25.5%	1.9%	25.5%	6.6%	16.0%	16.0%	0.0%	8.5%	100%
	Asian	55.2%	2.0%	9.1%	12.8%	6.8%	8.8%	0.0%	5.2%	100%
	Black or African American	17.6%	2.1%	41.1%	16.3%	5.6%	8.2%	0.1%	9.1%	100%
	Hispanic or Latino	38.3%	1.0%	18.1%	11.7%	11.7%	12.7%	0.04%	6.5%	100%
	Native Hawaiian or other Pacific Islander	25.0%	0.0%	25.0%	10.7%	10.7%	17.9%	0.0%	10.7%	100%
	White	41.8%	1.5%	16.9%	11.6%	10.0%	11.8%	0.04%	6.3%	100%
	More than one race	45.6%	1.2%	15.0%	9.3%	9.2%	12.4%	0.0%	7.3%	100%
	Race or ethnicity unknown	49.4%	1.8%	10.4%	10.8%	11.8%	9.6%	0.1%	6.0%	100%
	International students	73.1%	3.3%	3.9%	3.2%	5.4%	6.5%	0.3%	4.4%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	5.3%	0.3%	1.1%	66.4%	0.2%	0.2%	26.5%	0.1%	100%
	American Indian or Alaska Native	4.1%	0.0%	1.8%	52.5%	0.5%	0.0%	40.6%	0.5%	100%
	Asian	1.8%	0.1%	0.9%	85.0%	0.1%	0.1%	12.0%	0.1%	100%
	Black or African American	1.2%	1.0%	1.9%	64.9%	0.1%	0.2%	30.5%	0.1%	100%
	Hispanic or Latino	4.2%	0.2%	2.1%	61.9%	0.02%	0.1%	31.4%	0.1%	100%
	Native Hawaiian or other Pacific Islander	6.0%	0.0%	6.0%	60.0%	0.0%	0.0%	24.0%	4.0%	100%
	White	6.5%	0.1%	0.9%	63.6%	0.1%	0.2%	28.4%	0.1%	100%
	More than one race	4.3%	0.4%	1.3%	62.1%	0.1%	0.1%	31.4%	0.2%	100%
	Race or ethnicity unknown	8.2%	1.1%	0.8%	69.5%	0.1%	0.04%	20.2%	0.1%	100%
	International students	2.2%	0.4%	0.7%	62.7%	3.5%	0.1%	30.0%	0.5%	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Master's Degrees	All racial and ethnic groups	22.1%	21.0%	18.9%	13.1%	4.5%	4.1%	0.6%	15.7%	100%
	American Indian or Alaska Native	9.3%	17.9%	25.9%	13.0%	6.1%	3.8%	4.5%	19.5%	100%
	Asian	30.0%	28.9%	10.3%	15.8%	2.6%	3.0%	0.3%	9.2%	100%
	Black or African American	10.5%	21.7%	20.6%	15.4%	2.9%	4.0%	0.7%	24.1%	100%
	Hispanic or Latino	12.8%	19.9%	23.5%	13.2%	4.9%	4.7%	0.5%	20.6%	100%
	Native Hawaiian or other Pacific Islander	11.9%	23.9%	22.9%	14.8%	4.6%	2.9%	0.6%	18.5%	100%
	White	15.1%	20.6%	23.2%	15.1%	5.1%	4.3%	0.4%	16.3%	100%
	More than one race	17.2%	19.8%	17.8%	14.2%	6.2%	5.1%	0.4%	19.3%	100%
	Race or ethnicity unknown	16.7%	27.3%	16.4%	13.9%	4.1%	4.1%	1.9%	15.7%	100%
	International students	61.3%	18.7%	2.5%	2.9%	3.5%	3.7%	0.9%	6.5%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV–eligible, degree-granting public four-year institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | *STEM fields* includes life and physical sciences, math, engineering, and computer science.

All Degrees

- The majority of international students completed a graduate degree or certificate in STEM (61.5 percent).
- More than a quarter of American Indian or Alaska Native students (25.5 percent) completed a graduate degree or certificate in education, while only 3.0 percent of international students did so.
- Over a quarter of Asian students (28.9 percent) completed a graduate degree or certificate in health, compared with only 4.0 percent of international students.

Research Doctoral Degrees

- Over half of all research doctoral degrees awarded at public four-year institutions in 2021 were in STEM fields (51.5 percent). Education was the second most popular field of study for doctoral degrees earned at these institutions (13.5 percent).
- Nearly three-quarters of international students (73.1 percent) earned a research doctoral degree in STEM fields. In contrast, a quarter of American Indian or Alaska Native (25.5 percent) and Native Hawaiian or other Pacific Islander (25.0 percent) students and 17.6 percent of Black or African American students did so.
- Among Black or African American students who earned a research doctoral degree, 41.1 percent did so in education—much higher than the corresponding percentages for all other groups.
- The largest shares of research doctoral degrees in social and behavioral sciences were earned by Native Hawaiian or other Pacific Islander (17.9 percent) and American Indian or Alaska Native (16.0 percent), compared with 6.5 percent of international students.

Professional or Other Doctoral Degrees

- Over half of all professional or other doctoral degrees earned at public four-year institutions in 2021 were awarded in health fields (66.4 percent) or in law (26.5 percent).
- Of the Asian students who completed a professional or other doctoral degree, 85.0 percent did so in health fields.
- About four in 10 American Indian or Alaska Native students completed a professional or other doctoral degree in law (40.6 percent).

Master's Degrees

- The most popular fields of study for master's degrees earned at public four-year institutions were STEM (22.1 percent), business and management (21.0 percent), and education (18.9 percent).
- More than 60 percent of international students (61.3 percent) and 30.0 percent of Asian students earned a master's degree in STEM fields. In contrast, 10.5 percent of Black or African American students and 9.3 percent of American Indian or Alaska Native students did so.

Private Nonprofit Four-Year Institutions

The primary fields for graduate completions at private nonprofit four-year institutions were business and management (21.3 percent) and health (20.3 percent), followed by education (16.2 percent), STEM (15.3 percent), social and behavioral sciences (6.2 percent), humanities (6.1 percent), and law (5.0 percent).

Table 5.3: Graduate Completions at Private Nonprofit Four-Year Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	15.3%	21.3%	16.2%	20.3%	6.1%	6.2%	5.0%	9.6%	100%
	American Indian or Alaska Native	7.2%	21.8%	21.1%	24.4%	5.7%	4.7%	5.6%	9.5%	100%
	Asian	19.3%	20.6%	6.9%	33.6%	4.1%	4.7%	4.4%	6.3%	100%
	Black or African American	6.9%	24.0%	17.9%	20.8%	6.4%	6.1%	4.2%	13.7%	100%
	Hispanic or Latino	8.0%	20.2%	19.9%	18.8%	4.9%	9.0%	6.4%	12.7%	100%
	Native Hawaiian or other Pacific Islander	7.0%	22.1%	18.4%	25.2%	5.0%	8.6%	2.4%	11.3%	100%
	White	8.9%	20.2%	20.4%	23.0%	6.7%	6.0%	5.6%	9.2%	100%
	More than one race	11.8%	19.2%	15.7%	21.5%	6.9%	7.8%	5.9%	11.2%	100%
	Race or ethnicity unknown	8.6%	21.0%	20.9%	23.0%	5.8%	7.0%	4.6%	9.0%	100%
	International students	45.6%	24.6%	2.6%	5.1%	5.9%	5.2%	2.9%	8.1%	100%
Research Doctoral Degrees	All racial and ethnic groups	35.0%	6.8%	24.0%	8.6%	10.5%	11.1%	0.4%	3.6%	100%
	American Indian or Alaska Native	22.2%	11.1%	36.5%	7.9%	7.9%	12.7%	0.0%	1.6%	100%
	Asian	46.2%	4.4%	12.8%	14.1%	9.2%	9.9%	0.1%	3.3%	100%
	Black or African American	7.3%	12.4%	50.1%	8.6%	8.2%	9.4%	0.2%	3.8%	100%
	Hispanic or Latino	24.4%	7.8%	34.9%	8.6%	7.7%	13.2%	0.0%	3.4%	100%
	Native Hawaiian or other Pacific Islander	6.5%	6.5%	48.4%	19.4%	6.5%	6.5%	0.0%	6.5%	100%
	White	29.3%	6.1%	27.0%	10.1%	12.5%	11.1%	0.1%	3.8%	100%
	More than one race	32.6%	6.0%	23.6%	9.9%	10.5%	11.8%	0.4%	5.2%	100%
	Race or ethnicity unknown	17.5%	12.5%	33.1%	10.3%	10.4%	13.4%	0.1%	2.8%	100%
	International students	65.3%	3.9%	2.6%	3.6%	9.0%	10.9%	1.5%	3.4%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	1.1%	0.1%	0.6%	57.8%	1.1%	2.2%	36.6%	0.5%	100%
	American Indian or Alaska Native	1.2%	0.0%	0.6%	50.9%	2.4%	2.4%	40.8%	1.8%	100%
	Asian	0.6%	0.04%	0.1%	79.3%	1.0%	1.0%	17.7%	0.3%	100%
	Black or African American	1.5%	0.4%	1.2%	55.0%	3.2%	2.4%	34.6%	1.7%	100%
	Hispanic or Latino	0.8%	0.02%	0.5%	48.5%	0.5%	2.7%	46.2%	0.9%	100%
	Native Hawaiian or other Pacific Islander	1.6%	0.0%	3.2%	68.3%	1.6%	1.6%	22.2%	1.6%	100%
	White	1.3%	0.1%	0.6%	53.9%	0.9%	2.4%	40.4%	0.3%	100%
	More than one race	0.7%	0.1%	0.1%	56.6%	0.5%	2.1%	39.8%	0.1%	100%
	Race or ethnicity unknown	0.9%	0.4%	0.6%	67.1%	0.4%	2.5%	27.1%	1.1%	100%
	International students	0.1%	0.1%	0.7%	53.7%	3.0%	1.5%	40.8%	0.2%	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Master's Degrees	All racial and ethnic groups	16.5%	25.6%	16.7%	16.0%	6.5%	6.4%	1.1%	11.3%	100%
	American Indian or Alaska Native	7.3%	25.7%	22.2%	22.0%	5.9%	4.2%	1.6%	11.2%	100%
	Asian	23.5%	27.5%	8.1%	21.7%	4.7%	5.5%	0.9%	8.1%	100%
	Black or African American	7.5%	28.2%	15.6%	17.9%	6.8%	6.3%	1.5%	16.4%	100%
	Hispanic or Latino	8.5%	23.9%	21.4%	15.1%	5.4%	9.7%	1.1%	15.0%	100%
	Native Hawaiian or other Pacific Islander	7.1%	25.0%	17.4%	22.6%	5.4%	9.1%	0.9%	12.6%	100%
	White	9.1%	24.7%	21.6%	19.4%	7.2%	6.3%	0.7%	11.0%	100%
	More than one race	12.7%	23.2%	16.4%	16.9%	7.8%	8.7%	0.9%	13.4%	100%
	Race or ethnicity unknown	9.1%	24.7%	21.6%	18.8%	6.1%	7.3%	2.2%	10.2%	100%
	International students	46.1%	27.2%	2.6%	3.2%	5.6%	4.8%	1.8%	8.6%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV-eligible, degree-granting private nonprofit four-year institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields includes life and physical sciences, math, engineering, and computer science.

All Degrees

- Nearly a quarter of international (24.6 percent) and Black or African American (24.0 percent) students at private nonprofit four-year institutions completed a graduate degree or certificate in business and management.
- More than one-third of Asian students completed a graduate degree or certificate in health (33.7 percent), while only 5.1 percent of international students did so.
- Approximately one in five American Indian or Alaska Native (21.1 percent), White (20.4 percent), and Hispanic or Latino (19.9 percent) students studied education, compared with 6.9 percent of Asian students and 2.6 percent of international students.
- More than 40 percent of international students studied STEM fields (45.6 percent), versus fewer than 10 percent of all American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and White students.

Research Doctoral Degrees

- The most popular field of study for research doctoral degrees awarded at private nonprofit four-year institutions was STEM (35.0 percent), followed by education (24.0 percent).
- In contrast with fewer than 10 percent of Black or Hispanic (7.3 percent) and Native Hawaiian or other Pacific Islander (6.5 percent) students, 65.3 percent of international students and 46.2 percent of Asian students completed a research doctoral degree in STEM fields.
- Around half of research doctoral degrees earned by Black or African American (50.1 percent) and Native Hawaiian or other Pacific Islander (48.4 percent) students were in education.

Professional or Other Doctoral Degrees

- Over half of all professional or other doctoral degrees awarded at private nonprofit four-year institutions were in health fields (57.8 percent). Law represented 36.6 percent of these types of doctoral degrees.
- About four in five professional or other doctoral degrees earned by Asian students were in health fields (79.3 percent).
- When considering students who completed a professional or other doctoral degree in law, 46.2 percent of Hispanic or Latino students earned a degree of this type, while 22.2 percent of Native Hawaiian or other Pacific Islander students and 17.7 percent of Asian students did so.

Master's Degrees

- The primary field for master's degrees awarded at private nonprofit four-year institutions was business and management (25.6 percent), followed by education (16.7 percent), STEM (16.5 percent), and health (16.0 percent).
- Fewer than 10 percent each of most domestic student groups completed a master's degree in STEM fields, compared with 46.1 percent of international students.

For-Profit Institutions

The primary fields for graduate completion at for-profit institutions were health (34.5 percent) and business and management (29.0 percent), followed by education (15.9 percent), social and behavioral sciences (6.4 percent), STEM (4.5 percent), humanities (2.0 percent), and law (0.7 percent).

Table 5.4: Graduate Completions at For-Profit Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	4.5%	29.0%	15.9%	34.5%	2.0%	6.4%	0.7%	7.1%	100%
	American Indian or Alaska Native	5.2%	26.2%	15.7%	35.6%	1.9%	5.2%	1.0%	9.2%	100%
	Asian	6.1%	24.6%	6.1%	54.1%	1.5%	3.8%	0.8%	3.1%	100%
	Black or African American	3.8%	33.1%	15.7%	29.1%	1.5%	6.4%	0.4%	10.0%	100%
	Hispanic or Latino	2.9%	26.0%	18.2%	36.3%	1.5%	8.1%	0.8%	6.2%	100%
	Native Hawaiian or other Pacific Islander	5.3%	30.3%	13.8%	37.1%	0.8%	4.8%	0.3%	7.8%	100%
	White	3.5%	22.8%	19.1%	38.9%	1.6%	6.9%	0.9%	6.3%	100%
	More than one race	5.0%	33.5%	13.1%	28.4%	2.1%	9.4%	0.2%	8.3%	100%
	Race or ethnicity unknown	5.6%	36.4%	13.2%	31.1%	1.8%	5.3%	0.7%	6.1%	100%
	International students	16.9%	54.4%	2.7%	7.8%	10.6%	1.9%	0.1%	5.6%	100%
Research Doctoral Degrees	All racial and ethnic groups	2.5%	17.9%	25.5%	26.4%	0.2%	17.9%	-	9.6%	100%
	American Indian or Alaska Native	0.0%	7.4%	29.6%	33.3%	0.0%	18.5%	-	11.1%	100%
	Asian	2.0%	12.6%	11.1%	48.5%	0.0%	23.2%	-	2.5%	100%
	Black or African American	2.2%	21.5%	27.1%	25.1%	0.0%	11.1%	-	13.0%	100%
	Hispanic or Latino	3.2%	14.7%	23.9%	16.8%	0.4%	32.6%	-	8.4%	100%
	Native Hawaiian or other Pacific Islander	4.8%	4.8%	47.6%	33.3%	0.0%	9.5%	-	0.0%	100%
	White	2.6%	12.0%	27.0%	27.3%	0.2%	23.8%	-	7.0%	100%
	More than one race	1.4%	17.7%	24.8%	15.6%	0.0%	29.8%	-	10.6%	100%
	Race or ethnicity unknown	2.9%	25.4%	23.2%	26.8%	0.3%	10.3%	-	11.2%	100%
	International students	5.1%	29.3%	17.2%	23.2%	1.0%	20.2%	-	4.0%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	1.7%	2.3%	0.6%	83.3%	0.6%	0.1%	11.5%	-	100%
	American Indian or Alaska Native	6.7%	0.0%	6.7%	60.0%	0.0%	0.0%	26.7%	-	100%
	Asian	1.0%	1.2%	0.2%	92.0%	0.0%	0.0%	5.6%	-	100%
	Black or African American	2.3%	6.1%	1.5%	71.1%	3.4%	0.0%	15.6%	-	100%
	Hispanic or Latino	0.7%	0.0%	0.0%	83.6%	0.2%	0.0%	15.4%	-	100%
	Native Hawaiian or other Pacific Islander	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	-	100%
	White	0.8%	1.3%	0.5%	84.4%	0.2%	0.1%	12.7%	-	100%
	More than one race	0.6%	1.9%	0.0%	94.9%	0.0%	0.0%	2.6%	-	100%
	Race or ethnicity unknown	7.9%	7.2%	1.5%	73.8%	0.5%	0.0%	9.2%	-	100%
	International students	0.0%	0.0%	0.0%	93.1%	0.0%	0.0%	6.9%	-	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Master's Degrees	All racial and ethnic groups	4.3%	30.0%	16.6%	33.1%	2.2%	6.0%	0.1%	7.6%	100%
	American Indian or Alaska Native	4.3%	26.5%	15.7%	35.9%	2.0%	5.1%	0.3%	10.4%	100%
	Asian	6.8%	28.2%	6.9%	49.3%	1.9%	3.3%	0.03%	3.6%	100%
	Black or African American	3.4%	33.2%	15.5%	29.2%	1.7%	6.2%	0.1%	10.7%	100%
	Hispanic or Latino	2.4%	26.1%	19.7%	35.7%	1.7%	7.8%	0.1%	6.6%	100%
	Native Hawaiian or other Pacific Islander	4.0%	33.0%	13.5%	34.3%	0.9%	5.2%	0.3%	8.9%	100%
	White	3.4%	24.1%	20.5%	37.0%	1.8%	6.4%	0.1%	6.8%	100%
	More than one race	4.9%	36.4%	13.6%	24.5%	2.6%	8.5%	0.0%	9.5%	100%
	Race or ethnicity unknown	5.2%	37.2%	13.1%	30.5%	2.0%	5.2%	0.4%	6.2%	100%
	International students	17.3%	55.7%	2.3%	6.6%	11.1%	1.3%	0.0%	5.7%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV-eligible, degree-granting for-profit institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | *STEM fields* includes life and physical sciences, math, engineering, and computer science.

All Degrees

- More than half of all Asian students (54.1 percent) earned a graduate degree or certificate in health fields.
- More than half of all international students (54.4 percent) studied business and management.
- Nearly one in five White (19.1 percent) and Hispanic or Latino (18.2 percent) students studied education, while 6.1 percent of Asian students and 2.7 percent of international students did so.
- Approximately 17 percent of international students (16.9 percent) earned a graduate degree or certificate in STEM fields.

Research Doctoral Degrees

- Over half of all research doctoral degrees completed at for-profit institutions in 2021 were in health fields (26.4 percent) or in education (25.5 percent).
- About half of Asian students (48.5 percent) completed a research doctoral degree in health fields.
- Almost half of research doctoral degrees completed by Native Hawaiian or other Pacific Islander students at for-profit institutions were in education (47.6 percent).
- Approximately one-third of Hispanic or Latino students studied social and behavioral sciences (32.6 percent), compared with 11.1 percent of Black or African American students and 9.5 percent of Native Hawaiian or other Pacific Islander students.
- Nearly three in 10 international students (29.3 percent) earned a research doctoral degree in business and management. In contrast, fewer than 10 percent of American Indian or Alaska Native (7.4 percent) and Native Hawaiian or other Pacific Islander (4.8 percent) students did so.

Professional or Other Doctoral Degrees

- Most of the professional or other doctoral degrees earned at for-profit institutions in 2021 were in health fields (83.3 percent). The second most popular field of study for professional or other doctoral degrees at for-profit institutions was law (11.5 percent).
- All professional or other doctoral degrees earned by Native Hawaiian or other Pacific Islander students at for-profit institutions were in health fields (100.0 percent). More than 90 percent of multiracial (94.9 percent), international (93.1 percent), and Asian (92.0 percent) students completed a professional or other doctoral degree in health fields.
- Over a quarter of American Indian or Alaska Native students (26.7 percent) and about 15 percent of Black or African American (15.6 percent) and Hispanic or Latino (15.4 percent) students at for-profit institutions completed a professional or other doctoral degree in law.

Master's Degrees

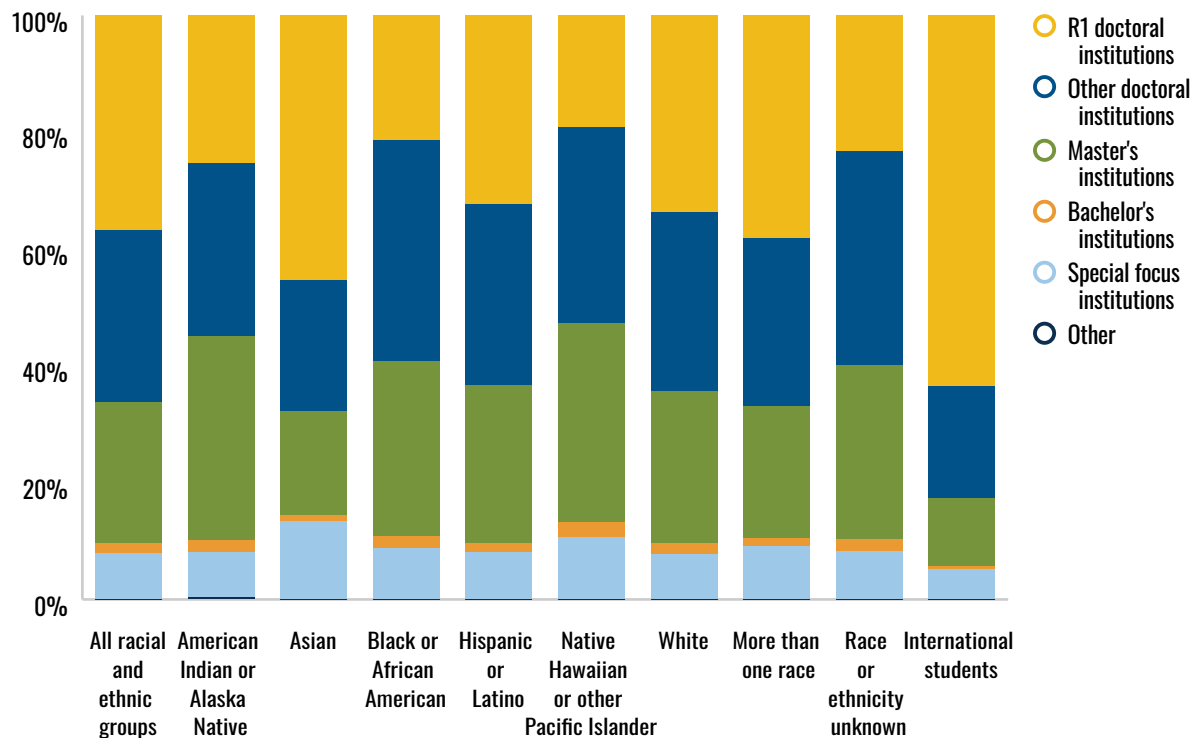
- The primary fields of study in which students at for-profit institutions completed a master's degree were health fields (33.1 percent) and business and management (30.0 percent).
- Over half of all international students (55.7 percent) completed a master's degree in business and management, while about a quarter of American Indian or Alaska Native (26.5 percent), Hispanic or Latino (26.1 percent), and White (24.1 percent) students did so.
- Nearly half of Asian students (49.3 percent) earned a master's degree in health fields, compared with 6.6 percent of international students.
- About one in five White (20.5 percent) and Hispanic or Latino (19.7 percent) students earned a master's degree in education versus 6.9 percent of Asian students and 2.3 percent of international students.
- Approximately one in five international students (17.3 percent) earned a master's degree in STEM fields. In contrast, fewer than 5 percent of multiracial (4.9 percent), American Indian or Alaska Native (4.3 percent), Native Hawaiian or other Pacific Islander (4.0 percent), Black or African American (3.4 percent), White (3.4 percent), and Hispanic or Latino (2.4 percent) students did so.

GRADUATE COMPLETIONS, BY CARNEGIE CLASSIFICATION AND FIELD

Among all graduate degrees and certificates earned in 2021, more than 90 percent were awarded by R1 doctoral institutions (36.7 percent), other doctoral institutions (29.6 percent), and master's institutions (24.1 percent).

- Nearly two-thirds of all international students (63.5 percent) and 45.4 percent of all Asian students earned a graduate degree or certificate at R1 doctoral institutions, compared with fewer than a quarter of all Black or African American (21.3 percent) and Native Hawaiian or other Pacific Islander (19.2 percent) students.
- Over one-third of all Black or African American (37.9 percent) and Native Hawaiian or other Pacific Islander (33.4 percent) students graduated from other doctoral institutions, while 22.4 percent of all Asian students and 19.1 percent of all international students did so.
- Over one-third of American Indian or Alaska Native (34.8 percent) and Native Hawaiian or other Pacific Islander (34.1 percent) students earned a graduate degree or certificate at master's institutions, compared with 17.9 percent of Asian students and 11.6 percent of international students.

Figure 5.4: Graduate Completions Across Carnegie Classifications, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at all Title IV–eligible, degree-granting institutions that were classified by the 2018 Carnegie Basic Classification. | Other includes other types of institutions, including some cases of associate institutions and Tribal Colleges and Universities that offer or confer graduate degrees.

R1 Doctoral Institutions

The primary field for graduate completions at R1 doctoral institutions was STEM (30.5 percent), followed by business and management (17.6 percent) and health (15.9 percent).

Table 5.5: Graduate Completions at R1 Doctoral Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	30.5%	17.6%	8.7%	15.9%	5.1%	5.0%	5.2%	11.9%	100%
	American Indian or Alaska Native	13.9%	13.0%	14.9%	15.2%	8.0%	3.2%	14.3%	17.3%	100%
	Asian	30.0%	20.5%	4.8%	27.4%	3.0%	3.2%	4.1%	7.0%	100%
	Black or African American	13.8%	16.1%	14.5%	21.3%	4.7%	4.3%	5.6%	19.7%	100%
	Hispanic or Latino	18.4%	17.6%	12.2%	18.5%	5.6%	4.9%	6.0%	16.8%	100%
	Native Hawaiian or other Pacific Islander	15.7%	15.2%	18.9%	19.7%	4.3%	3.7%	3.7%	18.7%	100%
	White	22.0%	17.6%	11.3%	18.6%	5.8%	5.0%	6.2%	13.5%	100%
	More than one race	23.7%	14.8%	10.1%	19.7%	6.5%	5.4%	5.9%	13.9%	100%
	Race or ethnicity unknown	23.4%	19.1%	7.0%	19.8%	5.5%	4.9%	9.9%	10.4%	100%
	International students	57.7%	17.3%	2.2%	3.6%	4.1%	5.7%	2.4%	7.0%	100%
Research Doctoral Degrees	All racial and ethnic groups	56.3%	2.5%	8.9%	7.0%	10.0%	9.9%	0.3%	5.0%	100%
	American Indian or Alaska Native	32.0%	2.0%	23.0%	7.0%	18.0%	10.0%	0.0%	8.0%	100%
	Asian	58.4%	2.6%	7.4%	10.6%	7.7%	8.7%	0.04%	4.6%	100%
	Black or African American	24.0%	3.7%	32.0%	13.7%	9.1%	9.0%	0.3%	8.3%	100%
	Hispanic or Latino	44.7%	1.5%	14.6%	8.2%	13.7%	11.6%	0.04%	5.8%	100%
	Native Hawaiian or other Pacific Islander	28.1%	0.0%	25.0%	12.5%	6.3%	15.6%	0.0%	12.5%	100%
	White	48.3%	1.9%	11.2%	9.1%	12.5%	11.4%	0.1%	5.7%	100%
	More than one race	51.6%	1.2%	10.6%	8.1%	11.0%	11.1%	0.1%	6.3%	100%
	Race or ethnicity unknown	48.9%	2.2%	9.5%	9.1%	15.0%	10.8%	0.2%	4.4%	100%
	International students	72.2%	3.3%	2.7%	2.8%	6.6%	8.1%	0.6%	3.9%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	6.6%	0.1%	0.3%	55.4%	0.3%	0.1%	36.8%	0.6%	100%
	American Indian or Alaska Native	5.9%	0.0%	0.6%	36.5%	0.0%	0.0%	55.3%	1.8%	100%
	Asian	2.3%	0.0%	0.1%	78.3%	0.2%	0.1%	18.7%	0.4%	100%
	Black or African American	2.2%	0.2%	0.6%	55.4%	0.8%	0.1%	38.4%	2.3%	100%
	Hispanic or Latino	5.0%	0.05%	0.2%	53.1%	0.02%	0.1%	40.6%	0.9%	100%
	Native Hawaiian or other Pacific Islander	8.5%	0.0%	6.4%	61.7%	0.0%	0.0%	19.1%	4.3%	100%
	White	8.5%	0.04%	0.3%	50.5%	0.2%	0.1%	40.1%	0.3%	100%
	More than one race	5.1%	0.1%	0.4%	56.3%	0.1%	0.0%	37.9%	0.2%	100%
	Race or ethnicity unknown	8.8%	0.9%	0.0%	58.5%	0.2%	0.0%	30.2%	1.5%	100%
	International students	1.4%	0.1%	0.1%	43.2%	2.4%	0.3%	52.0%	0.4%	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Master's Degrees	All racial and ethnic groups	31.9%	22.4%	8.8%	11.1%	5.0%	4.8%	1.3%	14.5%	100%
	American Indian or Alaska Native	13.2%	17.2%	13.5%	12.7%	9.2%	3.2%	8.5%	22.6%	100%
	Asian	35.6%	28.1%	5.3%	15.0%	3.1%	3.4%	0.6%	8.9%	100%
	Black or African American	14.8%	19.7%	13.6%	16.8%	4.9%	4.2%	1.9%	24.1%	100%
	Hispanic or Latino	18.8%	21.8%	13.3%	13.9%	5.7%	4.9%	1.2%	20.4%	100%
	Native Hawaiian or other Pacific Islander	14.1%	19.0%	19.0%	15.2%	5.3%	3.0%	1.9%	22.4%	100%
	White	22.1%	23.0%	12.0%	13.9%	6.0%	5.0%	0.8%	17.2%	100%
	More than one race	25.0%	19.2%	11.0%	14.0%	7.2%	5.5%	0.7%	17.4%	100%
	Race or ethnicity unknown	23.8%	27.3%	6.8%	12.8%	5.1%	4.3%	6.6%	13.3%	100%
	International students	57.2%	20.4%	1.9%	2.6%	3.5%	5.2%	1.7%	7.5%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV–eligible, degree-granting institutions classified as R1 doctoral institutions in this report. | *STEM fields* includes life and physical sciences, math, engineering, and computer science.

All Degrees

- More than half of international students (57.7 percent) earned a graduate degree or certificate in STEM. In contrast, much smaller percentages of Native Hawaiian or other Pacific Islander (15.7 percent), American Indian or Alaska Native (13.9 percent), and Black or African American (13.8 percent) students did so.
- A larger share of Native Hawaiian or other Pacific Islander students (18.9 percent) completed a graduate degree or certificate in education, compared with corresponding shares of all other groups.
- Larger shares of American Indian or Alaska Native students studied law (14.2 percent) or humanities (8.0 percent) than the corresponding shares of other racial and ethnic groups.

Research Doctoral Degrees

- Over half of all research doctoral degrees awarded at R1 doctoral institutions in 2021 were in STEM fields (56.3 percent).
- Nearly three-quarters of all international students (72.2 percent) earned a research doctoral degree in STEM, while about a quarter of Black or African American students with a research doctoral degree (24.0 percent) did so.
- Larger shares of American Indian or Alaska Native students (18.0 percent) earned a research doctoral degree in humanities, compared with 6.6 percent of international students and 6.3 percent of Native Hawaiian or other Pacific Islander students. A much larger percentage of Black or African American students (32.0 percent) earned a research doctoral degree in education than that of Asian students (7.4 percent) and international students (3.3 percent).

Professional or Other Doctoral Degrees

- Over half of all professional or other doctoral degrees earned at R1 doctoral institutions in 2021 were in health (55.4 percent) or law (36.8 percent).
- More than three-quarters of Asian students (78.3 percent) completed a professional or other doctoral degrees in health fields, compared with 36.5 percent of American Indian or Alaska Native students.
- Over half of American Indian or Alaska Native (55.3 percent) and international (52.0 percent) students earned a professional or other doctoral degree in law, while fewer than 20 percent of Native Hawaiian or other Pacific Islander (19.1 percent) and Asian (18.7 percent) students did so.

Master's Degrees

- The primary fields of study in which students at R1 doctoral institutions completed a master's degree were STEM (31.9 percent) and business and management (22.4 percent).

- Over half of all master's degrees completed by international students at R1 doctoral institutions were in STEM fields (57.2 percent). In contrast, much smaller percentages of Black or African American (14.8 percent), Native Hawaiian or other Pacific Islander (14.1 percent) American Indian or Alaska Native (13.2 percent) students at these institutions earned a master's degree in STEM fields.
- About one in five Native Hawaiian or other Pacific Islander students (19.0 percent) completed a master's degree in education, compared with 5.3 percent of Asian students and 1.9 percent of international students.

Other Doctoral Institutions

The primary fields for graduate completions at other doctoral institutions were health (22.0 percent) and education (21.7 percent), followed by business and management (18.1 percent) and STEM (11.9 percent). Smaller percentages of graduate degrees and certificates were awarded in social and behavioral sciences (6.5 percent), humanities (4.3 percent), or law (4.3 percent).

Table 5.6: Graduate Completions at Other Doctoral Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	11.9%	18.1%	21.7%	22.0%	4.3%	6.5%	4.3%	11.2%	100%
	American Indian or Alaska Native	7.9%	16.0%	25.0%	22.4%	4.1%	6.2%	5.3%	13.1%	100%
	Asian	15.2%	20.3%	10.7%	35.5%	2.8%	5.0%	4.2%	6.3%	100%
	Black or African American	6.0%	18.9%	24.2%	23.0%	3.6%	6.7%	3.0%	14.7%	100%
	Hispanic or Latino	6.8%	17.8%	26.7%	17.6%	3.6%	8.6%	5.0%	13.8%	100%
	Native Hawaiian or other Pacific Islander	7.2%	22.5%	19.0%	26.8%	3.5%	7.7%	2.9%	10.3%	100%
	White	8.6%	16.3%	24.4%	23.6%	4.7%	6.3%	5.0%	11.1%	100%
	More than one race	8.8%	18.1%	19.4%	20.9%	5.3%	8.8%	5.3%	13.6%	100%
	Race or ethnicity unknown	7.5%	23.3%	20.5%	24.9%	4.3%	7.3%	2.9%	9.3%	100%
	International students	48.1%	22.2%	4.6%	6.6%	4.5%	4.2%	2.2%	7.7%	100%
Research Doctoral Degrees	All racial and ethnic groups	17.7%	8.8%	33.8%	15.0%	4.9%	13.8%	0.1%	5.9%	100%
	American Indian or Alaska Native	8.2%	8.2%	41.2%	14.1%	2.4%	22.4%	0.0%	3.5%	100%
	Asian	21.7%	5.6%	21.0%	27.8%	5.1%	14.5%	0.0%	4.4%	100%
	Black or African American	4.1%	13.0%	43.7%	16.8%	3.6%	10.6%	0.0%	8.2%	100%
	Hispanic or Latino	8.7%	8.9%	41.3%	12.2%	3.5%	19.9%	0.0%	5.5%	100%
	Native Hawaiian or other Pacific Islander	2.0%	5.9%	49.0%	23.5%	5.9%	9.8%	0.0%	3.9%	100%
	White	13.8%	6.2%	37.2%	16.0%	6.0%	15.8%	0.01%	5.0%	100%
	More than one race	9.5%	10.4%	33.0%	12.0%	4.7%	22.8%	0.0%	7.7%	100%
	Race or ethnicity unknown	7.7%	18.9%	32.5%	17.6%	3.9%	13.2%	0.0%	6.1%	100%
	International students	62.1%	4.9%	9.0%	5.5%	4.6%	7.3%	1.0%	5.8%	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Professional and Other Doctoral Degrees	All racial and ethnic groups	0.6%	0.5%	0.7%	60.3%	0.5%	1.5%	35.8%	0.1%	100%
	American Indian or Alaska Native	0.9%	0.0%	0.0%	52.6%	1.7%	0.0%	44.0%	0.9%	100%
	Asian	0.3%	0.3%	0.2%	82.1%	0.3%	0.7%	16.1%	0.03%	100%
	Black or African American	0.5%	1.9%	1.1%	60.2%	1.8%	1.3%	33.1%	0.1%	100%
	Hispanic or Latino	0.1%	0.03%	1.3%	48.6%	0.2%	1.9%	47.7%	0.03%	100%
	Native Hawaiian or other Pacific Islander	0.0%	0.0%	2.4%	61.9%	0.0%	0.0%	35.7%	0.0%	100%
	White	0.6%	0.3%	0.6%	57.8%	0.4%	1.6%	38.7%	0.1%	100%
	More than one race	0.1%	0.6%	0.3%	55.8%	0.4%	1.4%	41.2%	0.1%	100%
	Race or ethnicity unknown	1.9%	2.3%	0.9%	64.9%	0.3%	2.2%	27.6%	0.0%	100%
	International students	0.0%	0.1%	1.6%	64.6%	1.5%	0.9%	31.1%	0.2%	100%
Master's Degrees	All racial and ethnic groups	12.8%	21.4%	21.9%	18.2%	4.8%	6.6%	0.8%	13.4%	100%
	American Indian or Alaska Native	8.1%	19.3%	24.6%	20.0%	4.4%	5.8%	2.0%	15.8%	100%
	Asian	18.6%	27.6%	12.5%	22.8%	3.4%	5.8%	1.1%	8.3%	100%
	Black or African American	6.4%	21.5%	21.6%	21.0%	3.8%	6.9%	1.1%	17.9%	100%
	Hispanic or Latino	7.3%	20.0%	27.9%	14.8%	4.0%	8.9%	0.9%	16.1%	100%
	Native Hawaiian or other Pacific Islander	7.5%	25.9%	16.8%	25.1%	3.7%	7.9%	0.8%	12.2%	100%
	White	9.2%	19.8%	25.2%	19.9%	5.5%	6.4%	0.6%	13.4%	100%
	More than one race	9.7%	21.2%	20.0%	17.0%	6.1%	9.0%	0.9%	16.2%	100%
	Race or ethnicity unknown	7.7%	25.7%	20.8%	22.0%	4.7%	7.5%	1.0%	10.6%	100%
	International students	48.9%	24.9%	4.1%	4.3%	4.4%	4.0%	1.4%	8.1%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV-eligible, degree-granting institutions classified as other doctoral institutions in this report. | STEM fields includes life and physical sciences, math, engineering, and computer science.

All Degrees

- Over one-third of Asian students (35.5 percent) earned a graduate degree or certificate in health, while only 6.6 percent of international students did so.
- About a quarter of Hispanic or Latino (26.7 percent), American Indian or Alaska Native (25.0 percent), White (24.4 percent), and Black or African American (24.2 percent) students earned a degree or certificate in education, compared with 10.7 percent of Asian students and 4.6 percent of international students.
- When considering students who completed a graduate degree in business and management, 22.5 percent of Native Hawaiian or other Pacific Islander and 22.2 percent of international students earned a degree of this type.
- Nearly half of all international students at other doctoral institutions (48.1 percent) earned a graduate degree or certificate in STEM, while 15.2 percent of Asian students and fewer than 10 percent of all other groups did so.

Research Doctoral Degrees

- Over one-third of all research doctoral degrees awarded at other doctoral institutions were in education (33.8 percent), the largest share of any field, followed by STEM (17.7 percent), health (15.0 percent), and social and behavioral sciences (13.8 percent).
- More than 40 percent of Native Hawaiian or other Pacific Islander (49.0 percent), Black or African American (43.7 percent), Hispanic or Latino (41.3 percent), and American Indian or Alaska Native (41.2 percent) students earned a research doctoral degree in education. In contrast, only 9.0 percent of international students did so.
- The majority of international students completed a research doctoral degree in STEM (62.1 percent), while fewer than 5 percent of Black or African American (4.1 percent) and Native Hawaiian or other Pacific Islander (2.0 percent) students did so.

- More than 20 percent of multiracial (22.8 percent) and American Indian or Alaska Native (22.4 percent) students studied social and behavioral sciences, compared with fewer than 10 percent of Native Hawaiian or other Pacific Islander (9.8 percent) and international (7.3 percent) students.
- Of the Black or African American students who completed a research doctoral degree, 13.0 percent did so in business and management.

Professional or Other Doctoral Degrees

- The majority of all professional or other doctoral degrees earned at other doctoral institutions in 2021 were in health fields (60.3 percent) or in law (35.8 percent).
- When considering students who completed a professional or other doctoral degree in health fields, 82.1 percent of Asian students versus 48.6 percent of Hispanic or Latino students earned a degree of this type.
- More than 40 percent of Hispanic or Latino (47.7 percent), American Indian or Alaska Native (44.0 percent), and multiracial (41.2 percent) students earned a professional or other doctoral degree in law, while 16.1 percent of Asian students did so.

Master's Degrees

- The primary fields of study in which students at other doctoral institutions earned a master's degree were education (21.9 percent) and business and management (21.4 percent), followed by health (18.2 percent) and STEM (12.8 percent).
- Around a quarter of Hispanic or Latino (27.9 percent), White (25.2 percent), and American Indian or Alaska Native (24.6 percent) students earned a master's degree in education.
- Approximately a quarter of Asian (27.6 percent), Native Hawaiian or other Pacific Islander (25.9 percent), and international (24.9 percent) students earned a master's degree in business and management.
- About a quarter of Native Hawaiian or other Pacific Islander students (25.1 percent) earned a master's degree in health fields, while only 4.3 percent of international students did so.
- Nearly half of all master's degrees earned by international students at other doctoral institutions were in STEM (48.9 percent), much higher than the corresponding percentages for other groups.

Master's Institutions

The primary fields for graduate completions at master's institutions in 2021 were education (27.7 percent) and business and management (26.2 percent), followed by health (16.2 percent), STEM (8.9 percent), social and behavioral sciences (4.9 percent), humanities (4.0 percent), and law (0.9 percent).

Table 5.7: Graduate Completions at Master's Institutions Across Fields of Study, by Award Level and Race and Ethnicity: 2021

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
All Degrees	All racial and ethnic groups	8.9%	26.2%	27.7%	16.2%	4.0%	4.9%	0.9%	11.2%	100%
	American Indian or Alaska Native	5.8%	25.1%	30.3%	17.9%	4.1%	3.7%	1.5%	11.8%	100%
	Asian	15.5%	30.2%	15.8%	23.0%	2.7%	4.3%	0.7%	7.7%	100%
	Black or African American	6.3%	33.5%	20.4%	15.2%	3.0%	4.6%	1.1%	15.9%	100%
	Hispanic or Latino	5.5%	24.5%	28.8%	12.6%	4.2%	7.3%	1.6%	15.5%	100%
	Native Hawaiian or other Pacific Islander	6.8%	31.9%	21.1%	19.2%	2.9%	6.0%	0.0%	12.2%	100%
	White	5.2%	23.7%	33.3%	17.7%	4.3%	4.8%	0.9%	10.1%	100%
	More than one race	6.9%	27.6%	25.0%	13.6%	5.0%	6.0%	1.1%	14.7%	100%
	Race or ethnicity unknown	6.5%	28.1%	26.4%	19.1%	3.7%	5.3%	0.5%	10.3%	100%
	International students	48.0%	30.0%	5.5%	3.8%	4.1%	1.8%	0.3%	6.6%	100%

		STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields	Total
Research Doctoral Degrees	All racial and ethnic groups	5.2%	13.7%	58.2%	5.3%	5.2%	5.4%	0.3%	6.7%	100%
	American Indian or Alaska Native	10.0%	30.0%	30.0%	10.0%	0.0%	10.0%	0.0%	10.0%	100%
	Asian	10.1%	12.7%	51.9%	5.1%	6.3%	6.3%	1.3%	6.3%	100%
	Black or African American	3.8%	14.8%	62.7%	4.8%	2.8%	4.5%	0.2%	6.4%	100%
	Hispanic or Latino	3.4%	16.5%	64.8%	5.1%	1.7%	4.5%	0.0%	4.0%	100%
	Native Hawaiian or other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
	White	3.0%	12.2%	58.6%	5.6%	7.4%	6.0%	0.1%	7.1%	100%
	More than one race	1.7%	8.6%	65.5%	3.4%	5.2%	6.9%	1.7%	6.9%	100%
	Race or ethnicity unknown	4.5%	18.0%	56.3%	7.3%	2.0%	4.5%	0.0%	7.3%	100%
	International students	42.2%	13.8%	22.9%	1.8%	5.5%	4.6%	3.7%	5.5%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	0.7%	0.8%	5.1%	64.3%	1.9%	3.1%	23.7%	0.4%	100%
	American Indian or Alaska Native	2.6%	0.0%	7.7%	53.8%	7.7%	7.7%	20.5%	0.0%	100%
	Asian	0.0%	0.4%	5.2%	80.6%	1.9%	1.4%	10.6%	0.0%	100%
	Black or African American	4.2%	2.6%	5.5%	46.2%	2.1%	1.5%	37.7%	0.3%	100%
	Hispanic or Latino	0.9%	0.7%	8.7%	35.8%	0.5%	2.8%	50.1%	0.4%	100%
	Native Hawaiian or other Pacific Islander	0.0%	0.0%	11.1%	77.8%	0.0%	0.0%	0.0%	11.1%	100%
	White	0.2%	0.6%	4.7%	66.5%	2.1%	3.7%	21.7%	0.5%	100%
	More than one race	0.6%	1.7%	7.2%	55.6%	0.6%	2.8%	31.1%	0.6%	100%
	Race or ethnicity unknown	0.7%	0.7%	2.5%	83.5%	0.7%	3.7%	7.6%	0.3%	100%
	International students	1.7%	1.1%	2.8%	68.8%	6.3%	1.7%	17.6%	0.0%	100%
Master's Degrees	All racial and ethnic groups	9.5%	27.9%	26.4%	15.1%	4.2%	4.9%	0.1%	12.0%	100%
	American Indian or Alaska Native	6.0%	25.9%	30.2%	17.4%	3.8%	3.3%	1.0%	12.4%	100%
	Asian	16.9%	33.0%	15.4%	19.0%	2.8%	4.6%	0.0%	8.4%	100%
	Black or African American	6.4%	35.0%	18.4%	14.9%	3.2%	4.7%	0.2%	17.3%	100%
	Hispanic or Latino	5.6%	25.4%	28.4%	12.2%	4.4%	7.4%	0.2%	16.4%	100%
	Native Hawaiian or other Pacific Islander	6.7%	32.0%	20.8%	19.0%	3.1%	6.2%	0.0%	12.3%	100%
	White	5.5%	25.5%	32.0%	16.8%	4.5%	4.8%	0.1%	10.9%	100%
	More than one race	7.2%	29.2%	23.6%	12.8%	5.4%	5.9%	0.1%	15.8%	100%
	Race or ethnicity unknown	6.9%	30.1%	25.1%	17.3%	3.9%	5.4%	0.2%	11.1%	100%
	International students	49.1%	30.4%	5.2%	3.2%	4.0%	1.7%	0.1%	6.3%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect graduate degrees and certificates earned at Title IV-eligible, degree-granting institutions classified as master's institutions in this report. | STEM fields includes life and physical sciences, math, engineering, and computer science.

All Degrees

- About one-third of White (33.3 percent) and American Indian or Alaska Native (30.3 percent) students at these institutions earned a graduate degree or certificate in education.
- Over one-third of Black or African American students (33.5 percent) earned a graduate degrees or certificate in business and management.
- Of the Asian students who completed a graduate degree at master's institutions, 23.0 percent studied health fields.
- Nearly half of all graduate degrees and certificates completed by international students at master's institutions were in STEM (48.0 percent), much higher than the corresponding percentages of other groups.

Research Doctoral Degrees

- Over half of all research doctoral degrees completed at master's institutions in 2021 were in education (58.2 percent).
- Around two-thirds of multiracial (65.5 percent), Hispanic or Latino (64.8 percent), and Black or African American (62.7 percent) students completed a research doctoral degree in education, compared with 22.9 percent of international students.
- The most popular field of study for international students who earned research doctoral degrees at master's institutions was STEM (42.2 percent). In contrast, only 10.1 percent of Asian students and fewer than 5 percent of students in all other groups completed a research doctoral degree in STEM.
- No Native Hawaiian or other Pacific Islander students completed research doctoral degrees at master's institutions in 2021.

Professional or Other Doctoral Degrees

- About two-thirds of all professional or other doctoral degrees awarded at master's institutions in 2021 were in health fields (64.3 percent). The second most popular field of study was law (23.7 percent).
- About four in five Asian students (80.6 percent) completed a professional or other doctoral degree in health fields, compared with 35.8 percent of Hispanic or Latino students.
- About half of Hispanic or Latino students (50.1 percent) earned a professional or other doctoral degree in law. No Native Hawaiian or other Pacific Islander students at master's institutions earned professional or other doctoral degrees in law.

Master's Degrees

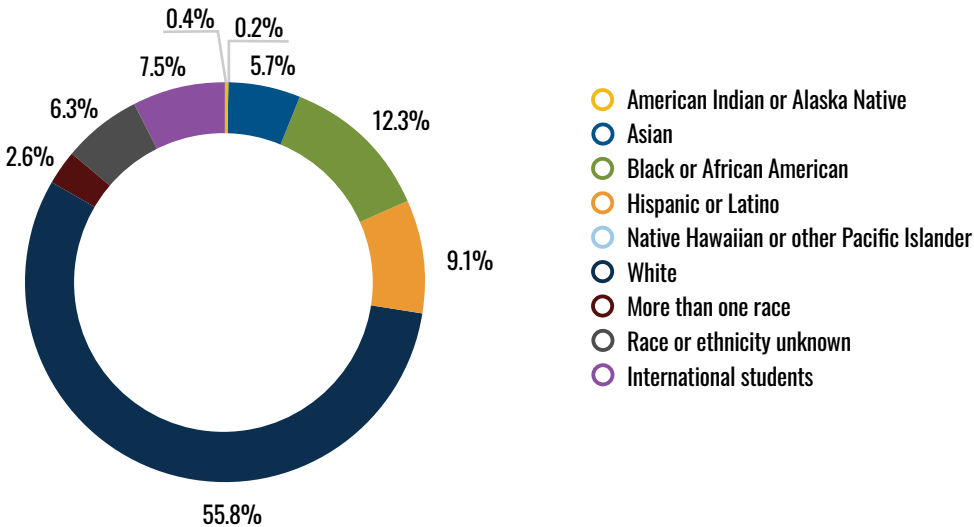
- The primary fields of study in which students at master's institutions earned a master's degree were business and management (27.9 percent) and health (26.4 percent).
- More than one-third of Black or African American students (35.0 percent) earned a master's degree in business and management.
- Nearly one-third of White students (32.0 percent) earned a master's degree in education, while only 5.2 percent of international students did so.
- When considering students who completed a master's degree in health fields, 19.0 percent of Native Hawaiian or other Pacific Islander and Asian students earned a degree of this type, compared with only 3.2 percent of international students.
- Nearly half of international students (49.1 percent) earned a master's degree in STEM fields. In contrast, 16.9 percent of Asian students and fewer than 8 percent of all other groups did so.

GRADUATE COMPLETIONS, BY CREDENTIAL TYPE

Postbaccalaureate Certificates

In 2021, graduate students earned about 86,000 postbaccalaureate certificates. Among postbaccalaureate certificate completers, 55.8 percent were White students and 30.4 percent were students of color. International students made up 7.5 percent of postbaccalaureate certificate completers, and 6.3 percent were of unknown race and ethnicity.

Figure 5.5: Postbaccalaureate Certificates Across Race and Ethnicity: 2021

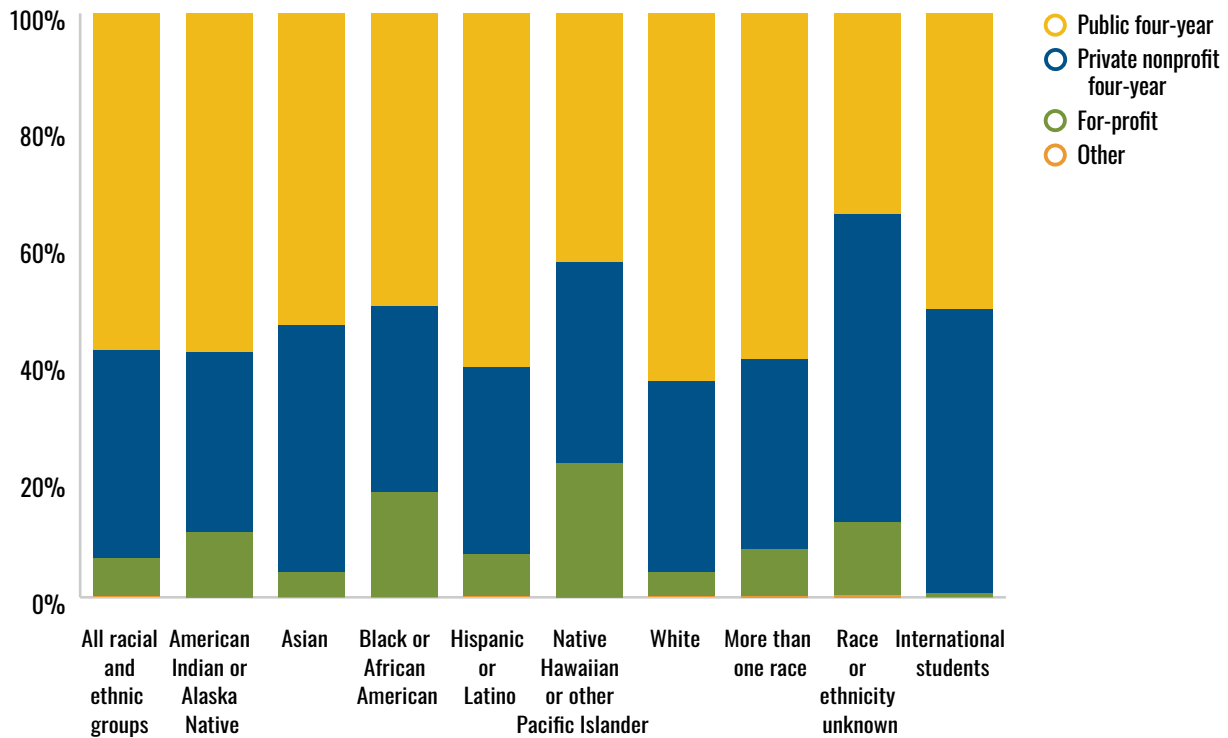


Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.
 Note: Data reflect postbaccalaureate certificates earned at all Title IV-eligible, degree-granting institutions.

Institutional Sector

Over half of all postbaccalaureate certificates were awarded at public four-year institutions (57.8 percent), and 35.5 percent at private nonprofit four-year institutions.

Figure 5.6: Postbaccalaureate Certificates Across Sectors, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

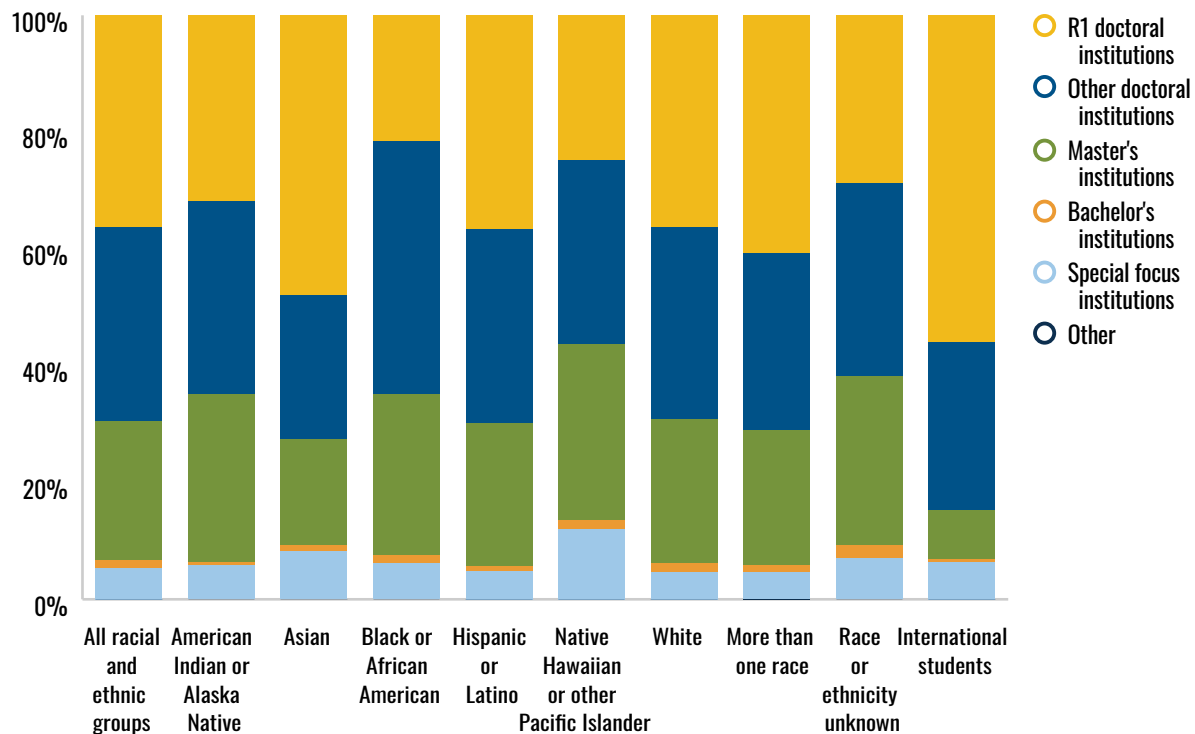
Notes: Data reflect postbaccalaureate certificates earned at Title IV–eligible, degree-granting public four-year, private nonprofit four-year, public two-year, and for-profit institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Other includes other types of institutions, as well as some cases of public two-year institutions that offer or confer postbaccalaureate certificates.

- More than 60 percent of White (62.9 percent) and Hispanic or Latino (60.6 percent) students earned a postbaccalaureate certificate at public four-year institutions, compared with 42.6 percent of Native Hawaiian or other Pacific Islander students.
- Larger shares of international (48.7 percent) and Asian (42.3 percent) students than those of other groups earned a postbaccalaureate certificate at private nonprofit four-year institutions.
- When considering students who completed a postbaccalaureate certificate at for-profit institutions, 23.0 percent of Native Hawaiian or other Pacific Islander students and 17.8 percent of Black or African American students earned degrees of this type. In contrast, 4.3 percent of Asian and White students and 0.7 percent of international students did so.

Carnegie Classification

R1 doctoral institutions (36.1 percent), other doctoral institutions (33.3 percent), and master's institutions (23.7 percent) awarded about 93 percent of all postbaccalaureate certificates earned in 2021 together. Special focus institutions and bachelor's institutions awarded 5.4 percent and 1.3 percent, respectively.

Figure 5.7: Postbaccalaureate Certificates Across Carnegie Classifications, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

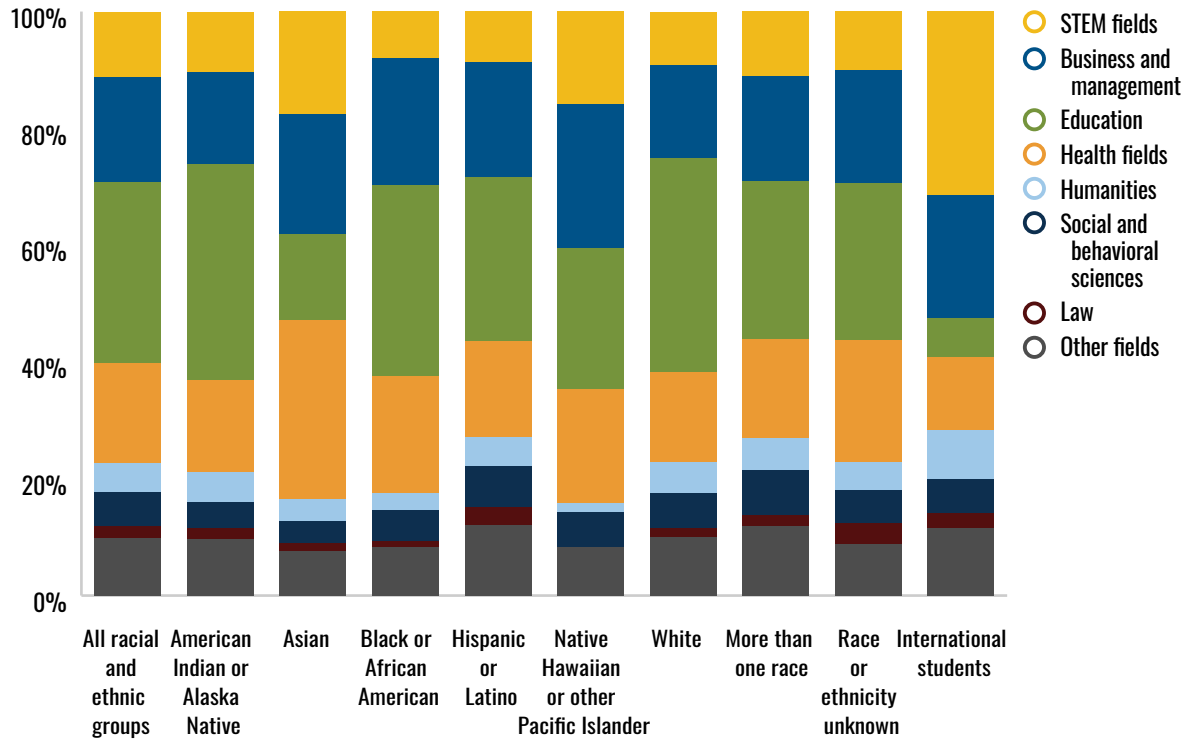
Notes: Data reflect postbaccalaureate certificates earned at all Title IV-eligible, degree-granting institutions, excluding institutions that were not classified by the Carnegie Classification system. | Other includes other types of institutions, as well as some cases of associate institutions and Tribal Colleges and Universities that offer or confer postbaccalaureate certificates.

- Of students who earned a postbaccalaureate certificate at R1 doctoral institutions, 56.0 percent of international students and 48.0 percent of Asian students did so, compared with 24.8 percent of Native Hawaiian or other Pacific Islander students and 21.6 percent of Black or African American students.
- Among Black or African American students who earned a postbaccalaureate certificate, the largest share graduated from other doctoral institutions (43.2 percent), followed by master's institutions (27.5 percent).
- When considering students who completed a postbaccalaureate certificate at master's institutions, 30.1 percent of Native Hawaiian or other Pacific Islander and 28.8 percent of American Indian or Alaska Native students did so, compared with only 8.5 percent of international students.
- Of the Native Hawaiian or other Pacific Islander students with postbaccalaureate certificates, 12.0 percent graduated from special focus institutions.
- In 2021, Tribal Colleges and Universities did not award any postbaccalaureate certificates.

Field of Study

The most popular field of study in which students earned postbaccalaureate certificates in 2021 was education (31.0 percent), followed by business and management (17.9 percent), health (17.2 percent), and STEM (11.3 percent) fields.

Figure 5.8: Postbaccalaureate Certificates Across Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

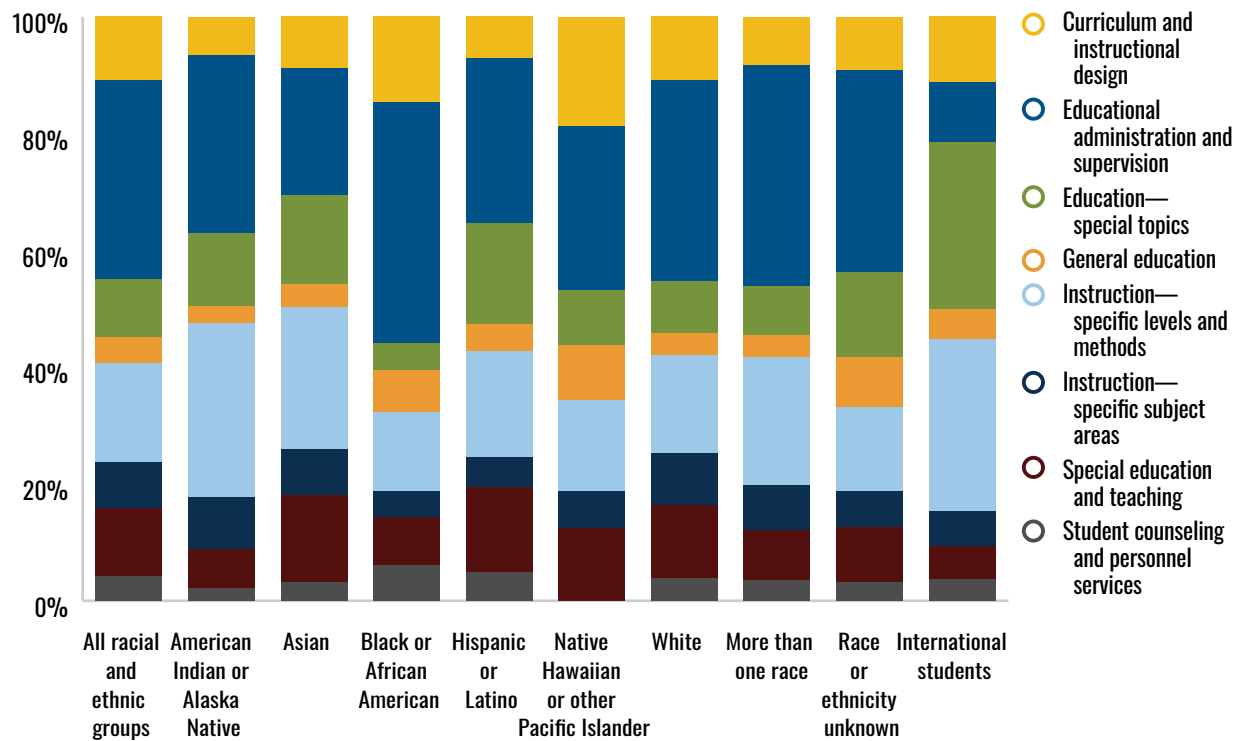
Notes: Data reflect postbaccalaureate certificates earned at all Title IV-eligible, degree-granting institutions. | STEM fields includes life and physical sciences, math, engineering, and computer science.

- Over one-third of all White (36.6 percent) and American Indian or Alaska Native (37.1 percent) students earned a postbaccalaureate certificate in education, compared with 14.8 percent of Asian students and 6.8 percent of international students.
- More than one in five Native Hawaiian or other Pacific Islander (24.8 percent), Black or African American (21.7 percent), international (20.9 percent), and Asian (20.4 percent) students earned a postbaccalaureate certificate in business and management.
- Of the Asian students who completed a postbaccalaureate certificate, 30.7 percent students did so in health.
- Nearly one-third of international students earned a postbaccalaureate certificate in STEM fields (31.5 percent). In contrast, fewer than 10 percent of White (9.2 percent), Hispanic or Latino (8.6 percent), and Black or African American (8.0 percent) students did so.

DETAILED FIELD OF STUDY: EDUCATION

In 2021, the primary field of study among postbaccalaureate certificate completers in education was educational administration and supervision (34.1 percent), followed by instruction—specific levels and methods (17.0 percent), special education and teaching (11.7 percent), curriculum and instructional design (10.8 percent), and education—special topics (9.9 percent).⁸

Figure 5.9: Postbaccalaureate Certificates in Education Across Detailed Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect postbaccalaureate certificates earned at all Title IV–eligible, degree-granting institutions. | *Curriculum and instructional design* includes curriculum and instruction; educational/instructional media design. | *Education—special topics* includes 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 levels and methods* includes teacher education and professional development, specific levels and methods. | *Instruction—specific subject areas* includes teacher education and professional development, specific subject areas.

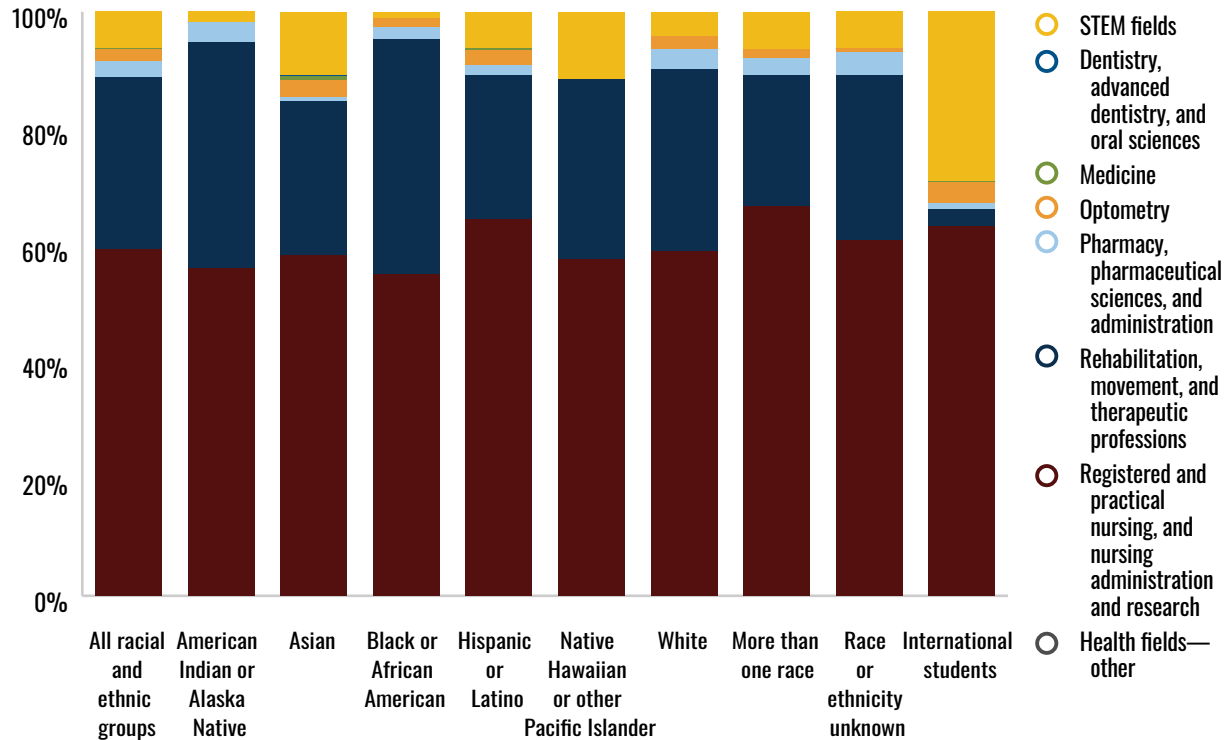
- Among Black or African American students who earned a postbaccalaureate certificate in education, 41.4 percent studied educational administration and supervision.
- About 30 percent of American Indian or Alaska Native (29.6 percent) and international (29.5 percent) students completed a certificate in instruction—specific levels and methods.
- Of students who earned a postbaccalaureate certificate in special education and teaching, 14.8 percent of Asian and 14.6 percent of Hispanic or Latino students did so, compared with 5.7 percent of international students.
- Nearly one in five Native Hawaiian or other Pacific Islander students (18.8 percent) earned a certificate in curriculum and instructional design.

8 *Instruction—specific levels and methods* included teacher education and professional development, specific levels and methods. *Curriculum and instructional design* included the curriculum and instruction as well as educational/instructional media design. *Education—special topics* included 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; and educational assessment, evaluation, and research.

DETAILED FIELD OF STUDY: HEALTH

The primary field of study among students who completed postbaccalaureate certificates in health fields was health fields—other (59.4 percent), followed by registered and practical nursing, and nursing administration and research (29.4 percent), and dentistry, advanced dentistry, and oral sciences (6.2 percent).⁹

Figure 5.10: Postbaccalaureate Certificates in Health Fields Across Detailed Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect postbaccalaureate certificates earned at all Title IV–eligible, degree-granting institutions. | *Health fields—other* includes 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. | Veterinary medicine, biomedical, and clinical sciences was no longer classified as a health care field in 2020 Classification of Institutional Programs (CIP) taxonomy. Veterinary fields of study were classified among agricultural, animal, plant, and veterinary sciences, which were included in STEM fields in this report.

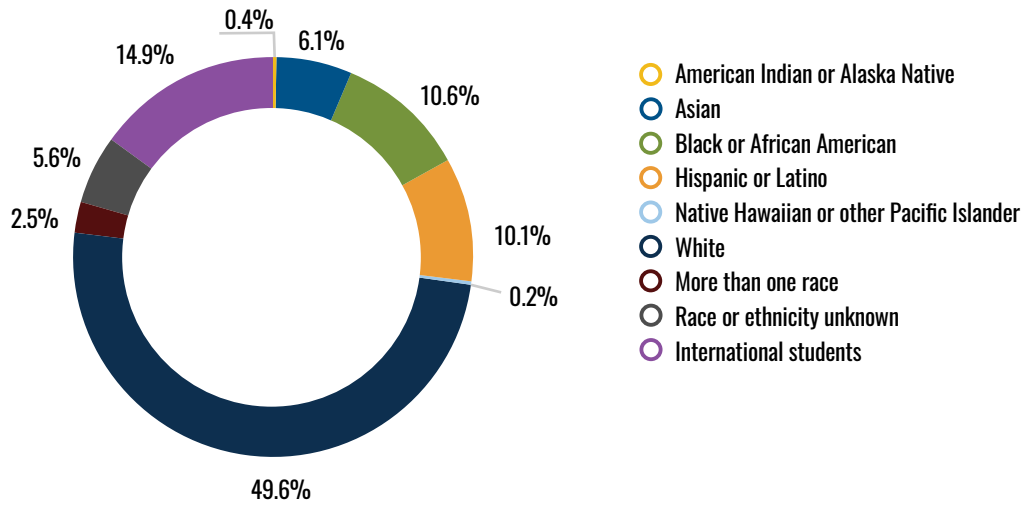
- Over two-thirds of multiracial students (66.8 percent) completed a certificate in health fields—other.
- About four in 10 Black or African American (40.3 percent) and American Indian or Alaska Native (38.6 percent) students earned a certificate in registered and practical nursing or nursing administration and research, while only 2.9 percent of international students did so.
- Twenty-nine percent of international students with postbaccalaureate certificates in health fields studied dentistry, advanced dentistry, and oral sciences, as did 11.5 percent of Native Hawaiian or other Pacific Islander students and 10.9 percent of Asian students. The shares of other groups who earned certificates in these fields were much smaller, ranging from 1.1 percent to 6.4 percent.

⁹ *Health fields—other* included 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; and podiatric medicine/podiatry.

Master's Degrees

Over 860,000 master's degrees were awarded in 2021. Of these, 49.6 percent were earned by White students, followed by international students (14.9 percent), Black or African American students (10.1 percent), Hispanic or Latino students (10.6 percent), Asian students (6.1 percent), students of unknown racial or ethnic background (5.6 percent), and multiracial students (2.5 percent). American Indian or Alaska Native students (0.4 percent), and Native Hawaiian or other Pacific Islander students (0.2 percent) represented fewer than 1 percent of all master's degree recipients.

Figure 5.11: Master's Degrees Across Race and Ethnicity: 2021

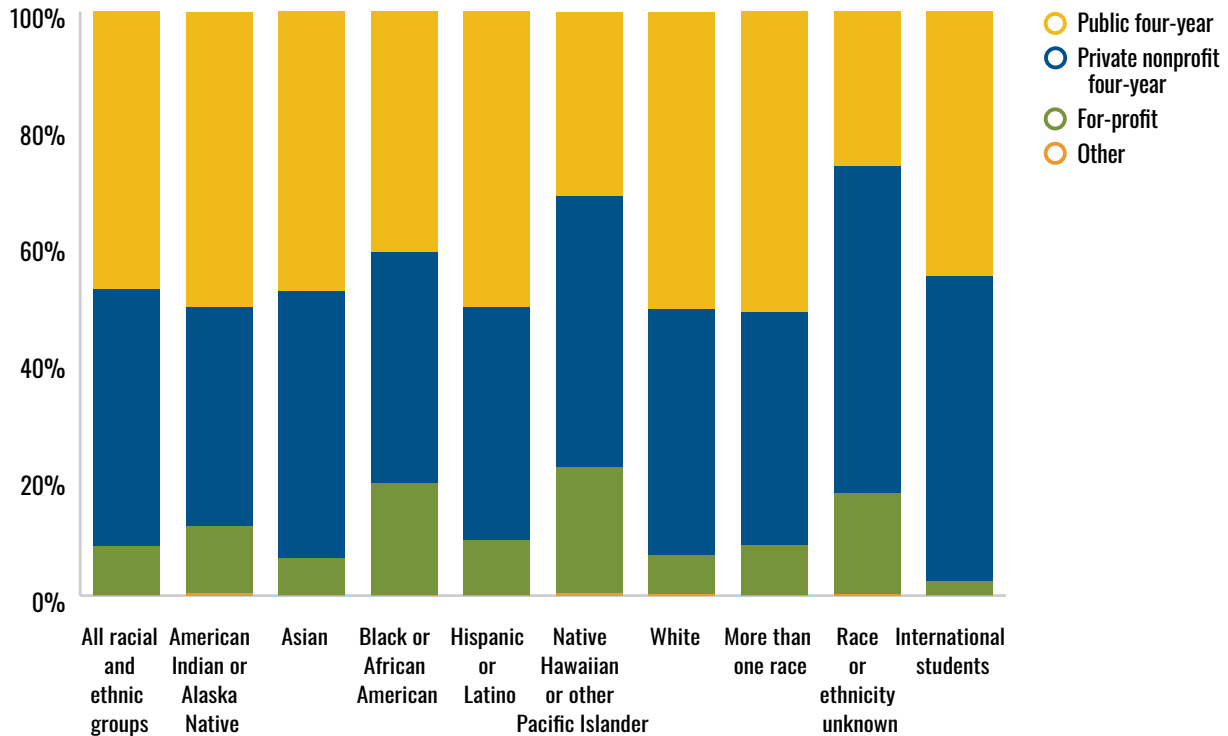


Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.
Note: Data reflect master's degrees earned at all Title IV-eligible, degree-granting institutions.

Institutional Sector

Of all master's degrees awarded in 2021, 47.5 percent were awarded at public four-year institutions, 44.1 percent at private nonprofit four-year institutions, and 8.3 percent at for-profit institutions.

Figure 5.12: Master's Degrees Across Sectors, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

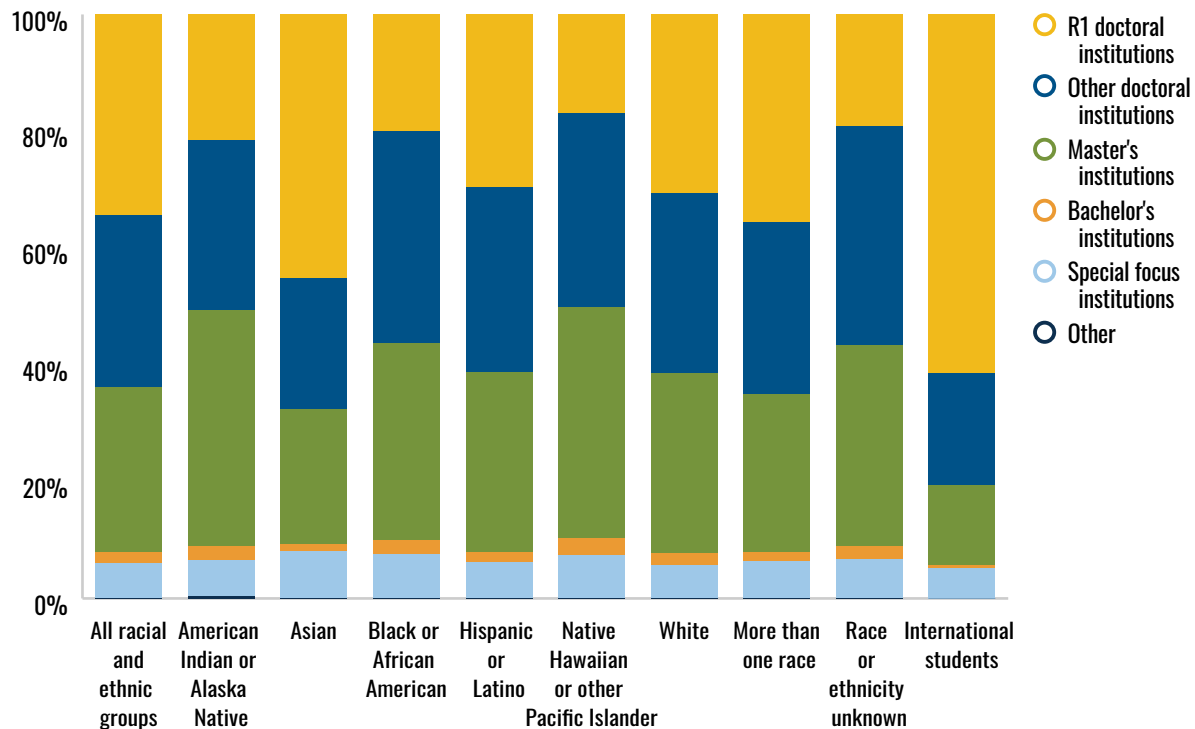
Notes: Data reflect master's degrees earned at Title IV-eligible, degree-granting public four-year, private nonprofit four-year, public two-year, and for-profit institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Other includes other types of institutions, including some cases of public two-year institutions that offer or confer graduate degrees.

- Over half of all multiracial (51.4 percent), White (51.0 percent), Hispanic or Latino (50.7 percent), and American Indian or Alaska Native (50.7 percent) students with a master's degree graduated from public four-year institutions.
- Over half of international students (52.1 percent) earned a master's degree at private nonprofit four-year institutions.
- About one in five Native Hawaiian or other Pacific Islander (21.5 percent) and Black or African American (19.1 percent) students earned a master's degree at for-profit institutions. In contrast, much smaller percentages of White (6.7 percent), Asian (6.4 percent), and international (2.5 percent) students did so.

Carnegie Classification

Most master's degrees completed in 2021 were awarded at R1 doctoral institutions (34.3 percent), other doctoral institutions (29.6 percent), or master's institutions (28.3 percent).

Figure 5.13: Master's Degrees Across Carnegie Classifications, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

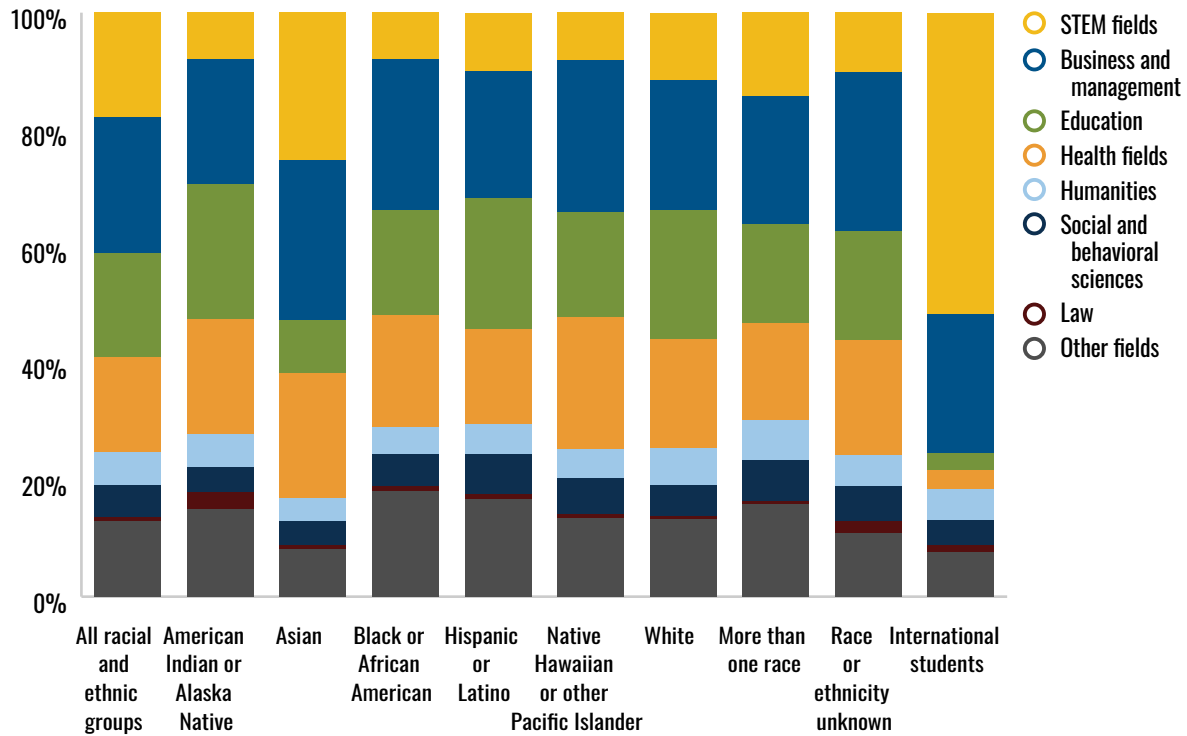
Notes: Data reflect master's degrees earned at all Title IV-eligible, degree-granting institutions that were classified by the 2018 Carnegie Basic Classification. | Other includes other types of institutions, including some cases of associate institutions and Tribal Colleges and Universities that offer or confer graduate degrees.

- Of students who graduated with a master's degree from R1 doctoral institutions, 61.4 percent of international students and 45.1 percent of Asian students did so.
- About one-third of Black or African American (36.3 percent) and Native Hawaiian or other Pacific Islander (33.2 percent) students earned a master's degree at other doctoral institutions.
- When considering students who completed a master's degree at master's institutions, 40.5 percent of American Indian or Alaska Native and 39.6 percent of Native Hawaiian or other Pacific Islander did so.

Field of Study

The primary fields in which students completed master's degrees in 2021 were business and management (23.3 percent), STEM (17.9 percent), education (17.7 percent), and health (16.4 percent).

Figure 5.14: Master's Degrees Across Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

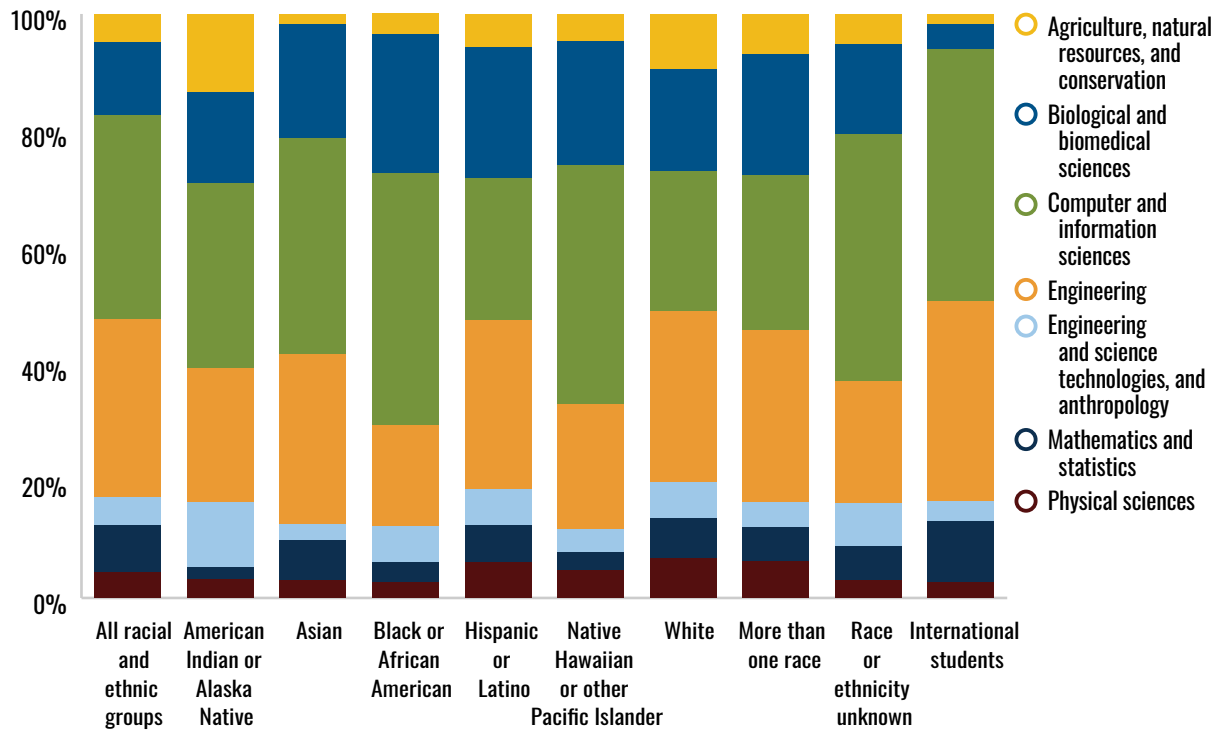
Notes: Data reflect master's degrees earned at all Title IV-eligible, degree-granting institutions. | STEM fields includes life and physical sciences, math, engineering, and computer science.

- Over a quarter of Asian (27.4 percent), Native Hawaiian or other Pacific Islander (26.0 percent), and Black or African American (25.8 percent) students earned a master's degree in business and management.
- Over half of international students (51.7 percent) earned a master's degree in STEM fields. This was the only group for which STEM was the top field of study.
- More than one in five American Indian or Alaska Native (23.1 percent), Hispanic or Latino (22.5 percent), and White (22.2 percent) students earned a master's degree in education. In contrast, 9.1 percent of Asian students and 2.8 percent of international students did so.
- Larger shares of domestic student groups studied health fields when completing master's degrees, ranging from 16.3 percent of Hispanic or Latino students to 22.8 percent of Native Hawaiian or other Pacific Islander students, compared with 3.3 percent of international students.

DETAILED FIELD OF STUDY: STEM

Among all master's degrees earned in STEM fields in 2021, the primary fields of study were computer and information sciences (35.0 percent); engineering (30.5 percent); and biological and biomedical sciences (12.5 percent).

Figure 5.15: Master's Degrees in STEM Fields Across Detailed Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

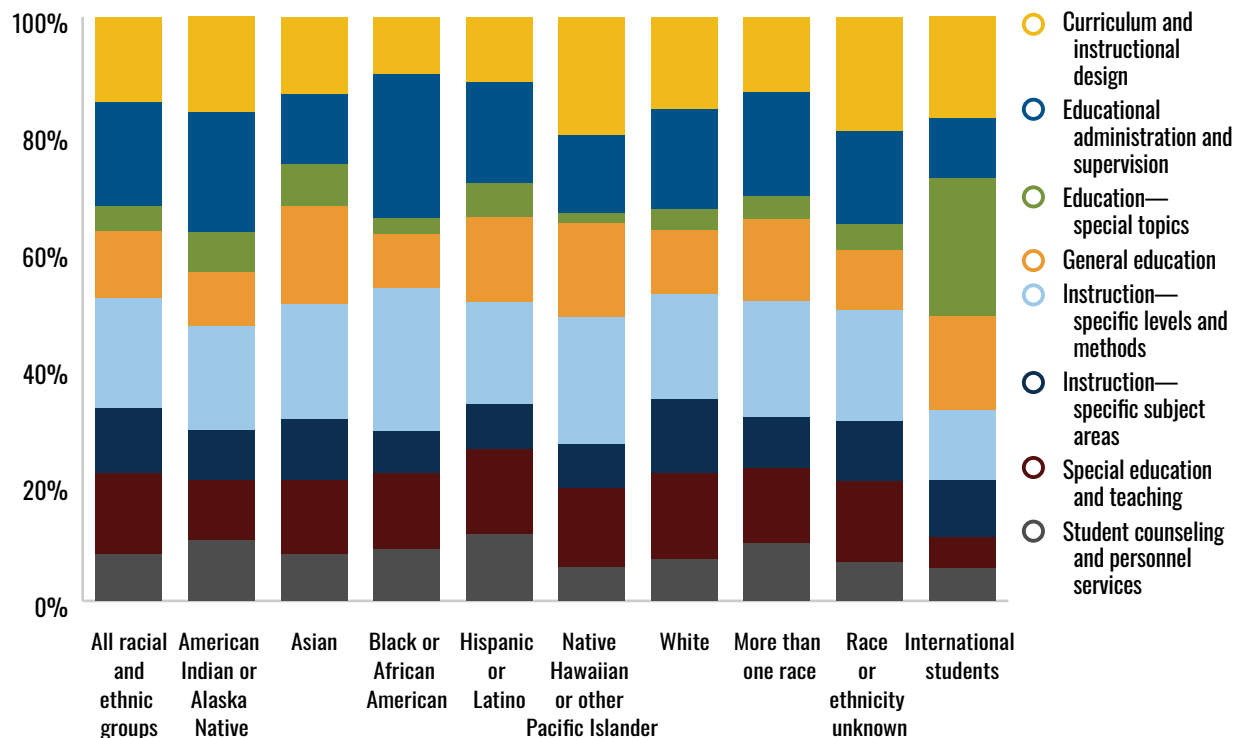
Notes: Data reflect master's degrees in STEM fields earned at all Title IV-eligible, degree-granting institutions. | *Agriculture, natural resources, and conservation* includes agriculture and related sciences; natural resources and conservation. Veterinary medicine and veterinary biomedical and clinical sciences, previously classified as a health care field in the 2010 Classification of Institutional Programs (CIP), were classified with agriculture and related sciences in the 2020 CIP used in this report. | *Engineering and science technologies, and anthropology* includes engineering technologies/technicians; science technologies/technicians; anthropology.

- More than 40 percent of Black or African American (43.3 percent), international (43.0 percent), and Native Hawaiian or other Pacific Islander (40.9 percent) students with a STEM master's degree studied computer and information sciences. In contrast, around a quarter of multiracial (26.7 percent), Hispanic or Latino (24.4 percent), and White (24.1 percent) students did so.
- Of students who earned a STEM master's degree in engineering, 34.2 percent of international students did so, compared with 17.1 percent of Black or African American students.
- Nearly a quarter of Black or African American students (23.8 percent) earned a STEM master's degree in biological and biomedical sciences. In contrast, only 4.4 percent of international students did so.

DETAILED FIELD OF STUDY: EDUCATION

In 2021, the primary fields of study among master's degree recipients in education were instruction—specific levels and methods (18.7 percent); educational administration and supervision (17.6 percent); curriculum and instructional design (14.7 percent); and special education and teaching (14.0 percent).

Figure 5.16: Master's Degrees in Education Across Detailed Fields of Study, by Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

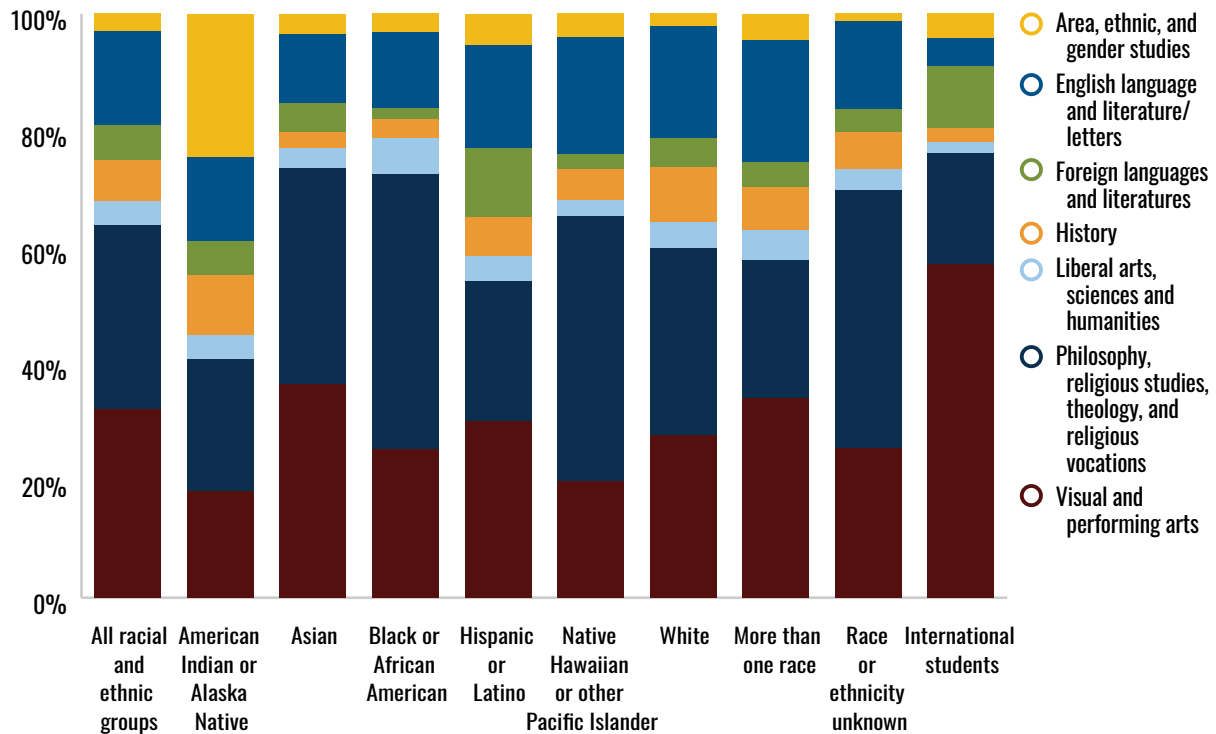
Notes: Data reflect master's degrees in education earned at all Title IV–eligible, degree-granting institutions. | *Curriculum and instructional design* includes curriculum and instruction; educational/instructional media design. | *Education—special topics* includes bilingual, multilingual, and multicultural 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 levels and methods* includes the following field of study: teacher education and professional development, specific levels and methods. | *Instruction—specific subject areas* includes the following field of study: teacher education and professional development, specific subject areas.

- A majority of Black or African American students who earned education master's degrees studied instruction—specific levels and methods (24.5 percent) or educational administration and supervision (24.7 percent).
- About one in five Native Hawaiian or other Pacific Islander students (20.4 percent) earned an education master's degree in curriculum and instructional design, while 9.9 percent of Black or African American students did so.
- Of students who earned an education master's degree in special education, only 5.4 percent of international students did so, versus more than 10 percent each of all domestic student groups.

DETAILED FIELD OF STUDY: HUMANITIES

In 2021, the primary fields of study among master's recipients in the humanities were visual and performing arts (32.3 percent); philosophy, religious, studies, theology, and religious vocations (31.4 percent); and English language and literature/ letters (16.1 percent).

Figure 5.17: Master's Degrees in Humanities Across Detailed Fields of Study, by Race and Ethnicity: 2021



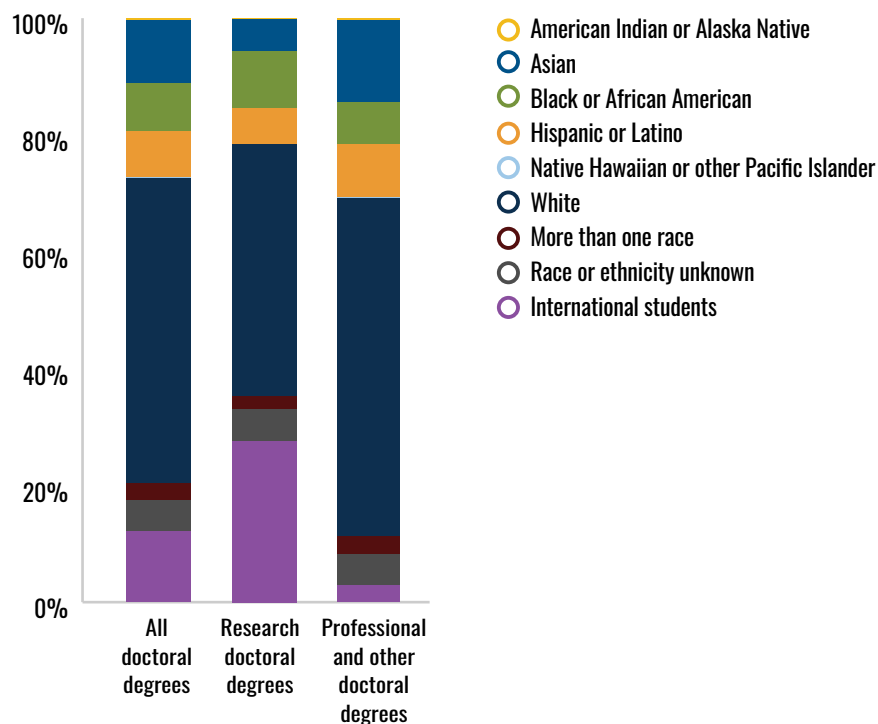
Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.
 Note: Data reflect master's degrees in humanities earned at all Title IV-eligible, degree-granting institutions.

- Over half of all international students with a master's degree in humanities studied visual and performing arts (57.0 percent).
- Nearly half of Black or African American (47.0 percent) and Native Hawaiian or other Pacific Islander (45.3 percent) students earned a humanities master's degree in philosophy, religious studies, theology, or religious vocations.
- About one in five multiracial (20.8 percent) and Native Hawaiian or other Pacific Islander (20.0 percent) students earned a humanities master's degree in English language and literature/letters, as did 11.8 percent of Asian students and 4.8 percent of international students.

Doctoral Degrees

In 2021, over 194,000 doctoral degrees were awarded. Of these, about one-third (37.3 percent) were research doctoral degrees and the remaining two-thirds (62.7 percent) were professional or other doctoral degrees.

Figure 5.18: Doctoral Degrees Across Race and Ethnicity: 2021



Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Note: Data reflect doctoral degrees earned at all Title IV-eligible, degree-granting institutions.

- The majority of all doctoral degrees were earned by White students (52.3 percent), followed by international students (12.1 percent), Asian students (10.8 percent), Black or African American students (8.2 percent), Hispanic or Latino students (8.0 percent), students of unknown racial or ethnic background (5.4 percent), and multiracial students (2.8 percent). American Indian or Alaska Native (0.3 percent) and Native Hawaiian or other Pacific Islander (0.1 percent) students represented fewer than 1 percent of all doctoral degree recipients.
- White students earned 43.1 percent of research doctoral degrees in 2021. International students represented 27.6 percent of research doctoral degree recipients, followed by Black or African American students (9.8 percent), Hispanic or Latino students (6.1 percent), students of unknown race or ethnicity (5.5 percent), Asian students (5.3 percent), multiracial students (2.2 percent), American Indian or Alaska Native students (0.3 percent), and Native Hawaiian or other Pacific Islander students (0.1 percent).
- Among professional and other doctoral degree recipients in 2021, 57.8 percent were White students, followed by Asian students (14.0 percent), Hispanic or Latino students (9.1 percent), Black or African American students (7.2 percent), students of unknown race or ethnicity (5.3 percent), multiracial students (3.2 percent), international students (2.9 percent), American Indian or Alaska Native students (0.4 percent), and Native Hawaiian or other Pacific Islander students (0.1 percent).

Institutional Sector

Of all doctoral degrees conferred in 2021, more than half (52.9 percent) were awarded at public four-year institutions, 41.9 percent at private nonprofit four-year institutions, and 5.2 percent at for-profit institutions. For research doctoral degrees, 60.0 percent were awarded at public four-year institutions, 33.0 percent at private nonprofit four-year institutions, and 7.0 percent at for-profit institutions. Similar shares of professional or other doctoral degrees were awarded at public four-year (48.2 percent) and at private nonprofit four-year (47.9 percent). In contrast, for-profit institutions awarded only 4.0 percent of such degrees.

Table 5.8: Doctoral Degrees Across Sectors, by Race and Ethnicity: 2021

	Public Four-Year	Private Nonprofit Four-Year	For-Profit	Total	
All Doctoral Degrees	All racial and ethnic groups	52.9%	41.9%	5.2%	100%
	American Indian or Alaska Native	54.1%	38.9%	7.0%	100%
	Asian	48.9%	46.7%	4.4%	100%
	Black or African American	40.9%	44.0%	15.1%	100%
	Hispanic or Latino	49.3%	45.7%	5.0%	100%
	Native Hawaiian or other Pacific Islander	36.1%	43.5%	20.4%	100%
	White	54.2%	41.7%	4.2%	100%
	More than one race	54.3%	39.4%	6.3%	100%
	Race or ethnicity unknown	38.1%	50.2%	11.7%	100%
	International students	67.0%	32.4%	0.6%	100%
Research Doctoral Degrees	All racial and ethnic groups	60.0%	33.0%	7.0%	100%
	American Indian or Alaska Native	54.1%	32.1%	13.8%	100%
	Asian	56.4%	38.2%	5.4%	100%
	Black or African American	37.1%	38.1%	24.8%	100%
	Hispanic or Latino	57.0%	36.2%	6.7%	100%
	Native Hawaiian or other Pacific Islander	35.0%	38.8%	26.3%	100%
	White	61.4%	32.9%	5.7%	100%
	More than one race	59.1%	31.7%	9.2%	100%
	Race or ethnicity unknown	36.3%	45.1%	18.6%	100%
	International students	72.1%	27.4%	0.5%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	48.2%	47.9%	4.0%	100%
	American Indian or Alaska Native	54.1%	42.1%	3.7%	100%
	Asian	46.9%	48.9%	4.2%	100%
	Black or African American	44.3%	49.5%	6.3%	100%
	Hispanic or Latino	45.8%	50.0%	4.2%	100%
	Native Hawaiian or other Pacific Islander	36.8%	46.3%	16.9%	100%
	White	50.6%	46.0%	3.4%	100%
	More than one race	52.0%	43.1%	4.9%	100%
	Race or ethnicity unknown	39.3%	53.7%	7.0%	100%
	International students	34.2%	64.8%	1.0%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect doctoral degrees earned at Title IV-eligible, public four-year, private nonprofit four-year, and for-profit institutions. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Among research doctoral degree recipients, the majority of international students graduated from public four-year institutions (72.1 percent), while about one-third of Black or African American (37.1 percent) and Native Hawaiian or other Pacific Islander (35.0 percent) students did so.
- About a quarter of Native Hawaiian or other Pacific Islander (26.3 percent) and Black or African American (24.8 percent) students with a research doctoral degree graduated from for-profit institutions. In contrast, only 5.7 percent of White students, 5.4 percent of Asian students, and 0.5 percent of international students did so.
- Among professional or other doctoral degrees recipients, the majority of international students (64.8 percent) graduated from private nonprofit four-year institutions, whereas the majority of American Indian or Alaska Native (54.1 percent), multiracial (52.0 percent), and White (50.6 percent) students earned a degree at public four-year institutions.
- Of students who graduated with a professional or other doctoral degree from for-profit institutions, 16.9 percent of Native Hawaiian or other Pacific Islander students and fewer than 7 percent of all other student groups did so. Only 1.0 percent of international students who earned a professional or other doctoral degree graduated from for-profit institutions.

Carnegie Classification

Among all doctoral degrees earned in 2021, nearly half were awarded at R1 doctoral institutions (47.6 percent), followed by other doctoral institutions (27.9 percent), special focus institutions (17.8 percent), master's institutions (5.8 percent), and bachelor's institutions (0.9 percent). Among research doctoral degrees, nearly two-thirds of them were awarded at R1 doctoral institutions (63.4 percent), 28.6 percent at other doctoral institutions, 4.2 percent at special focus institutions, 3.6 percent at master's institutions, and 0.2 percent at bachelor's institutions. For professional or other doctoral degrees, over one-third of them were awarded at R1 doctoral institutions (38.2 percent), followed by other doctoral institutions (27.5 percent), special focus institutions (25.9 percent), master's institutions (7.1 percent), and bachelor's institutions (1.3 percent).

Table 5.9: Doctoral Degrees Across Carnegie Classifications, by Race and Ethnicity: 2021

		R1 Doctoral Institutions	Other Doctoral Institutions	Master's Institutions	Bachelor's Institutions	Special Focus Institutions	Total
All Doctoral Degrees	All racial and ethnic groups	47.6%	27.9%	5.8%	0.9%	17.8%	100%
	American Indian or Alaska Native	41.7%	31.1%	7.6%	1.7%	17.9%	100%
	Asian	45.3%	21.6%	4.5%	0.5%	28.1%	100%
	Black or African American	29.0%	43.9%	9.5%	0.9%	16.8%	100%
	Hispanic or Latino	44.6%	27.8%	5.9%	0.6%	21.1%	100%
	Native Hawaiian or other Pacific Islander	30.3%	35.6%	3.4%	1.5%	29.1%	100%
	White	45.5%	29.0%	6.3%	1.1%	18.1%	100%
	More than one race	47.7%	24.9%	4.4%	0.9%	22.1%	100%
	Race or ethnicity unknown	39.4%	34.8%	8.8%	1.2%	15.8%	100%
	International students	77.4%	15.7%	1.2%	0.2%	5.4%	100%
Research Doctoral Degrees	All racial and ethnic groups	63.4%	28.6%	3.6%	0.2%	4.2%	100%
	American Indian or Alaska Native	49.5%	42.1%	5.0%	1.0%	2.5%	100%
	Asian	69.9%	21.4%	2.0%	0.1%	6.5%	100%
	Black or African American	27.2%	58.3%	9.0%	0.5%	5.0%	100%
	Hispanic or Latino	58.4%	31.2%	4.0%	0.1%	6.2%	100%
	Native Hawaiian or other Pacific Islander	37.6%	60.0%	0.0%	0.0%	2.4%	100%
	White	61.4%	29.3%	4.2%	0.3%	4.9%	100%
	More than one race	63.4%	28.1%	3.7%	0.2%	4.6%	100%
	Race or ethnicity unknown	44.2%	45.5%	6.2%	0.5%	3.6%	100%
	International students	83.2%	14.1%	0.5%	0.1%	2.1%	100%

		R1 Doctoral Institutions	Other Doctoral Institutions	Master's Institutions	Bachelor's Institutions	Special Focus Institutions	Total
Professional and Other Doctoral Degrees	All racial and ethnic groups	38.2%	27.5%	7.1%	1.3%	25.9%	100%
	American Indian or Alaska Native	38.2%	26.1%	8.8%	2.0%	24.9%	100%
	Asian	39.7%	21.7%	5.1%	0.6%	33.0%	100%
	Black or African American	30.4%	32.2%	9.9%	1.2%	26.4%	100%
	Hispanic or Latino	39.0%	26.4%	6.7%	0.8%	27.1%	100%
	Native Hawaiian or other Pacific Islander	26.7%	23.9%	5.1%	2.3%	42.0%	100%
	White	38.4%	28.8%	7.2%	1.5%	24.1%	100%
	More than one race	41.2%	23.6%	4.7%	1.2%	29.4%	100%
	Race or ethnicity unknown	36.3%	28.2%	10.4%	1.7%	23.4%	100%
	International students	44.0%	25.1%	5.0%	1.1%	24.7%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Note: Data reflect doctoral degrees earned at all Title IV–eligible, degree-granting institutions that were classified by the 2018 Carnegie Basic Classification.

- Among research doctoral degree recipients, the majority of international (83.2 percent), Asian (69.9 percent), multiracial (63.4 percent), White (61.4 percent), and Hispanic or Latino (58.4 percent) students earned a degree at R1 doctoral institutions. In contrast, the majority of Native Hawaiian or other Pacific Islander (60.0 percent) and Black or African American (58.3 percent) students who earned a research doctoral degree graduated from other doctoral institutions.
- Among professional and other doctoral degree recipients, 44.0 percent of international students and 41.2 percent of multiracial students graduated from R1 doctoral institutions, while 26.7 percent of Native Hawaiian or other Pacific Islander students did so.
- Nearly one-third of Black or African American students (32.2 percent) with professional or other doctoral degrees earned a degree from other doctoral institutions.
- When considering students who completed professional or other doctoral degrees at special focus institutions, 42.0 percent of Native Hawaiian or other Pacific Islander students did so.

Field of Study

The primary fields in which students earned doctoral degrees in 2021 were health fields (44.1 percent), law (18.5 percent), and STEM fields (17.6 percent). The primary fields for research doctoral degrees were STEM (42.3 percent) and education (17.7 percent), while health (64.2 percent) and law (29.4 percent) were the primary fields for professional or other doctoral degrees.

Table 5.10: Doctoral Degrees Across Fields of Study, by Race and Ethnicity: 2021

		Business and Management	Education	Health Fields	Humanities	Law	Social and Behavioral Sciences	STEM Fields	Other Fields	Total
All Doctoral Degrees	All racial and ethnic groups	1.9%	7.0%	44.1%	3.9%	18.5%	4.8%	17.6%	2.1%	100%
	American Indian or Alaska Native	1.8%	10.3%	40.2%	4.1%	26.7%	5.7%	8.4%	2.6%	100%
	Asian	0.7%	2.3%	71.3%	1.9%	10.8%	2.3%	9.8%	0.9%	100%
	Black or African American	5.3%	18.8%	40.5%	4.4%	16.8%	5.1%	5.2%	3.9%	100%
	Hispanic or Latino	1.3%	7.6%	43.4%	3.2%	27.1%	5.0%	10.6%	1.8%	100%
	Native Hawaiian or other Pacific Islander	1.1%	14.6%	52.1%	3.1%	15.7%	4.2%	5.7%	3.4%	100%
	White	1.2%	6.8%	46.1%	3.7%	22.3%	4.7%	13.3%	1.8%	100%
	More than one race	1.4%	5.8%	47.9%	2.9%	22.1%	5.1%	12.7%	2.1%	100%
	Race or ethnicity unknown	4.8%	9.0%	47.5%	4.2%	14.2%	5.4%	12.4%	2.4%	100%
	International students	3.0%	3.2%	11.5%	6.4%	5.7%	6.8%	59.8%	3.5%	100%
Research Doctoral Degrees	All racial and ethnic groups	4.7%	17.7%	10.3%	8.6%	0.2%	10.8%	42.3%	5.3%	100%
	American Indian or Alaska Native	5.9%	30.0%	10.8%	10.8%	0.0%	15.3%	20.7%	6.4%	100%
	Asian	3.4%	10.8%	15.8%	7.5%	0.1%	9.9%	48.4%	4.3%	100%
	Black or African American	10.6%	40.4%	15.9%	5.6%	0.1%	9.5%	10.0%	7.8%	100%
	Hispanic or Latino	4.3%	24.2%	11.2%	9.6%	0.02%	14.2%	31.0%	5.4%	100%
	Native Hawaiian or other Pacific Islander	3.5%	38.8%	18.8%	7.1%	0.0%	11.8%	12.9%	7.1%	100%
	White	3.6%	20.6%	12.2%	10.5%	0.04%	12.3%	35.3%	5.5%	100%
	More than one race	4.2%	18.5%	10.1%	9.1%	0.1%	14.3%	36.8%	6.9%	100%
	Race or ethnicity unknown	10.9%	22.6%	13.6%	9.2%	0.1%	11.6%	26.4%	5.5%	100%
	International students	3.5%	3.6%	3.4%	6.6%	0.7%	7.8%	70.2%	4.1%	100%
Professional and Other Doctoral Degrees	All racial and ethnic groups	0.2%	0.7%	64.2%	1.0%	29.4%	1.2%	2.9%	0.3%	100%
	American Indian or Alaska Native	0.0%	1.3%	53.6%	1.1%	38.8%	1.3%	2.9%	0.9%	100%
	Asian	0.1%	0.4%	83.9%	0.7%	13.3%	0.5%	1.1%	0.2%	100%
	Black or African American	0.9%	1.3%	60.6%	3.3%	30.3%	1.5%	1.3%	0.8%	100%
	Hispanic or Latino	0.1%	1.0%	56.2%	0.6%	37.9%	1.3%	2.5%	0.4%	100%
	Native Hawaiian or other Pacific Islander	0.0%	2.8%	68.2%	1.1%	23.3%	0.6%	2.3%	1.7%	100%
	White	0.2%	0.7%	61.2%	0.7%	32.2%	1.3%	3.6%	0.2%	100%
	More than one race	0.3%	0.6%	63.4%	0.3%	31.2%	1.4%	2.8%	0.1%	100%
	Race or ethnicity unknown	1.0%	0.7%	68.3%	1.2%	22.9%	1.5%	3.8%	0.6%	100%
	International students	0.1%	0.6%	58.0%	5.0%	34.3%	1.0%	0.7%	0.2%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect doctoral degrees earned at all Title IV-eligible, degree-granting institutions. | STEM fields includes life and physical sciences, math, engineering, and computer science.

- Among research doctoral degree recipients, 70.2 percent of international students earned a degree in STEM fields, while 12.9 percent of Native Hawaiian or other Pacific Islander students and 10.0 percent of Black or African American students did so.
- Of students with a research doctoral degree who studied education, 40.4 percent of Black or African American and 38.8 percent of Native Hawaiian or other Pacific Islander did so, versus 10.8 percent of Asian students and 3.6 percent of international students.
- Among professional and other doctoral degree recipients, 83.9 percent of Asian students studied health fields.
- Nearly four in 10 American Indian or Alaska Native (38.8 percent) and Hispanic or Latino (37.9 percent) students earned a professional or other doctoral degree in law, while 13.3 percent of Asian students did so.

DETAILED FIELD OF STUDY: STEM

Among all doctoral degrees earned in STEM fields in 2021, the primary fields of study were engineering (31.9 percent), biological and biomedical sciences (21.9 percent), and physical sciences (16.7 percent). Those three detailed fields were particularly popular for research doctoral degree recipients. In contrast, almost all professional or other doctoral degrees awarded in STEM in 2021 were in agriculture, natural resources, and conservation (96.0 percent).

Table 5.11: Doctoral Degrees in STEM Fields Across Detailed Fields of Study, by Race and Ethnicity: 2021

		Agriculture, Natural Resources, and Conservation	Biological and Biomedical Sciences	Computer and Information Sciences	Engineering	Engineering and Science Technologies, and Anthropology	Mathematics and Statistics	Physical Sciences	Total
All Doctoral Degrees in STEM Fields	All racial and ethnic groups	14.3%	21.9%	7.5%	31.9%	2.0%	5.7%	16.7%	100%
	American Indian or Alaska Native	29.1%	32.7%	1.8%	14.5%	5.5%	1.8%	14.5%	100%
	Asian	10.2%	30.6%	7.8%	30.9%	2.5%	5.0%	12.8%	100%
	Black or African American	15.7%	30.5%	15.4%	20.3%	3.0%	3.0%	12.1%	100%
	Hispanic or Latino	20.0%	32.1%	4.2%	21.0%	2.3%	4.3%	16.2%	100%
	Native Hawaiian or other Pacific Islander	26.7%	33.3%	6.7%	20.0%	6.7%	0.0%	6.7%	100%
	White	23.6%	27.4%	4.2%	20.2%	2.2%	4.5%	17.9%	100%
	More than one race	18.4%	29.0%	3.9%	23.8%	2.5%	4.5%	17.9%	100%
	Race or ethnicity unknown	19.5%	24.9%	10.3%	23.5%	4.5%	3.8%	13.5%	100%
	International students	4.3%	13.0%	10.5%	46.5%	1.3%	7.6%	16.8%	100%
Research Doctoral Degrees in STEM Fields	All racial and ethnic groups	5.0%	24.4%	8.2%	35.5%	2.0%	6.4%	18.6%	100%
	American Indian or Alaska Native	11.9%	42.9%	0.0%	19.0%	4.8%	2.4%	19.0%	100%
	Asian	2.5%	33.6%	8.2%	33.9%	2.2%	5.5%	14.1%	100%
	Black or African American	5.6%	35.2%	16.2%	23.4%	2.1%	3.5%	14.0%	100%
	Hispanic or Latino	4.2%	38.5%	4.8%	25.2%	2.7%	5.1%	19.4%	100%
	Native Hawaiian or other Pacific Islander	0.0%	45.5%	9.1%	27.3%	9.1%	0.0%	9.1%	100%
	White	6.5%	33.6%	5.1%	24.8%	2.6%	5.6%	22.0%	100%
	More than one race	3.8%	34.2%	4.5%	28.2%	2.9%	5.3%	21.1%	100%
	Race or ethnicity unknown	4.3%	30.8%	9.7%	29.0%	4.8%	4.7%	16.7%	100%
	International students	4.2%	13.0%	10.6%	46.6%	1.2%	7.6%	16.8%	100%

		Agriculture, Natural Resources, and Conservation	Biological and Biomedical Sciences	Computer and Information Sciences	Engineering	Engineering and Science Technologies, and Anthropology	Mathematics and Statistics	Physical Sciences	Total
Professional and Other Doctoral Degrees in STEM Fields	All racial and ethnic groups	96.0%	0.3%	2.0%	0.1%	1.5%	-	-	100%
	American Indian or Alaska Native	84.6%	0.0%	7.7%	0.0%	7.7%	-	-	100%
	Asian	91.1%	0.0%	3.3%	0.0%	5.6%	-	-	100%
	Black or African American	79.6%	0.9%	9.7%	0.9%	8.8%	-	-	100%
	Hispanic or Latino	98.9%	0.0%	1.1%	0.0%	0.0%	-	-	100%
	Native Hawaiian or other Pacific Islander	100.0%	0.0%	0.0%	0.0%	0.0%	-	-	100%
	White	98.1%	0.4%	0.6%	0.2%	0.8%	-	-	100%
	More than one race	98.1%	0.9%	0.9%	0.0%	0.0%	-	-	100%
	Race or ethnicity unknown	83.8%	0.0%	13.0%	0.0%	3.2%	-	-	100%
	International students	80.0%	0.0%	0.0%	0.0%	20.0%	-	-	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect doctoral degrees in STEM fields earned at all Title IV-eligible, degree-granting institutions. | *Agriculture, natural resources, and conservation* includes agriculture and related sciences; natural resources and conservation. Veterinary medicine and veterinary biomedical and clinical sciences, previously classified as a health care field in the 2010 Classification of Institutional Programs (CIP), were classified with agriculture and related sciences in the 2020 CIP used in this report. | *Engineering and science technologies and anthropology* includes engineering technologies/technicians; science technologies/technicians; anthropology.

- Among STEM research doctoral degree recipients, engineering was the top field of study for international (46.6 percent) and Asian (33.9 percent) students. For all other groups, biological and biomedical sciences was the most chosen field.
- Nearly all STEM professional or other doctoral degrees earned in 2021 by Native Hawaiian or other Pacific Islander (100.0 percent), Hispanic or Latino (98.9 percent), multiracial (98.1 percent), and White (98.1 percent) students were in agriculture, natural resources, and conservation.

DETAILED FIELD OF STUDY: EDUCATION

The primary fields of study among education doctoral degree recipients in 2021 were educational administration and supervision (54.8 percent), followed by general education (15.9 percent); and curriculum and instructional design (11.8 percent). Over half of education research doctoral degrees (53.4 percent) and nearly three-quarters of education professional or other doctoral degrees (74.6 percent) earned in 2021 were in educational administration and supervision.

Table 5.12: Doctoral Degrees in Education Across Detailed Fields of Study, by Race and Ethnicity: 2021

		Curriculum and Instructional Design	Educational Administration and Supervision	Education—Special Topics	General Education	Instruction—Specific Subject Areas, Specific Levels, and Methods	Student Counseling and Personnel Services	Total
All Doctoral Degrees in Education	All racial and ethnic groups	11.8%	54.8%	6.3%	15.9%	8.2%	3.0%	100%
	American Indian or Alaska Native	11.9%	58.2%	6.0%	14.9%	7.5%	1.5%	100%
	Asian	11.2%	50.3%	6.0%	17.3%	12.1%	3.1%	100%
	Black or African American	8.2%	60.6%	5.0%	17.9%	5.8%	2.4%	100%
	Hispanic or Latino	8.8%	56.5%	5.4%	20.9%	5.4%	3.1%	100%
	Native Hawaiian or other Pacific Islander	2.6%	42.1%	2.6%	47.4%	2.6%	2.6%	100%
	White	12.5%	55.7%	6.2%	13.3%	8.7%	3.5%	100%
	More than one race	10.5%	57.5%	5.7%	15.6%	7.9%	2.9%	100%
	Race or ethnicity unknown	12.8%	53.3%	4.4%	22.2%	5.6%	1.7%	100%
	International students	24.3%	23.5%	17.4%	14.7%	17.8%	2.4%	100%
Research Doctoral Degrees in Education	All racial and ethnic groups	12.4%	53.4%	6.6%	15.7%	8.7%	3.2%	100%
	American Indian or Alaska Native	13.1%	55.7%	6.6%	14.8%	8.2%	1.6%	100%
	Asian	12.7%	45.9%	6.7%	17.5%	13.5%	3.6%	100%
	Black or African American	8.5%	59.9%	5.0%	18.0%	6.0%	2.5%	100%
	Hispanic or Latino	9.5%	53.8%	5.9%	21.4%	6.0%	3.4%	100%
	Native Hawaiian or other Pacific Islander	3.0%	33.3%	3.0%	54.5%	3.0%	3.0%	100%
	White	13.2%	54.6%	6.4%	12.8%	9.3%	3.7%	100%
	More than one race	11.0%	55.1%	6.2%	16.1%	8.6%	3.1%	100%
	Race or ethnicity unknown	13.4%	52.3%	4.6%	22.0%	5.9%	1.8%	100%
	International students	25.0%	22.8%	17.9%	13.6%	18.3%	2.5%	100%
Professional and Other Doctoral Degrees in Education	All racial and ethnic groups	2.1%	74.6%	3.2%	19.1%	0.7%	0.4%	100%
	American Indian or Alaska Native	0.0%	83.3%	0.0%	16.7%	0.0%	0.0%	100%
	Asian	1.5%	78.5%	1.5%	15.4%	3.1%	0.0%	100%
	Black or African American	0.9%	78.8%	5.3%	15.0%	0.0%	0.0%	100%
	Hispanic or Latino	1.8%	82.1%	0.0%	16.1%	0.0%	0.0%	100%
	Native Hawaiian or other Pacific Islander	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100%
	White	2.8%	71.5%	4.3%	20.0%	0.9%	0.6%	100%
	More than one race	4.3%	87.0%	0.0%	8.7%	0.0%	0.0%	100%
	Race or ethnicity unknown	0.0%	73.8%	0.0%	26.2%	0.0%	0.0%	100%
	International students	0.0%	47.6%	0.0%	52.4%	0.0%	0.0%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect doctoral degrees in education earned at all Title IV–eligible, degree-granting institutions. | *Curriculum and instructional design* includes curriculum and instruction; educational/instructional media design. | *Education—special topics* includes 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 teacher education and professional development, specific subject areas; teacher education and professional development, specific levels and methods; special education and teaching.

- Among recipients of research doctoral degrees in education, 59.9 percent of Black or African American students studied educational administration and supervision, while 22.8 percent of international students did so.
- Unlike all other groups, the majority of Native Hawaiian or other Pacific Islander students with a research doctoral degree in education studied general education (54.5 percent).
- Among students who earned professional or other doctoral degrees in education, all Native Hawaiian or other Pacific Islander students (100.0 percent) studied educational administration and supervision, while fewer than half of international students (47.6 percent) did so.

DETAILED FIELD OF STUDY: HEALTH FIELDS

In 2021, the primary fields of study among students who earned a doctoral degree in health fields were medicine (23.7 percent); rehabilitation, movement, and therapeutic professions (17.8 percent); and pharmacy, pharmaceutical sciences, and administration (17.5 percent). For research doctoral degrees, registered and practical nursing, and nursing administration and research (40.1 percent) and health fields—other (33.8 percent) were the primary fields. For professional and other doctoral degree recipients in health fields, medicine (25.9 percent) was the most popular field of study, followed by pharmacy, pharmaceutical sciences, and administration (18.6 percent) and rehabilitation, movement, and therapeutic professions (17.8 percent).

Table 5.13: Doctoral Degrees in Health Fields Across Detailed Fields of Study, by Race and Ethnicity: 2021

		Chiropractic	Dentistry, Advanced Dentistry, and Oral Sciences	Medicine	Optometry	Osteopathic Medicine/Osteopathy	Pharmacy, Pharmaceutical Sciences, and Administration	Rehabilitation, Movement, and Therapeutic Professions	Registered and Practical Nursing, and Nursing Administration and Research	Health Fields—Other	Total
All Doctoral Degrees in Health Fields	All racial and ethnic groups	3.1%	7.9%	23.7%	2.1%	8.7%	17.5%	17.8%	12.7%	6.5%	100%
	American Indian or Alaska Native	5.7%	8.0%	21.4%	2.7%	7.3%	15.3%	10.3%	20.2%	9.2%	100%
	Asian	1.1%	10.9%	29.8%	3.1%	11.4%	23.5%	10.3%	5.7%	4.3%	100%
	Black or African American	1.9%	5.0%	22.5%	0.8%	3.5%	20.3%	8.5%	27.1%	10.5%	100%
	Hispanic or Latino	4.6%	8.7%	27.5%	1.8%	6.8%	16.0%	17.3%	11.3%	5.9%	100%
	Native Hawaiian or other Pacific Islander	5.9%	6.6%	8.8%	2.2%	8.8%	14.0%	17.6%	25.7%	10.3%	100%
	White	3.4%	7.0%	22.4%	1.9%	9.1%	15.1%	21.1%	13.9%	6.1%	100%
	More than one race	2.9%	8.9%	25.8%	1.9%	12.7%	17.4%	15.9%	9.3%	5.1%	100%
	Race or ethnicity unknown	4.7%	3.8%	21.1%	1.3%	6.7%	17.6%	23.5%	11.7%	9.5%	100%
	International students	5.9%	17.6%	8.9%	4.4%	3.7%	24.0%	17.6%	4.8%	13.0%	100%
Research Doctoral Degrees in Health Fields	All racial and ethnic groups	0.4%	0.7%	-	-	-	6.7%	18.3%	40.1%	33.8%	100%
	American Indian or Alaska Native	0.0%	0.0%	-	-	-	4.5%	9.1%	54.5%	31.8%	100%
	Asian	0.0%	1.0%	-	-	-	7.2%	19.3%	42.0%	30.5%	100%
	Black or African American	0.7%	0.1%	-	-	-	1.9%	4.8%	48.1%	44.4%	100%
	Hispanic or Latino	2.0%	0.8%	-	-	-	4.7%	17.2%	41.9%	33.4%	100%
	Native Hawaiian or other Pacific Islander	0.0%	0.0%	-	-	-	0.0%	25.0%	56.3%	18.8%	100%
	White	0.3%	0.2%	-	-	-	3.6%	23.8%	43.0%	29.2%	100%
	More than one race	0.6%	1.3%	-	-	-	4.4%	25.6%	34.4%	33.8%	100%
	Race or ethnicity unknown	0.0%	0.4%	-	-	-	2.8%	21.5%	33.7%	41.7%	100%
	International students	0.1%	4.6%	-	-	-	37.1%	5.8%	12.6%	39.8%	100%

		Chiropractic	Dentistry, Advanced Dentistry, and Oral Sciences	Medicine	Optometry	Osteopathic Medicine/Osteopathy	Pharmacy, Pharmaceutical Sciences, and Administration	Rehabilitation, Movement, and Therapeutic Professions	Registered and Practical Nursing, and Nursing Administration and Research	Health Fields—Other	Total
Professional and Other Doctoral Degrees in Health Fields	All racial and ethnic groups	3.4%	8.6%	25.9%	2.3%	9.5%	18.6%	17.8%	10.1%	3.9%	100%
	American Indian or Alaska Native	6.3%	8.8%	23.3%	2.9%	7.9%	16.3%	10.4%	17.1%	7.1%	100%
	Asian	1.1%	11.3%	31.0%	3.2%	11.9%	24.2%	9.9%	4.1%	3.1%	100%
	Black or African American	2.2%	6.1%	27.3%	1.0%	4.2%	24.2%	9.2%	22.6%	3.3%	100%
	Hispanic or Latino	4.8%	9.4%	29.6%	2.0%	7.4%	16.9%	17.3%	8.9%	3.8%	100%
	Native Hawaiian or other Pacific Islander	6.7%	7.5%	10.0%	2.5%	10.0%	15.8%	16.7%	21.7%	9.2%	100%
	White	3.6%	7.6%	24.4%	2.1%	9.9%	16.2%	20.9%	11.3%	4.1%	100%
	More than one race	3.1%	9.5%	27.5%	2.1%	13.6%	18.3%	15.3%	7.6%	3.2%	100%
	Race or ethnicity unknown	5.3%	4.2%	23.7%	1.4%	7.5%	19.4%	23.8%	9.0%	5.5%	100%
	International students	7.9%	21.9%	11.9%	5.9%	4.9%	19.7%	21.6%	2.2%	4.1%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.

Notes: Data reflect doctoral degrees in health fields earned at all Title IV–eligible, degree-granting institutions. | *Health fields—other* includes 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. | Veterinary medicine, biomedical, and clinical sciences was no longer classified as a health care field in 2020 Classification of Institutional Programs (CIP) taxonomy. Veterinary fields of study were classified among agricultural, animal, plant, and veterinary sciences, which were included in STEM fields in this report.

- Among students who earned research doctoral degrees in health fields, over half of Native Hawaiian or other Pacific Islander (56.3 percent) and American Indian or Alaska Native (54.5 percent) students studied registered and practical nursing, and nursing administration and research, while 12.6 percent of international students did so.
- Of the Black or African American students who earned a research doctoral degree in health fields, 44.4 percent studied health fields—other, while 18.8 percent of Native Hawaiian or other Pacific Islander students did so.
- When considering students who earned a research doctoral degree in health fields, 37.1 percent of international students did so in pharmacy, pharmaceutical sciences, or administration, versus fewer than 5 percent of most other groups.
- Among students with professional or other doctoral degrees in health fields, about three in 10 Asian (31.0 percent) and Hispanic or Latino (29.6 percent) students studied medicine, while 11.9 percent of international students and 10.0 percent of Native Hawaiian or other Pacific Islander students did so.

DETAILED FIELD OF STUDY: HUMANITIES

Among those who earned a doctoral degree in the humanities in 2021, the primary fields of study were philosophy, religious studies, theology, or religious vocations (36.3 percent) and visual and performing arts (22.2 percent). These were also the primary fields of study for research doctoral degrees (25.4 percent and 25.1 percent, respectively). Philosophy, religious studies, theology, or religious vocations accounted for 91.0 percent of all professional or other doctoral degrees in humanities awarded in 2021.

Table 5.14: Doctoral Degrees in Humanities Across Detailed Fields of Study, by Race and Ethnicity: 2021

		Area, Ethnic, and Gender Studies	English Language and Literature/Letters	Foreign Languages and Literatures	History	Liberal Arts, Sciences and Humanities	Philosophy, Religious Studies, Theology, and Religious Vocations	Visual and Performing Arts	Total
All Doctoral Degrees in Humanities	All racial and ethnic groups	3.6%	14.4%	13.1%	9.2%	1.2%	36.3%	22.2%	100%
	American Indian or Alaska Native	22.2%	22.2%	7.4%	3.7%	3.7%	29.6%	11.1%	100%
	Asian	3.8%	9.5%	8.8%	3.5%	0.5%	45.4%	28.6%	100%
	Black or African American	5.5%	8.5%	2.7%	4.3%	2.5%	70.0%	6.4%	100%
	Hispanic or Latino	6.1%	13.2%	22.6%	11.4%	1.6%	27.9%	17.1%	100%
	Native Hawaiian or other Pacific Islander	25.0%	12.5%	0.0%	0.0%	0.0%	62.5%	0.0%	100%
	White	2.7%	18.2%	10.0%	11.1%	1.3%	34.7%	22.2%	100%
	More than one race	8.4%	23.2%	12.9%	9.0%	1.9%	23.2%	21.3%	100%
	Race or ethnicity unknown	2.5%	13.2%	13.2%	8.2%	0.9%	44.1%	18.0%	100%
	International students	3.3%	8.5%	24.1%	8.1%	0.5%	24.4%	31.2%	100%
Research Doctoral Degrees in Humanities	All racial and ethnic groups	4.3%	16.9%	15.7%	11.1%	1.4%	25.4%	25.1%	100%
	American Indian or Alaska Native	27.3%	22.7%	9.1%	4.5%	4.5%	18.2%	13.6%	100%
	Asian	5.2%	13.2%	12.2%	4.9%	0.7%	27.8%	36.1%	100%
	Black or African American	9.5%	14.8%	4.8%	7.5%	4.3%	48.5%	10.6%	100%
	Hispanic or Latino	7.1%	15.4%	26.2%	13.2%	1.9%	16.5%	19.6%	100%
	Native Hawaiian or other Pacific Islander	33.3%	16.7%	0.0%	0.0%	0.0%	50.0%	0.0%	100%
	White	3.1%	20.5%	11.5%	12.8%	1.5%	26.1%	24.6%	100%
	More than one race	9.1%	25.2%	14.0%	9.8%	2.1%	17.5%	22.4%	100%
	Race or ethnicity unknown	3.0%	15.7%	15.9%	9.9%	1.1%	33.2%	21.2%	100%
	International students	3.8%	9.6%	27.3%	9.1%	0.5%	17.7%	32.0%	100%
Professional and Other Doctoral Degrees in Humanities	All racial and ethnic groups	-	1.4%	-	-	0.0%	91.0%	7.6%	100%
	American Indian or Alaska Native	-	20.0%	-	-	0.0%	80.0%	0.0%	100%
	Asian	-	0.0%	-	-	0.0%	91.0%	9.0%	100%
	Black or African American	-	0.0%	-	-	0.0%	99.3%	0.7%	100%
	Hispanic or Latino	-	0.0%	-	-	0.0%	98.5%	1.5%	100%
	Native Hawaiian or other Pacific Islander	-	0.0%	-	-	0.0%	100.0%	0.0%	100%
	White	-	3.2%	-	-	0.0%	90.1%	6.7%	100%
	More than one race	-	0.0%	-	-	0.0%	91.7%	8.3%	100%
	Race or ethnicity unknown	-	1.3%	-	-	0.0%	96.1%	2.6%	100%
	International students	-	0.0%	-	-	0.0%	74.4%	25.6%	100%

Source: Data from U.S. Department of Education, Integrated Postsecondary Education Data System, 2021.
 Note: Data reflect doctoral degrees in humanities earned at all Title IV-eligible, degree-granting institutions.

- Among students who earned a research doctoral degree in humanities, the majority of Native Hawaiian or other Pacific Islander (50.0 percent) and Black or African American (48.5 percent) students studied philosophy, religious studies, theology, or religious vocations.
- Around one-third of Asian (36.1 percent) and international (32.0 percent) students who earned a research doctoral degree in humanities earned a degree in visual and performing arts.
- Over a quarter of international (27.3 percent) and Hispanic or Latino (26.2 percent) students who earned a research doctoral degree in humanities studied foreign languages and literatures.
- Almost all professional or other doctoral degrees in humanities earned in 2021 by Native Hawaiian or other Pacific Islander (100.0 percent), Black or African American (99.3 percent), and Hispanic or Latino (98.5 percent) students were in philosophy, religious studies, theology, or religious vocations.

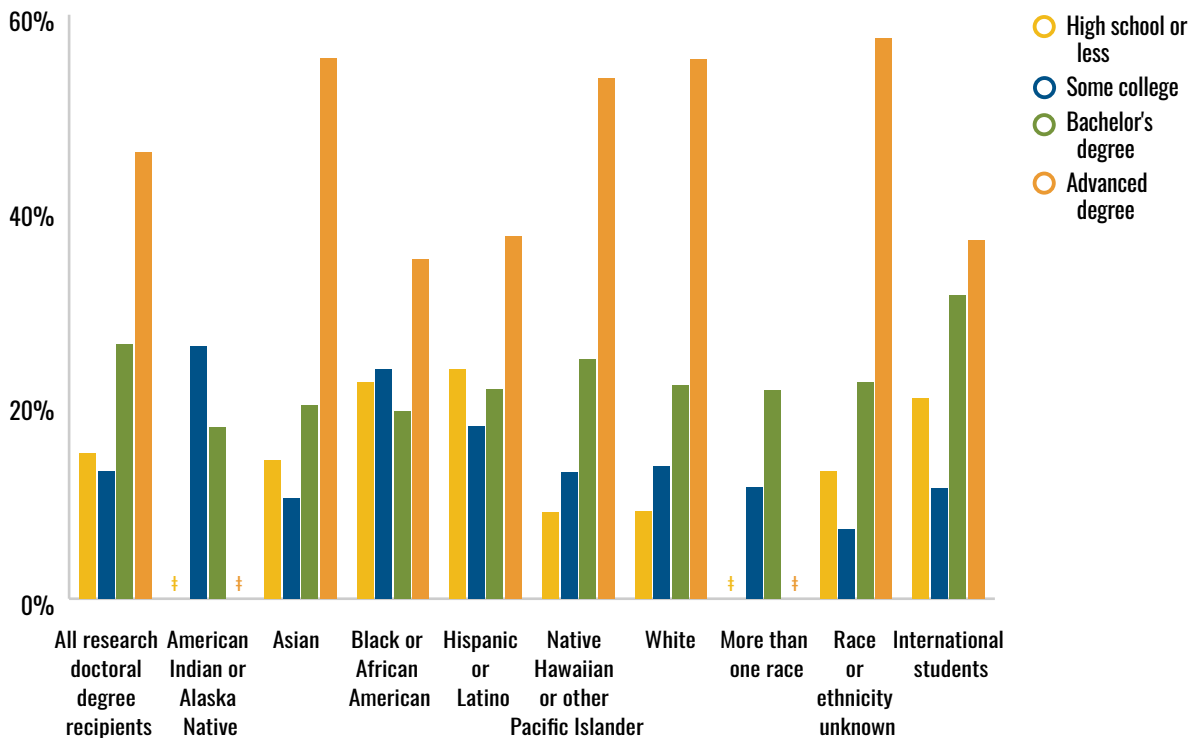
EDUCATIONAL EXPERIENCES OF RESEARCH DOCTORAL DEGREE RECIPIENTS

This section utilizes data from the Survey of Earned Doctorates (SED) to examine the experiences and educational journeys of doctoral degree recipients. Started in 1957, the SED is an annual survey of individuals who have received a research doctorate from accredited U.S. institutions in a given academic year. The SED collects information related to the educational pathways, demographic characteristics, and postgraduation plans of research doctoral degree recipients. The SED is sponsored by the National Center for Science and Engineering Statistics—which is part of the National Science Foundation—as well as by the National Institutes of Health, the U.S. Department of Education, and the National Endowment for the Humanities (National Science Foundation, n.d.). The data presented in this section of the report are on research doctoral degree recipients in 2021 and are not inclusive of professional or other doctoral degree recipients.

Parental Educational Attainment Level

The majority of 2021 research doctoral degree recipients had parents or guardians who had completed some level of postsecondary education. These findings show that research doctoral degree recipients had parents or guardians with much higher education levels than the average for all adults. Roughly 72 percent of research doctoral degree recipients had parents or guardians who had completed a bachelor’s degree or higher. About 46 percent of research doctoral degree recipients had parents or guardians who had advanced degrees. In contrast, about 42 percent of all adults ages 35 to 54 held a bachelor’s or higher degree and 17 percent held an advanced degree in 2021 (U.S. Census Bureau 2022).

Figure 5.19: Educational Attainment of 2021 Research Doctoral Degree Recipients’ Parents or Guardians, by Race and Ethnicity



Source: Data from National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.
 Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders were categorized as international students. | Totals include only research 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. | † Reporting standards not met.

- Over half of Asian (55.5 percent), multiracial (55.4 percent), and White (53.5 percent) students had parents or guardians who had attained an advanced degree. Moreover, about a quarter of Asian research doctoral recipients had parents or guardians who had completed research doctoral degrees (25.7 percent), a much higher percentage than all other groups.
- More than one in five Hispanic or Latino (23.6 percent), Black or African American (22.2 percent), and international (20.6 percent) research doctoral recipients had parents or guardians who had attained only a high school credential or less, compared with 8.9 percent of White students and 9.0 percent of multiracial students.¹⁰

Pre-doctoral Postsecondary Experience

Community College Enrollment

Overall, 21.2 percent of all 2021 research doctoral degree recipients had ever attended a community college.

Table 5.15: Percentage of 2021 Research Doctoral Degree Recipients Who Had Ever Attended a Community College, by Field of Study and Race and Ethnicity

	All Research Doctoral Degrees	Education	Engineering	Humanities	Arts	Agricultural Sciences and Natural Resources	Biological and Biomedical Sciences	Health Sciences	Mathematics and Statistics	Computer Sciences	Physical Science	Geosciences, Atmospheric, and Ocean Sciences	Psychology	Social Sciences	Multidisciplinary/ Interdisciplinary Sciences	Business	Other Fields
All racial and ethnic groups	21.2%	35.1%	12.5%	24.6%	20.3%	26.1%	22.7%	35.5%	14.3%	9.2%	17.3%	20.7%	29.8%	21.3%	18.5%	18.7%	24.0%
American Indian or Alaska Native	55.4%	52.6%	‡	‡	‡	‡	‡	55.6%	-	-	‡	‡	‡	80.0%	0.0%	‡	83.3%
Asian	21.3%	26.6%	18.9%	‡	‡	15.8%	20.6%	27.4%	26.1%	20.0%	19.2%	23.3%	34.8%	17.9%	14.7%	20.3%	20.2%
Black or African American	33.7%	39.0%	‡	‡	‡	31.0%	‡	40.5%	28.6%	13.9%	‡	‡	‡	34.4%	34.0%	42.9%	34.6%
Hispanic or Latino	37.4%	50.2%	32.8%	29.7%	32.6%	26.8%	35.0%	48.9%	34.9%	35.5%	33.5%	29.8%	40.9%	39.3%	30.8%	50.0%	35.6%
White	30.5%	38.5%	24.7%	29.0%	21.8%	43.5%	29.5%	45.6%	26.8%	23.2%	27.3%	30.8%	29.8%	28.9%	31.3%	33.4%	31.6%
More than one race	34.7%	48.4%	27.7%	38.2%	45.5%	45.5%	31.3%	40.7%	18.8%	19.2%	31.3%	30.3%	36.3%	37.5%	40.7%	26.3%	39.5%
Other race or race not reported	36.8%	42.3%	34.3%	‡	‡	‡	41.9%	41.7%	66.7%	27.3%	23.8%	‡	39.4%	45.5%	22.2%	‡	35.3%
Ethnicity not reported	31.2%	33.3%	29.0%	16.7%	50.0%	12.5%	42.9%	50.0%	20.0%	16.7%	40.0%	50.0%	27.8%	12.5%	0.0%	33.3%	41.7%
International students	4.0%	7.4%	3.7%	6.5%	8.6%	5.6%	4.1%	8.1%	2.9%	2.1%	3.4%	1.9%	6.8%	3.5%	4.5%	5.0%	4.0%

Source: Data from National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders were categorized as international students. | Other fields includes other non-science and engineering fields not shown separately. | ‡ Estimate suppressed. Reporting standards not met. | - Not calculable.

10 The SED includes several categories in which students can identify their citizenship status. In the SED data analyzed in this chapter, individual racial and ethnic categories included all U.S. citizens and permanent residents. Temporary visa holders were categorized as international students.

- By race and ethnicity among domestic students, the shares of research doctoral degree recipients who had attended a community college ranged from 21.3 percent of Asian students to 55.4 percent of American Indian or Alaska Native students. Only 4.0 percent of international students who earned a research doctoral degree had ever attended a community college.
- By broad field of study, over one-third of students who earned a research doctoral degree in health sciences (35.5 percent) and education (35.1 percent) had at some point attended a community college, while 9.2 percent of those in computer sciences did so.
- Of American Indian or Alaska Native students who earned a research doctoral degree in social sciences, only 80.0 percent had ever attended a community college.
- Over half of Hispanic or Latino students who earned a research doctoral degree in education (50.2 percent) or in business (50.0 percent) had ever attended a community college.

Bachelor's Degree Fields

In 2021, 61.7 percent of all research doctoral degree recipients had previously earned a bachelor's degree in a field of study related to their doctorate.

Table 5.16: Percentage of 2021 Research Doctoral Degree Recipients Who Earned a Bachelor's Degree Related to Their Doctorate, by Field of Study and Race and Ethnicity

	All Research Doctoral Degrees	Education	Engineering	Humanities	Arts	Agricultural Sciences and Natural Resources	Biological and Biomedical Sciences	Health Sciences	Mathematics and Statistics	Computer Sciences	Physical Science	Geosciences, Atmospheric, and Ocean Sciences	Psychology	Social Sciences	Multidisciplinary/ Interdisciplinary Sciences	Business	Other Fields
All racial and ethnic groups	61.7%	25.4%	82.3%	73.4%	69.1%	49.6%	64.3%	44.5%	80.1%	40.9%	78.6%	53.0%	72.7%	56.2%	12.3%	36.5%	35.9%
American Indian or Alaska Native	47.3%	33.3%	‡	‡	‡	0.0%	‡	‡	-	-	100.0%	‡	62.5%	46.7%	0.0%	‡	0.0%
Asian	60.6%	17.5%	‡	70.3%	74.2%	51.3%	67.0%	‡	80.4%	43.7%	73.7%	50.0%	75.1%	51.0%	16.2%	35.1%	36.9%
Black or African American	46.2%	18.3%	79.4%	‡	76.5%	31.0%	‡	‡	64.3%	47.2%	76.7%	69.2%	68.2%	51.6%	‡	‡	‡
Hispanic or Latino	61.1%	16.4%	82.3%	69.3%	62.8%	34.1%	72.4%	33.1%	85.7%	61.3%	79.9%	46.8%	80.6%	55.2%	16.7%	39.3%	33.7%
White	63.7%	28.6%	81.5%	77.4%	71.2%	48.7%	69.1%	45.5%	85.5%	46.1%	82.9%	54.5%	75.6%	59.3%	11.2%	‡	‡
More than one race	58.2%	16.1%	77.9%	71.8%	63.6%	‡	71.2%	29.6%	71.9%	53.8%	69.8%	45.5%	68.5%	57.3%	‡	47.4%	26.3%
Other race or race not reported	56.7%	15.4%	91.4%	‡	‡	‡	76.7%	38.5%	66.7%	27.3%	73.9%	‡	69.7%	54.5%	‡	20.0%	23.5%
Ethnicity not reported	51.5%	22.2%	60.0%	84.6%	60.0%	50.0%	64.3%	28.6%	70.0%	42.9%	81.3%	50.0%	52.6%	44.4%	0.0%	25.0%	8.3%
International students	64.0%	33.8%	84.5%	71.0%	66.7%	54.9%	52.0%	55.1%	78.6%	39.0%	76.2%	54.4%	63.0%	56.6%	13.7%	37.9%	45.3%

Source: Data from National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders were categorized as international students. | Other fields includes other non-science and engineering fields not shown separately. | A bachelor's degree was 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 were both in the same major field category for all fields except for engineering and education fields, in which 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 research doctoral degree recipients. | ‡ Estimate suppressed. Reporting standards not met. | - Not calculable.

- Nearly two-thirds of international (64.0 percent) and White (63.7 percent) students who earned a research doctoral degree had earned a bachelor's degree in a related field, while fewer than half of American Indian or Alaska Native (47.3 percent) and Black or African American (46.2 percent) students did so.
- By broad field of study, more than 80 percent of research doctoral degree recipients in engineering (82.3 percent) and mathematics and statistics (80.1 percent) had earned a bachelor's degree in a related field, while much smaller shares of those in education (25.4 percent) and multi- or interdisciplinary sciences (12.3 percent) did so.
- Among Black or African American students who earned a research doctoral degree in engineering, physical sciences, or arts, over three-quarters had earned a bachelor's degree in a related field (79.4 percent, 76.6 percent, and 76.5 percent for those three fields, respectively).
- Among Hispanic or Latino students who earned a research doctoral degree in mathematics and statistics, engineering, or psychology, more than 80 percent had completed a bachelor's degree in a related field (85.7 percent, 82.3 percent, and 80.6 percent for those three fields, respectively).
- All American Indian or Alaska Native research doctoral recipients in the physical sciences field had earned a bachelor's degree in a related field (100.0 percent).
- Fewer than 20 percent of Black or African American (18.3 percent), Asian (17.5 percent), Hispanic or Latino (16.4 percent), and multiracial (16.1 percent) students with a research doctoral degree in education had earned a bachelor's degree in a related field.

Master's Degree Fields

More than half of all research doctoral degree recipients in 2021 (57.6 percent) had previously completed a master's degree in a field of study related to their doctorate.¹¹ The remaining 42.4 percent of doctoral degree recipients either earned a master's degree in an unrelated field or did not earn a master's degree.

Table 5.17: Percentage of 2021 Research Doctoral Degree Recipients Who Earned a Master's Degree Related to Their Doctorate, by Field of Study and Race and Ethnicity

	All Research Doctoral Degrees	Education	Engineering	Humanities	Arts	Agricultural Sciences and Natural Resources	Biological and Biomedical Sciences	Health Sciences	Mathematics	Computer Sciences	Physical Sciences	Geosciences, Atmospheric, and Ocean Sciences	Psychology	Social Sciences	Multidisciplinary/ Interdisciplinary Sciences	Business	Other Fields
All racial and ethnic groups	57.6%	62.1%	68.1%	81.7%	82.2%	52.1%	30.5%	59.7%	66.1%	52.0%	45.5%	52.3%	75.9%	68.8%	25.6%	59.0%	60.6%
American Indian or Alaska Native	57.1%	77.8%	‡	‡	‡	‡	‡	‡	-	-	‡	‡	87.5%	46.7%	0.0%	‡	‡
Asian	52.8%	65.6%	61.3%	75.7%	87.1%	56.4%	29.1%	54.8%	58.7%	48.9%	42.4%	36.7%	79.0%	66.1%	23.5%	67.6%	67.9%
Black or African American	58.1%	61.5%	69.7%	‡	‡	48.3%	31.0%	‡	‡	‡	‡	‡	68.2%	55.8%	‡	67.6%	56.6%
Hispanic or Latino	54.7%	59.1%	61.5%	83.0%	‡	41.5%	24.3%	68.4%	61.9%	74.2%	39.7%	42.6%	75.6%	65.3%	15.2%	‡	60.2%
White	56.5%	64.1%	63.2%	84.9%	86.3%	50.8%	25.1%	61.1%	65.8%	59.4%	40.5%	51.4%	78.9%	67.9%	28.6%	59.8%	61.5%
More than one race	54.0%	62.4%	‡	78.2%	86.4%	‡	27.8%	53.7%	65.6%	‡	34.4%	30.3%	79.0%	65.6%	25.9%	‡	‡
Other race or race not reported	61.7%	73.1%	74.3%	73.3%	50.0%	‡	‡	53.8%	‡	54.5%	43.5%	16.7%	78.8%	72.7%	‡	60.0%	47.1%
Ethnicity not reported	59.6%	66.7%	63.3%	84.6%	‡	37.5%	42.9%	42.9%	60.0%	50.0%	62.5%	100.0%	68.4%	68.8%	50.0%	‡	25.0%
International students	62.0%	60.9%	72.6%	80.5%	77.3%	57.0%	43.6%	55.7%	67.8%	50.2%	53.7%	59.8%	69.8%	76.8%	25.8%	57.5%	62.9%

Source: Data from National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.

Notes: Data for individual racial and ethnic categories include all U.S. citizens and permanent residents. Temporary visa holders were categorized as international students. | Other fields includes other non-science and engineering fields not shown separately. | A master's degree was counted as *related master's* if the fields of study of doctorate recipient's first or most recent master's degree and doctoral degree were both in the same major field category for all fields except for engineering and education fields, in which 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 research doctoral degree recipients. | ‡ Estimate suppressed. Reporting standards not met. Includes totals unknown due to suppressed estimates. | - Not calculable.

- The majority of international and Black or African American students (62.0 percent and 58.1 percent, respectively) who earned a research doctoral degree had earned a master's degree in a field related to their doctoral degrees.
- By broad field of study, more than 80 percent of research doctoral degree recipients in arts (82.2 percent) and humanities (81.7 percent) had completed a master's degree in a related field of study, while fewer than one-third of those in biological and biomedical sciences (30.5 percent) and multi- or interdisciplinary sciences (25.6 percent) did so.

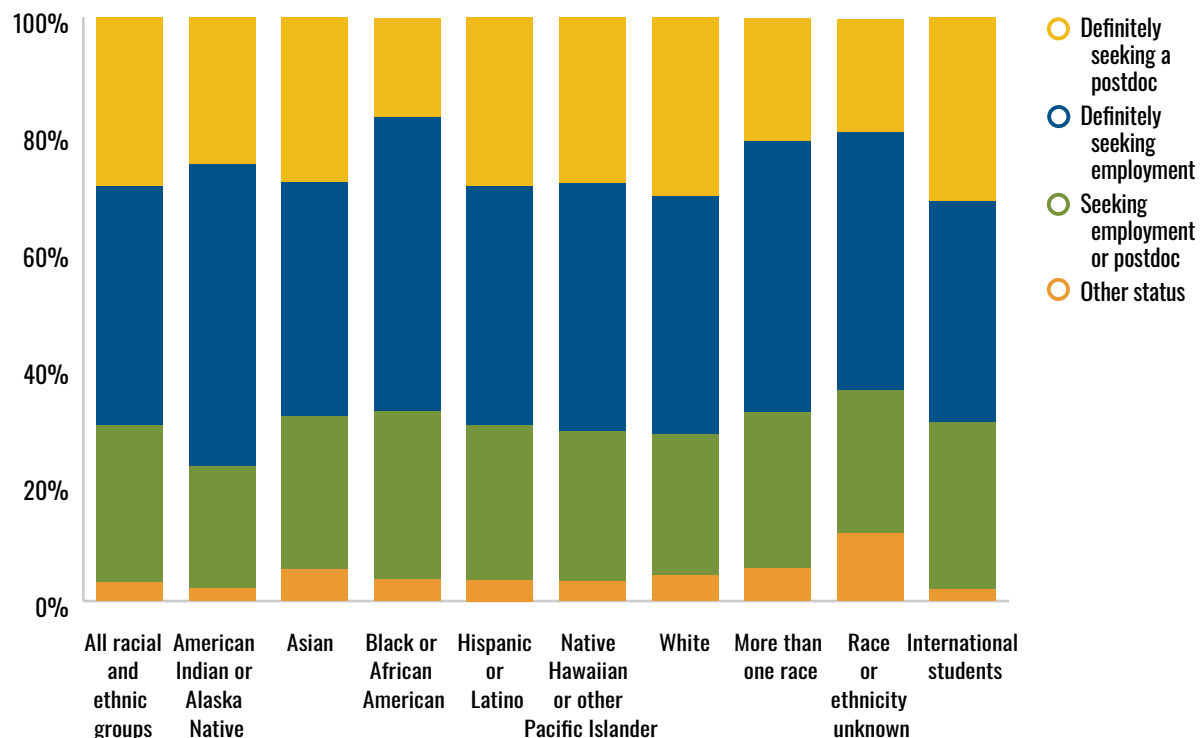
11 A master's degree was counted as *related master's* if the fields of study of a doctorate recipient's first or most recent master's degree and doctoral degree were both in the same major field category for all fields except for engineering and education fields, in which broad field categories need 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.

- Nearly three-quarters of Hispanic or Latino research doctoral degree recipients in computer science (74.2 percent) had earned a master's degree in a related field, a much higher share than those of other groups (ranging from 48.9 percent to 59.4 percent).
- Among American Indian or Alaska Native students who earned a research doctoral degree in psychology or in education, more than three-quarters had earned a master's degree in a related field (87.5 percent and 77.8 percent for those two fields, respectively).

Postgraduate Plans

Among all 2021 research doctoral degree recipients, 41.0 percent planned to seek employment after graduation, 28.9 percent planned to seek a postdoc, 26.9 percent reported they would seek either employment or postdoc, and 3.1 percent reported some other plan following graduation.¹²

Figure 5.20: Postgraduate Plans of 2021 Research Doctoral Degree Recipients, by Race and Ethnicity



Source: Data from National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.

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 were categorized as international students. | Totals may not add to 100 percent due to rounding.

- More than half of American Indian or Alaska Native (51.6 percent) and Black or African American (50.3 percent) research doctoral degree recipients reported that they would definitely seek employment after graduation. In contrast, fewer than 40 percent of Asian (39.9 percent) and international (31.6 percent) research doctoral degree recipients gave the same answer.
- Over three in 10 international students who earned a research doctoral degree (31.6 percent) reported that they would definitely seek a postdoc after graduation, while 17.1 percent of Black or African American students with a research doctoral degree answered the same.

¹² A postdoc is a temporary position primarily for gaining additional education and training in research that is awarded in academe, industry, or government, or at a nonprofit organization.

REFERENCES

- Delisle, Jason D., and Jason Cohn. 2023. "An Earnings Test for Master's Degrees: Identifying Programs at Risk of Failing a Proposed Rule for Federal Loans." Washington, DC: Urban Institute. <https://www.urban.org/research/publication/earnings-test-masters-degrees-identifying-programs-risk-failing-proposed-rule>.
- Federal Student Aid. 2023. "Annual and Aggregate Loan Limits." In *2023–2024 Federal Student Aid Handbook*. Washington, DC: U.S. Department of Education. <https://fsapartners.ed.gov/knowledge-center/fsa-handbook/2023-2024/vol8/ch4-annual-and-aggregate-loan-limits>.
- National Science Foundation. n.d. "Survey of Earned Doctorates." <https://www.nsf.gov/statistics/srvydoctorates/#sd>.
- U.S. Bureau of Labor Statistics. 2023. "Education Pays, 2022." Washington, DC: U.S. Bureau of Labor Statistics. <https://www.bls.gov/careeroutlook/2023/data-on-display/education-pays.htm>.
- U.S. Census Bureau. 2022. "Educational Attainment in the United States: 2021," Table 3. Detailed Years of School Completed by People 25 Years and Over by Sex, Age Groups, Race and Hispanic Origin: 2021. Washington, DC: U.S. Census Bureau. <https://www.census.gov/data/tables/2021/demo/educational-attainment/cps-detailed-tables.html>.
- U.S. Census Bureau. 2023. "PINC-03. Educational Attainment-People 18 Years Old and Over, by Total Money Earnings, Work Experience, Age, Race, Hispanic Origin, and Sex; 35 to 44 Years; Total Work Experience; All Races." Washington, DC: U.S. Census Bureau. <https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pinc/pinc-03.html>.