



The screenshot shows the website for the National Center for Science and Engineering Statistics (NCSSES). The header includes the NSF and NCSSES logos, the title 'National Center for Science and Engineering Statistics', and a navigation menu with links for 'WMPD Home', 'Report', 'Data Tables', 'Technical Notes', 'Downloads', and 'FAQs'. The main content area features a background image of scientists in a laboratory. A prominent blue banner reads 'Featured Report | 2023' and 'Diversity and STEM: Women, Minorities, and Persons with Disabilities'. To the right, a white box contains a thumbnail of the report cover, which includes a bar chart and the title 'Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023'. Below the thumbnail, the text states: 'Statistical information about the representation of these three groups in STEM employment and science and engineering education. A formal report is issued every 2 years.' At the bottom of this box are two buttons: 'View' and 'Download'.

National Center for Science and Engineering Statistics
Social, Behavioral and Economic Sciences
National Science Foundation

Underrepresentation in STEM

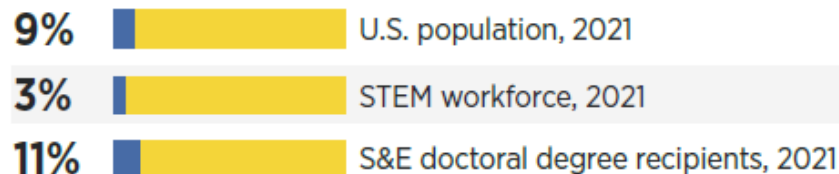
Women



Underrepresented minorities



Persons with disabilities



Diversity and STEM 2023 presents key statistics about three groups—women, minorities, and persons with disabilities—whose representation in STEM employment and science and engineering (S&E) education is smaller than their representation in the U.S. population.

Underrepresented minorities include

1. Hispanics or Latinos
2. Blacks or African Americans
3. American Indians or Alaska Natives

Note: Whenever possible, statistical estimates are presented for all racial and ethnic groups discussed in the report.

Sources: Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2021; National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, 2020; and National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2021.

Expanded Definition of the STEM Workforce

The STEM workforce is made up of individuals at all education levels who work in S&E, S&E-related, and middle-skill occupations.

S&E occupations: Typically require a bachelor's degree for entry and employ workers in five broad occupation categories—computer and mathematical scientists; biological, agricultural, and environmental life scientists; physical scientists; social scientists; and engineers.

S&E-related occupations: Require STEM skills and expertise but do not fall into the five primary S&E occupational categories. They primarily include health-related occupations, S&E managers, S&E precollege teachers, and technologists and technicians.

Middle-skill occupations: Require significant STEM skills and expertise but do not typically require a bachelor's degree. These positions are primarily in the areas of construction; installation, maintenance, and repair; and production.

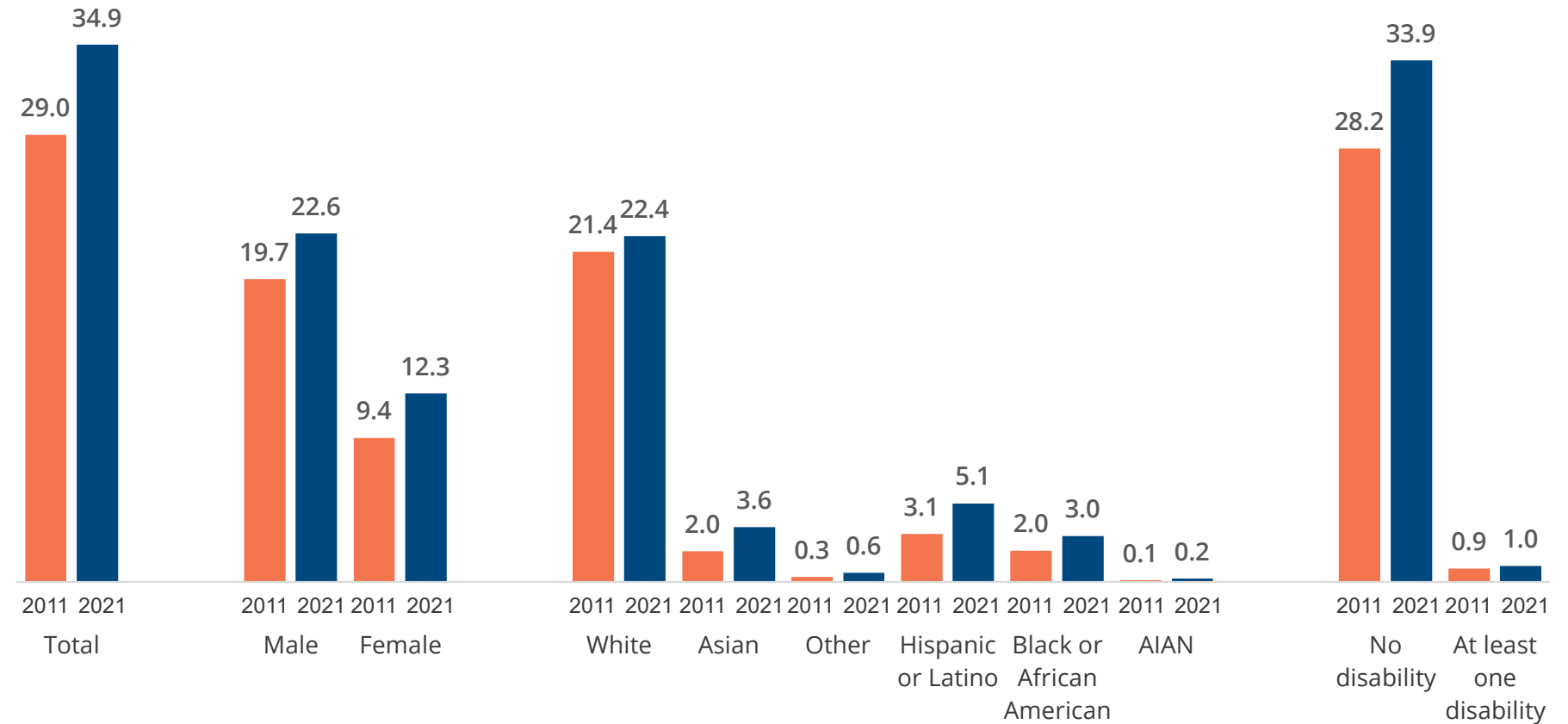
The STEM Workforce

STEM Workforce: Summary of Findings

- The size of the STEM workforce grew between 2011 and 2021 for all sex, racial and ethnic, and disability groups.
- Although men and White workers make up the largest share, the STEM workforce has been gradually diversifying, with increasing representation of women and underrepresented minorities.
- STEM workers have higher median earnings and lower unemployment rates than non-STEM workers, regardless of sex, race, ethnicity, or disability status, but disparities among these groups exist.
- The distribution by broad occupation type varies within groups of STEM workers organized by sex, race, ethnicity, or disability status.

The size of the STEM workforce grew between 2011 and 2021 for all groups.

(Numbers in millions)

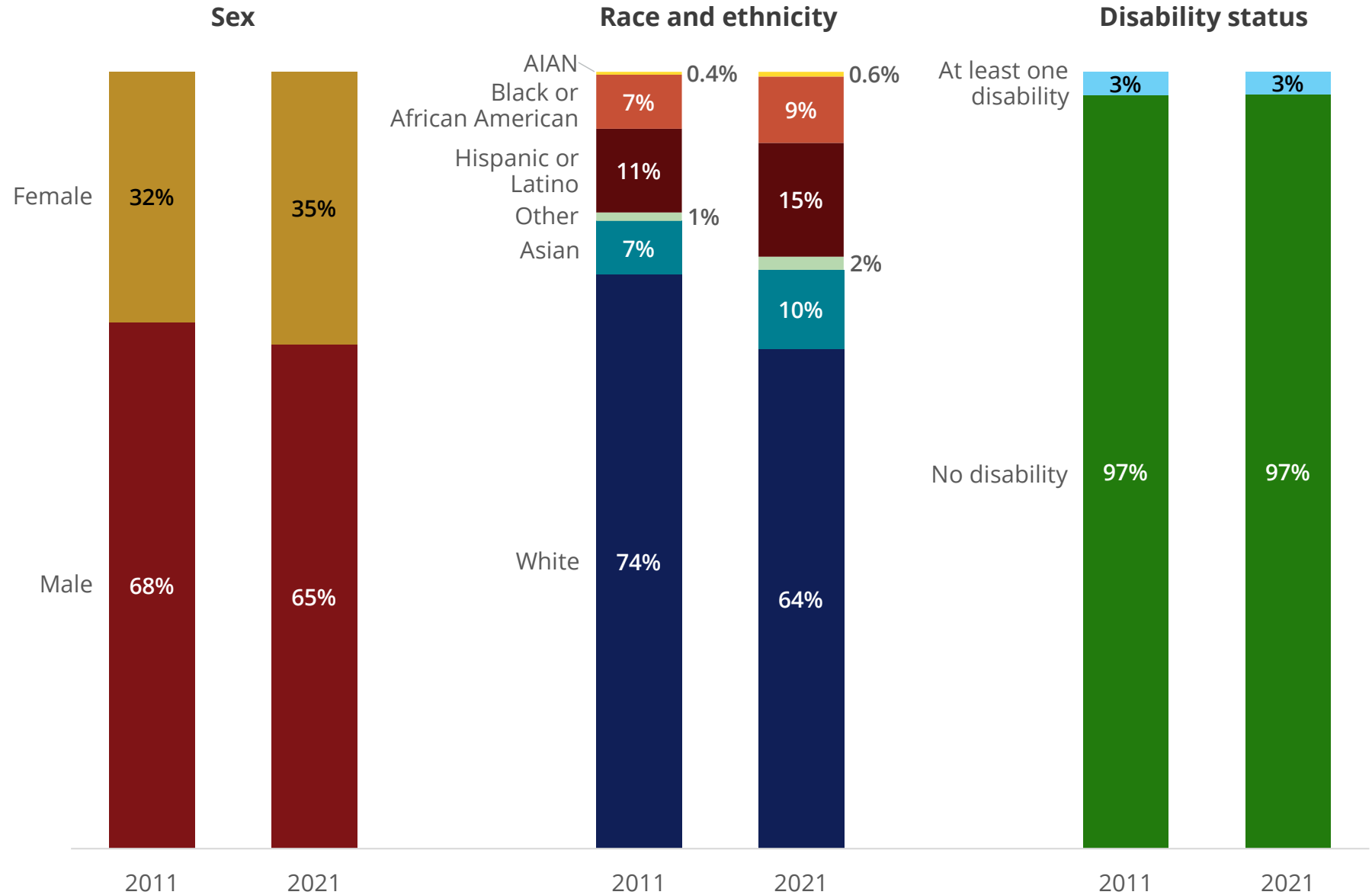


STEM workforce ages 18–74, by sex, ethnicity, race, and disability status: 2011 and 2021

Source(s): Census Bureau, Current Population Survey, Annual Social and Economic Supplement. *Diversity and STEM*, Figure 2-2.

AIAN = American Indian or Alaska Native.

The share of women and underrepresented minorities in the STEM workforce increased between 2011 and 2021.

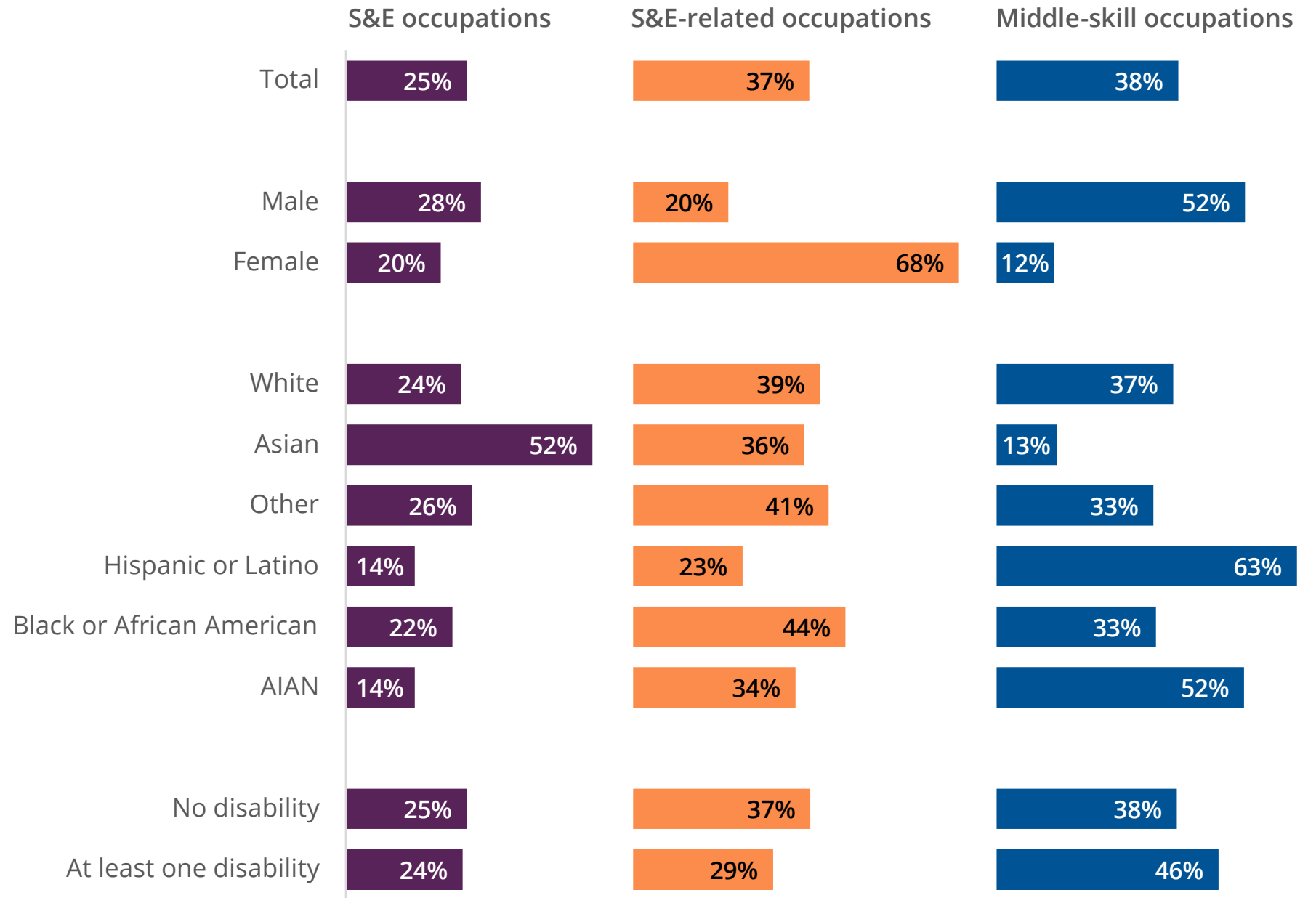


Characteristics of the STEM workforce ages 18–74: 2011 and 2021

Source(s): Census Bureau, Current Population Survey, Annual Social and Economic Supplement. *Diversity and STEM*, Figure 2-3.

AIAN = American Indian or Alaska Native.

Within groups of STEM workers organized by sex, race, ethnicity, or disability status, the distribution by broad occupation type varies.

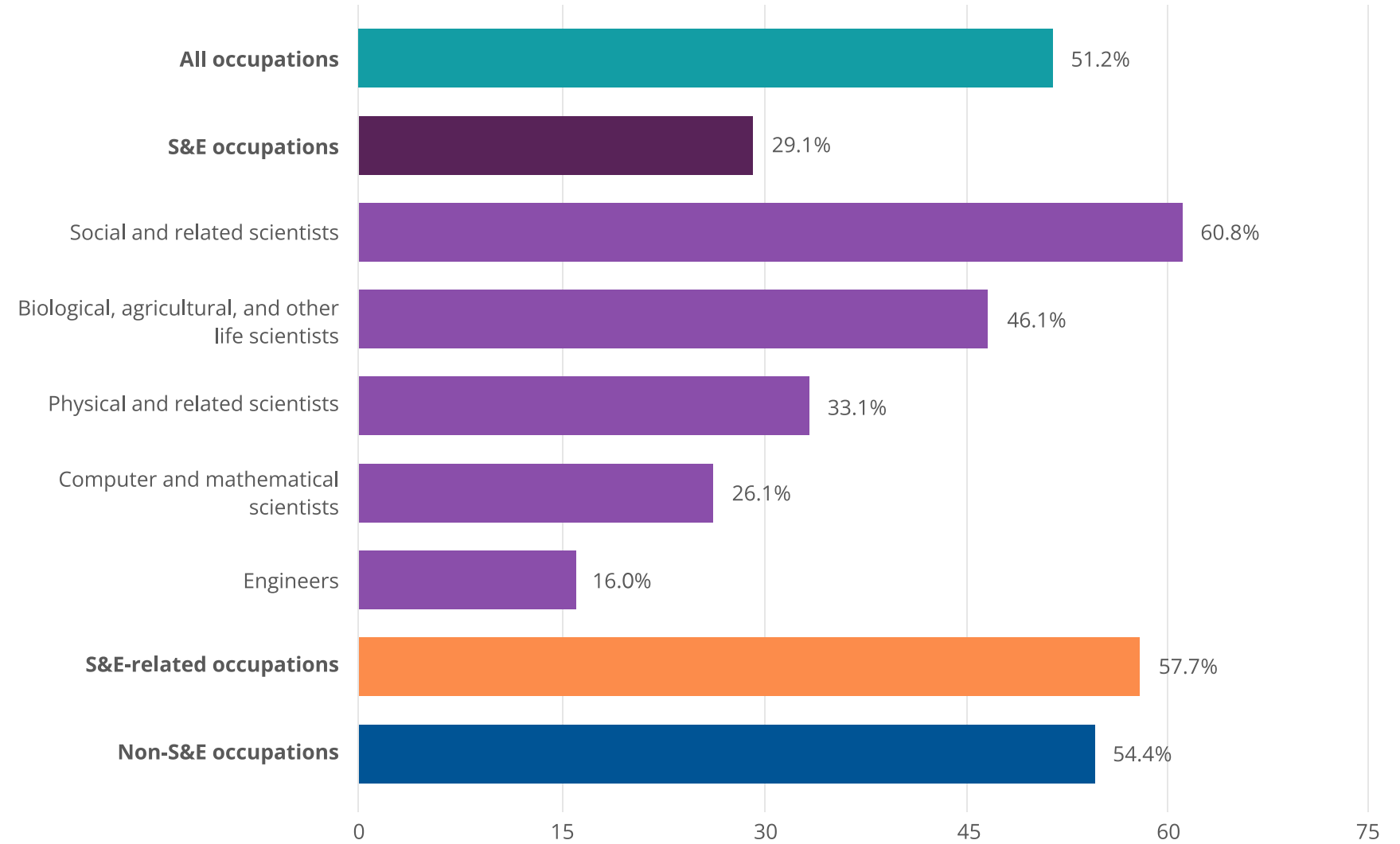


Occupations of the STEM workforce ages 18–74, by sex, ethnicity, race, and disability status: 2021

Source(s): Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2021. *Diversity and STEM*, Figure 3-1.

AIAN = American Indian or Alaska Native.

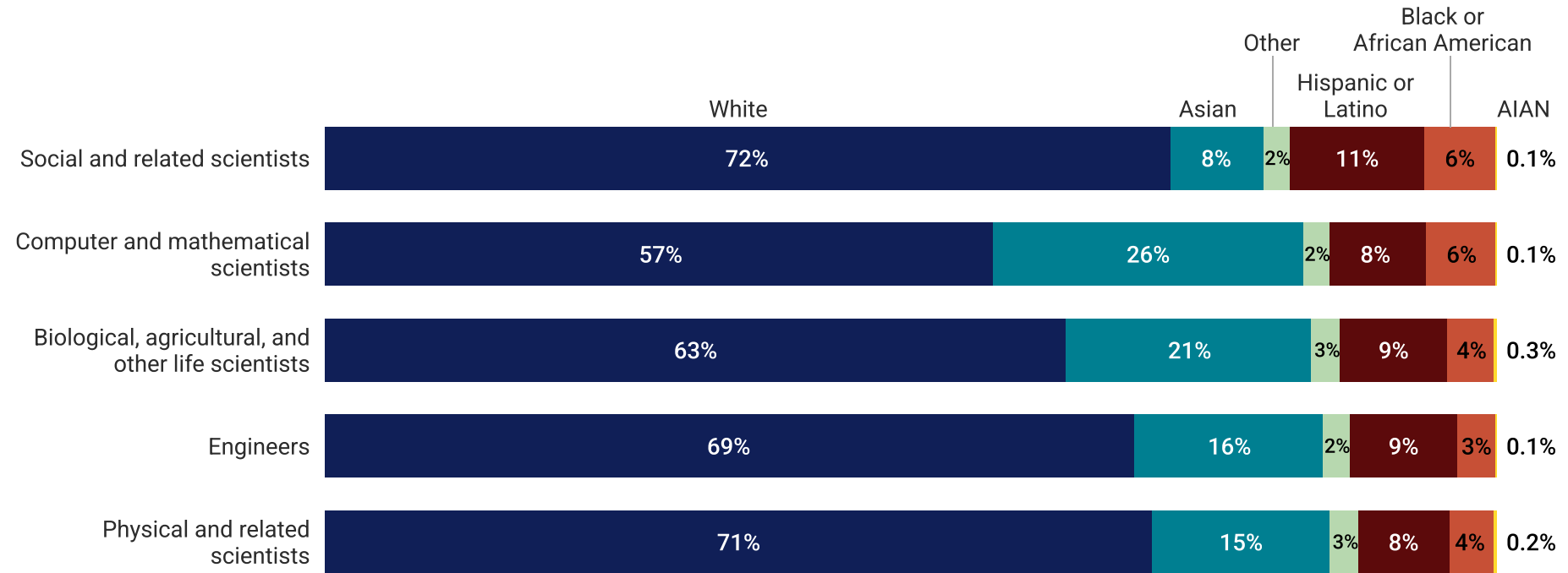
Women with at least a bachelor's degree were unevenly represented in S&E occupations and made up only 29% of college-educated workforce in S&E occupations.



College-educated women, by occupation: 2021

Source(s): National Center for Science and Engineering Statistics, National Survey of College Graduates, 2021. *Diversity and STEM*, Figure 6-1.

Representation of underrepresented minority groups as a whole in S&E occupations ranged from 12% to 18%.



Race and ethnicity of the college-educated workforce, by S&E occupation: 2021

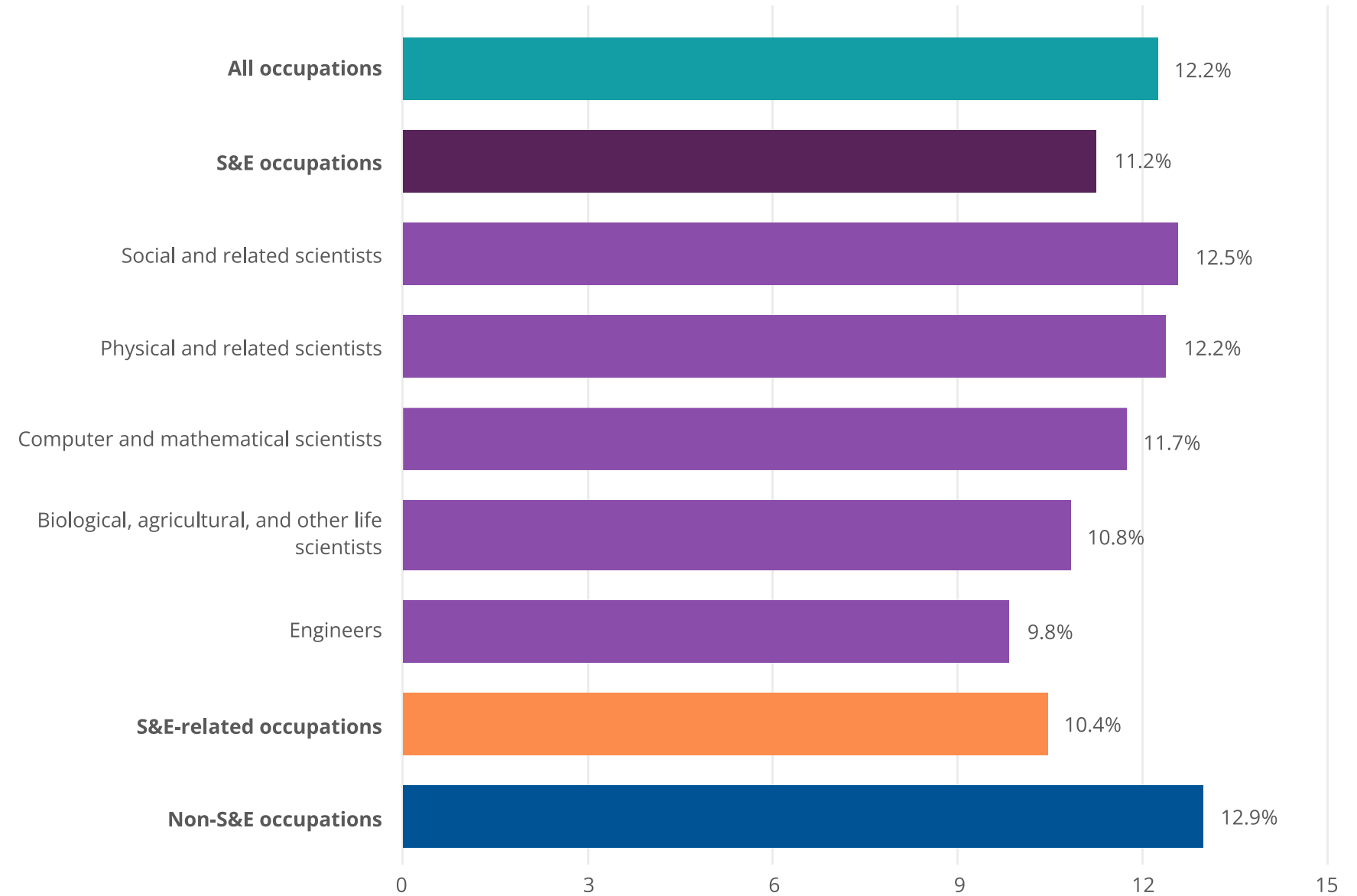
Source(s): National Center for Science and Engineering Statistics, National Survey of College Graduates, 2021. *Diversity and STEM*, Figure 6-3.

AIAN = American Indian or Alaska Native.

Representation of workers with at least one disability varied little among S&E and S&E-related occupations.

College-educated persons with disabilities, by occupation: 2021

Source(s): National Center for Science and Engineering Statistics, National Survey of College Graduates, 2021. *Diversity and STEM*, Figure 6-4.



Science and Engineering Higher Education

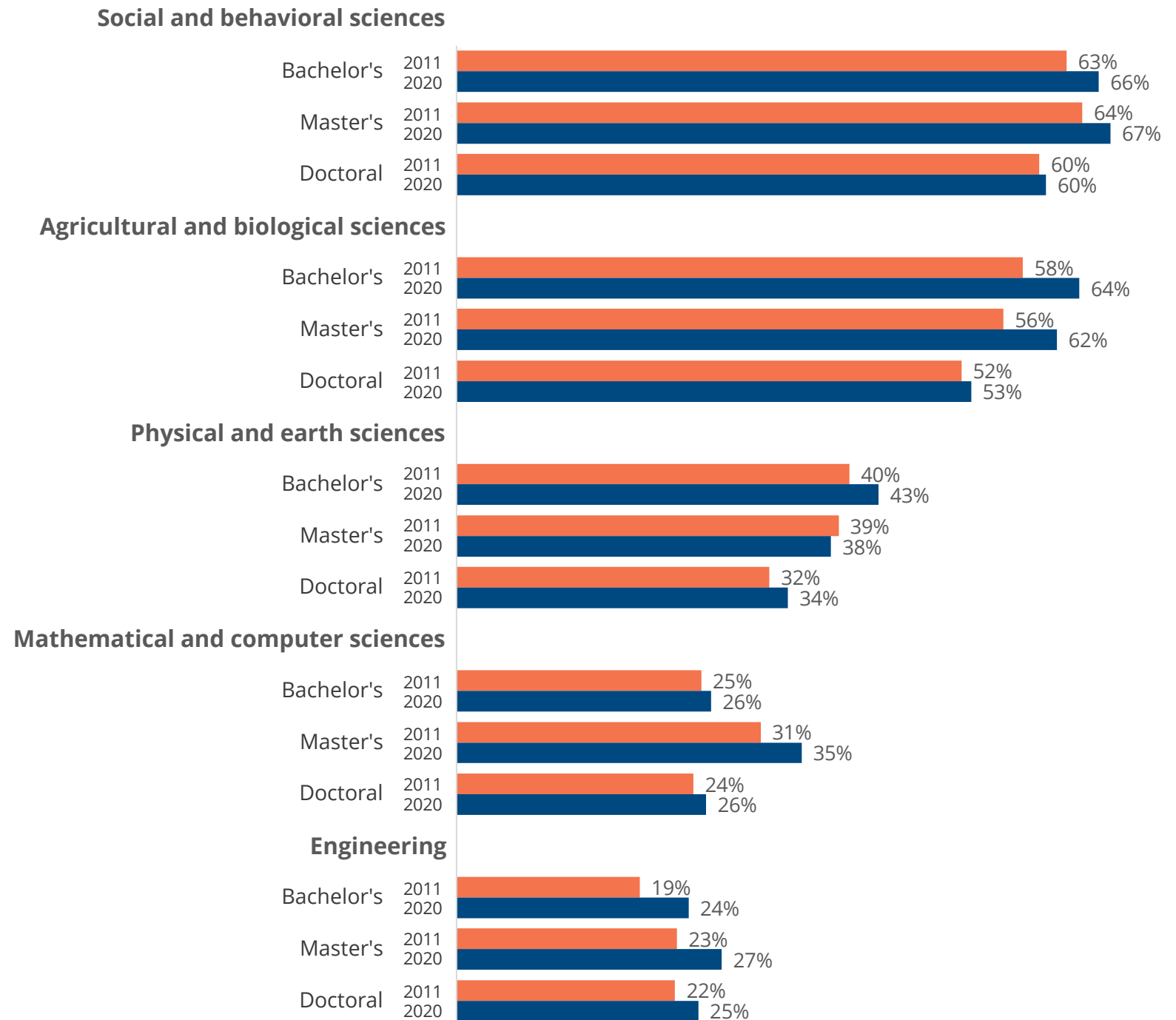
S&E Higher Education: Summary of Findings

- Overall, representation of women and minorities in S&E higher education continues a long-term gradual increase, but patterns vary substantially by S&E field, degree level, and specific demographic group.
- Women's share of S&E degrees was largely static over the past decade, except for S&E associate's degrees, where women's share increased from 43% in 2011 to 49% in 2020.
- Hispanics or Latinos, Blacks or African Americans, and American Indians or Alaska Natives are underrepresented among S&E graduate students and degree recipients, especially at the doctoral level.
- As the Hispanic share of the U.S. college-age population has grown, so has the share of S&E degrees earned by Hispanic students.
- Driven by growth in social and behavioral sciences degrees among Hispanic women, the number of S&E associate's degrees earned by Hispanics tripled from 2011 to 2020.

Women have slightly increased representation in many broad S&E degree fields. Large differences in representation persist between fields.

S&E degrees awarded to women, by field and degree level: 2011 and 2020

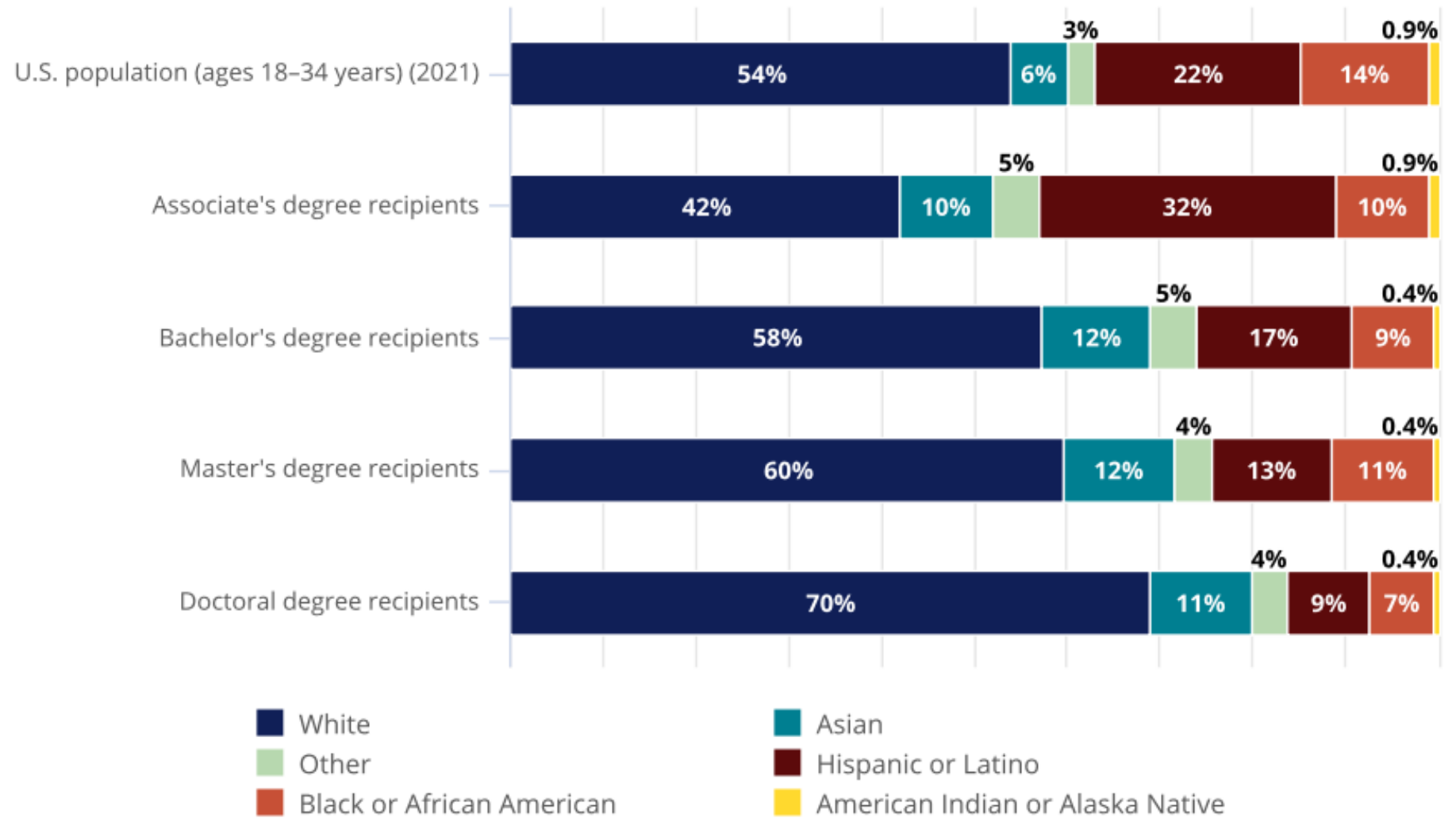
Source(s): National Center for Education Statistics, Integrated Postsecondary Education Data Systems, Completions Survey. *Diversity and STEM*, Figure 7-3.



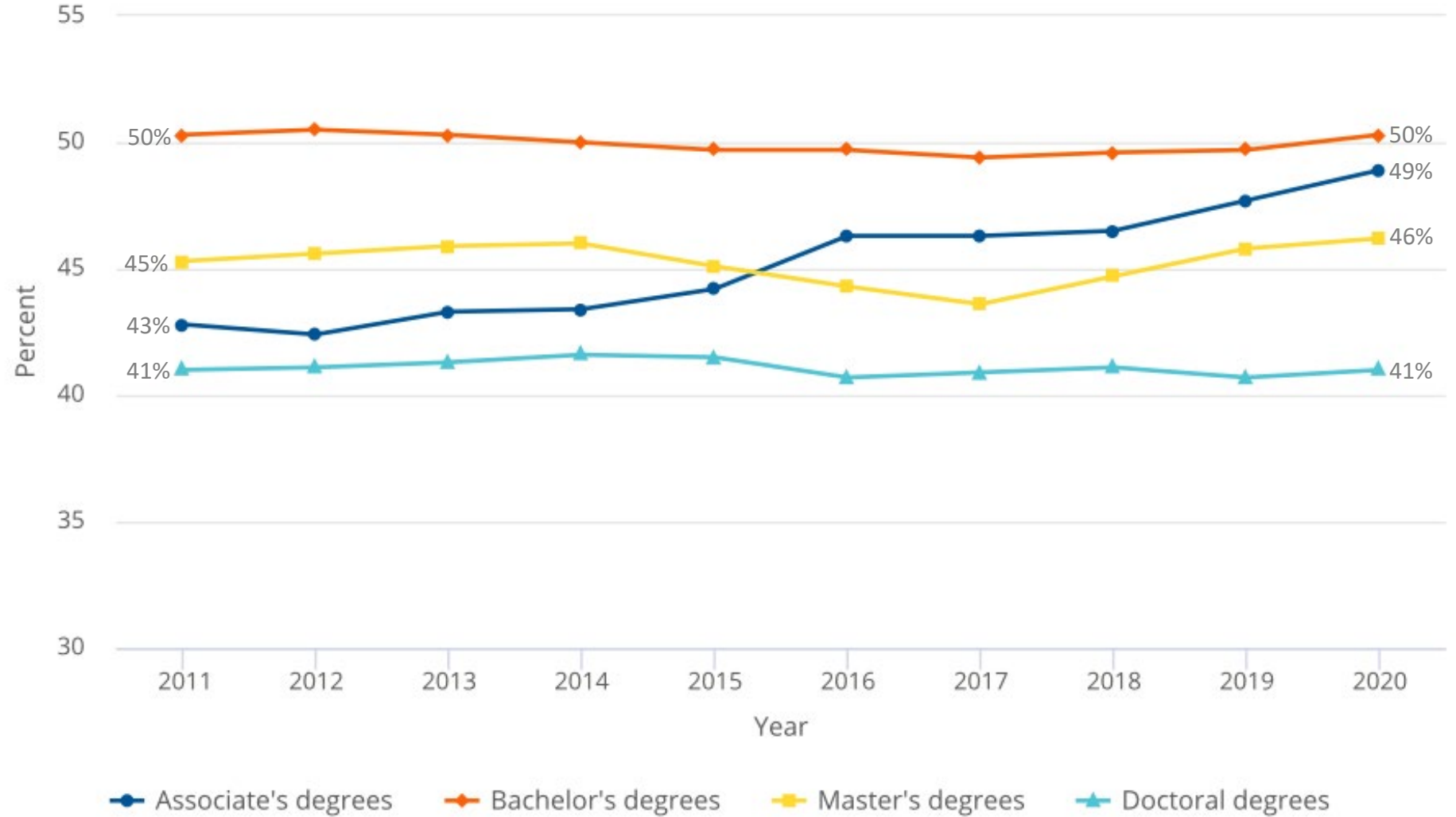
Hispanics or Latinos, Blacks or African Americans, and American Indians or Alaska Natives are underrepresented among S&E degree recipients at the bachelor's level and above.

U.S. population ages 18–34 and S&E degree recipients, by degree level and race and ethnicity: 2020

Source(s): National Center for Education Statistics, Integrated Postsecondary Education Data Systems, Completions Survey, 2020; population data from Census Bureau, Current Populations Survey, Annual Social and Economic Supplement, 2021. *Diversity and STEM*, Figure 7-4.



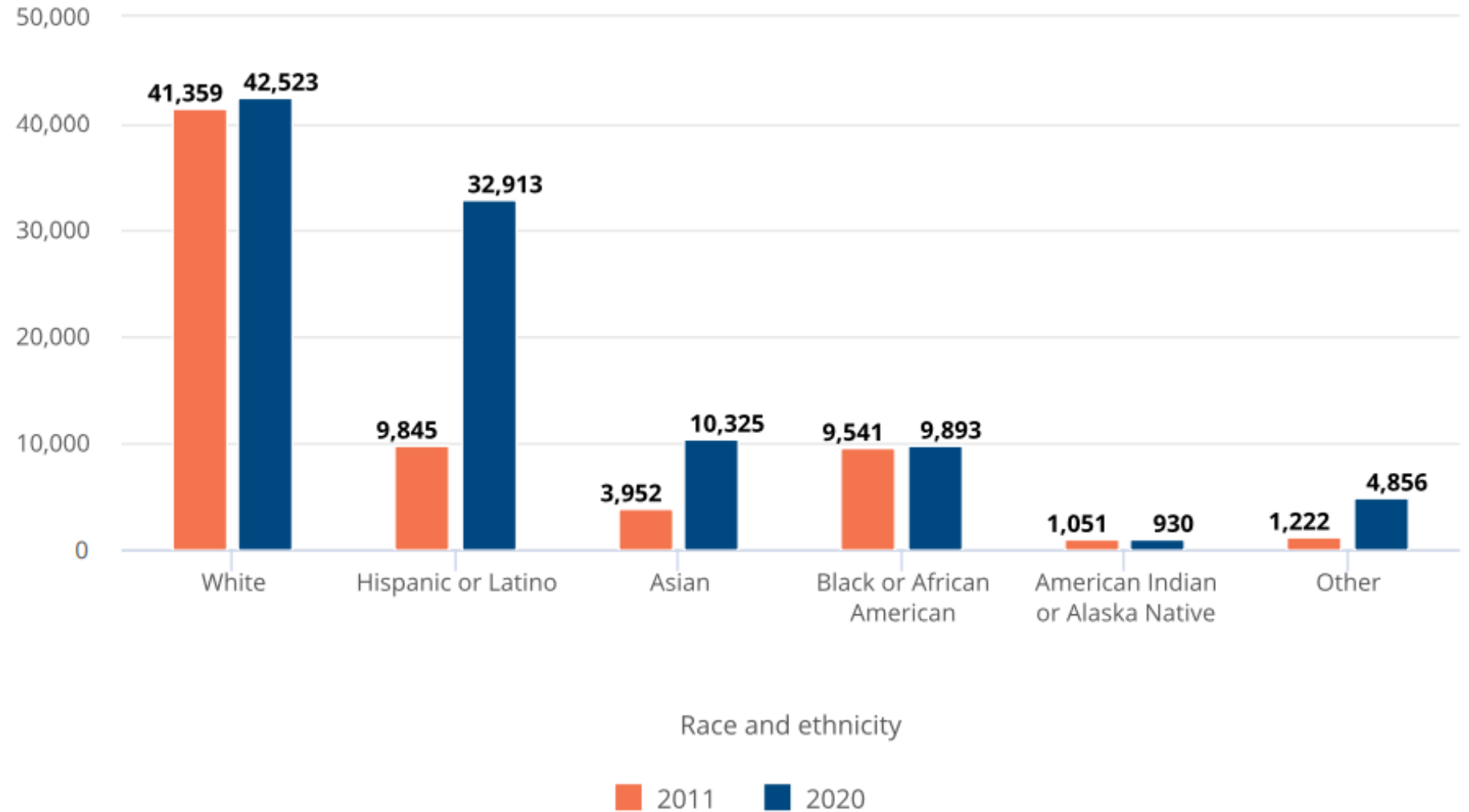
Women's share of S&E degrees has increased at the associate's level and remained stable at other degree levels.



S&E degrees awarded to women, by degree level: 2011–20

Source(s): National Center for Education Statistics, Integrated Postsecondary Education Data Systems, Completions Survey. *Diversity and STEM*, Figure 7-2.

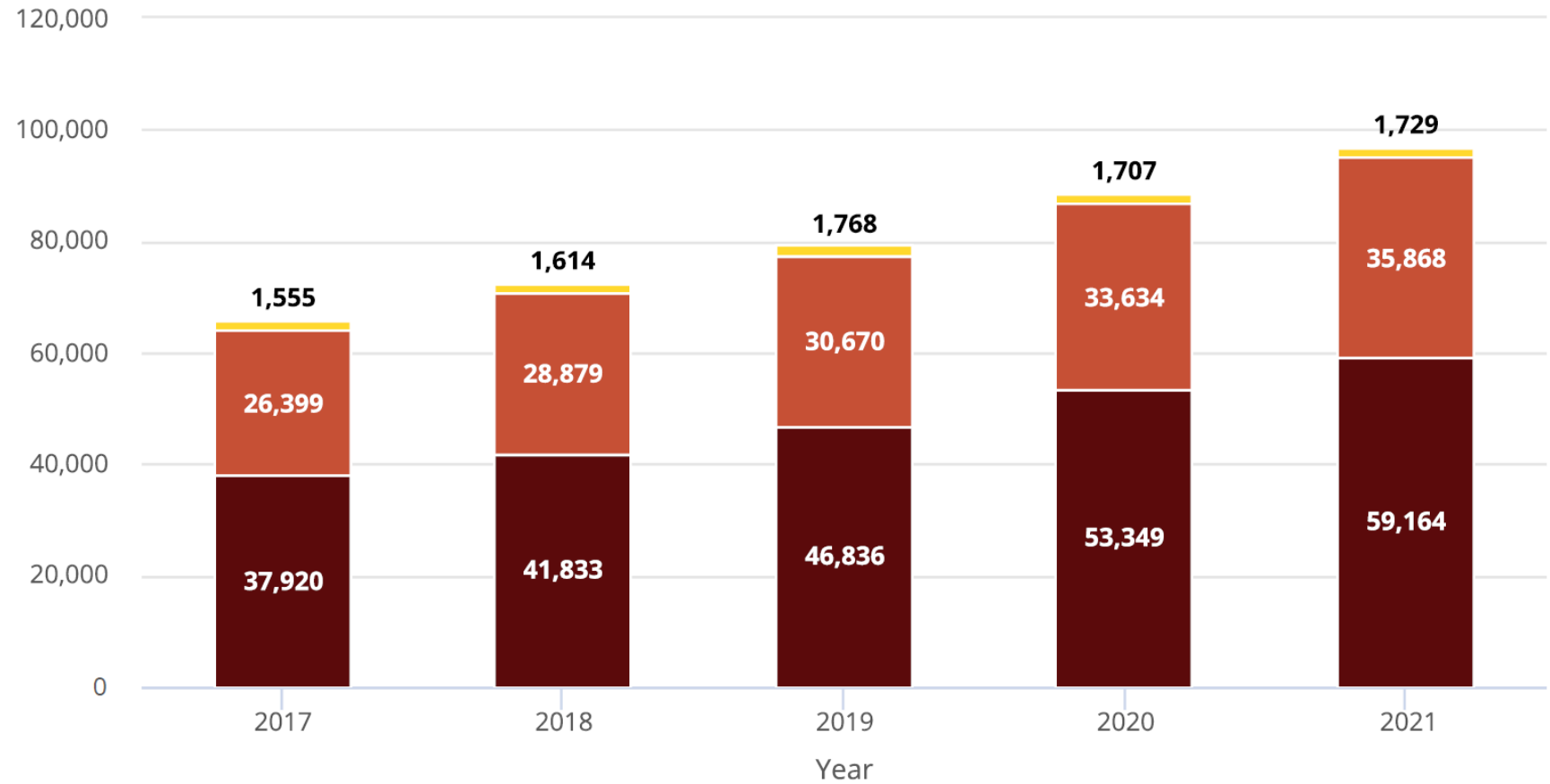
The number of S&E associate's degrees earned by Hispanic students has more than tripled in the past decade.



S&E associate's degrees awarded, by race and ethnicity: 2011 and 2020

Source(s): National Center for Education Statistics, Integrated Postsecondary Education Data Systems, Completions Survey. *Diversity and STEM*, Figure 7-6.

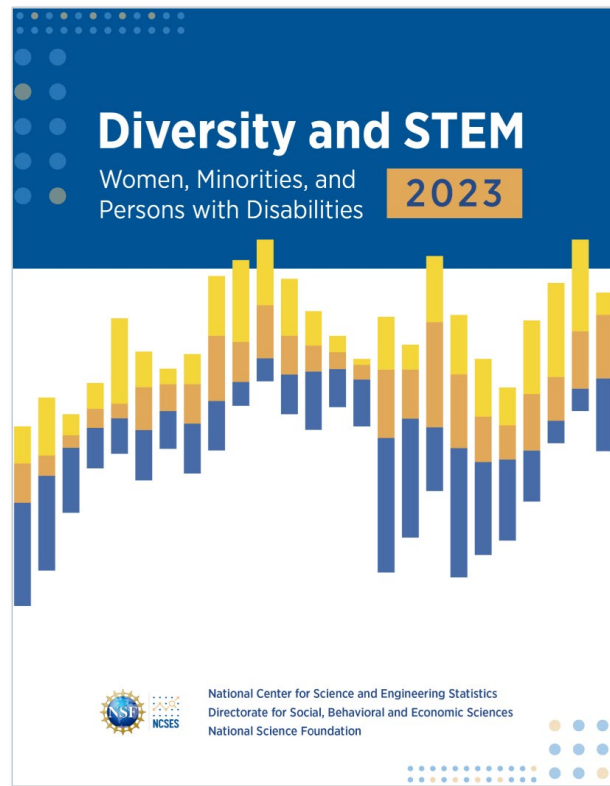
Increasing S&E graduate enrollment of underrepresented minorities is driven by Hispanic students.



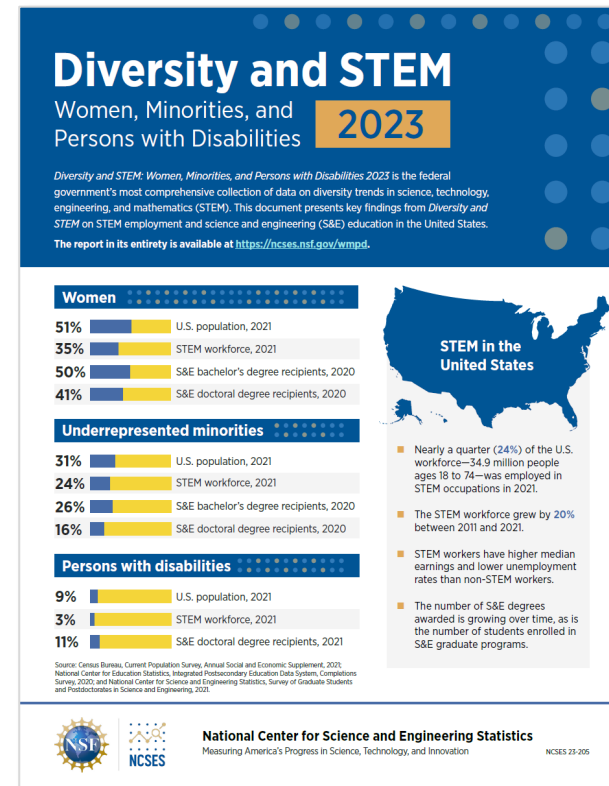
S&E graduate students from underrepresented minority groups, by race and ethnicity: 2017–21

Source(s): National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering. *Diversity and STEM*, Figure 8-4.

The Report and Additional Resources Are Available on the NCSES Website



Report



Report Highlights

Q&A





Report: <https://nces.nsf.gov/wmpd>

For media questions: media@nsf.gov

For data and information questions: ncesweb@nsf.gov