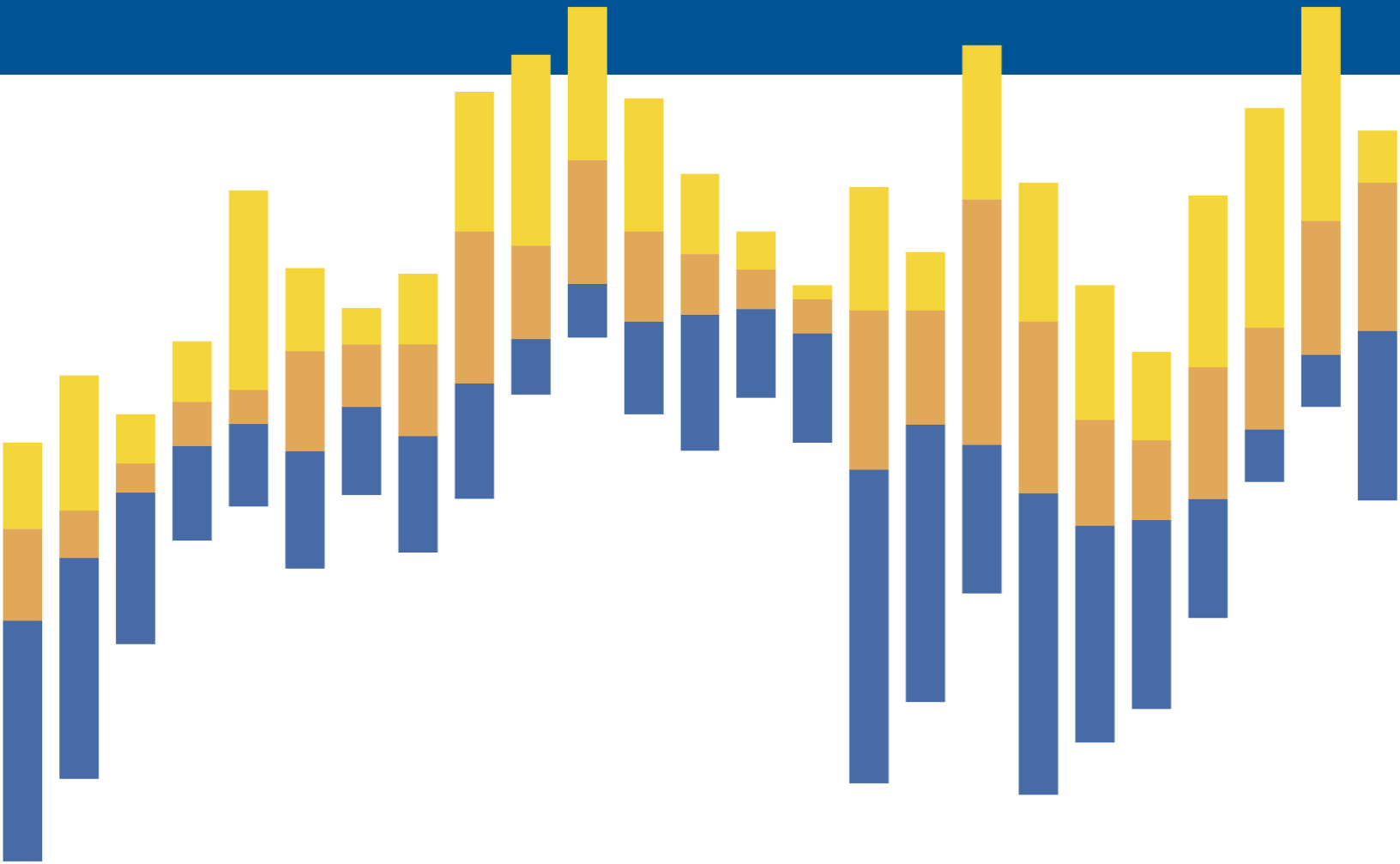


Diversity and STEM

Women, Minorities, and
Persons with Disabilities

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National Center for Science and Engineering Statistics
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Executive Summary

A diverse workforce provides the potential for innovation by leveraging different backgrounds, experiences, and points of view. Innovation and creativity, along with technical skills relying on expertise in science, technology, engineering, and mathematics (STEM), contribute to a robust STEM enterprise. Furthermore, STEM workers have higher median earnings and lower rates of unemployment compared with non-STEM workers. This report provides high-level insights from multiple data sources into the diversity of the STEM workforce in the United States.

Key Takeaways

STEM Workforce

- The U.S. STEM workforce gradually diversified between 2011 and 2021, with increased representation of women and underrepresented minorities—Hispanics or Latinos, Blacks or African Americans, and American Indians or Alaska Natives.
- In 2021, among people ages 18 to 74 years, women made up half (51%) of the total U.S. population and about a third (35%) of people employed in STEM occupations.
- In 2021, nearly a quarter (24%) of individuals in the U.S. workforce were employed in STEM occupations.
- Hispanic workers represented 15% of the total STEM workforce in 2021, and Asian and Black workers were 10% and 9%, respectively. American Indians and Alaska Natives together made up less than 1% of the U.S. population and STEM workforce in 2021.
- In 2021, among female STEM workers, 68% had science and engineering (S&E)–related jobs (health care workers, S&E managers, S&E precollege teachers, and technologists and technicians); women represented nearly two-thirds (65%) of workers in S&E-related occupations.
- In 2021, nearly two-thirds (63%) of Hispanic individuals in STEM jobs worked in middle-skill occupations (jobs that require considerable STEM skills and expertise but do not typically require a bachelor’s degree for entry); among those in middle-skill occupations, 24% were Hispanic.
- In 2020, women had lower median earnings than men in S&E, S&E-related, and middle-skill occupations.
- In 2020, Hispanic, Black, and American Indian or Alaska Native STEM workers had lower median earnings than White or Asian STEM workers.
- Persons with a disability who worked part time in an S&E-related occupation in 2021 reported wanting to work full time at about twice the rate of those without a disability (28% vs. 15%).

STEM Workforce and Education

- Nearly two-thirds (65%) of women working in STEM jobs in 2021 had at least a bachelor’s degree education, compared with less than half (43%) of men in STEM jobs.
- Among the college-educated workforce in S&E occupations in 2021, women’s representation ranged from 61% of social and related scientists to 16% of engineers.
- In 2021, about two-thirds (65%) of STEM workers with at least one disability had less than a bachelor’s degree education.

- Underrepresented minorities—Hispanic, Black, and American Indian or Alaska Native individuals—made up a higher share of the skilled technical workforce (32%) in 2021 than of workers who were employed in STEM occupations with at least a bachelor's degree (16%).

S&E Degrees

- Hispanic, Black, and American Indian or Alaska Native persons collectively account for 37% of the U.S. population ages 18–34 years in 2021 and 26% of S&E bachelor's, 24% of S&E master's, and 16% of S&E doctoral degrees earned by U.S. citizens and permanent residents in 2020.
- At the associate's level only, Hispanic students earned a higher share of S&E degrees among U.S. citizens and permanent residents in 2020 (32%), relative to the Hispanic share of the college-age population (22%).
- Black students had higher representation among the U.S. citizens and permanent residents in the social and behavioral sciences, earning 12% of bachelor's degrees in these fields in 2020, relative to 5% of bachelor's degrees in engineering.
- The number of S&E degrees earned by women between 2011 and 2020 increased by 63% at the associate's level, 34% at the bachelor's level, 45% at the master's degree level, and 18% at the doctorate level.
- In 2020, women earned 66% of bachelor's, 67% of master's, and 60% of doctoral degrees in the social and behavioral sciences.
- In 2020, women were underrepresented among degree recipients at all degree levels in physical and earth sciences, mathematics and computer sciences, and engineering.
- Among S&E doctorate recipients in 2021, individuals earning degrees in psychology and social sciences had the highest rate of disability (13%) and those in engineering had the lowest rate (8%).