Science is US

FOR RELEASE

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Bachelor's degree not required for STEM professionals and most don't have one

Over 67 million Americans work in STEM fields, 55% don't hold a bachelor's degree

WASHINGTON, D.C. (Mar. 1, 2023) – When asked who a STEM professional is—most Americans conjure images of university scientists in lab coats, doctors, Silicon Valley engineers—but while those folks are certainly an important part of the nation's STEM workforce, they do not comprise the majority.

According to a new analysis of U.S. Bureau of Labor Statistics data, there were 195.1 million workers in the U.S. economy in 2021, of which 67.1 million were STEM professionals and of those 37.1 million (55.4%) were held by people who do not have a bachelor's degree.

The analysis conducted by FTI Consulting for Washington, D.C.-based Science is US, a nonprofit initiative guided by eight science and engineering organizations shows that:

- 3.3 million (4.9%) STEM employees do not have a high school diploma;
- 13 million (19.5%) possess a high school diploma or general equivalency credential;
- 12.9 million (19.4%) attended college but do not have a degree; and
- 7.8 million (11.6%) earned an associate's degree.

Interestingly, the number of STEM employees who do not have a high school diploma is almost equal to the 3.5 million who have a doctoral or professional degree.

The *People of Science* are aeronautical engineers, advanced manufacturing specialists, architects, biochemists, electricians, ironworkers, laboratory technicians, licensed practical nurses, math teachers, and soil scientists, among many others.

STEM professionals earn more, produce more and contribute more to both the nation's economy and the economies of the states they live in. The average labor income for a U.S. STEM professional is $91,664 compared to $64,976 for a non-STEM professional.

"STEM professions provide pathways to fulfilling, middle-class livelihoods for people at all education levels," said Rachel Kerestes, Executive Director of Science is US. "STEM fields continue to produce more jobs than we're able to fill and that gap is expected to widen in the coming years.

"Educators, business owners and government leaders – not to mention parents – must recognize the enormous value in STEM fields and do what's necessary to teach, train and recruit the workers to fill existing vacancies in the near term while developing a strong STEM workforce for the long term," she said.

STEM professionals at all educational levels also have a disproportionate impact on the American economy. While they represent 34.3% of direct U.S. employment, they account for 42.8% of sales output, 40.5% of gross domestic product and 43% of labor income, showing they are more productive than peers in non-STEM occupations.

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"As the U.S. economy has grown and changed in recent years, the new data tell us science, technology, engineering, medicine and math are becoming even more important and will continue to demand a greater share of domestic labor," Kerestes noted.

According to the analysis of the 50 states and the District of Columbia, the top-ten states with the largest percentage of their workforce in STEM are:

1. Washington, D.C.
2. Michigan
3. Massachusetts
4. Indiana
5. New Hampshire
6. Virginia
7. Connecticut
8. Ohio
9. Maryland
10. Wisconsin

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Science is US *is a foundation-supported effort that brings together a diverse group of science, engineering, industry, higher education and labor organizations to galvanize a broad, bipartisan political base of support for science and technology.*