

# Identifying Educational and Training Characteristics of the U.S. STEM Workforce



## National Training, Education, and Workforce Survey Pilot

The U.S. science, technology, engineering, and mathematics (STEM) workforce constantly evolves as new discoveries, innovations, and technological advancements influence the forces that drive the labor market. Understanding these changes and examining the impact of a wide range of nondegree, work-related credentials (such as certificates, certifications, and licenses) on employment can be useful to data users and policymakers.

## What is the NTEWS Pilot?

The National Training, Education, and Workforce Survey (NTEWS) Pilot is a survey of individuals ages 16 through 75 living in the United States and Puerto Rico who are not currently enrolled in high school. The survey collects information about the educational and training characteristics of the U.S. workforce, focusing on the skilled technical workforce (STW). The NTEWS Pilot is developed and cosponsored by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation and by the Department of Education.

### What is the skilled technical workforce?

The skilled technical workforce comprises workers in STEM occupations who do not have an educational attainment of a bachelor's degree or higher.

## How can I use the NTEWS Pilot?



### Data from the NTEWS Pilot can answer questions like

- What are the demographic characteristics of the STW?
- Which STEM occupations have the highest concentration of STW workers?
- How many STW workers have earned a work-related vocational certificate?
- What share of the STW has a professional certification or government-issued license?
- How many STW workers participated in a work experience program (i.e., apprenticeship, internship, or student teaching)?
- What is the median income of STW workers compared with STEM workers with a bachelor's degree or higher?

## Why is the NTEWS Pilot important?

Data from the NTEWS Pilot provide insight into which work-related qualifications are obtained and how these credentials lead to specific employment. Because the NTEWS Pilot collects information from the general population (regardless of educational attainment), policymakers and researchers can use the data to understand a wide variety of aspects of the workforce, such as the size of the STEM workforce, high-demand jobs, and declining job markets or industries.

For more information, the [NTEWS Pilot homepage](https://nces.nsf.gov/surveys/national-training-education-workforce) (<https://nces.nsf.gov/surveys/national-training-education-workforce>) features additional details about the survey, its questionnaires, and links to related publications and products.



## Data details

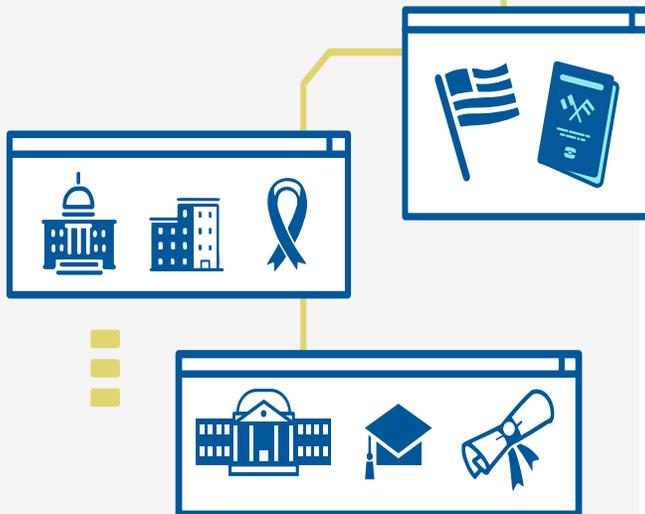
### Where can I find NTEWS Pilot data?

NTEWS Pilot data can be found in several places throughout the NCSES website. On the survey's **homepage**, the Data tab offers data tables that can be downloaded by users and access to public-use microdata files, and the Analysis tab chronicles all NCSES publications that use the survey's data.



Individuals report information such as

- Employment status
- Occupation
- Educational background
- Field of degree for the highest degree
- Credential type (certificate, license, or certification)
- Training or work experience
- Demographics (e.g., age, sex, race and ethnicity, citizenship, and disability status)



### Why is NTEWS a pilot survey?

NTEWS is currently in a pilot phase, where the survey methods used to collect the data are being evaluated. NCSES has designated the NTEWS Pilot as an **experimental statistical product** and has released the data to engage stakeholder involvement in the survey's development with the goal of improving quality in future iterations. The estimates included in the NTEWS Pilot are not official statistics and should not be used to make official statements or inferences about characteristics of the population or economy. For more information, see [NTEWS Pilot methodology](#).

#### Survey specifics

**Frequency:** Periodic, to be determined

**Initial survey year:** 2022

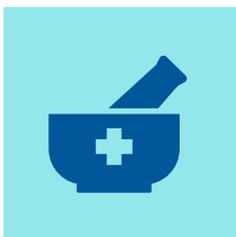
**Reference period:** To be determined

**Response unit:** Individuals ages 16 through 75 who are not currently enrolled in high school

**Sample or census:** Sample

**Population size:** Approximately 249.8 million individuals

**Sample size:** Approximately 43,000 individuals



### National Center for Science and Engineering Statistics (NCSES)

For more information about NCSES's products and data collection process, visit <https://nces.nsf.gov>.

You can also explore our Surveys page at <https://nces.nsf.gov/surveys> to learn more about NCSES surveys and the NTEWS Pilot, as well as its methodology, survey design, and questionnaires.