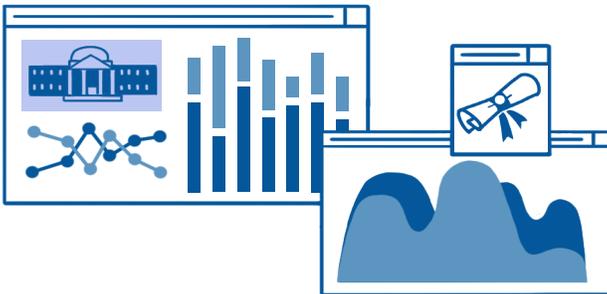


# Measuring Recipients of Research Doctorates in the United States



## The Survey of Earned Doctorates

Data regarding the educational history and postgraduation employment plans of doctorate recipients can illuminate career pathways, as well as help U.S. educational institutions, labor force researchers, and prospective students with data-driven decision-making and planning.

## What is the SED?

The Survey of Earned Doctorates (SED) is an annual census of all individuals receiving a research doctorate from an accredited U.S. institution in a given academic year. The SED is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation and by three other federal agencies: the National Institutes of Health, Department of Education, and National Endowment for the Humanities.

## How can I use the SED?

### Data from the SED can answer questions like

- How many doctorate-granting institutions are in the United States, and how many students earn their research doctoral degree from each institution?
- How have the total number and demographic characteristics of research doctorate recipients changed in different fields over the years?
- What are the sources of financial support for research doctorate recipients during graduate school?
- How many temporary visa holders earned U.S. research doctoral degrees each year, and what are their countries of origin?
- What are the postgraduation employment plans for research doctoral students and their expected salary at the time of doctorate receipt?



## Why is the SED important?

The SED is the primary source of information in the United States for assessing trends in the characteristics of research doctorate recipients, for determining which institutions support research doctoral training and in which fields, and for discovering their sources of financial support. The annual SED data are used to update the Doctorate Records File, a cumulative file of all U.S. research doctorate recipients since the 1920s.

For more information, the [SED homepage](https://ncses.nsf.gov/surveys/earned-doctorates) (<https://ncses.nsf.gov/surveys/earned-doctorates>) features additional details about the survey, its questionnaires, and links to related publications and products.



## Data details

### Where can I find SED data?

SED 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 the Analysis tab chronicles all NCSES publications that use the survey's data. SED data can also be accessed by using the **Restricted Data Access System** (<https://ncesdata.nsf.gov/rdas>) and the **SED table builder** (<https://ncesdata.nsf.gov/builder/sed>). SED restricted-use microdata files are available via the NCSES **Restricted Use Data License Program** (<https://nces.nsf.gov/about/licensing>) at its Secure Data Access Facility and the **Federal Statistical Research Data Centers** (<https://census.gov/about/adrm/fsrdc.html>).

### Doctorate recipients report information such as

- Institution name and characteristics of doctorate and other degrees
- Education history including degree field and degree start/receipt dates
- Sources of financial support during graduate school
- Undergraduate and graduate debts
- Postgraduation plans, including employment sector and salary
- Age, sex, race and ethnicity
- Citizenship status at graduation
- Country of birth and citizenship
- Marital status
- Disability status
- Educational attainment of parents

The SED gathers information from new U.S. research doctorate recipients and contains data regarding their educational paths and postgraduation plans. A related study, the **Survey of Doctorate Recipients** (<https://nces.nsf.gov/surveys/doctorate-recipients>), is a biennial sample survey based on information from many previous cycles of the SED and examines the employment of doctoral scientists and engineers post-graduation, as well as their career development and employment history.

## Products supported by SED data

SED data are used in NCSES publications, such as analytical reports (*Doctorate Recipients from U.S. Universities*) and data tables. Its data also supplement NCSES publications such as *Women, Minorities, and Persons with Disabilities in STEM, Science and Engineering State Indicators*, and *Science and Engineering Indicators*.

### Survey specifics

**Frequency:** Annual

**Initial survey year:** Academic year 1957–58

**Reference period:** Academic year (1 July through 30 June of the following year)

**Response unit:** Individuals

**Sample or census:** Census

**Population size:** Approximately 55,000

**Sample size:** The survey is a census of all known eligible doctorate recipients



### 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 SED, as well as its methodology, survey design, and questionnaires.