## **National Center for Science and Engineering Statistics**

# Measuring Graduate Enrollment and Postdoctoral Appointments at U.S. Academic Institutions

# Survey of Graduate Students and Postdoctorates in Science and Engineering

Measuring data about students and researchers earning graduate or doctoral degrees at U.S. academic institutions helps illuminate trends in science and engineering (S&E) graduate student enrollment and financial support. This information assists government agencies, academic institutions, researchers, and prospective students by providing data that helps anticipate future supply and demand in these fields.



# What is the GSS?

The Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) is an annual census of all academic institutions in the United States and its territories (Puerto Rico, U.S. Virgin Islands, and Guam) granting research-based master's degrees or doctorates in science, engineering, or selected health fields each survey year. The GSS is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation and by the National Institutes of Health.

# How can I use the GSS?

#### Data from the GSS can answer questions like

- What is the distribution of research-focused graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and selected health fields in the United States?
- How many research-focused master's-granting institutions are in the United States?
- What are the primary sources of financial support for research-focused master's students, postdoctoral appointees, or doctorate recipients at U.S. academic institutions?
- How many research-focused graduate students in science, engineering, and selected health fields at U.S. academic institutions are temporary visa holders?
- How have the total number and demographic characteristics of research-focused graduate students at U.S. academic institutions changed in science, engineering, and health fields over time?

# Why is the GSS important?

The GSS collects information about research-focused graduate students, postdoctoral researchers, and other doctorate-holding nonfaculty researchers at U.S. academic institutions. Results are used to assess shifts in graduate enrollment, shifts in postdoctoral and nonfaculty researcher appointments, and trends in financial support.

For more information, the <u>GSS homepage</u> (<u>https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/</u>) features additional details about the survey, its questionnaires, and links to related publications and products.





Measuring America's Progress in Science, Technology, and Innovation

## **Data details**

#### Where can I find GSS data?

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. NCSES's interactive **data tools** (https://ncsesdata.nsf.gov/home) allow users to explore GSS data and to build charts and tables tailored to their unique research interests. Additionally, historical microdata for each survey year beginning with 1972 can be found at the **GSS public use files page** (https://nsf.gov/statistics/srvygradpostdoc/pub data.cfm).

## Coordinators at eligible institutions report information such as

#### Number of master's and doctoral graduate students by

- Demographic characteristics
- Financial support characteristics (except for part time)
- Full-time, part-time, and first-time full-time enrollment

#### Number of postdoctoral researchers by

- Demographic characteristics
- Financial support characteristics
- Origin of doctoral degree

# Number of doctorate-holding nonfaculty researchers by

Sex

Type of doctoral degree

#### Institutions by

- Name
- Location
- Highest degree granted

#### **Schools by**

- Name
- IntegratedPostsecondaryEducation Data System(IPEDS) unique identifier
- Type (e.g., public or private)
- Carnegie Classification
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# Organizational units (e.g., academic departments, degree-granting programs) in academic institutions by

- Name
- Highest degree granted
- Field of study

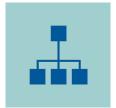
The GSS gathers a wide range of information from institutions about research-focused graduate, master's, and doctoral students. A related survey, the annual **Survey of Earned Doctorates** (https://ncses.nsf.gov/surveys/earned-doctorates/), gathers information from new U.S. research doctorate recipients and contains data regarding their educational paths and postgraduation plans.

## Products supported by GSS data

GSS data are used in NCSES publications, such as InfoBriefs, special reports, and data tables that can be found in the Graduate Students and Postdoctorates in Science and Engineering series. Its data also supplement NCSES publications such as *Diversity and STEM: Women, Minorities, and Persons with Disabilities in Science and Engineering* as well as *Science and Engineering Indicators*.



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## **Survey specifics**

Frequency: Annual

Initial survey year: 1966

Reference period: Fall of the survey year

**Response unit:** Organizational units in academic

institutions

Sample or census: Census

**Population size:** Approximately 22,000 units at approximately 700 academic institutions

**Sample size:** The survey is a census of all known eligible organizational units within academic institutions





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

For more information about NCSES's products and data collection process, visit <a href="https://ncses.nsf.gov">https://ncses.nsf.gov</a>. You can also explore our Surveys page at <a href="https://ncses.nsf.gov/surveys">https://ncses.nsf.gov/surveys</a> to learn more about NCSES surveys and the GSS Survey, as well as its methodology, survey design, and questionnaires.

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