

SIDEBAR

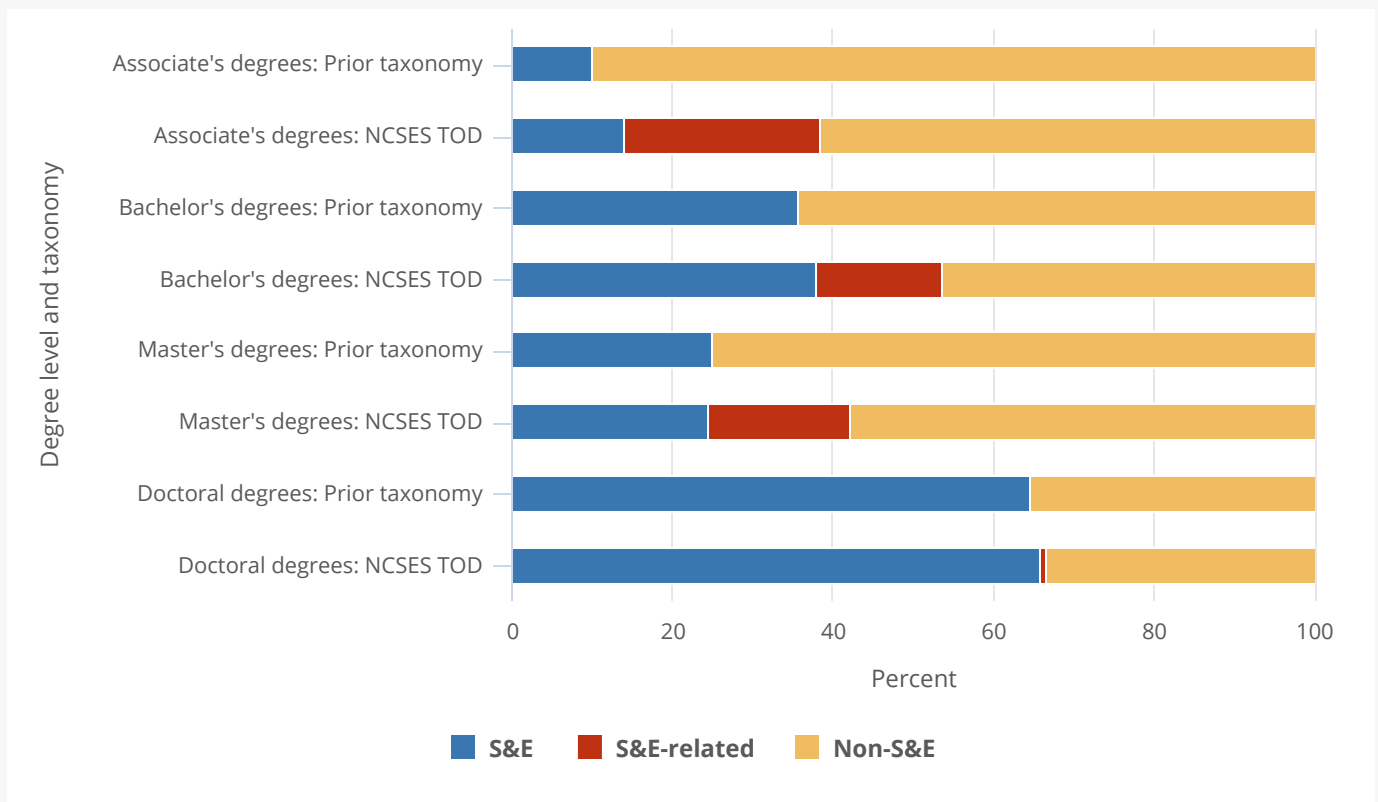
Revisions to Classification of IPEDS Degree Data under the NCSES Taxonomy of Disciplines

For the first time, this edition of the “Higher Education in Science and Engineering” *Indicators* report classifies degree data from the Integrated Postsecondary Education Data System (IPEDS) according to the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD). The implementation of the TOD means that IPEDS degree data presented in this report are not comparable to the data presented in earlier editions.

The TOD was developed to promote uniformity in reporting of academic disciplines across the NCSES data collections. The TOD is closely aligned with the National Center for Education Statistics Classification of Instructional Programs (CIP), which is used in the IPEDS Completions Survey. However, because the NCSES TOD is used for the reporting of different academic discipline concepts (e.g., degrees, research fields) with different purposes, there are some differences between the TOD and IPEDS CIP structure.

The adoption of the TOD with respect to IPEDS data has changed the distribution of degree awards among S&E, non-S&E, and S&E-related fields; the latter of these was not present in the prior taxonomy (Figure HED-A). The extent of this change varies considerably by degree level, with the greatest impacts observed at lower degree levels. The S&E share of degrees awarded in 2019 increases from 10% to 14% under the TOD at the associate’s level and increases from 36% to 38% at the bachelor’s level. Much of the increase is attributable to the shift of criminal justice and certain interdisciplinary fields from non-S&E to S&E; these fields are far more prevalent at lower degree levels. The shift of public administration degrees—which are most popular at the master’s level—from S&E to non-S&E leads to a small net decrease in the share of S&E master’s degrees. Educational psychology and school psychology, which have had their classification changed from education (non-S&E) to psychology (S&E), account for much of the comparatively small increase in S&E degrees at the doctoral level.

Figure HED-A

Degrees awarded, by field, level of degree, and taxonomy: 2019

NCSSES = National Center for Science and Engineering Statistics; TOD = taxonomy of disciplines.

Note(s):

Data are based on institutions eligible to participate in Title IV federal financial aid programs. Data are not available for S&E-related fields in the prior taxonomy because this category did not exist in the prior taxonomy. Doctoral degree programs include research doctoral degree programs only and do not include professional doctoral programs (e.g., Doctor of Medicine). *Prior taxonomy* is the S&E field classification for Integrated Postsecondary Education Data System (IPEDS) degree data in *Indicators 2022* and prior reports. NCSSES TOD is the S&E field classification used for IPEDS degree data for the first time in *Indicators 2024*.

Source(s):

National Center for Science and Engineering Statistics, special tabulations (2022) of the National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions Survey, provisional release data.

Science and Engineering Indicators

The new category of S&E-related fields includes health professions, protective services, science and mathematics teacher education, and technology-oriented programs. Degrees in registered nursing are by far the most common S&E-related degrees at the associate's, bachelor's, and master's levels. A variety of other health-oriented practitioner and technician programs make up much of the remainder of S&E-related degrees. S&E-related degrees are most frequent at the associate's level, where they account for 24% of degrees (Figure HED-A). This is because degrees in other S&E-related technician programs outside of health, such as automotive mechanics, are awarded almost exclusively at the associate's level. Doctoral degrees in S&E-related fields are rare; this is largely because health fields are classified as S&E rather than S&E-related fields at the doctoral level. In contrast to lower degree levels, NCSSES classifies health doctorates in the IPEDS degree data as S&E because these fields are more likely to be research oriented rather than practitioner oriented at the doctoral level. Note that in this report, doctoral degree programs include research doctoral degree programs only and do not include professional doctoral programs (e.g., Doctor of Medicine).