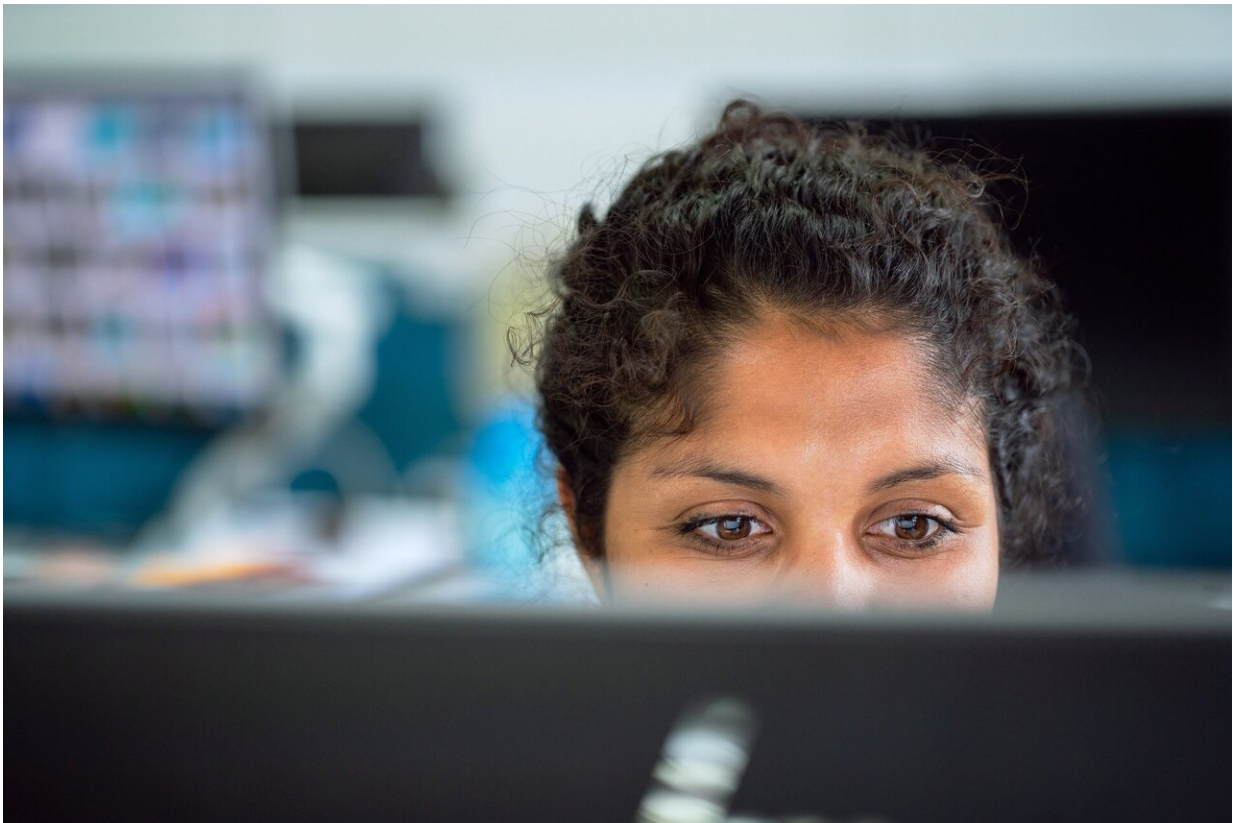


Few tenure-track jobs for engineering Ph.D.s, study finds

May 8 2024



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A study finds that most engineering Ph.D. graduates will never secure a tenure-track faculty position. Over the past 50 years, the number of full-time faculty positions in US universities has steadily declined while

production of science and engineering Ph.D. graduates has nearly doubled.

Siddhartha Roy and colleagues analyzed data on Ph.D. graduates and tenure-track and tenured faculty members across all engineering disciplines from 2006–2021. The work is [published](#) in the journal *PNAS Nexus*.

The average annual likelihood of securing a tenure-track faculty position in engineering during this 16-year period was 12.4%. The likelihood of securing a tenure-track faculty position was 18.5% in 2006. By 2014, the likelihood had fallen to 10.9%. In 2021, the likelihood had increased slightly to between 11.3% and 12%.

Subdisciplines with the lowest placement rates for newly minted Ph.D.s include engineering management, [petroleum](#), biomedical, [nuclear engineering](#), metallurgical and materials, and [environmental engineering](#). Previous research has found that nearly 80% of tenure-track engineering faculty members hired during 2011–2020 were trained at just 20% of US universities, suggesting that the likelihood of finding a tenure-track engineering position depends on the prestige of the degree-granting university.

According to the authors, alternative-academic career tracks such as careers in government and industry should be emphasized during Ph.D. training to ensure student expectations match the realities of the job market.

More information: Siddhartha Roy et al, Competition for engineering tenure-track faculty positions in the United States, *PNAS Nexus* (2024). [DOI: 10.1093/pnasnexus/pgae169](https://doi.org/10.1093/pnasnexus/pgae169)

Provided by PNAS Nexus

Citation: Few tenure-track jobs for engineering Ph.D.s, study finds (2024, May 8) retrieved 22 June 2024 from <https://phys.org/news/2024-05-tenure-track-jobs-phds.html>

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