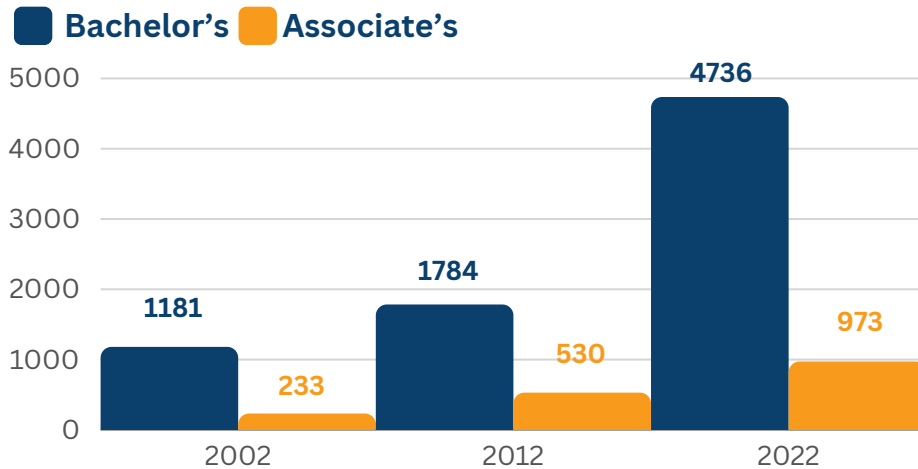


Latine Women: Growing Participation in Engineering

by Alan Peterfreund and Talia Goldwasser of SageFox Consulting Group

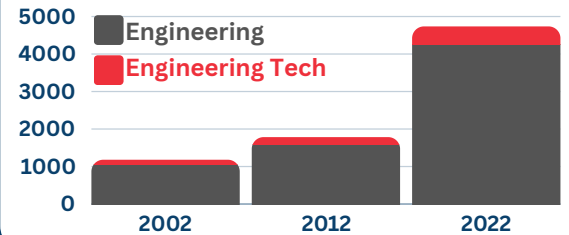


Latine Women: Engineering Degrees over Time

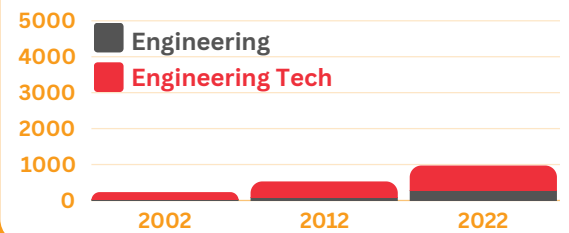


Nationally, 20% of Latine women bachelor's awardees in 2022 were in California. 23% were in Texas.

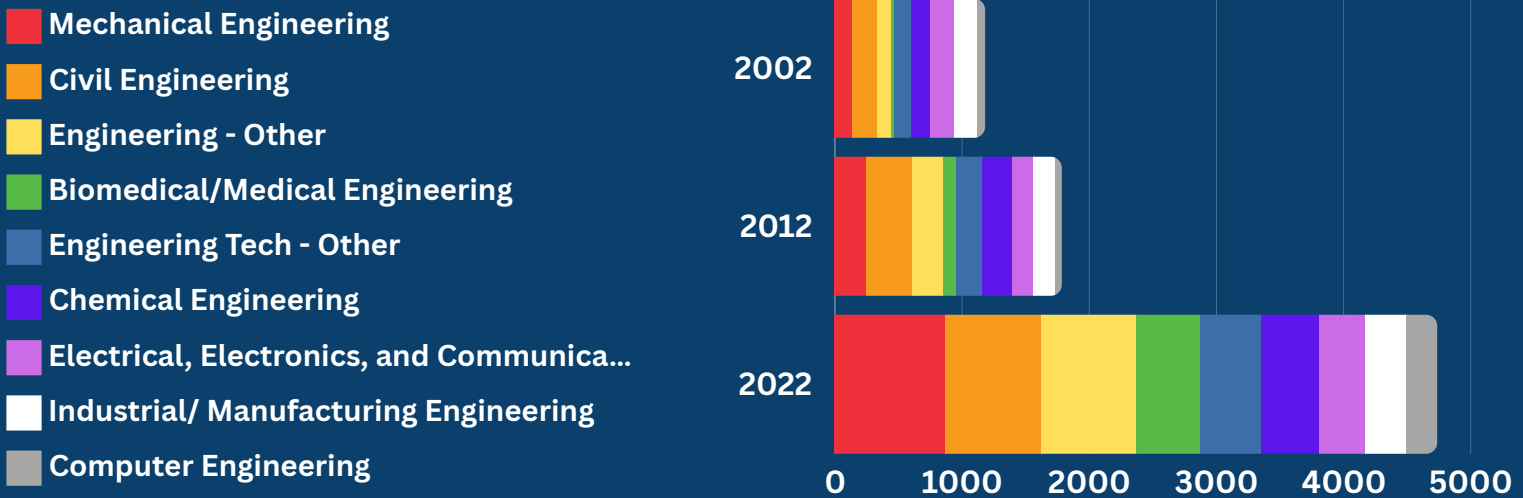
Bachelor's Degree Breakdown



Associate's Degree Breakdown



Latine Women Earning Engineering Bachelor's Degrees: Breakdown by Major



The number of engineering bachelor's degrees earned by Latine women increased more than fourfold between 2002 and 2022.

Growth between 2002 and 2022 appears to be across all majors with biomedical and medical engineering expanding most rapidly by percent (2.4% → 10.5%) and mechanical by absolute number (↑731).



Engineering PLUS CIDER Research Team Brief

Alan Peterfreund and Talia Goldwasser of SageFox Consulting Group compiled this brief as part of their work within the Engineering PLUS Alliance.

NSF's Eddie Bernice Johnson INCLUDES Alliance Engineering PLUS (Partnerships Launching Underrepresented Students). This work is supported by the National Science Foundation under award HRD-2119930. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

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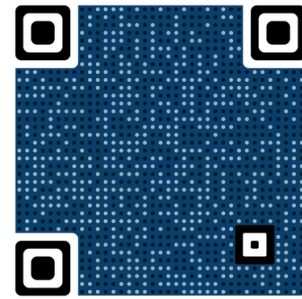
With a goal of increasing diversity in those that are earning engineering degrees, this information can help highlight a population that is not explicitly discussed across the alliance.

- It can help **surface the types of partnerships** that may be involved in reaching Latine women through which institutions or groups can further our objectives
- It can serve as a **discussion point to align the leadership** teams around best practices in an applied case.
 - The brief will raise questions about the diversity of Latine women in engineering nationally
- **For Individual change agents** [such as stEm PEERs]
 - Advocates can use these data to compare their local programs with the national trends.
 - Advocates can use this analysis to facilitate conversations within their own colleges to understand a) which engineering degree programs are enrolling and graduating Latine women more successfully b) what accounts for these differences and c) how to leverage best practices across their colleges.
- **For Institutional Partnership groups** [Such as Engineering PLUS Hubs or Impact Working Groups]
 - Taking a regional approach to understanding participation of Latine women may help surface the strategies used to engage Latine women among partnership members. The partnership may also identify additional best practices and other resources to surface and share.

Sources and More Information:

- Sarah L. Rodriguez, Erin E. Doran, Mackenzie Sissel & Nia Estes (2022) Becoming La Ingeniera: Examining the Engineering Identity Development of Undergraduate Latina Students, *Journal of Latinos and Education*, 21:2, 181-200, DOI: 10.1080/15348431.2019.1648269
- <https://shpe.org/>
- <https://www.edexcelencia.org/>

For A Deeper Dive



Explore the data



www.sagefoxgroup.com/cider

Discussion Prompts

- Which schools are more successful and why?
- How do we maintain momentum?
 - Could the growth we see with Latine women be replicated with other groups?
 - How do these trends relate to other populations in Engineering?
- How do local/regional trends align with the national trends? What accounts for this (mis)alignment?
- Are there policies or programs that are influencing the growth of Latine women in engineering and in particular in specific disciplines?
- What industries might be driving opportunities?
- We invite you to share these results with your students. What would your Latine students in particular say about the stories behind the numbers?



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