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SCIENCE, ENGINEERING STUDIES ARE STILL A HARD SELL TO WOMEN

Data show women earned just 21 percent of undergraduate engineering degrees and fewer in computer science, a trend that could exacerbate a gender-based earnings gap

By Melissa Korn
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Computer science and engineering are gaining in popularity as undergraduate and graduate courses of study. But in a trend that could further solidify for decades a gender-based earnings gap, men continue to flock to those lucrative disciplines in significantly larger numbers than women.

Nearly half of all bachelor's degrees earned in the sciences and engineering in the 2015-2016 academic year went to women, according to new data from the National Student Clearinghouse Research Center. That is due in large part to the popularity of psychology, biology and social-science programs. Women still earned just 21 percent of undergraduate engineering degrees and an even smaller share in computer science.

More than twice as many women received bachelor's degrees in psychology last year as they did undergraduate degrees in computer science, engineering and the physical sciences combined. Women accounted for 77.6 percent of all bachelor's degrees in psychology last year, and earned 57.6 percent of all undergraduate degrees across disciplines in the 2015-16 academic year.

Overall, schools awarded 552,458 bachelor's degrees in science and engineering last year, up 44 percent from a decade earlier. They gave out another 142,503 master's and doctoral degrees last year, an equivalent increase on a percentage basis.

Doug Shapiro, executive research director of the National Student Clearinghouse Research Center, said the split illustrates the importance of tracking outcomes not just for the sciences broadly, but at different degree levels and within [specific fields of studies](#).

The gender split in so-called STEM programs has long frustrated school officials, who increasingly offer special boot camps, internship programs and mentoring opportunities to help boost the ranks of women in those fields. But so far, at least, those initiatives have borne little fruit in evening out the share of men and women who pursue such degrees.

While overall numbers increased, the share of bachelor's degrees earned by women outright fell over the past decade in earth, atmospheric and ocean sciences, the physical sciences, mathematics, computer sciences and biology.

"If we had a silver bullet, it would be solved already," said Erin Cech, an assistant professor of sociology at the University of Michigan who studies gender equity in science and engineering and called the biases that eat away at women's confidence in the fields "pernicious" and stubborn."

She said reframing the skills needed to succeed in hard sciences and engineering – including communication, teamwork and creative problem-solving, rather than just technical capabilities – could help draw more women to the subjects.