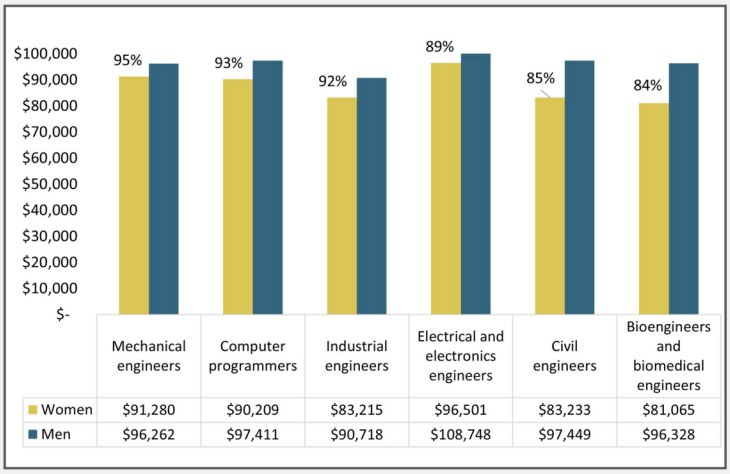
Fast Facts 2023

Society of Women Engineers

Annual Salary and Earnings Gap

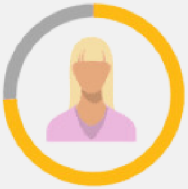


	Mechanical engineers	Computer programmers	Industrial engineers	Electrical and electronics engineers	Civil engineers	Bioengineers and biomedical engineers
Women	$91,280	$90,209	$83,215	$96,501	$83,233	$81,065
Men	$96,262	$97,411	$90,718	$108,748	$97,449	$96,328

While the median annual salary (US dollars) and gender earnings gap differ across work fields, mechanical engineering has the smallest gap, with women earning 95% of men's median salary in 2021. This means that, on average, women mechanical engineers earn $95 for every $100 that men mechanical engineers earn.

Earnings Gap for Women of Color

The gender pay gap in STEM is significant, with women earning only 74% of what men earn.



Black and Hispanic women in STEM jobs earn 14% less than White women.

Black and Hispanic women earn 55% of what Asian men earn in STEM professions.

Engineering Job Retention

53%
Women
Are employed in engineering 1-5 years after graduating from engineering.
2021

27%
Women
Are employed in engineering 11-15 years after graduating from engineering.
2021

Global STEM Workforce

Women comprise 49 % of non-STEM professionals across 146 nations but only 29 % of all STEM workers and are underrepresented in leadership.

26%	Managers
27%	Directors
18 %	Vice Presidents
12 %	C-suite Positions

www.swe.org/research
research@swe.org
1130 East Randolph Street, Suite 3500
Chicago, IL 60601

SWE FAST FACTS 2023

Top 10 Engineering Degrees Awarded to Women

The following is a list of the top ten bachelor's degrees in engineering and computing fields ranked by the number of women who graduated from those disciplines in 2021.

1. Mechanical engineering
2. Computer science
3. Biomedical engineering
4. Chemical engineering
5. Civil engineering
6. Industrial-manufacturing eng.
7. Electrical engineering
8. Computer engineering
9. Aerospace engineering
10. Environmental engineering

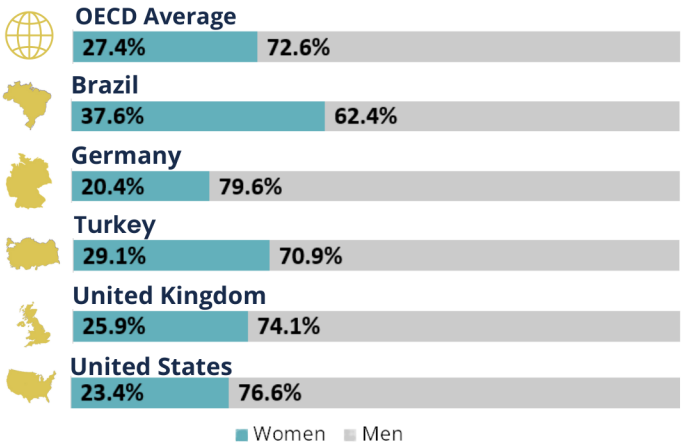
Girl's Future Career Aspirations

In 2018, PISA found that girls were less interested than boys in pursuing careers in science, engineering, and information and communication technology (ICT) professions.

Country	Science and engineering		ICT professions	
	% Boys	% Girls	% Boys	% Girls
Brazil	21.7	10.2	3.6	0.4
China	12.3	7.1	7.4	1.0
Mexico	30.0	10.7	4.8	1.2
Spain	16.0	7.3	9.5	1.2
Turkey	24.5	10.7	2.3	0.4
United Kingdom	18.9	8.8	6.9	0.6
United States	17.4	6.0	6.6	1.1

Tertiary Graduates

Percentage of tertiary (bachelor's, master's, and doctorate) degrees in engineering, manufacturing, and construction awarded to women in 2020 in select countries.



Degrees Awarded

Trends in women's higher education in engineering and computer science in the United States.

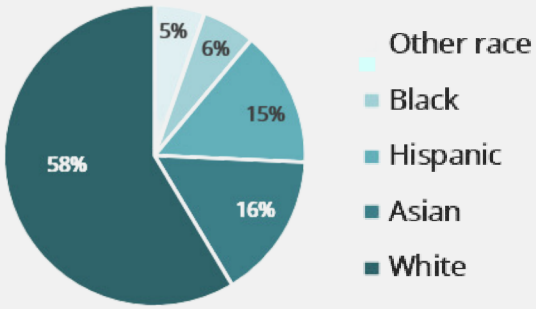
Degrees* Awarded 2019-20

Bachelor's:	54,091
Master's:	31,858
Doctoral:	3,339

*Degrees in engineering and computer science.

Bachelor's Women of Color

Distribution of bachelor's degrees to women of Color in 2020-2021 by racial/ethnic background.



Sources

- American Society for Engineering Education. (2022). Engineering and Engineering Technology By the Numbers.
- National Center for Education Statistics, Digest of Education Statistics, 2020 and 2021. Tables 354.35, 323.50, 322.50, 325.35, 325.45
- National Center for Science and Engineering Statistics (2022). National Survey of College Graduates
- OECD (2023), Graduates by field, OECD.Stat https://stats.oecd.org
- OECD (2019), PISA 2018 Results (Volume II): Where All Students Can Succeed, https://doi.org/10.1787/b5fd1b8f-en.
- Pew Research Center (2021). STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity
- U.S. Census Bureau (2021). American Community Service (5-year estimates). Tables B24122 and B24123
- World Economic Forum (2023, June 20). Global Gender Gap Report. https://tinyurl.com/y5k78462