Women in Mechanical Engineering and Entrepreneurship

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Abstract
Women in mechanical engineering remain underrepresented despite an increasing percentage in the overall enrolment for Sciences, Technology, Engineering, and Mathematics (STEM). Women, all over the world, account for approximately a quarter of tertiary engineering graduates. Despite that, their presence is still uneven across disciplines and countries. The mechanical engineering discipline shows among the lowest numbers of women (national data shows women as ~10% of mechanical engineers in some datasets). Moreover, some restraints limit women's participation and persistence, e.g., gender bias, cultural stereotypes, a lower sense of belonging, and workplace climates that reduce retention. These barriers were documented in large-scale analyses of women in engineering and computing.

Engineering and entrepreneurship are closely linked, as both involve problem-solving, innovation, and the application of technical knowledge to address societal needs. This has opened opportunities for women engineers to engage in entrepreneurial ventures, creating startups and businesses that transform technical expertise into market solutions. Global Entrepreneurship Monitor data shows that women's startup activity has increased significantly over the past two decades, with startup rates rising from 6.1% (2001–2005) to 10.4% (2021–2023), and established business ownership growing from 4.2% to 5.9% in the same period.

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