

Where are All the Women?

It's a decades-old, profession-wide question that demands answers. One engineering firm is taking deliberate steps to bridge the gender gap, starting within its own walls.



By Sharon Aschalek

the pathway to becoming a licensed professional engineer in Ontario is now much smoother for women who work at Siemens Canada. In 2024, the company introduced the Engineering Development Program, a structured pathway of guidance and resources to allow the efficient pursuit of a P.Eng. designation. Managers assign tasks that allow employees to develop relevant work experience required for licensure, while a dedicated validator can attest to their engineering expertise. They are also matched with a senior engineer who provides mentorship, and, if needed, they can access financial support to pay for licensing application fees. The program is open to all aspiring professional engineers, but it aims to enable the pursuit of licensure by more women.

"We believe in inclusion and belonging. We want to nurture and support women in the organization who want to become engineers," says Siemens Canada's director of higher education and sustainability, Natalia Malafeeva, P.Eng., who initiated the program.

As Malafeeva notes, advancing opportunities for women in engineering is vital to its ability to continue to innovate and compete, especially given that Siemens Canada is one of the country's largest technology consultancies and engineering employers. Across units at the organization, she says, it is well understood that inclusive workforces are more co-operative and creative—essential ingredients for operating in a sustainable, impactful way. Ensuring more diversity, and particularly gender balance, among its engineering teams optimizes how the company designs, develops and implements technological services for its clients in battery manufacturing, food and beverage, pharmaceutical and other major industries.

"Fostering an environment where all employees can thrive isn't just about fairness. It's also very much a strategic imperative that drives our success. Diverse teams bring diverse perspectives, and that leads to better innovation and problem-solving," says Faisal Kazi, Siemens Canada president and CEO. "We believe in equal opportunity for all, and that means actively working to remove barriers and create pathways for everyone, including female talent. We want to ensure every individual can contribute their unique skills and ideas to our company purpose."

FROM LICENSURE TO LEADERSHIP

This proactive approach to gender equity in engineering matters in a context where women continue to be significantly underrepresented in the profession. According to PEO's most recent data, of the province's approximately 90,000 licensed practitioners, about 15 per cent are women. This figure roughly aligns with the national picture, with Engineers Canada reporting that in 2024, women comprised about 16 per cent of engineers in the country. These gaps are shaped by the persistent gender divide among graduates of engineering programs: the most recent data from Engineers Canada found that among the 17,000 graduates who had earned an accredited engineering degree in 2022, only 23 per cent were women.

Research suggests that for women navigating the road to licensure, a supportive workplace culture could be the deciding factor in reaching the finish line. According to a comprehensive gender audit PEO initiated in 2021 to better understand the obstacles women

face during the licensing process, women are more likely than their men counterparts to report challenges with the experience requirement, leading them to delay licensure or consider giving up on it altogether. Specifically, women applicants reported having less access to engineering validators and mentors at their workplaces to guide them through the process. As well, they indicated experiencing gender bias in hiring decisions and job assignments, which impeded their ability to build their technical skills.

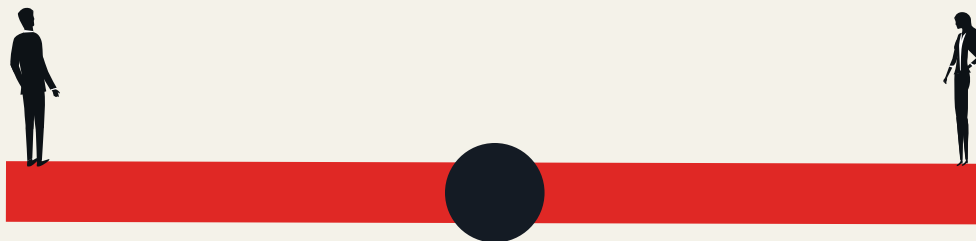
Like many of the women who participated in PEO's gender audit, Malafeeva says she kept questioning whether her work experience would pass muster for licensure. After completing a mechanical engineering degree in Moscow and moving to Canada, she took on roles in energy management consulting before joining Siemens Canada in 2012. At Siemens, Malafeeva says she benefitted from the support of a variety of mentors, including a manager who actively championed her journey by providing sufficient opportunities to develop her skills. In March 2025, Malafeeva realized her goal of earning her P.Eng., becoming the fourth engineer in her family.

"Having this support gave me the confidence in my ability to perform in my career," Malafeeva says. "They gave me a safe environment in which to make mistakes, learn and grow."

THE RETENTION FACTOR

Getting more women licensed has long been a goal for engineering regulators across Canada. But the conversation is now shifting from getting more women in the door to creating workplaces they want to stay in. Keen to uplift other aspiring and junior female engineers at Siemens Canada, Malafeeva began organizing informal career-development gatherings with other women engineers in 2021. She recently formalized these efforts into the company's first Women in Engineering community. Its approximately two dozen members meet monthly online or in person to network and share learning resources. The group has launched a 12-month internal marketing campaign for 2026 that will spotlight women engineers at the company. It is also focused on delivering a webinar for employees on pursuing an engineering licence with PEO, building a robust pool of in-house P.Eng. validators and better tracking engineering licensure among female engineers.

"The initiative is guided by a core team of six women, working closely with our business excellence team, who collectively help coordinate



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activities,” Malafeeva says. “The community is creating a stronger sense of belonging while advancing key career development metrics for women engineers across Siemens Canada.”

More broadly, Siemens Canada annually celebrates International Women in Engineering Day in June, which last year featured a panel discussion on empowering women in STEM that included as a speaker PEO CEO/Registrar Jennifer Quaglietta, P.Eng., MBA, ICD.D. The company is also actively involved in community outreach to support women in the profession: it is a major sponsor of the Society of Women Engineers Toronto and provides annual scholarships to women in engineering and computer science at the University of Waterloo.

Bolstering representation of women in the profession directly connects to Siemens Canada’s strategic priorities, says CEO Kazi. “When we proactively attract, retain and support female engineers, we tap into a wider talent pool, which is crucial in today’s competitive landscape,” Kazi says. “A more inclusive environment where our engineers, including female engineers, feel fully supported and valued leads to higher engagement and retention. They are more motivated, more productive and more likely to contribute their best work.”

A SHARED RESPONSIBILITY

As Siemens Canada works to create opportunities for women engineers to thrive in the workplace, PEO plays an equally important role in fostering a more inclusive profession through its own regulatory work. For nearly a decade, PEO has been actively supporting Engineers Canada’s 30 by 30 goal, which seeks to raise the percentage of newly licensed women engineers in Canada to 30 per cent by 2030. Since completing an audit of its licensing process, PEO has focused on finding ways to support women in getting licensed and staying in the profession.

In 2022, PEO introduced its Anti-Racism & Equity Code, in which countering discrimination against women is embedded as a key principle. Last year, PEO offered a series of optional webinars for its volunteers to learn more about the role they play in enhancing a culture of belonging. Meanwhile, many chapters have committees focused on supporting women P.Engs and run seminars to help women navigate and advance in the profession. Currently, the regulator is collecting detailed demographic data on its applicants and licence holders to support evidence-based decision-making about gender equity measures.

Much of PEO’s momentum towards advancing gender parity has evolved under the leadership of CEO/Registrar Quaglietta, whose appointment in January 2023 as the organization’s first female

CEO/registrar was a key milestone for the 104-year-old organization. Under her tenure, almost 6000 women have become licensed, a growth rate significantly faster than at any time in PEO’s history.

“It’s a marathon to embed EDI into every aspect of our regulatory role,” Quaglietta says. “That means identifying and removing systemic barriers, promoting fairness in licensing and discipline, and ensuring our practices reflect the diversity of the public we serve.”

Quaglietta also walks the talk in the community, most recently participating in Toronto Metropolitan University’s Women in Engineering Conference in February to mark International Day of Women and Girls in Science, which had as its theme this year “Synergizing AI, Social Science, STEM and Finance: Building Inclusive Futures for Women and Girls.” As the keynote speaker, she shared her career journey as an engineer and the importance of mentoring young women entering the profession.

As we look to the future, the efforts of Siemens Canada and PEO signal a broader cultural shift within the profession. By continuing to evolve policies and implement practices that support women engineers at every stage, both organizations are helping to redefine what a successful career in engineering looks like. The work being done today to improve licensure access, advocate for career advancement and create more supportive workplaces lays the groundwork for a profession where women are empowered to lead. Both PEO and individual firms have an ongoing responsibility to ensure this momentum continues.

“We’re committed to fostering a profession where all individuals can see a place for themselves and thrive,” Quaglietta says. “The call to action for employers is to provide more supportive guidance to women in your organizations [and] to look at your processes and programs to ensure women are given equal access to P.Eng. supervisors and mentorship so they can accumulate professional experience.” **e**