

NTU SG launches new program to encourage STEM education, career among women

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Singapore – Nanyang Technological University, Singapore (NTU Singapore), in a bid to promote science, technology, engineering, and mathematics (STEM) educational opportunities and careers, has launched a new program to persuade women in exploring STEM-related education and career.

Named 'Promotion of Women in Engineering, Research, and Science' (POWERS), the program will aim to recruit and empower women with a long-term goal to increase gender diversity in STEM careers. This will be achieved through creating a supportive ecosystem, conducting research to address barriers, and providing education and skill-building opportunities for career advancement in STEM.

POWERS was unveiled during the biennial Women in Engineering, Science & Technology (WiEST) symposium, held at the Lee Kong Chian School of Medicine, Clinical Sciences Building, at NTU's Novena campus, which was formally launched in the presence of Singapore president Halimah Yacob and Subra Suresh, NTU Singapore president.

POWERS is driven by Women@NTU, a voluntary initiative co-founded by **Sierin Lim, associate dean for global partnerships at NTU Graduate College** and **Kimberly Kline, associate dean at NTU College of Science**. POWERS is also supported by NTU's College of Engineering, College of Science, and Graduate College.

"Our programs are designed to create a supportive ecosystem to empower women to enter and develop successful careers in STEM industries. We want to provide them with enhanced networking activities, as well as mentoring them towards opportunities in STEM careers," Lim stated.

Part of the program campaign is the launch of WiEST 2021, which celebrates notable female role models, seeking to inspire and engage women who are considering a STEM career and to connect students with industry partners, with the long-term goal of increasing gender diversity in the STEM workforce.

"The strong support and collaborations with STEM partners, from education, industry, and the government, are essential to the success of the program. Together, we can develop women for future leadership in STEM," Lim added.

The program launch is in response to the low rate of women engaging in STEM courses. A recent study by NTU shows that from a sample of 738 Singaporeans, only 58% of women who graduated with a STEM diploma or degree went on to work in a STEM field, compared to 70% of men with the same qualifications. This is despite women and men expressing equal career interests consistent with STEM jobs.

Furthermore, the study noted that women who left the STEM career pathway were more likely than men to perceive barriers of inclusion and career advancement. This finding is consistent with other international research which found that women are more interested in STEM education and careers when they believe they belong and can succeed in STEM.

"I believe men can be a compelling catalyst for other men to engage in equitable practices to support women empowerment. We can help provide women with a sense of belonging and purpose in STEM, especially in the male-dominant engineering field. We can create a long-lasting sustainable impact leading to greater diversity and attract more women to pursue their education and careers in STEM," Louis Phee, dean of NTU's College of Engineering.

As part of the program, POWERS will be initiated in a three-pronged approach: Connect, Research and Educate. The pilot program will connect students to the STEM community, conduct research to develop data-driven approaches with the local context, and work with educators and the community, to build a supportive ecosystem for women, from pre-university to postdoctoral levels, enabling them to thrive, advance and succeed in STEM.

For **Kimberly Kline, co-chair of WOMEN@NTU**, the program is designed to empower young women to engage in STEM through leadership training and community building.

"Our mentors are trained to motivate, support and inspire women to pursue and achieve their goals. We want the next generation of women to view themselves as agents of change as they utilize their STEM education to address global challenges. We are building a community of high-achieving women because we believe that we are stronger together," Kline stated.