

THE INNOVATIVE ENGINEER OF THE FUTURE



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It is an exciting time to be engineers. We have entered the age of digital transformation and more than ever, we need to be fast to respond by harnessing new technologies, including disruptive ones, at a much quicker pace within our applied solutions to real-world problems.

Disciplines within engineering and across other disciplines are now blurring. What we study today may not be able to sustain us for tomorrow. An insatiable curiosity for the world, constantly questioning and having an entrepreneurial mindset are critical. Engineers also need to harness collective resources and multi-disciplinary expertise to succeed, interacting with stakeholders and collaborating widely across disciplines to reach world class solutions.

Meanwhile, many opportunities have emerged through disruptive technologies, and engineers can look forward to these permeating almost every industry. Artificial Intelligence (AI), the Internet of Things (IoT), and robotics are well known. We are also increasingly dependent on analysing and making good sense of data to deliver cutting edge “intelligent engineering” products and services augmented by IoT to our customers, while powering solutions with AI.

As engineers, we need to be technically strong and have an analytical mind to succeed in our professions. Engineers of the future have a greater challenge. They also need to be captains of their industry – and lead innovative engineering amidst such volatility. Thus they have to be agile social architects who are able to form communities willing and capable to co-create with them in open collaboration.

At ST Engineering, we realise that counting on organic growth and cost reductions is insufficient and have prioritised investments in innovation and digital capabilities. We believe that open innovation and collaboration are enablers to grow Singapore’s intellectual property creation capabilities and further strengthen the organisation’s innovative engineering ecosystem.

We complement traditional R&D with open innovation to create new technologies. We invite collaborators from around the world to work with us at the ST Engineering Open Lab on breakthrough engineering-based solutions. Our Corporate Venture Capital unit also scouts for start-ups globally to collaborate with us and take their technologies a step further.

At the country level, Singapore is well placed to stand among the giants in the world in innovative engineering. Singapore is currently top in Asia and sixth globally in terms of innovation capabilities, according to the 2017 Global Innovation Index that measures innovation in 128 countries.

I encourage engineers of Singapore to come together to continue building great things for the country and the world. This is what collective genius and open collaboration is about – cutting across the ecosystem comprising the government, industry, academia, start-ups and small and medium enterprises.

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