

## Talent

# Higher learning institutes can help boost skilled manpower

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There is a dearth of local talent in the manufacturing sector, and higher learning institutes must play their part in helping the Republic achieve its goal to grow the sector by 50 per cent by 2030, say experts and observers.

The 10-year plan was announced in January by Trade and Industry Minister Chan Chun Sing, who identified the manufacturing industry as a key driver of economic growth for Singapore.

The plan will raise the global competitiveness of the sector, but more Singaporeans will have to work in it as the proportion of low-wage foreign workers is reduced, Mr Chan had said.

Singapore Manufacturing Federation (SMF) president Douglas Foo says: “(Educational institutions) must be agile and nimble to adapt and develop talent in a dynamic landscape of advanced technology in manufacturing, so as to deepen the capabilities of the workforce with the required skill sets, while continuing to advance the transformation of the sector.”

He notes that the SMF has been actively engaging government and private partners, other trade associations and chambers, and various higher learning institutes to discuss how the sector can attract young talent.

### LACK OF LOCAL TALENT

Mr Oo Kah Wee, 54, co-founder of a precision engineering company and part-time engineering teacher at a polytechnic, says there is a lack of local talent in the manufacturing sector.

“I’ve seen a leakage of engineering students from the education system as they prefer to pursue further studies in other fields,” he notes.

His students have told him that the “culture shock” at factory working environments, among other reasons, may drive them away. “Some factories are located in remote in-

dustrial areas and the setting is quite different from in schools, where they have very nice, modern and air-conditioned laboratories and classrooms,” Mr Oo says.

Schemes like the SGUnited Jobs and Skills Package help Singaporeans acquire job-related skills and capabilities, and access employment opportunities.

As at end-January this year, some 4,770 people have been placed in the manufacturing sector through this scheme, up from about 2,120 in mid-October last year, according to the Ministry of Manpower.

About 3,260 of them found jobs, up from about 1,350, while around 800 were placed in company-hosted traineeships, attachments and training opportunities, up from about 320. The remainder – about 720 – were placed in skills training opportunities, up from about 450.

There are more than 12,500 remaining jobs, company-hosted traineeships, attachments and training opportunities, as well as training places available in the manufacturing sector, under the SGUnited Jobs and Skills Package.

### STRENGTHENING THE TALENT PIPELINE

The autonomous universities say they are making efforts to boost the talent pipeline for the manufacturing sector and ensure the programmes they offer keep pace with industry needs and trends.

A Singapore Institute of Technology spokesman says the school offers specialised degree programmes such as in electronics and data engineering, where students learn about factory operations and production management.

At the Singapore University of Technology and Design (SUTD), engineering product development as well as engineering systems and design programmes, where students learn to use relevant tools, are offered.

From 2017 to 2019, close to 13 per cent of students from these

SUTD programmes found work in the manufacturing sector.

Nanyang Technological University’s deputy provost (education) Tan Ooi Kiang says the university encourages students to pursue interdisciplinary courses and project work in areas such as advanced materials and digital and additive manufacturing.

Meanwhile, a National University of Singapore (NUS) spokesman says a significant majority of NUS graduates who entered the manufacturing sector upon graduation in recent years have engineering backgrounds.

A good number also came from the science and business faculties.

Beyond training undergraduates, NUS also offers courses related to advanced manufacturing for adult learners, the spokesman adds.

Singapore Management University’s vice-provost (undergraduate matters) Venky Shankararaman says some business students also find work in the manufacturing sector. “They usually take on business roles, such as those in operations, marketing or finance,” he adds.

### CHANGING MINDSETS OF PROSPECTIVE HIRES

NUS materials science and engineering graduate Felix Deng, 27, started work in 2017 at semiconductor manufacturing company Applied Materials as a process engineer. He handles communications with customers for various engagements, as well as research and development assignments.

“The local sector lacks young talent...Many have the perception that engineering is tough, while not necessarily paying well or having good career progression,” he says.

The various talent development programmes and training opportunities will “hopefully be a good starting point for changing the mindset of engineering students and society towards engineering”, he adds.

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