

# Many options for engineering

PRIVATE institutions have turned their attention to engineering degrees, to keep up with industry demands.

Some, like PSB Academy and Management Development Institute of Singapore (MDIS), have set up laboratory facilities and brought in machinery for students to use.

This comes as engineering jobs rank among the top 10 unfilled positions for the third year in a row.

Young people, even those with engineering qualifications, tend to shun the profession for other fields such as finance and banking as they perceive it to be dull, not as high-paying and involving work that gets their hands dirty.

But while engineering jobs are not popular, engineering degrees continue to be in demand, with local universities offering programmes with overseas partners such as London's Imperial College to attract each cohort's best.

Last year, Nanyang Technological University accepted 2,800 engineering students, and National University of Singapore took in 1,500. These figures were about the same as those in the previous year.

The number trained by local universities will rise further with new offerings from Singapore University of Technology and Design (SUTD) and Singapore Institute of Technology (SIT).

The bulk of SUTD's first intake of 340 students in 2012 will graduate this year with an engineering degree.

Last year, SIT introduced two of its own degrees in infrastructure engineering and software engineering.

Noting this demand, private schools

are offering engineering qualifications.

Last year, PSB Academy started offering an electrical and electronic engineering degree by Britain's Coventry University. This is on top of two degree courses in electrical and mechanical engineering that the academy runs with Australia's University of Newcastle.

In 2011, MDIS introduced degrees in electrical and electronic engineering, and mechanical design engineering, which took in more than 50 students. These now have about 350 students.

MDIS also started a new product design engineering degree last year.

It let polytechnic graduates with relevant diplomas complete these two courses in a year instead of the usual three.

MDIS' senior director Tan Gek Khim said: "The top-up programmes, specifically, were introduced to meet the demand from polytechnic graduates who wish to upgrade their qualifications."

The school has built three workshops and laboratories with equipment such as 3D printers and machines for welding and plasma cutting to let students hone their skills.

Similarly, PSB Academy will be bringing in 3D printers and scanners for students. It has four labs and three rooms with electrical, mechanical and physics equipment.

Mr Kenneth Tay, 28, who joined its mechanical engineering degree course from the University of Newcastle, said not many private schools offered engineering courses five years ago.

"I was considering going overseas to study, but I was looking for a shorter route as I want to start work soon,"

said the former Institute of Technical Education student. He did a Higher Nitec in electronics and electrical engineering in 2008, and hopes to work in the silicon chip industry.

At least three other institutions, including James Cook University Singapore, are exploring the possibility of engineering degrees.

Kaplan Singapore is wrapping up discussions with Australia's RMIT University to offer degrees in mechanical and aerospace engineering, which will start in the second quarter of the year. Students may spend part of these courses at RMIT's laboratory facility in Melbourne to gain practical experience.

Kaplan Singapore's president Leon Choong said these new degrees "are in response to the increasing trend we see of large aerospace companies such as Rolls Royce and Pratt and Whitney setting up their operations and manufacturing facilities in Singapore".

Similarly, the East Asia Institute of Management is looking to start aeronautical and mechanical engineering degrees in one to two years' time. It may also launch a master's degree in engineering.

Its principal and executive chairman Andrew Chua said: "We are aware that setting up engineering labs to support the practical aspects of engineering education is necessary and can be expensive. However, as a considerable part of engineering lab work revolves around the use of computer simulations, cost is not a major factor in the provision of a good engineering degree."

AMELIA TENG



**Mr Kenneth Tay is on a PSB Academy mechanical engineering degree programme under the University of Newcastle. He hopes to work in the silicon chip industry.**

PHOTO: TED CHEN FOR THE STRAITS TIMES