SINGAPORE INSTITUTE OF TECHNOLOGY

Publication: The Straits Times
Date: 10 January 2022
Headline: SIT students learning interdisciplinary content in five degree courses

SIT students learning interdisciplinary content in five degree courses

First batch to do so enrolled last year; curriculum equips them to handle real-life problems across different fields

Amelia Teng
Education Correspondent

Students across five degree programmes at the Singapore Institute of Technology (SIT) have been learning content beyond their disciplines since September last year.

The 370 freshmen, who enrolled in SIT last year, are the first batch of undergraduates to benefit from a revamped curriculum, which aims to equip them to handle complex real-life problems that may cut across different fields.

At least 15 per cent of their overall curriculum credits will comprise interdisciplinary learning and working with peers from other disciplines, SIT president Chua Kee Chaing said in an interview with The Straits Times last month.

SIT, which has a total enrolment of about 9,000, is piloting this new approach in five degrees: digital communications and integrated media, pharmaceutical engineering, physiotherapy, robotics systems, and speech and language therapy.

Apart from a foundational module in critical thinking and communicating, students will take two design innovation modules that will equip them with skills needed to solve problems under real-world constraints, which might be economic, environmental, social or political.

They will also have to undertake a social innovation project, working with community partners to address various challenges.

With more of such initiatives, the university hopes to have students be less reliant on final examinations, said Professor Chua, whose appointment as SIT president took effect on Jan 1.

He had been president-designate of SIT since last September, and provost before that.

He said: "This is also a mindset change for my colleagues, because traditionally, professors are very concerned that students copy one another. But you have to think of ways to assess the students individually, although it is a team effort."

Each degree programme will also have several complementary modules to further aid students to keep up with changes in a particular sector.

For instance, hospitality students will take some engineering modules to understand basic robotics, digitalisation and automation – all of which are becoming more prevalent in the industry.

Prof Chua said he hopes to have all programmes contain interdisciplinary modules in the next four years, with more degrees having them from September this year.

SIT will have 38 undergraduate programmes in the academic year starting in September.

WORK-READY GRADUATES

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SIT PRESIDENT CHUA KEE CHAING

Prof Chua said that as a university that focuses on applied learning, SIT's aim is for graduates to "hit the ground running" when they step into the workforce.

"We want our education to be as authentic as possible, and that means working very closely with industry... to expose our students to the kind of problems they will face when they go to work," he said.

And problems are becoming more complex, he said, adding that issues such as climate change and sustainability require expertise from multiple disciplines.

More attention will also be given to transferable skills, or abilities that are useful across careers. SIT has drawn up a list of 18 such skills – from written communication and digital data literacy to professional ethics and self-management – that it wants students to learn through existing and new modules.

Students will be able to track their learning progress through an app that will map out the skills they have learnt. The app will be ready within the next two years.

Interdisciplinary learning has been of recent interest among universities in Singapore.

The National University of Singapore admitted the first cohort of students into its College of Humanities and Sciences in August last year, bringing together two of its oldest faculties.

Prof Chua said as an applied learning institution, SIT's approach to interdisciplinary learning is more targeted as it has to ensure that students still gain sufficient expertise in their specialisations without extending their time in school.

It is not about cramming knowledge from multiple disciplines into their university education, he said, but getting students to develop the ability to interact with people and jobs across disciplines.

ateng@sph.com.sg