NTU revamps its curriculum structure for 2011's incoming freshmen

By Hoe Yeen Nie | Posted: 15 March 2011 1835 hrs

SINGAPORE: The Nanyang Technological University (NTU) has unveiled a major revamp of its curriculum structure that will involve more choice, greater flexibility and fewer hours in the classroom for this year's incoming freshmen.

Currently, students at NTU already have some element of cross faculty studies. For instance, engineering students spend about 25 per cent of their time on electives.

However, under the new structure, they will spend at least 30 per cent of curriculum time on inter-disciplinary elective modules.

These include 29 new options in Liberal Studies, as well as a compulsory core option in Environmental Sustainability, on top of the roughly 800 electives already available.

NTU is also introducing a new Renaissance Engineering Programme which melds engineering with business management modules.

The aim, it says, is to “groom an exclusive breed of engineering leaders into future CEOs (Chief Executive Officers) and CTOs (Chief Technology Officers)”. It will also start two new double degrees in Business and Computer Engineering, and Business and Computer Science.

More students will also get the chance to spend time overseas for exchanges with partner universities or internships, with the aim to raise the percentage of the cohort that do so from 50 per cent to 70 per cent.

The new structure will not apply to existing students, but they may be able to take up some of the new courses.

NTU says on average, a new student may end up taking three or four fewer modules across his four years in NTU.

But while changes will mean fewer hours in the classroom, the university says there will be no dilution in content or academic rigour.

Instead, more time will be devoted to independent study and group learning.

Teaching methods will change too, with greater attention to the use of IT and tutorials in place of large lectures.

Faculty staff too, are expected to take on more research activities.

President-Designate and Provost, Professor Bertil Andersson says the revamp is needed to keep up with a world that has become more multi-cultural and globalised.

“We have to admit that maybe our undergraduate courses have been more conservative. Maybe we teach in the same way as we did 20, 25 years ago. And I think there’s a big change that has to be done. We have to educate young people for the knowledge of tomorrow,” said Professor Andersson.

The changes are part of a three-year review, called the Blue Ribbon Commission on Undergraduate Education, by NTU.

And they are aimed at developing graduates that are creative, have strong leadership skills, and possess a social conscience.

Beyond the academic aspects, it also calls for a change in campus environment.

This means new types of classrooms to facilitate student-lecturer exchange and group discussions, as well as more residential halls and recreational spaces.

Some of these plans were laid out in NTU’s campus masterplan, announced earlier in the year.

NTU says the last revamp of the curriculum was in 2003, when it introduced more inter-disciplinary elements, and more avenues for undergraduate research and overseas exposure.

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