NTU students go for team-based learning in special programme

By CALVIN YANG

IN CLASSROOMS fitted with cluster seating and multiple LCD screens, groups of five to six Nanyang Technological University (NTU) undergraduates, armed with iPads, discuss quiz questions and answer them as a team.

Every group does better than the top individual’s score on the same quiz, showing the benefits of small group discussions.

Aware of the benefits, NTU has introduced a team-based learning format for its Renaissance Engineering Programme (REP), which combines engineering with business and liberal arts, and is aimed at top A-level students. REP students will be taught certain modules via team-based learning, similar to what is used at NTU’s Lee Kong Chian School of Medicine.

Students will use mobile devices such as iPads and applications like iREP, an NTU-designed online library stack where they can access video lectures and other resources.

With the revised pedagogy, NTU will cut back on lectures and tutorials for the programme, which awards an engineering science degree and master’s in technology management in 4½ years. Programme director Teoh Swee Hin said: “Professors will no longer be the sole source of information. Students will be able to facilitate their own learning. Those who are weaker can get help from their peers.”

A pilot using the revised format involving 56 REP freshmen was carried out last August. Three modules have since adopted the new approach.

The format will be implemented for new students in the August intake, with 30 per cent of the curriculum involving team-based learning. The university plans to double this by 2017.

Modules that do not require open-ended discussions, such as engineering mathematics, will still follow the usual format.

Grading for the modules will be adjusted, with students having to take weekly tests, group quizzes and a final exam comprising 50 to 60 per cent of the final grade. Previously, the final exam made up 80 per cent.

REP freshman Rachel Tan, 20, who went through the pilot, said: “In small groups, we were able to ask each other questions and clarify certain concepts with our professors.”

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