Solving real-life problems

Dr Susanna Leong helped to develop Singapore's first undergraduate programme in pharmaceutical engineering at Singapore Institute of Technology.

Ways to improve

Besides paving the way for SIIT's pharmaceutical programme, Dr Leong also looks at ways to improve teaching and learning at the university. For example, she has to re-think how best to use information technology to deliver lessons to hetero-
savvy students effectively.

She also had to overcome workplace learning that was distant from classroom learning through SIIT's Integrated Work-Study Programme, to give students a competitive edge in acquiring real-life industrial skills that complement classroom theory.

Dr Leong also spends time researching medical problems to find viable solutions that can help patients.

That includes working with clinicians at the National University Health System (NUHS) and manufacturers of catheters – the medical tubes inserted into the body – to develop antimicrobial catheters to reduce infections in hospitalised patients.

Meeting industry needs

Today, Dr Leong serves as an associate professor and programme director at the Singapore Institute of Technology (SIIT), helping Singapore's first autonou-
ous university develop its pharmaceutical engineering programme.

"It is particularly important in helping us shape the programme's educational focus to meet real industry needs, as one of SIIT's key goals is to produce industry-competent graduates," she adds.

However, developing the programme also proved to be one of the biggest challenges in Dr Leong's career at SIIT.

"As SIIT received its autonomous university status only in March 2014, the journey to rollout new programmes is inevitably short," she says.

"I have a capable team that has been working relentlessly with me on the programme's develop-
ment and the programme is now ready for launch in September," she adds.

Dr Leong says the programme has drawn strong support from the pharmaceutical industry be-
cause of its industrial relevance. She is confident the programme will be well received by students as well.