Freshmen joining Nanyang Technological University (NTU) in the new academic year in August will take up a new common curriculum that spans a variety of subjects. They will also need to complete internships in order to graduate.

These are among the initiatives that NTU laid out yesterday – as part of its plans for the next five years – to better prepare students for a changing workforce.

The core curriculum, which emphasises interdisciplinary skills, comprises seven modules covering topics such as digital literacy, communication and inquiry, ethics and global challenges. The aim is to help students make connections between disciplines and prepare them for a world where complex challenges need to be tackled from different angles.

The revamped curricula starts with the 6,000 freshmen joining NTU in August – except those studying medicine and at the National Institute of Education. These modules, which students will take across their first two years, make up about a fifth of the overall academic workload.

Higher learning institutions have been making a greater push for students to see connections across disciplines.

In August, the National University of Singapore will enrol first-year students into its new College of Humanities and Sciences, marking a shift from the traditional way of learning in separate disciplines.

Speaking to The Straits Times, NTU president Subra Suresh said that, with the curricula overhaul, undergraduates will take classes alongside peers from other disciplines and listen to a wider range of faculty members.

He cited the example of an engineering or computer science student who would naturally have computer literacy and coding expertise. But he or she would also need to understand softer aspects of technology, such as the ethics of computing, as well as privacy and confidentiality.