SINGAPORE - Students at Nanyang Technological University (NTU) will now be able to take courses straddling different disciplines with the merging of two units in the engineering and science colleges.

The new School of Chemistry, Chemical Engineering and Biotechnology will help spearhead efforts to embark on interdisciplinary education and research, said NTU in a statement on Friday (Aug 26).

NTU engineering college dean Louis Phee said it will enable engineering students to better understand the fundamental science behind their work.
Likewise, science students, too, will gain a better understanding of the applications of their studies, he added.

He said: "Such an academic approach will be useful when students enter the professional workforce since these fields of knowledge often overlap."

The new NTU school is the latest development in the shift in Singapore universities towards interdisciplinary learning, which involves learning content beyond the boundaries of a single discipline.

For instance, the Singapore Management University in August (2022) set up a new college that will allow master's and PhD students to take courses and programmes from a range of disciplines such as law, commerce and technology.

In 2021, NUS said it would merge Yale-NUS College with the University Scholars Programme, as well as combine the Faculty of Engineering with the School of Design and Environment to form the College of Design and Engineering.

Second Minister for Education Maliki Osman was the guest of honour at the launch of the new school on Friday.

NTU president Subra Suresh, in his welcome speech, said scientists, to achieve a real impact on society, now think beyond theories and calculations to products that can benefit everyday people.

"At the same time, the development of revolutionary products requires engineers and inventors to have a thorough understanding of fundamental concepts," he added.

Professor Suresh cited the Human Genome Project as an example of collaboration between fundamental science and engineering.

It ran from 1990 to 2003 and brought together an international team of researchers to study the human DNA, he said.

Already, the new NTU school is gaining ground in cross-disciplinary research, added Prof Suresh.

For instance, Professor Ling Xing Yi, a trained chemist, has developed a breathalyser device to detect Covid-19 from a person's breath.

First-year bioengineering student Izren Zuhairee, 22, who is part of the pioneer batch of 420 students to start at the new school this month, said: "It is important to be versatile and acquire more knowledge and skills, so we can be more valuable assets to a company after graduating."