

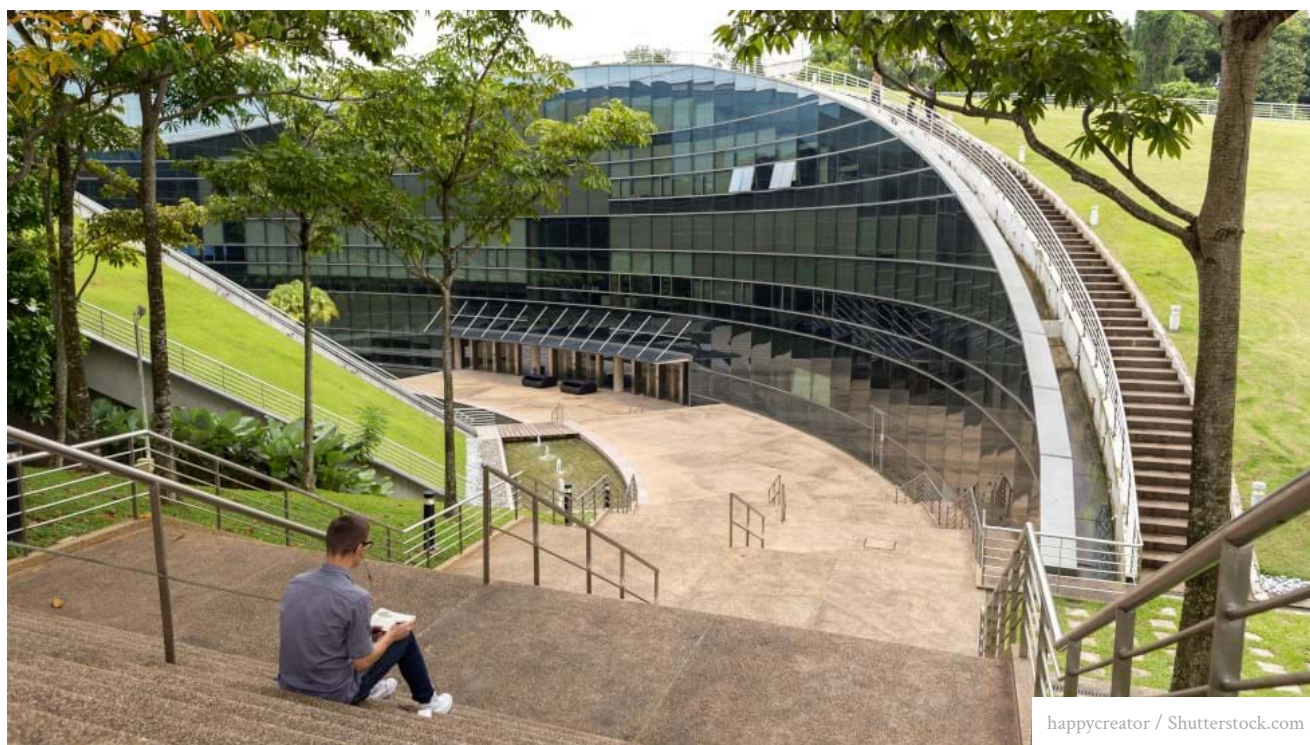


Education

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NTU Singapore launching hybrid chemeng-chemistry course to fill skills gap

Article by Adam Duckett



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NTU is launching the new course in August 2024

IN AN EFFORT to produce graduates with chemical engineering and chemistry skillsets, Nanyang Technological University (NTU) in Singapore is launching a new course in process engineering and synthetic chemistry.

The four-year degree – Bachelor of Engineering Science with Double Major in Process Engineering and Synthetic Chemistry – will launch in August 2025. NTU says it will nurture a new breed of graduates who can navigate the intricacies of chemistry and chemical engineering, a skillset it says is currently lacking yet in high demand.

Shunsuke Chiba, chair of NTU's School of Chemistry, Chemical Engineering and Biotechnology (CCEB), said: "The demand for such a skillset is driven by the need for innovation in developing new materials and pharmaceuticals, ensuring sustainable and efficient production processes, bridging the gap between molecular understanding and large-scale production, leveraging AI and Big Data for optimisation, meeting future industry demand for interdisciplinary expertise, and supporting Singapore's focus on being an advanced manufacturing and biopharmaceuticals hub."



Students will also be taught about project management and intellectual property in an effort to give them a competitive edge in the job market. The course will close with one of two optional capstone projects. Either a final-year research project involving a semester of intensive individual research under faculty supervision that will focus on cutting-edge chemical science and engineering topics. Or a final-year design project spanning two semesters. This will be team-based, requiring students to apply chemical engineering principles and economic evaluation methods to design a chemical plant, including process flow diagrams and computer simulations.

NTU has also announced it is launching a Bachelor of Engineering in Robotics to meet demand for engineers to design and integrate robotic systems for industrial and commercial use.

Ling San, NTU deputy president, said: “NTU works closely with industry partners to design academic offerings that anticipate global trends so that the skills our students learn will remain relevant and meet the demands of an evolving workplace.”

In September, the University of Bath launched [a new master's in Artificial Intelligence](#) for Engineering and Design centred around the growing importance of AI and machine learning and the apparent lack of dedicated courses aimed at engineers.



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