

NTU Singapore Introduces Two New Degree Programmes in Robotics and Advanced Chemical Manufacturing to Shape High-Tech Talent

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New courses launching in August 2025 aim to meet rising global industry demands, equipping students with interdisciplinary skills in robotics, AI, chemistry, and process engineering, aligned with Singapore's Smart Nation vision.



Nanyang Technological University, Singapore (NTU Singapore), a leading institution of higher learning, is set to launch two cutting-edge undergraduate programmes in August 2025: the Bachelor of Engineering in Robotics and the Double Major Bachelor of Engineering Science in Process Engineering and Synthetic Chemistry. These programmes are designed to meet global industry demands and bolster Singapore's position as a hub for high-tech talent and innovation.

As industries worldwide increasingly automate, the need for skilled roboticists is growing rapidly. NTU's **Bachelor of Engineering in Robotics** programme is crafted to equip students with practical and future-ready robotics skills, aligned with Singapore's vision to become a Smart Nation. The curriculum covers a comprehensive blend of mechanical, mechatronics, electrical, and artificial

intelligence (AI) disciplines, providing students with the depth and breadth necessary to excel in the evolving robotics sector.

“By integrating core disciplines and emphasizing industry-relevant skills, our new robotics programme aims to cultivate a new generation of engineers who will drive innovation in automation and contribute to Singapore's journey towards becoming a global leader in robotics and AI,” said [Spokesperson] NTU Singapore.

NTU Singapore will also introduce the **Double Major Bachelor of Engineering Science in Process Engineering and Synthetic Chemistry**, the first of its kind in Singapore. This interdisciplinary programme bridges the gap between chemistry and chemical engineering, nurturing graduates with a unique skill set that is currently in high demand. With its strong focus on synthetic chemistry and advanced process engineering, the degree aims to support Singapore's ambitions to lead in high-value advanced chemical and pharmaceutical manufacturing.

“This pioneering double major programme is tailored to address the increasing need for experts who can navigate the complexities of both chemistry and engineering. It’s a significant step towards developing a talent pool that can support Singapore’s growing advanced manufacturing sector,”

Both programmes emphasize an interdisciplinary approach, incorporating courses in artificial intelligence and machine learning to equip students with the tools needed to adapt to a rapidly changing industrial landscape. Students will also benefit from hands-on training and real-world projects that prepare them to tackle industry challenges head-on.

Applications for both programmes open in January 2025.

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