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NTU And Global Nonprofit The Good Food Institute Asia Pacific Launch New Undergraduate Course

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AGRICULTURE



Credit: (Credit to NTU Singapore).

Nanyang Technological University, Singapore (NTU Singapore) and The Good Food Institute Asia Pacific (GFI APAC), a global nonprofit headquartered in Washington DC that works to accelerate alternative protein innovation, are launching a new undergraduate course in August this year.

Named Future Foods – Introduction to Advanced Meat Alternatives, the course aims to equip NTU students with expertise and knowledge of the food industry focussing on alternative proteins and cultivated meat.

Singapore is at the forefront of the alternative proteins sector, with international food tech startups such as Perfect Day, Eat Just, Givaudan and Bühler setting up their regional base of operations here.

The course will help to develop local talent for the alternative meats sector in Singapore, as regional appetite for plant-based meat and other alternative proteins continues to soar. It is also in line with national needs, as alternative protein has been identified as an integral part of the Singapore government's "30 by 30" goal to produce 30 per cent of the country's nutritional needs locally by 2030.

This will be the first such programme offered by a local tertiary institution, with the first batch of undergraduates enrolling this August. It will be offered as an elective to third and fourth year students taking the Food Science & Technology degree programme as a 2nd Major, which is offered jointly by NTU and Wageningen University (WUR) from the Netherlands.

Professor Ling San, NTU Deputy President and Provost said, "As a leading research-intensive university, NTU has been playing its part in nurturing talent for the various emerging sectors of the economy, in close collaboration with industry. Our partnership with the GFI APAC will see NTU leveraging its strength in emerging food technologies to develop local talent in the alternative protein sector. With NTU's deep expertise in food science and GFI's extensive network of experts, our students will be able to benefit from a cutting-edge course on alternative meats delivered by an international panel of experts, which will stand them in good stead in the future job market."

Ms Mirte Gosker, Acting Managing Director of GFI APAC said: "Today's university students are tomorrow's entrepreneurs and political leaders, so they need to be equipped to confront the escalating pressures of skyrocketing protein demand, increased climate disruption, and threats of viral outbreaks. NTU's groundbreaking course creates a template that universities across Asia should follow to help us achieve a world where alternative proteins are no longer alternative."

Professor William Chen, the joint course's coordinator and Director of NTU's Food Science and Technology (FST) Programme, said: "Alternative protein production has emerged as a powerful economic engine in Asia, potentially creating lucrative job opportunities for skilled young people from across the novel food industry landscape. NTU's FST has developed a number of groundbreaking innovations for alternative protein production and is therefore well-positioned to offer and contribute to this historic university course on Future Foods – the first of its kind in the APAC region."

Students to benefit from a global panel of experts

The course offered in NTU will be based on GFI's unique alternative protein curriculum, which has been successfully launched in several universities in Israel, such as The Hebrew University of Jerusalem, Tel-Aviv University and Ben Gurion University.

Adapted to suit Singapore's context and needs, the course will be delivered by several GFI's scientific experts alongside NTU faculty. It will also feature seminars conducted by veterans from leading companies, providing students with industry insights and knowledge of the specific regulatory and business environment for this industry.

As the instructors are based in different countries across the global regions of the world, the lectures will be delivered fully using e-learning tools via Microsoft Teams and Zoom.

The team of educators aim to equip students with knowledge of the science, technology, advances and challenges facing the three alternative protein industry pillars of plant-based meat, eggs, and dairy, cultivated meat and fermentation.

As part of the curriculum, students will develop a research proposal to address a real-world challenge the industry faces and learn how sustainable alternatives to conventional meat can mitigate issues of climate change, food safety, health, and other challenges humanity faces.

Elaborating on potential opportunities, Prof Chen said: "We look forward to working with other Asian universities to prepare students for a future technology-driven world, contribute to enhanced food security, and create real societal impact in the region. Besides this, we hope to open up the course to working professionals to help them upskill in this rapidly changing economy."

Ms Gosker added: "We hope to partner with additional universities around Asia Pacific to set up new academic courses on alternative proteins. GFI provides course materials free of charge, in addition to other support. Together with the world's top universities, we look forward to raising the next generation of alternative protein scientists."