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New Degree Programs to Meet Society Needs

The Hong Kong University of Science and Technology (HKUST) will offer two new degree programs from September 2004, in bioproduct engineering and quantitative finance.

The new [BEng in Chemical and Bioproduct Engineering](#) is the first program of its kind in Hong Kong and Asia, and combines studies in the disciplines of bioscience and product engineering. It will be taught by the Department of Chemical Engineering, the only department specializing in chemical engineering in Hong Kong.

The [BSc in Quantitative Finance](#) will provide students with the appropriate computing and mathematical skills to solve financial problems. The program is jointly offered by the Departments of Finance and Mathematics.

The biosciences have recently been responsible for some enormous scientific advances and breakthroughs, while product engineering is a new research area that is transforming scientific discoveries into functional products. The BEng in Chemical and Bioproduct Engineering provides a link between the biosciences and product engineering, and will focus on the design and manufacturing of biochemical products and bio-devices. Students will be equipped with knowledge in a wide array of disciplines including biology, chemistry, mathematics and chemical engineering, and will gain hands-on experience by undertaking internships during the program.

"Product engineering has emerged as a leading research and education area, with many US universities like MIT and Stanford introducing product engineering into their curricula," says Prof Ka Ming Ng, Head of the Department of Chemical Engineering. "This new program will put HKUST at the forefront of chemical engineering in the Asia-Pacific region and indeed the world."

"Students will acquire knowledge on the design and processing of chemical and bioproducts. As the biochemical engineers, bioprocess engineers and quality engineers of the future, their skills will be highly sought after in the biotechnology, pharmaceutical, food and beverage and TCM industries, both in Hong Kong and throughout the region."

The Quantitative Finance program is designed to meet the needs of the banking and finance industry, where there is considerable demand for graduates with a strong technical background. Students will receive comprehensive training in finance, statistics and mathematics, which are all essential to financial data analysis, investment strategy, financial modeling, financial derivative pricing, and risk management.

A special feature of the program is its final year project, in which students will apply their knowledge and skills to real business projects sponsored by companies.