



Master of Science in the field of

# **FOOD INDUSTRY: MANAGEMENT AND MARKETING**

*Driving professionalism in modern food industry*

2024-25 (September 2024 intake)

# IS THE PROGRAMME FOR YOU

Why this Programme

- Established by the School of Biological Sciences in 1998, the MSc in the field of Food Industry: Management and Marketing programme:
  - offers advanced training in management skills and marketing research methodology for food and/or nutritional science graduates working or planning to work in the food industry
  - differs from other management programmes in that students are taught marketing and management skills relevant to the food industry, using case studies drawn from the food sector
  - opens opportunities in overseas experiential learning in China, Canada, Singapore and other Asian and European countries
- Instruction is given by the academic staff and experts both locally and from overseas with relevant industrial experience

## World-class rankings of HKU

### Quacquarelli Symonds (QS)

WORLD UNIVERSITY RANKINGS **#26** World Rankings 2024  
**#2** Asia Rankings 2024

### Times Higher Education (THE)

World University Rankings **#35** World Rankings 2024  
**#4** Asia Rankings 2023

### Top-notch Scientists in the Faculty

Clarivate Analytics' Essential Science Indicators

**18.3%** of our professoriate staff (average over the past decade) are classified Top 1% scholars



What the Programme Covers



### Tuition fees

**Composition fee: HK\$180,000<sup>#</sup>** (subject to approval)  
 Students are required to pay Caution Money (HK\$350, refundable on graduation subject to no claims being made) and Graduation Fee (HK\$350). All full-time students will be charged a student activity fee of HK\$100 per annum to provide support for activities of student societies and campus-wide student events.



### Programme duration

Full-time: 1 year



### Study load

Credits: 63 credits

Learning hours: 1,260-1,890 hours (including 300 hours for project and contact hours of 252-378 hours)



### Class schedule / format

- Teaching takes place mainly on weekday and some Saturday afternoons
- Students are expected to participate in class discussion, conduct group and individual projects with continuous assessments



### Medium of instruction

English



### Assessment

- Written work forms an essential part of the programme
- Courses in this programme are assessed in different ways, according to the requirements of each course:
  - by coursework assessment only
  - by examination only
  - both by coursework assessment and by examination
- The project report will be assessed by examiners and participation in the seminars at which students present their work is one of the requirements for the completion of this component of the degree curriculum

<sup>#</sup>The fee shall generally be payable in 2 instalments over 1 year

## Host

### School of Biological Sciences

The School was founded in 2007 following the merger of the Departments of Zoology, Botany, and Ecology & Biodiversity. Through a range of approaches from molecular, chemical and microbiological techniques in food, and its application in human nutrition, we are committed to undertaking global challenges in securing, managing and distributing food for consumers. Study of management skills in food industry is crucial for food security in current generation. It entails scientific and social approach related to national and international demands in preserving food quality and management with the incorporation of environmental factors at industry, society and governmental levels.

### Network

Food industries and institutions in Asia Pacific and Mainland China.

### Transferable skills

- Food product quality control
- Food product development and marketing
- Human resource management in food industry
- Strategic management, economics
- Food security

### Career development

- Management in food related cooperations
- Marketing, operations, ESG
- Food retail manager
- Entrepreneurship in food industry
- Food and produce broker
- Food product developer

Where will this Programme Lead You

What the Programme Covers

- For food and/or nutritional science graduates — an advanced training in management skills and marketing research methodology
- Emphasises practical approaches to:
  - quality assurance and safety management in food production, supply chain and distribution of food products
  - waste management and control
  - market research, business and financial strategies, organisational culture, product development and evaluation
  - future foods and biotechnology, food culture and economics



- ◇ Students are expected to have a science background preferably in food science and/or nutritional science
- ◇ The programme is intended for those who wish to:
  - Enhance their management skills in food industry
  - Enhance the learning of product development and marketing
  - Improve their knowledge in current food technology
  - Better knowledge in food security and management



- Job positions held by some of our admitted students in past years are:
- ◇ Senior Health Inspector, Food & Environmental Hygiene Department, HKSAR Government
  - ◇ Quality Control Officer, Vitasoy International Holdings Ltd.
  - ◇ Head of Dietary Department, Tsuen Wan Adventist Hospital
  - ◇ QA/R&D Supervisor, The Kowloon Dairy Ltd.
  - ◇ Quality Assurance Officer, Cathay Pacific Catering Services (HK) Ltd.
  - ◇ Quality Assurance Supervisor, Wellcome Co. Ltd.
  - ◇ Merchandiser, City Super Ltd.
  - ◇ Vending Services Assistant Manager, Swire Coca-Cola HK Ltd.
  - ◇ Assistant Quality Assurance consultant, McDonald's Restaurant
  - ◇ Food Technician, Amoy Food Ltd.
  - ◇ R&D Manager, Maxim's Caterers Ltd.
  - ◇ Product development, Dairy Farm International

## Hear from our graduates



Chung Man WONG  
Class of 2022

“ This MSc programme introduces food science-related theories (e.g. food processing technologies & quality management system), regulations and management skills (e.g. problem solving, change management & financial control). It enables us to enter the management level of the food industry through the reinforcement of food-related concepts and class discussions. Besides the curriculum, listening to interesting life experiences and workplace stories shared by different professors of the food industry nourished my study life. I feel satisfied and relieved with the support from my colleagues, friends, professors and families throughout the study journey despite it being stressful to strike a balance between study, work and life. With the new changes enforced in the curriculum, I believe it will be more favourable for people who would like to develop their career in the food industry in the foreseeable future. ”



Ronald Ping Chung TANG  
Class of 2022

“ Taking the MSc in Food Industry: Management and Marketing was an excellent experience to explore my potential talents. Through lectures and inspiring group projects, I have not only learned essential techniques in product development (R&D, packaging, marketing, quality assurance, financial management and legal compliance) but have also strengthened my skills in leadership (communication, time management, team building and crisis management). The course is intriguing and keeps me abreast with new developments in the industry. If you enjoy the learning process and make good use of the synergy created from the interaction and network with the faculties, teammates and food industry experts, it would become a great asset for your career development and help you achieve remarkable outcomes in product invention. ”

Design of curriculum (full-time)		
	Compulsory courses (51 credits)	Elective courses (12 credits)
<b>Core Courses</b>	FOOD7001 Quality assurance and management I (6 credits) FOOD7006 Future food (9 credits) FOOD7007 Marketing management (6 credits) FOOD7008 Organisational behaviour (6 credits) FOOD8009 Project (12 credits) [Capstone experience] FOOD8010 Quality assurance and management II (6 credits) FOOD8013 Business and financial strategies (6 credits)	Select any two elective courses from the following list: FOOD7003 Advance food technology (6 credits) FOOD7004 Food studies: exploring economics, culture, and environmental implications (6 credits) FOOD8011 Food innovation & product development (6 credits) FOOD8012 Food marketing strategies (6 credits)
<b>Total credits</b>	<b>63</b>	

Remark: The programme structure will be reviewed from time to time and is subject to change

## Compulsory courses

### FOOD7001 Quality assurance and management I

This course includes an overview on the practical aspects of quality management not only from consumers, but also stakeholders' perspectives in managing a cost effective quality department in multinational corporations. The application of different quality management systems by international food corporations will be discussed. The management of food laboratories as well as international lab accreditation requirements will be introduced in this course. Students will learn the different phases of crisis management supplemented with case studies for discussion and practice. Issue management, crisis handling, product recall and post-crisis recovery will be discussed. Students will learn the skills in risk management. Troubleshooting techniques for root cause analysis during product failure including microbiological troubleshooting will be discussed. Quality/process improvement tools will also be introduced.

### FOOD7006 Future food

Due to social and consumer demands, practical modifications in food industries are inevitable globally. Notwithstanding, the use of advanced technology, AI and urban farming has become essential worldwide. Students will learn up-to-date approaches in sustaining food retail such as resources, digital business and the use of big data, and the application of modern farming in the city. Guest lectures from local and international experts will be invited to exchange real-life experience in the current food industry.

### FOOD7007 Marketing management

The course is designed to provide an understanding of the role of marketing in multinational business organisation and its contribution to business success. Students will be introduced to different marketing concepts, marketing programmes, planning

and execution of marketing strategies. On completion of the course students will be able to analyse customer requirements, competitive environment and to formulate effective marketing programme. Sharing sessions with international industry practitioners will be arranged to deliver the topics on marketing in food industry (F&B operations & marketing, food labelling tracking system, food safety management and accreditation of ISO 22000 standard to create/deliver customer value) and field work will be arranged to visit food industry settings in Hong Kong.

### FOOD7008 Organisational behaviour

The course aims to equip students with a better understanding of the complex array of behaviours in organisational life in global entity. It will analyse the determinants of human behaviour in an organisation at the individual, group and organisational levels. Topics covered will include motivation, performance management, group dynamics, leadership, organisational culture, management of conflict, management ethics, and the leading change of these topics.

### FOOD8009 Project

This is an individual or group research project to be carried out under the supervision of one or more faculty members in local or overseas institutions. Students may propose their own topics and approach potential supervisors, or they may consider those suggested by the faculty members. The proposed project title must be submitted for approval before starting the study. The candidate shall make a formal presentation on the subject of his/her project during the final semester of the teaching programme.

### FOOD8010 Quality assurance and management II

This course includes an overview on quality management focused on global food safety and risk management. Students will learn food quality and safety management, and crisis and management in food industry. Core components in

# WHAT YOU WILL LEARN

GMP and other international safety standards and religious related standards (GSFI, ISO, BRC, Halal, Kosher) will be introduced in this course. Through these foundations and exercises of problem solving, students will be able to apply the knowledge in decision making of crisis and the use of modern communications for intervention.

## **FOOD8013 Business and financial strategies**

This course aims to prepare the student for a successful business career with a broad understanding of the importance and complexity of strategic decisions and the way they integrate other aspects of formulating business, and financial strategy. It examines the rationale of decisions that determine the future direction and effectiveness of organisations. The perspective taken is that of the general manager, the owner, CEO, president, or further CFO. It focuses on the skills required of the general manager in diagnosing and finding solutions for critical problems in complex business situations and implementing them. Practically the course covers not only financial management, but also business/corporate-level strategies.

## **Elective courses**

### **FOOD7003 Advance food technology**

The effects of processing and packaging on the shelf lives and changes in physical and chemical characteristics of food products will be discussed. Emphasis will be placed on the food preservation methods to extend product shelf lives as applicable to the popular local food products. Methods for sensitive nutrients and techniques to preserve the characteristic aroma and taste of a product in processing modification will be reviewed. Issues related to nutrient enrichment and fortification will be discussed. Global case studies will be used to dispel the many misplaced information on food preservations and alternatives to extending shelf life of foods without the use of the traditional food preservatives. In addition, understanding of various newly world-visionic food ingredients for health will be introduced; reformulation to reduce sugar and fat as well as reinforcement of fibres to foods are to be discussed.

### **FOOD7004 Food studies: exploring economics, culture, and environmental implications**

The course will explore a range of themes related to food from various disciplines including but not limited to economics, social sciences, cultural studies, environmental studies, and food sciences. The course will have two distinct parts. In part one, traditional approaches of food studies from the economics and agri-business perspectives will be examined. Various historical and contemporary social issues across the globe that intervene our daily food consumption with an interdisciplinary perspective will also be discussed. In part two, current applications and limitations of food waste treatment technologies will be addressed. The handling and management

of food waste is an important part of the green circular economy strategy which focuses on food waste minimization, conversion and valorization. These components will be further explored, by including the social, economic, and environmental implications associated with food waste.

### **FOOD8011 Food innovation & product development**

The role of research from the management perspective in global corporations, the R&D process and the impact of technological innovation on the development of new products will be discussed. The impact of global issues in the direction of research and development for food corporations. The risks and opportunities of new product development for international markets. Interrelationship between product recipes, processing and food packaging in the food product development process will be discussed together with the effects of product formulations on food safety, sustainability, fair trade and business ethics will be highlighted.

Cultural aspects will be emphasised as an important consideration in developing new market frontiers. Differences between basic research and application research as applied in food product development will be deliberated along with career prospects. The difference in the product development process among food companies as compared to more established FMCG global food companies will also be discussed with case studies, together with illustrations in actual product formulations. Consumer survey and data analysis will be covered. The application of information technology in food manufacturing and catering, and the concepts of logistics in supply chain and new regulations in cold chain and food delivery will be discussed.

### **FOOD8012 Food marketing strategies**

Marketing approaches and techniques applied for food products include test marketing, segmentation, positioning, branding, targeting and consumer research. Notwithstanding the approach of market strategy including product choice, pricing, promotion and distribution in relation to the food industry will be discussed. In this course, advanced knowledge of the factors specific to food effecting the global sustainability of food production and the role that innovation can play in the sector will be addressed. Appreciation of the complex and global environment in which the food business currently operates and the uncertainties and risks attached to food production will be examined. The course cover issues and tasks that marketing managers face in dynamic marketplaces and the concepts that can be used for decision making and understand consumer behaviours towards food products sold in domestic and international market will be discussed.

**More course information at:**

<https://www.scifac.hku.hk/prospective/tpg/FoodInd>



# YOUR PROGRAMME EXPERTS



*We nurture science students the practice of food marketing and management to be global and regional leaders in the next generation.*



## **Programme Director**

**Professor Jetty C Y LEE**

B Agr *KU*; MPhil, PhD *HKU*, SFHEA *UK*

Professor Jetty LEE leads the Undergraduate Food & Nutritional Science Major at HKU. Her management and teaching skills are highly recognised by her fellow colleagues and students, where she was awarded 2018-19 Faculty of Science Teaching Excellence Award. She recently received her Senior Fellowship awarded by Advanced Higher Education (UK). Professor Lee has authored or co-authored over 95 science and education related journal papers. Her research work has centered around dietary lipids namely oxidised omega-fatty acids as specialised lipid mediators and biomarkers in human diseases. Using robust analytical tools, she integrated and applied the knowledge into her research that focus on bioactive roles of lipid mediators in health diseases, and the environment and marine ecosystem. More recently, Professor Lee has initiated a Knowledge of Exchange study in 'Food Waste to Good Taste' to help F&B sector in Hong Kong in upcycling food waste. Aside from science research, she has high interest in science education where she is currently co-investigating in several research projects, mentor Advanced Higher Education (HKU) and an inaugural member of HKU Teaching Academy.



## **Deputy Programme Director**

**Dr Mingfu WANG**

BSc; PhD *RU*

Dr Mingfu WANG is an Honorary Associate Professor in the School of Biological Sciences, The University of Hong Kong, teaching and researching in the areas of food, nutritional science, and traditional Chinese medicine. He also holds adjunct professorships at Shanghai Ocean University, Jiangnan University and Jinan University. Food toxicology and health foods are the current focuses of Dr Wang's research. In the past, his laboratory has successfully demonstrated the formation and inhibitory mechanism of several foodborne toxicants and discovered the new health benefits of some food components. Dr Wang has authored or co-authored over 200 science journal papers and two books, including the *Handbook of Analytical Methods for Dietary Supplements* published by the American Pharmacists Association. He is also a co-inventor of 10 patents/patent applications. He serves as an editor-in-chief/editorial board member for several international journals in food science and toxicology including editor-in-chief for *Journal of Functional Foods* by Elsevier.

## Part-time lecturers

<b>Dr Dalal S A J A ALGHAWAS</b>	BSc UOM; MSc MMU; PhD HKU
<b>Mr Alfred C W CHEUNG</b>	MSc U of I; Food Science; CFS; Visiting Professor (JNU)
<b>Dr Olivier HABIMANA</b>	BSc; MSc UMB; PhD <i>Université Paris-Sud XI</i> ; Assoc Prof GTIIT, Hon. Assist Prof SBS HKU
<b>Dr Jongsoo KIM</b>	BA KU; MBA KU; MS UIUC; PhD Purdue
<b>Dr Peter K S KOH</b>	BA SNU; MA SNU; PhD MSU
<b>Ms Tracy H Y KWONG</b>	BA CUHK; PG Diploma CBS & MIT Sloan; MBA UoD
<b>Mr Billy H TANG</b>	BSc, MSc OSU; Consultant (Dongguan Continental Food Ltd. of Café de Coral); Technical Expert (Hong Kong Accreditation Service)
<b>Dr Jennifer M F WAN</b>	BSc London; BChinMed BUCM; PhD Southampton
<b>Ms Mary W M WONG</b>	BSc, MSc HKU; Global QSR lead (Asia Pacific region)

## Admissions

### Requirements

- ◇ A Bachelor's degree in Science
- ◇ Preference will be given to those specialising in food science, nutrition or other related major
- ◇ Fulfil the University Entrance Requirements

### How to apply

Application deadline: **12:00 noon (GMT +8), April 30, 2024**

Online application:  
[admissions.hku.hk/tpg/](https://admissions.hku.hk/tpg/)



### Expected degree conferment will take place in

November / December 2025 (Winter Congregation)

## Further Information

### Programme details

[bit.ly/2Nj2bxK](https://bit.ly/2Nj2bxK)



### Support for students

[www.cedars.hku.hk/](http://www.cedars.hku.hk/)



### Enquiries

#### School of Biological Sciences

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#### Programme Director

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