

Master of Science in the field of Food Industry: Management and Marketing

Apply now for entry in September 2020



THE UNIVERSITY OF HONG KONG
FACULTY OF SCIENCE



The MSc in the field of Food Industry: Management and Marketing is a part-time taught master programme introduced in 1998. It is supported by the School of Biological Sciences. The objective is to offer advanced training in management skills and marketing research methodology for food professionals so as to enhance the competitiveness of local food manufacturers in a changing market. The programme emphasizes practical approaches to quality assurance and safety management in processing, packaging, storage and distribution of food products, waste management and control, as well as market research, financial planning, product development and evaluation, and compliance with food laws and regulations.

The programme extends over two academic years of part-time study. Instruction is given by the academic staff as well as experts both locally and from overseas with relevant industrial experience. This is the only taught postgraduate programme available in Hong Kong on food technology and management. It 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.

Admission in September 2020

The Programme offers:

- Food professionals an advanced training in management skills and marketing research methodology so as to enhance the competitiveness of local food manufacturers in a changing market
- Secondary school teachers the relevant training to prepare themselves to teach under the New Senior Secondary Curriculum, e.g. Technology & Living
- Practical approaches to quality assurance and safety management in processing, packaging, storage and distribution of food products, waste management and control, as well as market research, financial planning, product development and evaluation, and compliance with food laws and regulations



Programme Structure

Part-time two years study

First Year – Core Courses (33 credits)

- FOOD7001 Quality assurance and management (6 credits)
FOOD7002 GMP and environmental management (6 credits)
FOOD7003 Food quality preservation and evaluation (6 credits)
FOOD7004 HACCP and food laws (6 credits)
FOOD7005 R&D and export market strategies (9 credits)

Second Year – Core courses (33 credits)

- FOOD8006 Marketing management (6 credits)
FOOD8007 Financial control (6 credits)
FOOD8008 Organisational behaviour (6 credits)
FOOD8009 Project (15 credits)

Course Contents

First Year

FOOD7001 Quality assurance and management (6 credits)

An overview on quality management will be presented. Case studies will be used to generate in-depth discussion on relevant topics. The management of food laboratories will also be described, with a review of the modes of infectious disease transmission followed by discussion on microbial and other contaminants of relevance to South East Asia. Standard assays as well as newer methods will be covered. Guidelines of the Department of Health on acceptable limits and routine inspection procedures will be discussed.

Assessment: Course work (30%); Examination (70%)

FOOD7002 GMP and environmental management (6 credits)

Good manufacturing practice has a significant impact on the daily operation of a food processing facility. Quality products and a safe work place are important components of a good company. This course will focus on issues arising from GMP and aspects of the physical design of a food processing facility which impact the safety of workers and products. There will be emphases on the sources of contamination, sanitation techniques for production site and personnel, pest control, and contingency plan for the production line. Quality assurance and HACCP will be discussed as well. Proper handling of waste is closely related to the issue of food safety and, in a broader context, it has an eventual impact on the environment. This course will also cover waste treatment and disposal, environmental impact assessment, operational procedures to implement ISO 14000, and laws and regulations on pollution control enforced by the Hong Kong Environmental Protection Department.

Assessment: Course work (20%); Examination (80%)

FOOD7003 Food quality preservation and evaluation (6 credits)

The effects of processing and packaging on the physical and chemical characteristics of food products will be discussed. Emphasis will be placed on the freezing technology of marine products and frozen dim sums. Analytical 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. Sensory evaluation as an important component of food product development and marketing will be covered. Various evaluation methods and analytical techniques will be discussed in a case study setting.

Assessment: Course work (30%); Examination (70%)



FOOD7004 HACCP and food laws (6 credits)

As a core quality management tool in the food industry, the relevance, impact and use of HACCP in manufacturing and catering will be discussed. Topics covered will include the integration of HACCP and ISO 9000 as well as the practical implementation of HACCP using Asian case studies. The course will provide students with a proper perspective on local Chinese and international food laws and regulations. Familiarisation with international agencies such as the Codex Alimentarius Commission. Issues related to food inspection, food additives, and contaminants as well as the concept of and procedural details in attaining ISO registration will be discussed.

Assessment: Course work (20%); Examination (80%)

FOOD7005 R&D and export market strategies (9 credits)

The role of research from the management perspective, the R & D process and the impact of technological innovation on the development of new products will be discussed. Cultural aspects will be emphasized as an important consideration in developing new market frontiers. The strengths and weaknesses of major "Chinese food" manufacturers will be analyzed. Areas of potentials will be identified and explored. Basic concepts of intellectual property rights will also be described in this course: copyright, trademarks, trade secrets, patents; Patent strategy for research-intensive technology companies; Practical aspects and international considerations in filing for patent protection. The application of information technology in food manufacturing and catering will be discussed.

Assessment: Course work (30%); Examination (70%)

Second Year

FOOD8006 Marketing management (6 credits)

The course is designed to provide an understanding of the role of marketing in the business organization and its contribution to business success. Students will be taught in an applications oriented framework to become familiar with the various marketing concepts, marketing programmes and planning and control of marketing strategies. On completion of the course, students will be able to analyze customer requirements, the competitive environment and to formulate effective marketing programme. Perspectives of local food manufacturers will be introduced through special seminars.

Assessment: Course work (20%); Examination (80%)

FOOD8007 Financial control (6 credits)

The course aims to equip non-accounting professionals with the skills required to analyze and interpret the major financial reports prepared by businesses. The focus of the course is on providing a user perspective of the financial statements rather than on specific preparation concepts. In addition, the course addresses principles of basic financial management and explains the need for internal control procedures. Particular emphasis is given to developing an understanding of the balance sheet, profit and loss statement, and cash flow statement. The relationship between the statements will be explained and illustrated in detail. A framework for making business decisions by analysing a set of financial statements using simple techniques will also be developed.

Assessment: Course work (30%); Examination (70%)

FOOD8008 Organisational behaviour (6 credits)

The course aims to equip students with a better understanding of the complex array of behaviours in organisational life. 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 management of change.

Assessment: Course work (60%); Examination (40%)

FOOD8009 Project (15 credits)

This is an individual or group research project to be carried out under the supervision of one or more Faculty members. 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 December 31 of the second year of their study. Candidates shall make a formal presentation on the subject of his/her/their project during the final semester of the teaching programme.

Assessment: Project (100%)

Programme Duration and Class Schedules

The programme extends over two academic years of part-time study. Teaching takes place mainly on weekday evenings and Saturday afternoons. This is a small programme and students are expected to participate in class discussion.

Target Students

The programme is intended for those with experience in food industry and related areas. Students are expected to have science background preferably in food and nutrition. It also offers secondary school teachers the relevant training to prepare themselves to teach under the New Senior Secondary Curriculum, eg. Technology & Living. 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 Limited
- 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.
- Code Standard Section Executive, Lee Kum Kee
- Food Technologist, Lam Soon (HK) Ltd.

Assessment

Written work forms an important part of the programme. All written and verbal communication is in English. Courses in this programme are assessed in different ways, according to the requirements of each course:

- a. by coursework assessment only;
- b. by examination only;
- c. 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.

Tuition Fees

The composition fee for the whole programme for 2020-21 intake will be HK\$120,000# which can be paid by 4 instalments. In addition, students are required to pay Caution Money (HK\$350, refundable on graduation subject to no claims being made) and Graduation Fee (HK\$350).

Subject to approval

Admission Requirements

A Bachelor's degree with Honours in science. Preference will be given to those recommended by their present employers.



Application

Application will be considered immediately until the new deadline. The deadline is extended to July 31, 2020.

Programme details:

<https://aal.hku.hk/tpg/>

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

Online application:

<https://aal.hku.hk/tpg/>



Enquiries

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Programme Director

Dr M F Wang

BSc, PhD (Rutgers, US)

Associate Professor, School of Biological Sciences

Dr Mingfu WANG received his BS degree in Chemistry from Ocean University of China, MS degree in Organic Chemistry from the Chinese Academy of Sciences, and PhD degree in Food Science from Rutgers University. After completing his PhD, Dr Wang worked in the food and pharmaceutical industry for two years, and joined the faculty of Rutgers University in 2001, before moving to HKU in 2005. He is now an 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 (TCM). He also have adjunct professorship 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 SCI journal papers, and two books, including a 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 associate editor/editorial board member for several international journals in food science and toxicology including associate editorship for Journal of Functional Foods by Elsevier.

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Deputy Programme Director

Dr Jetty C Y Lee

B.Agr (Korea University), M.Phil, Ph.D. (HKU)

Assistant Professor, School of Biological Sciences

Dr Jetty LEE received her BAggr degree in Food Technology from Korea University (Seoul, Korea), and MPhil and PhD in Food and Nutritional Science from HKU. Dr. Lee returned to Korea University for Post-doctoral Research Associate to research on Functional Foods at Graduate School of Biotechnology and thereafter, was promoted to Research Assistant Professor. She then joined Yong Yoo Lin School of Medicine at National University of Singapore (NUS, Singapore) as Research Fellow where she focused on antioxidant and oxidative stress in clinical studies, in particular neurodegenerative diseases. After 8.5 years at NUS, Dr. Lee returned to HKU to teach and research in Food and Nutritional Science.

Dr Lee has authored or co-authored over 80 SCI journal papers. Her research work has centered around dietary lipids namely oxidized omega-fatty acids as specialized lipid mediators and biomarkers in human diseases. She has developed analytical methods for targeted lipidomics that are applied in numerous model systems e.g. cells, rodent tissues, human biological fluids, gonads and guts of marine species to name a few. Using robust analytical tools, she integrated and applied the knowledge into her research that focus on bioactive roles of lipid mediators in health and diseases, the environment and marine ecosystem.

Besides being a motivated researcher, she is an educator where she leads the Undergraduate Food & Nutritional Science Major. Her management and teaching skills are highly recognized by her fellow colleagues and students, where she was awarded 2018-19 Faculty of Science Teaching Excellence Award.

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