If you are passionate about food and you want to contribute on mitigating major worldwide problems such as Food security and Food safety, our MSc course is your gateway for succeeding in this area.

Developed with and for the industry, our graduates are highly valued by different Agrifood businesses and thus we have a very high employment rate of 94.5%* for our School. Hence joining us might be the "golden ticket" you need to boost your careers in the fast and ever changing Agrifood area.

Through the integration of scientific, technological and managerial aspects (teaching shared with our internationally recognised School of Management and industry experts) you will learn how to use and manage food resources more efficiently (agriculture, logistics, food analysis, consumers, food management, certification, food innovation), in order to achieve sustainable, secure and safe food supply chains across the globe.

We have a great commitment with student excellence, from both the UK and from around the world, and every year we will offer bursaries to several outstanding candidates.

*(based on those for whom we hold data. Source: DLHE 2017 Collections).

Who is it for?

The course is suitable for new graduates from a science or technology background who are interested in a career within the food industry. The course is also ideal for professionals already working in the industry who would like to train to further their careers. Available on a full and part-time basis the course offers flexibility and support for those who wish to train whilst remaining in employment.

Food Systems and Management MSc is part of the Agriculture and Food Programme. It provides a critical appreciation of the issues concerned with the production and supply of safe food in the modern world. Through the integration of scientific, technological and managerial factors you will learn how to use food resources more efficiently to achieve higher quality and safer food production as well as successfully understand and manage food supply chains.

The holistic approach of the MSc will provide you with a detailed understanding of the whole of the food chain system including: Diagnostics, Food microbiology, HACCP, Logistics, Postharvest technology, Predictive modelling, Risk assessment of food, Supply chain management.

Course structure

- Eight taught modules (40%),
- Group project (20%),
- Individual research project (40%).

Informed by industry

This MSc benefits from input from an industry advisory panel with representatives from commercial and non-commercial organisations, who help to ensure the course maintains its real-world relevance to the marketplace and industry focus. This involvement and direct contact with industry makes successful students highly sought after in the employment market.

Key information

**Duration:**
- MSc: one year full-time, two to three years part-time,
- PgDip, PgCert: one year full-time, two years part-time.

**Start date:**
- Full-time: October.
- Part-time: October.

**Qualification:**
- MSc, PgDip, PgCert.

**Location:**
- Cranfield campus.

**Entry requirements**

A first or second class UK Honours degree in a relevant scientific discipline; such as a life science, food science or food engineering. Candidates with appropriate professional experience are also invited to apply.
Future career
A degree from Cranfield will fast-track your career, enabling you to go further and to progress more quickly. The skills you acquire are in demand by growers, food retailers, agrochemical companies, government agencies, logistics and supply chain companies and research institutions across the world. Specific relevant job roles may include: management, food innovation, production, logistics, research or academia, retail sector, food storage. Our graduates are working in some of the sector’s most successful companies - including Unilever, PepsiCo, Warburton, G’s Growers, Discovery Foods, Adelie Foods, MAKRO and Syngenta – and the most prestigious research organisations such as EU Universities and Rothamsted Research.

Overview of taught modules

Example modules
Modules form only part of the course content with the projects and theses making up the balance. Please see the course structure for details.

The list below shows the modules offered in the 2019/2020 academic year, to give you an idea of course content. To keep ours courses relevant and up-to-date, modules are subject to change - please see the webpage for the latest information.

Compulsory modules
(all the modules in this list need to be taken as part of this course).

Agrifood Business Innovation
This module explores current and future challenges that different sectors of the food chain are facing. It is delivered in London and run in collaboration with our industrial partners and members of the Agrifood Industrial Advisory Panel. Throughout the module, external speakers will provide students with an insight into the main challenges their organisations have faced and the innovative projects that have been delivered to overcome them.

Food Chain Resilience
In this module, you will be introduced to key aspects of supply chain management which are critical to improving the overall resilience of the global food supply network.

Food Diagnostics
This module aims to equip you with a holistic understanding of the concept of food diagnostics and the role of monitoring and analysis in food quality, safety, and management. This includes a broad range of areas: analytical methods, non-destructive techniques, detection of food adulteration and current techniques to identify fraud, integration and datasets to predict food quality and safety (bioinformatics).

Food Safety and Quality Management and Certification
You will gain an overview of the food quality legal framework and examples of its application to industrially relevant cases. You will also gain an understanding on the general framework and then narrow down to particular areas and sectors. Some important food chains are being used as examples.

Leading Corporate Sustainability
This module outlines the major sustainability challenges and explores the capabilities organisations require need to respond positively to them.

Postharvest Technology
This module provides an overview of the key aspects of postharvest physiology and explore the technologies used to extend the storage and shelf-life of fresh produce reducing waste throughout the food supply chain.

Quality of Food and Beverages
This module provides an understanding of how quality (e.g. colour, shape, aroma, taste, texture, nutrition) and value are evaluated in foods and beverages, and how this is influenced by genetic, environmental and management factors.

Group project
Group projects provide you with an understanding of working on real challenges in the workplace along with skills in team working, managing resources and developing reporting and presentation skills. Many of the projects are supported by external organisations and the experience gained is highly valued by both you and prospective employers. For part-time students a dissertation usually replaces the group project.

Examples of recent group projects include:
- Hygiene profiling of a fast food restaurant,
- Evaluation of the health hazards of deep frying,
- Assessing microbial spoilage risks of high energy snacks.

Individual project
The four-month individual research project can be carried out within industry or academia and for part-time candidates it can be undertaken in your place of work. This key part of the course allows you to apply the research skills acquired during the taught phase of the course to a practical problem in health science and acts as an opportunity for you to meet potential future employers.

Cranfield University also actively seeks sponsorship and support for individual thesis projects from the food and environmental sector employers to provide professional experience and development opportunities for students. Thesis sponsors and supporters include: Coca Cola Enterprises, Selva Organic, McDonald's Restaurants Ltd, GreenWay Foods, Giles Foods, Discovery Foods, Edward Vinson Ltd., KWS Ltd., Greenyard Fresh UK, and Whitworth's

Accreditation
The MSc of this course is accredited by:

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For further information please visit www.cranfield.ac.uk/fsn