

# FOOD SCIENCE AND FOOD SECURITY

Globally we face huge and growing challenges to supply the world's population with adequate safe and nutritious food. Food scientists will play a crucial role in addressing global food insecurity.

This unique Food Science qualification combines BSc and Master's-level study and allows students to develop their subject to a high level, experiencing cutting-edge technologies involved in food research.

The subject is underpinned by a scientific understanding of food, such as its properties and composition, production and manufacture, testing and regulation, interaction with the human body, and the current and future challenges for its safety and supply.

## COURSE CONTENT

The overall vision is to provide a dynamic learning environment committed to excellence in teaching and research, that contributes to national and global efforts, to provide the world's growing population with a sustainable, safe and secure supply of high-quality food.

In doing so Queen's seeks to prepare internationally-recognised graduates for leading roles in the production and supply of safe and nutritious food. Students must take the equivalent of three modules in each stage, including any compulsory modules.

The modules are:

### • Stage 1

- Chemistry and Composition of Foods
- Fundamentals of Nutrition and Food Policy
- The World of Microorganisms

### • Stage 2

- Food Commodities, Processing and Hygiene
- Food Choice, Diet and Health
- Principles of Food Quality

### • Work Placement

- Food Science and Food Security students complete a 16-week degree-related work placement
- Food Science and Food Security with Professional Studies students will complete a one-year, degree-related work placement

### Stage 3

- Business Innovation and Entrepreneurship
- Global Issues in Agriculture
- Food Product Development
- Food Supply Chain Safety and Security
- Honours Project

### • Stage 4

- Agri Food Traceability and Fraud
- Food Safety Health and Disease
- Advanced Food Bioanalysis
- MSci Research Project



QUEEN'S  
UNIVERSITY  
BELFAST

## MSci Honours

Food Science and Food Security 4 yrs (D990)

Food Science and Food Security with

Professional Studies 5-yr SW (D991)

See also Food Safety, Quality and Nutrition

## Entrance Requirements

### A-level:

AAB including Biology and Chemistry  
+ GCSE Mathematics grade C

OR

AAB including Biology and either Home  
Economics or Nutrition and Food  
Science + GCSE Chemistry grade C or  
GCSE Double Award Science grades  
CC + GCSE Mathematics grade C

OR

AAB including Chemistry and either  
Home Economics or Nutrition and Food  
Science + GCSE Biology grade C or  
GCSE Double Award Science grades  
CC + GCSE Mathematics grade C

OR

AAA including Biology or Chemistry or Double  
Award Applied Science or Double Award Life and  
Health Sciences + GCSE Biology and Chemistry  
grade C or GCSE Double Award Science  
grades CC + GCSE Mathematics grade C.

### BTEC Extended Diploma:

A relevant Food/Science BTEC Extended  
Diploma with 140 credits at Distinction and 40  
credits at Merit + GCSE Biology and Chemistry  
grade C or GCSE Double Award Science  
grades CC + GCSE Mathematics grade C.

**Note:** MSci applicants will automatically be  
considered for admission to the BSc Food  
Quality, Safety and Nutrition degree if they are  
not eligible for entry to the MSci, both at initial  
offer-making stage and when results are received.

**Option to Transfer:** transfers between BSc  
Food Quality, Safety and Nutrition and MSci  
may be possible at the end of Stage 2.

### For students whose first language is not English

An IELTS score of 6.5 with a minimum of  
5.5 in each test component or an equivalent  
acceptable qualification, details of which are  
available at: [go.qub.ac.uk/EnglishLanguageReqs](http://go.qub.ac.uk/EnglishLanguageReqs)

## WHY QUEEN'S?

### • Work Placement

Students taking MSci Food Science and Food Security with Professional Studies undertake a compulsory work-placement of at least 46 weeks between Stages 2 and 3 of their degree. This is a significant learning and employability enhancement opportunity.

Our past students have also gained work placement with organisations such as Sainsbury's, Marks & Spencer, Kerry Group, Kraft Foods, Moy Park, Tayto, Ulster Cancer Foundation, hospital trusts and many more.

### Experience

The degree also offers opportunities for additional laboratory training and experience, for example summer scholarships.

### • Flexibility

The unique flexible design of these degrees enables transfer to the BSc Food Quality, Safety and Nutrition degrees up until the end of Stage 2.

### • Convenience

This tailored degree is shorter than studying for BSc and Master's degrees separately, and students are able to finance their postgraduate-level studies within existing student finance arrangements.

### • The Institute for Global Food Security

This programme is linked to the Institute for Global Food Security at Queen's and students may complete their project work at the Institute. Known globally for their world-renowned research, the Institute was at the forefront of uncovering and understanding the horsemeat scandal in the UK.

## CAREERS/FURTHER STUDY

Nationally and internationally there is a shortage of food science graduates with higher level research skills and technical expertise. These degrees are designed to produce graduates ideally suited to high-level careers in research, R&D, industry, education, and also for PhD study.

Although the majority of our graduates are interested in pursuing careers in the food industry or health promotion, some develop careers in a wide range of other sectors. The following is a list of the major career sectors that have attracted our graduates in recent years:

- Food industry – graduate recruitment schemes
- Food industry – new product development
- Food industry – food technologist
- Food industry – quality management
- Charities – health promotion

- Nutrition – assistant dietician in a hospital trust
- Teaching – home economics (PGCE needed)
- Research – industry research association
- Research – PhD studies

### • Employer Links

We regularly consult and develop links with a large number of employers including all those who provide work placement opportunities. These range from multinationals such as Moy Park and Sainsbury's to many local companies such as Irwin's and Tayto.

**Queen's Food Science is ranked 4th in the UK (Times and Sunday Times Good University Guide 2019). This unique Food Science qualification combines BSc and Master's-level study and allows students to develop their subject to a high level, experiencing cutting-edge technologies involved in food research. The degree also offers opportunities for additional laboratory training and experience, for example summer scholarships.**



### Entrance requirements

e: [admissions@qub.ac.uk](mailto:admissions@qub.ac.uk)  
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### Course information

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